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EXPERIENCES INFLUENCING DEGREE COMPLETION ARTICULATED
BY DOCTORAL STUDENTS IN EDUCATION ADMINISTRATION

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A Dissertation
Submitted to the Faculty of the
Graduate School of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy

Department of Leadership, Foundations,
and Human Resource Education
University of Louisville
Louisville, Kentucky

December 2008

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A Dissertation Approved on

December 4, 2008
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DEDICATION

This dissertation is dedicated to my wife Kimberly Reese Barnett,
my parents Charlie Barnett and Helen Barnett,
and my brother and sister, Teresa Chambers and Rick Barnett,
who have given me unending support throughout my educational endeavors.

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I could not have completed this research project without the support of my wife, Kimberly. She is first and foremost among many to whom I owe a tremendous debt of gratitude. Others I wish to acknowledge include Dr. John L. Keedy, my dissertation advisor, for continually providing encouragement and holding me to his high standards of research; Ms. Elizabeth Lambert for prompting me to pursue doctoral studies; The Scottish Rite for their generous support during the early stages of my program; my dissertation committee members for their patience and willingness to offer their critiques; and my peers who offered their support and assistance over the duration of my program. My appreciation is also extended to the participants of this study who generously shared their time and personal life stories to provide me the opportunity to explore this topic. To all of you, I sincerely say thank you.

ABSTRACT

EXPERIENCES INFLUENCING DEGREE COMPLETION ARTICULATED BY DOCTORAL STUDENTS IN EDUCATION ADMINISTRATION

David Lee Barnett

December 4, 2008

Educational literature indicates that approximately half of all doctoral students persist to degree completion. The literature indicates persistence rates among the social sciences are even lower. This study examined factors influencing doctoral student persistence in education administration programs.

Tinto's theory of graduate student persistence framed four research questions: Do the demographics of doctoral students persisting to degree completion in education administration differ from those not completing their programs? Do doctoral students in education administration programs articulate experiences of academic integration as influencing their persistence? Do doctoral students in education administration programs articulate experiences of social integration as influencing their persistence? Do doctoral students in education administration programs attribute commitments to external obligations as influencing their persistence?

The design of the study was interpretive and exploratory in nature and utilized constant comparative analysis techniques. Survey and interview were

used to collect participant views of doctoral student experiences. Participants ($N = 30$) for the study included those who had completed their dissertations ($N = 15$) and those who were All But Dissertation ($N = 15$) and attended two comprehensive research universities in the southeastern United States.

The major findings from the study were that (a) no differences existed in demographics reported by degree completers and ABD participants; (b) degree completers described experiences related to academic integration, social integration, and external obligations as having sustaining effects on their persistence to degree completion; (c) and ABD participants described experiences related to academic integration, social integration, and external obligations as having restraining effects on their persistence.

Findings indicated that students having positive academic and social integration experiences and the ability to negotiate shared responsibility for duties related to external obligations were more likely to complete their programs. Findings also supported that students having negative academic and social integration experiences and an inability to negotiate shared responsibility for duties related to external obligations were less likely to complete their programs.

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CHAPTER I

INTRODUCTION TO THE STUDY

Student persistence to graduation and the assessment of student needs during college are at the center of much research during the latter part of the 20th century. Members of both the academic community and educational reformers have interest in determining ways to increase the likelihood of successful degree completion. Persistence research has focused primarily on identifying factors impacting the undergraduate experience. Less is known about graduate student persistence, particularly the experiences of doctoral students and the interplay of factors influencing their persistence to degree completion.

Researchers exploring the problem of persistence offer various explanations for what improves graduation rates. Tinto (1975, 1987, 1993) argued that persistence was the result of the successful integration by students into an institution's academic and social systems. He contended that if students made a successful transition from previous experiences to the college experience and became academically and socially integrated, their likelihood of persistence increased dramatically.

Spady (1970, 1971), Astin (1975, 1977, 1985), Pascarella (1980), and Pascarella and Terenzini (1979, 1980, 1991, 2005) argued that student

persistence resulted from an interplay between individual background characteristics and an institution's environment. They believed student characteristics interacted with the institutional environment influencing student tendencies toward involvement in the collegiate environment, ultimately affecting their likelihood of persistence. Bean and Hull (1984) found this interplay even more pronounced for minority students. Minority students attending predominantly white institutions experienced higher levels of isolation and dissatisfaction than did majority students because of experiencing difficulty transitioning into various academic and social subcultures.

Pascarella and Terenzini (1991) concluded that "beyond the obvious importance of academic achievement, the weight of evidence also suggested that one's level . . . of integration in an institution's social systems has significant implications for attainment" (p. 418). All these theorists described issues primarily related to concerns about student needs for social and academic integration within the academy and placed the responsibility for successfully negotiating the process of integration primarily on the student.

Terenzini (1980) extended the argument that persistence resulted from student characteristics by proposing the additional concept that persistence was the result of what happened to students once they arrived on campus rather than being explicitly the result of what they were like before getting there. Following Terenzini's assertion, more recent studies (Berger & Braxton 1998; Stoecker, Pascarella, & Wolfle, 1988; Tinto, 1998; Woodward, Mallory, & DeLuca, 2001) examined the relationship between student characteristics and predispositions

and institutional factors, arguing that institutions bore partial responsibility for integrating students and improving their retention and graduation rates. These studies found that student and institutional factors combined to influence collegiate success or failure.

The studies above examined primarily the persistence of undergraduates. Students from all types of postsecondary institutions were participants in these studies and the primary method used to analyze data was correlation design, seeking to measure the level of influence various factors had on student persistence. Crafting a more holistic description of doctoral student experiences required the use of methods encouraging direct dialogue with the students and reporting the details of their experiences.

Examining factors influencing the persistence of doctoral students was necessary because the transition from course-taker to independent scholar is difficult for many and understanding influential factors impacting their transition might provide insight on method for improving their likelihood for success (Lovitts, 2008). The qualitative approach used in this study allowed the researcher to examine factors affecting doctoral student persistence while holding to the goal of presenting the students viewpoints on the issue (Bogdan & Biklen, 1982).

Studies of doctoral student persistence revealed an interesting trend that differed from studies of undergraduate students. Results of doctoral student graduation rates for institutions of higher education in the United States indicated that the higher the level of education, the lower the completion rate (Tinto, 1993).

Six-year completion rates of undergraduates fluctuate annually but average just below 60%. Estimates of doctoral student completion rates, however, consistently approximated 50% (Dorn & Papalewis, 1997; Lovitts, 1996; Tinto, 1993). Expanding extant research on the persistence of doctoral students was needed to develop a better understanding of factors affecting their persistence to determine if they were similar to or different from those impacting undergraduates.

Using an interpretative design to explore these issues provided a methodological approach yielding data detailing the attitudes and beliefs of doctoral students about the factors affecting their persistence. Such a design delves into the specific contexts of doctoral students whose educational experiences differ from those of traditional undergraduates.

Sigafus (1998) reported that most doctoral students terminating their programs did so after the completion of their coursework and comprehensive exams. "Although few students terminate their pursuit of a doctorate during the course-work phase of their program, many doctoral students drop out around the time they successfully complete planned courses, a period known as 'all but dissertation' (ABD)" (Sigafus, 1998, p. 1). Additionally, the median length of time for completion of a doctoral degree varied across disciplines (e.g., physical sciences, engineering, life sciences, social sciences, humanities and education) with the field of education being the second longest at slightly over eight years (Hoffer, Dugoni, Sanderson, Sederstrom, Ghadialy, & Rocque, 2001).

These findings lead to the question of why a more holistic understanding of the phenomenon of doctoral student persistence is not available. The question needs exploration on a macro level but also on the micro level with attention given to differences between various disciplines. Tinto (1993) posed the problem this way:

Given the importance of graduate education, it is surprising that so little research has been carried out on the process of graduate persistence. Relative to the knowledge acquired from the extensive body of research on the process of undergraduate persistence . . . we have gained little insight into the forces that shape graduate persistence. (p. 230)

There exist many models and theories of persistence for undergraduates, each emphasizing the perspectives of the various academic disciplines grounding them. Theoretical frameworks aimed at defining persistence issues for doctoral students are fewer, and testing of those that do exist is slight. The use of existing models of undergraduate persistence provided a viable foundation for research on doctoral students. Tinto (1993) proposed such a rationale:

As a beginning point for our thinking about the possible character of a theory of graduate persistence we take the theory of [undergraduate] persistence . . . because recent research on doctoral persistence yields a number of findings that are quite similar to those at the undergraduate level. (p. 231)

Using existing undergraduate models of student persistence as a starting point to frame this study of doctoral student experiences proved useful.

Statement of the Problem

The problem addressed by this study was the lack of holistic, interpretative studies examining factors affecting doctoral student persistence. Unlike undergraduates, studies indicated that the likelihood for attrition increased

among doctoral students as they progressed through their programs, especially after the completion of comprehensive exams (e.g., Golde, 1994, 1998; Tinto, 1993).

College and university administrators regularly employ strategic plans and initiate early intervention programs aimed at increasing undergraduate student persistence, focusing on transitional needs, providing academic support, encouraging faculty contact, and recruiting participation in social programs. The majority of institutional programs support students during their freshman year because studies indicated that the highest level of attrition for undergraduates happened between the first and second year of college. It was reasonable to generalize from this research that some of the same factors influencing undergraduate persistence existed for doctoral student persistence.

Social science theories grounded much of the current research leading to models predicting levels of student persistence (Baird, 1990; Corcoran & Clark, 1984; Tinto, 1993; Pascarella & Terenzini, 1991; Weidman & Stein, 1990). Many postsecondary educators acknowledged that students needed integration into the academic and social culture of their institutions through formal programs. Poock (2004) found that most extant institutional programming aimed at integrating doctoral students occurred at the very beginning of their programs and communicated information pertaining to university academic policies, library use, and registration procedures. He noted that universities differed regarding which professionals took responsibility for the programming. Some placed the responsibility with academic units, others with student affairs professionals.

Regardless of the placement of responsibility for such programs, most graduate students only experienced institutionally sanctioned efforts toward integration at the beginning of their programs of study.

Tinto (1993) suggested a need for a longitudinal model of doctoral persistence to identify factors and a determination of when various factors seemed most influential. He indicated that reliable data to develop a longitudinal model were sparse and data needed to develop such a model can be collected through a series of research projects focusing on various points or phases of doctoral student programs. The need existed for examining the factors affecting doctoral student persistence among a broad range of academic disciplines to enhance the development of such a longitudinal theory.

Weideman, Twale, and Stein (2001) argued for decisions that consider the unique nature of doctoral students. "No two graduate or professional programs are identical, and no two students experience graduate or professional school in quite the same way" (p. 2). Their contention was that studies examining and exploring the experiences of an extensive number of doctoral students improves the development of models of doctoral persistence. This study addressed the problem of identifying factors affecting doctoral student persistence after students have completed their comprehensive exams, the point at which the highest level of attrition occurs in doctoral studies.

Purpose of the Study

The purpose of this study was to learn from doctoral students important factors influencing their persistence to degree completion. The approach taken in

this study relied on qualitative methods, attempting to stay close to the data and make sense out of the experiences of doctoral students (Wolcott, 1994). To understand how doctoral students make meaning of their experiences (Bogdan & Biklen, 1982), this study described, analyzed, and interpreted data on doctoral student experiences gathered through surveys and interviews.

Tinto's (1993) longitudinal model of doctoral persistence and other contemporary models of student persistence (Eaton & Bean, 1993; Pascarella & Terenzini, 1991; Spady, 1970, 1971; Tinto, 1993) informed the development of the survey used to gather information on participants' background characteristics and the interview questions used to gain an understanding of the doctoral students' experiences during their programs of study. Data collected from this study could inform institutional decisions about the provision of programming, support services, and institutional engagement activities focused on the needs of doctoral students.

Significance of the Study

The significance of the study was the expansion of research on factors impacting doctoral student persistence for the academy and policymakers. The investment in higher education is significant, especially at the level of doctoral education. House (1994) reported that higher education garnered approximately 40 percent of educational spending by the government in the United States. It was important to examine ways that policymakers increased their involvement in the assessment of higher education performance.

The actions of policymakers in the recent past demonstrated an ever increasing determination to delineate performance expectations for higher education and the articulation of acceptable standards for that performance. "As long as I can remember, legislators financed higher education by poking money through a hole in the fence . . . lately, they have started looking over the fence to see what was on the other side" (Schmidt, 1999, p. 26). The assessments and critiques of higher education by policymakers influence public affirmation for funding higher education on both federal and state levels.

Many of the previous decisions made by academic administrators, policymakers, legislators, and leaders of governmental departments guiding postsecondary education proceeded from generalizations made from studies conducted on undergraduate students. This study explored factors affecting doctoral student persistence. Better and more informed decisions for the provision of programs and services aimed at improving doctoral student persistence result from guidance provided by research conducted on samples from the doctoral student population. This study examined doctoral student experiences to add to that needed research.

Research Questions

Based on the purpose of learning from doctoral students factors that impacted their persistence, the following research questions guided this study. The research questions focused on doctoral student experiences of students enrolled in education administration programs. The choice to focus on education administration doctoral students was made because earlier research determined

differences existed in the percentages of doctoral students completing a dissertation after finishing coursework; social sciences are among the lowest at approximately 30% (Golde & Dore, 2001). Researcher has indicated that discipline specific examination of doctoral student persistence allows for the identification possible reasons for the differences between disciplines and leads to a more complete understanding of the phenomenon (Tinto, 1993). The variables explored in these research questions concentrate on elements presented in student persistence research from previous four decades (Bean, 1980; Pascarella & Terenzini, 1991; Tinto, 1987, 1993; Spady, 1970, 1971).

1. Do the demographics of doctoral students persisting to degree completion in education administration differ from those not completing their programs?
2. Do doctoral students in education administration programs articulate experiences of academic integration as influencing their persistence?
3. Do doctoral students in education administration programs articulate experiences of social integration as influencing their persistence?
4. Do doctoral students in education administration programs attribute commitments to external obligations as influencing their persistence?

Definition of Terminology

This study used the following terminology adapted from the literature to define and describe elements of student persistence.

Academic Integration

The levels of success students have infusing themselves into academic norms of their particular institutions, departments, and fields of study (Bean, 1980; Pascarella & Terenzini, 1991; Tinto, 1987, 1993; Spady, 1970, 1971).

All But Dissertation (ABD)

Students who chose to discontinue their programs before writing their dissertations. Students designated as ABD for this study discontinued their programs at various points after the completion of their comprehensive exams but prior to the approval of a dissertation proposal.

Attrition

Students' withdrawal from pursuing their programs of study prior to the completion of their degrees (Golde, 1994, 1996; Pascarella & Terenzini, 1991; Tinto, 1987, 1993).

Demographics

Characteristics of doctoral students related to age, gender, ethnicity, family structures, academic background, and academic attainment (Bean, 1980; Spady, 1970, 1971; Tinto, 1987, 1993).

Degree Completers

Doctoral students who had completed all the requirements of their institution and earned their terminal degrees. Those defined as degree completers in this study earned either the Doctor of Education (EdD) or Doctor of Philosophy (PhD) degree.

External Obligations

Roles doctoral students are responsible for executing related to family, work, or other obligations during their programs of study that are not directly associated with the pursuit of their degree (Golde, 1994, 1996; Hernandez, 2002; Pascarella & Terenzini, 1979; Schlosberg, Lynch, & Chickering, 1989; Stoecker, Pascarella, & Wolfle, 1988; Tinto, 1975, 1987, 1993, 1998).

Institutional Fit

The comfort level students have with the culture and environment of the university where they chose to pursue their degrees (Astin, 1993; Eaton & Bean, 1993; Pascarella & Terenzini, 1991; Tinto, 1993; Spady, 1970, 1971).

Involvement

The physical and psychological investment of students in their programs of study, academic departments, and their institutions (Astin, 1977, 1985).

Persistence

The continuation of students in a program of study until the completion of all degree requirements (Tinto, 1987, 1993).

Social Integration

The levels of success students have becoming members of a social network of peers in their particular institutions and departments (Bean, 1980; Pascarella & Terenzini, 1991 Tinto, 1987, 1993; Spady, 1971, 1970).

Summary

This study reviewed (a) decisions made by policymakers seeking to influence persistence in higher education, (b) contemporary student persistence models and theories, and (c) recent studies of student persistence to formulate research questions that yielded a contextualized, holistic understanding of the factors influencing doctoral student persistence.

Policymakers and academicians needed a holistic portrait of doctoral student persistence that might enhance the performance of universities relative to doctoral student outcomes, students enrolled at the highest academic and most cost intensive levels of education. This study employed an inductive and interpretative methodology to elicit, collect, and analyze data from doctoral students in a meaningful and reliable way to provide such a holistic understanding.

This study used a survey instrument and interviews to develop descriptive portraits of doctoral student experiences so that the researcher and other audiences might learn from doctoral students which factors they characterize as having significant impacts on their decisions to proceed or withdraw from their programs. Capturing the perspectives of doctoral students about the phenomenon and using their words to create the portraits of their experiences was essential to learn what factors affected the likelihood of their persisting to the completion of their doctoral programs and how those factors were similar and different among doctoral students who persist and those who do not.

CHAPTER II

REVIEW OF LITERATURE

A majority of colleges and universities had institutionalized programming addressing the issue of persistence, primarily focusing on undergraduate student experiences. The majority of the undergraduate persistence programs placed a heavy emphasis on the experiences of freshmen (Daughtery, & Lane, 1999; DeBerard, Spielmans & Julka, 2004; Johnson, 2006). This emphasis on first-year experiences influenced research assessing the effectiveness of social and academic integration efforts of universities. Institutional leaders placed enormous energy and substantial resources on efforts to retain freshmen to their sophomore year, hoping ultimately to increase graduation rates for freshmen cohorts.

Concern for increasing the level of persistence among graduate students was an emerging phenomenon in higher education (Di Perro, 2007; Golde & Dore, 2001; Hoskins & Goldberg, 2005). The level of resources dedicated to enhancing persistence rates for graduate students was considerably less than those for undergraduates, but this was changing at the time of this study.

A need existed for identifying and examining the factors influencing the persistence of graduate students. Such research could not attend to all levels of

graduate students simultaneously. The experiences of graduate students varied widely among levels of study and degree programs, even within the same institution.

Master's level students typically experienced programs that are shorter in length than doctoral students. The emphasis on research varied among masters programs with some requiring comprehensive exams and a thesis, others requiring only one or the other, and some requiring neither for successful completion of the degree (Peterson's, 2007). The intensity and types of research projects, number of credit hours needed to complete a degree, and length of programs also differ. Professional programs considering the Masters degree as a terminal degree for practice often required longer courses of study taking several years to complete. Masters programs considered a level of study between the baccalaureate and terminal degree in a discipline typically required a shorter length of time to complete.

Doctoral programs also varied widely. Differences across academic fields of study in doctoral programs caused some program variations. The type of institution offering doctoral degrees also created variation in doctoral programs. Multiple classifications of institution type, varying institutional missions, and different methodological approaches for managing the progress of doctoral student enrollments caused variations among programs and the type of students enrolled (Council of Graduate Schools, Ph.D. Completion Project, 2007)

Whereas doctoral programs varied widely in program requirements, they tended to follow similar stages for the progression of students. The majority of

doctoral programs required successful completion of a number of courses, demonstration of acquired knowledge and skills through passing a comprehensive examination, and completion of a dissertation under the supervision of a faculty mentor. This similarity of experience across programs provided an opportunity to examine student experiences and develop an understanding of the factors affecting doctoral student persistence. The approach followed in this study gave attention to the admonition of Tinto (1993) to approach this type of study systematically by academic disciplines, examining and exploring the phenomenon at the departmental or school level.

Examining the factors associated with doctoral student persistence required an overview of general factors affecting the persistence of students enrolled in higher education. Persistence captured the attention of policymakers and researchers alike during the latter portion of the twentieth century. Policymakers have interest in increasing graduation rates to demonstrate successful programs and reasonable returns on resources invested in higher education. Institutional leaders have interest in increasing student persistence to bolster or maintain revenues projections from student enrollments. Both groups sought methods to raise graduation rates to serve as demonstrative evidence of higher student outcomes.

Because of the interest among policymakers with outcomes in higher education, it is important to examine ways that policymakers increased their involvement in the assessment of higher education performance in the recent past. Chapter two consists of three major sections: higher education policy,

contemporary models of student persistence, and evaluations of student persistence models.

In the higher education policy section are examples of the efforts of policymakers to establish mechanisms for examining and measuring the effectiveness of institutions of higher education at achieving desired outcomes. One area of emphasis for policymakers was persistence rates for all levels of higher education, including doctoral students. The actions of policymakers described in the higher education policy section below demonstrated a need to understand the models of student persistence and factors affecting student graduation rates.

A review of contemporary models of student persistence in the second section provided a framework for identifying factors affecting persistence and developing research questions to guide this study. The contemporary persistence models identify factors affecting student persistence tested in subsequent studies. The affirmation of many assertions made in the models through the thorough testing of researchers provided confidence about the validity of the models and the reliability of their predictive capabilities.

The third section of this review reported the results of studies that examined factors affecting student persistence using various sample groups. The studies below demonstrated the impact of the factors on the persistence of undergraduate and graduate students. The wealth of persistence studies available pertaining to undergraduate students demonstrated the level of emphasis placed on this group within higher education. The fewer number of

studies conducted on graduate students demonstrated that further investigation of graduate segment students was needed.

The factors identified as significant in the reported studies provided grounding for the interview and survey questions posed to doctoral students that sought to elicit from them the factors affecting their persistence to degree completion. An expansion of the extant research to include doctoral students provided a richer description of the factors affecting the persistence of students attempting to complete the ultimate level of degree granted by the higher education system.

Higher Education Policy

Federal and state governments play an important role in influencing outcomes in higher education through policy initiatives. Government agencies and privately funded organizations drive policy decisions aimed at improving perceived deficiencies in higher education. Increasing graduation rates of students enrolled at the highest level of education is an outcome that gained the interest of policymakers in the last decade. McLendon, Hearn, and Deaton (2006) reported that during the last two decades 42 states adopted accountability measures linking educational outcomes in higher education to funding. Below is an overview of national and state policy initiatives aimed at improving educational outcomes.

National Policy Initiatives

Federal government policy initiatives affecting higher education represents one of the largest investments made by the American public. House (1994)

described the American higher education system as the best in the world given the number of students educated, scholarship produced, and benefits to the general population through the development of professional personnel. House cautioned education leaders, however, about future political battlefields related to funding the enterprise. "Without question, it is the best in the world. It is also very expensive to maintain" (p. 27). House predicted that changing economic trends and structures within the economy and marketplace would chill public support for funding and increase sentiment for standardized accountability measures.

Perkin (1989) noted that changing economic trends increased public attacks on professionals and lessened support for benevolent enterprises in general. Perkins cited a movement in public sentiment from the position of public-sector professionals advocating state-supported benevolence to private-sector professionals advocating supporting wealth production. This shift in public sentiment foreshadowed a reconstruction of higher education according to House (1994):

Now higher education's turn has come. It is likely to be severely downsized and transformed in the coming years. Likely policies include the elimination of tenure, . . . outside interference in internal campus affairs, mandating of campus policies and curricula, privatization, and use of productivity indicators to compare higher education institutions with one another for purposes of cost containment. (p. 29)

Little more than a decade later, the United States Secretary of Education Margaret Spelling (2005) demonstrated the wisdom of House's prediction when she made the following statements.

The message here is simple. In today's global economy, the best jobs go to the most skilled and motivated workers. Around 80 % of the fastest-growing jobs require at least some postsecondary education. That means

a college education is more important than ever. And now is the time to have a national conversation on our goals for higher education. . . . As taxpayers, we all have a stake in the higher education system. Most people don't realize that federal dollars make up about one-third of our nation's total annual investment in higher education. . . . We all have a part to play at the federal, state, community, and private level. . . . [I]t's time to examine how we can get the most out of our national investment. . . . That's why today I'm announcing the formation of a new commission on higher education to lead this debate. We are calling it "A National Dialogue: The Secretary of Education's Commission on the Future of Higher Education." The goal is to launch a national discussion on the future of higher education and how we can ensure our system remains the best in the world and provides more opportunities for all Americans. (p. 1)

Secretary Spelling's remarks demonstrated the desire of federal government to increase its level of involvement in articulating acceptable outcomes for higher education given the nation's investment in the enterprise.

Following this sentiment, national organizations adopted productivity indicators to measure a variety of areas in higher education. It was important to require institutional benchmarks, with periodic review to ensure that policies and procedures that have been put in place are consistently serving students and achieving the desired outcome (U.S. Department of Education, 2002). In *Schools Aren't as Good as They Used to Be: They Never Were*, Maehr and Maehr (1996) summarized many of the concerns of policymakers, "[T]here is the perception in many quarters that . . . our students are not exhibiting the achievement patterns of students in countries that are our economic competitors" (p. 22). Agreement with this perspective among policymakers served to motivate a movement toward the development of national standards of performance for higher education.

In his strategic plan for the United States Department of Education, President Bush (U.S. Department of Education, 2002) agreed with this principle

stating, "It demands achievement in return for investment, and it requires a system of performance throughout the educational enterprise" (p. 2). One strategy the plan articulated for measuring achievement objectives was to "create a reporting system on retention and completion that is useful for state accountability systems" (p. 63). Policymakers' interest in the performance of higher education not only increased on a macro level during the recent past, tying specific performance levels to future funding became the norm.

Cochran-Smith (2005) described the movement among policymakers toward evidence based results as a market-based model for approaching improvement in higher education. She proposed this as problematic if higher education institutions adopt "a social system in which [they] compete with one another for scarce resources" (p. 7). She suggested such a system inevitably favors those institutions that are in better financial positions and are more selective. Higher persistence rates already exist at such institutions; she believed this difference increased if funding grew for higher levels of performance.

The Pew Charitable Trusts (PCT) led the way among private organizations by funding initiatives aimed at evaluating the performance of higher education and comparing higher education systems to each other in hopes of influencing public policy. The PCT (2005) described its purpose for evaluating the performance higher education from this perspective:

Education and training beyond high school used to be one of many roads Americans could take to social and economic improvement--but it is becoming the only road. . . . [A]t a time when the importance of attaining a college degree has never been higher, questions related to how well higher education is performing are being raised. (p. 1)

The PCT (2005) concentrated its support for evaluating the performance of higher education through The National Center for Public Policy and Higher Education (NCPPE). The NCPPE is a private organization that worked on educational reform initiatives by encouraging governmental involvement. The organization developed a systematic approach for evaluating higher education in all 50 states and used the results from their evaluations to develop policy recommendations for school improvement and reform initiatives.

The NCPPE (2003) reported that both federal and state governments had substantial interests in the success of higher education. The NCPPE described federal and state programs during the last 50 years that continued to increase the investment, such as the G.I. Bill and the Higher Education Amendments of 1972. States also increased institutional capacity through the expansion of programs and physical resources. The motivation to grow and invest in higher education stemmed “from a conviction that such investment serves the public interest while helping fulfill the aspirations of those who enroll” (National Center for Public Policy and Higher Education, 2003, p. 1).

Increasingly, policymakers want to establish standardized criteria to determine whether institutions are successful in attaining their stated purposes.

The NCPPE developed a set of five criteria for gauging the performance of higher education. The five criteria are: (a) preparation for higher education, (b) affordability, (c) participation, (d) completion, and (e) the benefits that higher education confers to individuals and the states. These criteria formed the basis on which the NCPPE evaluated higher education in all 50 states. NCPPE

used the results of the evaluation to compose “Measuring Up 2000: The State-by-State Report Card for Higher Education” (National Center for Public Policy and Higher Education, 2000). The NCPPHE re-evaluates each state every year and publishes updated information relative to the performance criteria.

As noted above, completion rates are an indicator of persistence. The NCPPHE measured the completion rates for undergraduates and this measurement comprised 20% of their evaluative model. The results of NCPPHE evaluation in 2004 relative to completion rates asserts that 10 states received a grade of “A”, 23 a grade of “B”, 14 a grade of “C”, one a grade of “D”, and two a grade of “F”. With such a premium placed on undergraduate student persistence as a key indicator of success for higher education, it is logical that graduate student persistence is soon to receive similar scrutiny.

Stampen and Hansen (1999) proposed that an effective way to improve outcomes in higher education was to examine education from a national level, reviewing it from the systems perspective. They suggested that improvements in higher education required policy initiatives aimed at improving education from K-12 schools through higher education rather than focusing on segments of the systems individually. They argued that improvement on the upper end of the spectrum required improvement at the lower end of the spectrum.

Stampen and Hansen (1999) examined higher education from the perspectives of politicians, policy analysts, and citizens and identified six broad objectives for higher education that national policy influenced:

- (a) develop the workforce needed to facilitate the nation’s economic growth, (b) increase the affordability of college in ways that promote

access and persistence, (c) enlarge the number of high schools and colleges capable of meeting students' needs, (d) increase the learning and educational attainment of K-12 students, (e) improve the quantity and quality of student learning in college, and (f) help at risk students succeed academically. (p. 418)

Stampen and Hansen (1999) argued that access and persistence were essential ingredients for the workforce development. They continued that colleges and universities needed to partner with K-12 systems to improve their levels of preparation to attain the previous objective. "The challenge for higher education, if it hopes to increase access and persistence, is to recognize the K-12 education and higher education constitute two major components" (p. 425) of the same system.

State Policy Initiatives in Kentucky

Government agencies at the state level measure the performance of higher education to determine if public investments attained intended goals and purposes. The Council on Postsecondary Education in Kentucky (CPE) is an example of a state agency evaluating higher education performance. As early as 1992, Kentucky adopted performance related funding policies for education (McLendon, Hearn, & Deaton, 2006). By legislative order contained in The Postsecondary Education Improvement Act of 1997, the CPE in Kentucky completed an intensive evaluation of higher education for the state and proposed several reform initiatives for higher education to implement between 2005 and 2010. The CPE (2005) proclaimed Kentucky to be leading the nation in higher education reform at the state level:

Kentucky's public agenda for postsecondary education has become a nationally recognized model for reform. The agenda calls for a fundamental, profound shift in the way the postsecondary system approaches its work: while institutions once competed against each other for their own interests, the public agenda challenges them to work together for the common good. It also urges the adult education system to eradicate illiteracy which, according to the Adult Education Act of 2000, 'is a fundamental barrier to every major challenge facing Kentucky.' The motto of reform is 'One Mission: Better Lives.' The long-term goal is to raise the standard of living and the quality of life in the Commonwealth above the national average by 2020. (p. 1)

The Postsecondary Education Improvement Act of 1997 required the CPE to review the postsecondary education agenda set by legislators every four years. The first review was conducted in 2004 and led to the establishment of five guiding questions for the CPE to use in subsequent reviews evaluating the effectiveness of higher education in Kentucky. These questions also guided the work of the adult and postsecondary education system leaders in Kentucky after the year 2005. "The questions also serve as the framework for accountability measures that monitor our progress and encourage and reward behaviors that move us closer to our goals" (CPE, 2005, p. 1). The five guiding questions used by CPE (2005) that served as evaluative benchmarks are:

1. Are more Kentuckians ready for postsecondary education?
2. Is Kentucky postsecondary education affordable for its citizens?
3. Do more Kentuckians have certificates and degrees?
4. Are college graduates prepared for life and work in Kentucky?
5. Are Kentucky's people, communities, and economy benefiting? (p. 1)

Each question holds significance for the future of higher education in Kentucky. The significance of including the questions here was providing an example of how state government assumed the responsibility of evaluating the effectiveness of state higher education institutions, public and private, through

the work of a governmental agency rather than asking institutions for self-evaluation reports. Policy development and government evaluation exercises on state and national levels impact the future of funding higher education research grants, underwriting portions of institutional budgets, and financial assistance provided to students.

The CPE (2005) predicted that the educational goals of Kentuckians would be beyond a single postsecondary degree in the future. "Kentuckians will seek advanced knowledge and skills throughout their lives to increase their professional mobility and keep pace with the demands of a knowledge economy" (CPE, 2005, p. 2). The CPE used question three, "Do more Kentuckians have certificates and degree," (CPE, 2005, p. 1) to evaluate the success rate of Kentucky's postsecondary education system in aiding Kentuckians in their pursuit of postsecondary degrees and advanced knowledge. The CPE recommended that postsecondary education do the following to improve their efforts to reach this goal:

The postsecondary system must recruit and enroll more students, ensure more students persist to certificate and degree completion, and keep graduates working in the state. Reaching our goals will require an infusion of high school graduates and working-age adults into the postsecondary pipelines at both the undergraduate and graduate level, including two- to four-year transfer students. If we succeed, everyone in the state . . . will benefit: more certificates and degrees mean more nurses, teachers, social workers . . . cutting edge medical research, [and] technological innovations. . . . The state's future in large part depends upon Kentuckians' ability to advance seamlessly through the educational system and obtain credentials that will enrich their lives and life in the Commonwealth. (p. 8)

Identifying factors contributing to the persistence of doctoral students informs the work of policymakers on both the national and state levels. The CPE

(2005, p. 9) stated that “concentrated efforts across the postsecondary system to strengthen the guidance and support provided to on-campus and distance education students” improved the probability of student success.

Policy decisions intended for positive outcomes do not always achieve the intended results. Kerlin (1995) examined this in relation to doctoral student attrition when he examined the impact of broader access to doctoral programs on graduation rates.

Kerlin (1995) suggested that among contemporary doctoral programs, current educational policy creates a “survival of the fittest” (p. 3) mentality for students. Kerlin stated:

The combined effects of shrinking institutional resources, rising tuition and student indebtedness, eroding public support for higher education, downward economic mobility in American society, deteriorating faculty morale and declining job opportunities for doctoral recipients . . . are the factors chiefly responsible for this outcome. (p. 3)

Kerlin’s (1995) thesis was that trends in higher education policy on the funding end of the spectrum counteracted policy decisions on the access end of the spectrum. He contended that although policy decisions created greater access for women, minorities, and individuals from middle and lower income, funding policies decreased the likelihood of completion of programs by those considered “at-risk.” Kerlin (1995) reported that the National Center for Education Statistics indicted that among all education doctoral students in 1993, 80% were self supported and 50% carried greater than \$10,000 in debt load related to their degree programs. Kerlin (1995) argued that the amount of debt relative to income increased for those from lower income backgrounds. He argued that the policy of

shifting costs of doctoral programs away from funded support to student debt served as a deterrent to those groups that other policy initiatives sought to encourage.

Many assumed that increasing expenditures yields increased levels of degree attainment. The CPE attempted to test such assumptions for Kentucky policymakers by developing a set of questions to evaluate postsecondary education. The NCPPHE developed a national scorecard to evaluate higher education across systems to test the similar assumptions.

Testing the assumption that expenditures impact degree attainment, Ryan (2004) examined the impact of expenditures on degree attainment at 363 Carnegie classified Baccalaureate I and II institutions. Ryan wanted to determine if spending more equaled more success and determine where in the academy increased expenditures were most effective on degree attainment. Ryan (2004) measured the relationships between expenditures and persistence. Using a “nonexperimental, applied research design, [Ryan] used the ordinary least-squares regression model to test the hypothesis” (p. 102). Controlling for institutional and student characteristics such as institutional size, institutional affiliation, living on campus, gender, ethnicity, academic preparation, and age, Ryan’s study examined expenditures per full-time equivalent (FTE) student on instruction, student services, academic support, and institutional support. He generated data using information about his sample contained on the National Center for Education Statistics (NECS) Integrated Postsecondary Education Data System (IPEDS).

Student data were from sample institutions ($N = 363$) reporting IPEDS. The institutions selected contained complete data sets on the system and equaled 58% of the total number of institutions in the classification of interest. Ryan chose this source for his study because it comprised self-reported institutional data submitted to the federal government to meet financial aid compliance regulations. He assumed the data was highly accurate because institutions found to be inaccurate in the reporting process risk loss of federal and state student aid funds.

Ryan's (2004) model demonstrated that certain expenditures in higher education had significant, positive effects on persistence while other expenditures do not. Expenditures per FTE for instruction ($\beta = .281, p < .001$) and academic support services ($\beta = .119, p < .01$) had significant positive effects and accounted for 39% of the variance in degree attainment. Expenditures per FTE for student development activities ($\beta = -0.021$) and administrative functions ($\beta = -0.018$) had negative effects though not significant. The study confirmed part of Ryan's "general hypothesis that expenditures affect student persistence and degree attainment" (p. 109). A compelling result of this study was the amount of variance explained by academic and instructional expenditures and insignificance of student development and administrative expenditures.

The question Ryan's (2004) research raises for educators is where best to concentrate or emphasize allocations for funding provided by policymakers. State and federal governments determine the amount of general support given to higher education, but decisions concerning the specific allocation of the support

primarily are the purview of each institution. Ryan (2004, p. 111) concluded that “the results of this study suggest that the level and location of financial expenditures within colleges and universities affect student persistence and degree attainment.”

Ryan’s (2004) findings affirmed his assumptions, that expenditures affected student persistence to degree attainment. In the current political environment, the findings encourage external evaluation of institutional effectiveness in facilitating student degree attainment.

In summary, the actions of policymakers in the recent past demonstrated an ever increasing determination to delineate performance expectations for higher education and articulation of acceptable standards for that performance. The assessments and critiques of higher education by policymakers influence public affirmation for funding higher education on both federal and state levels. More than a decade ago, House (1994) demonstrated that expenditures for higher education in the United States trailed much of the industrialized world. Policymakers indicated that increased levels of degree attainment by students was one criteria used for performance evaluation. Ryan (2004) identified areas in higher education where expenditures affected student persistence. Models of persistence currently used by administrators throughout higher education vary in approaches aimed to improve the problem of persistence.

The most recent persistence models suggested approaching the issue attempting to address a wide variety of issues affecting student decisions to stay or leave college (Astin, 1977, 1985; Bean, 1980, 1983; Spady, 1971; Pascarella

& Terenzini, 1991; Tinto, 1987, 1993). An overview of contemporary models persistence provided a framework for developing questions to investigate the phenomenon. The need to investigate the phenomenon of persistence relative to doctoral students in particular reflects an interest in determining effective strategies for increasing persistence among students at the most costly and highest level of education.

Contemporary Student Persistence Models

Contemporary models of student persistence evolved from various academic fields (e.g., primarily psychology, sociology, and organizational theory), each giving prominence to one aspect of student experiences impacting persistence and reducing the importance of another. Early models tended to emphasize factors related to individual student preferences, predispositions, and abilities (Heilbrun, 1965; Marks, 1967; Rose & Elton, 1966) while giving less weight to institutional factors impacting students. Later models (Bean, 1980, 1983, 1990) focused on the impact of persistence decisions on individual student behaviors and attitudes. Other theorists (Clark, 1960; Featherman & Hauser, 1978; Pincus, 1980) emphasized external factors influencing student persistence while giving less credence to institution-specific forces (Tinto, 1993). The debates between theorists centered on whether persistence resulted from student background characteristics, student decisions and experiences, institutional factors, or a combination of them all.

Bean's (1980, 1983) persistence model used organizational studies of the workplace and employee turnover to examine how organizational attributes

affected student satisfaction. Influenced by psychological theory, Bean considered how reward structures and institutional attributes impacted students' intent to persist. The relationship between attitudes and intentions and individual behavior was central to this model. Eaton and Bean (1993) later modified Bean's original model by adding background characteristics "as contributing to academic and social integration as well as environmental pull, a measure of external factors which can draw an individual away from college" (Eaton & Bean, 1993, p. 7). In this later model, they considered how coping constructs influenced student integration into the academic and social cultures of higher education.

Coping methods used by students in their academic and social encounters were behavioral indicators of student intentions (Eaton & Bean, 1993). Two key coping constructs were central to Eaton and Bean's later model, adjustment and adaptation. Eaton and Bean (1993) used the work of French, Rodgers, and Cobb (1974) to define adjustment as "the process by which an individual establishes a 'goodness of fit' with the environment" (p. 7). The concept of goodness of fit as it pertains to student choice of institution appears throughout other theorists' work relative to persistence. The cornerstone of this concept is that students and institutions should invest in the necessary effort to assure compatibility between student goals and desires and institutional mission.

Eaton and Bean (1993) also used the work of Lazarus, Averill and Opton (1974) to define adaptation as "the means by which an individual learns to cope with a particular situation" (p. 7). Coping with a particular situation is a defensive method for managing life challenges or stress producers (Eaton & Bean, 1993).

Eaton and Bean (1993) argued that the most sensible way to understand coping from a behavioral psychology perspective was through the use of the definitions of approach and avoidance given by Lazarus, Averill and Opton (1974). Eaton and Bean (1993) defined coping behaviors as follows:

Approach behaviors are those practices in which an individual engages to take action against the stress producer. Avoidance behaviors are those practices which the individual uses to divert attention away from the stressor. In both cases, the individual is taking some action (or non-action) as a means of reducing stress in a given situation. Some perceive the constructs of approach and avoidance as dichotomous with repression or withdrawal from activity at one end, and engagement in activity at the other. Lazarus, Averill and Opton (1974) make a distinction between these behaviors, however, stating that aggressive, positive, approach behaviors draw from different motivational forces than do avoidant, passive or withdrawal behaviors. Individuals are not exclusively approachers or avoiders. In fact, in most situations, an individual may alternate between both types of behavior depending on how he/she interprets the situation over time. (pp. 8-9)

Eaton and Bean (1993) argued that these constructs provided a reasonable method for examining student coping strategies when dealing with the stress of adapting or adjusting to college. "Social and academic integration can be considered to be primary indicators of adjustment to the college environment" (p. 9). Students' abilities to cope with the stresses of social and academic integration are a behavioral response that is measurable (Eaton & Bean, 1993). Student successes in adapting and adjusting to the social and academic environments of college become indicators of student likelihood of persisting.

Eaton and Bean (1993) developed the model expanding upon Bean's earlier work (Bean, 1990) to include the approach/avoidance mechanisms (see Figure 1). Attrition is the predicted outcome. Eaton and Bean (1993) identified

attrition as a physical measure of behavior. "Intent to Leave is an attitudinal construct. . . . In the model, it is the single attitudinal predictor of attrition" (p. 12). Social and academic integration are constructs extant in other models of persistence discussed below (Spady, 1970; Tinto, 1987, 1993). Whereas Tinto and Spady focused on academic and social integration relative to the concept of community, here Eaton and Bean divided academic and social integration into two parts and examined it relative to short and long term perspectives.

Eaton and Bean (1993) based their reasoning for viewing academic integration this way on their belief that academic rigors increased as students progressed through their degree programs, calling for the demonstration of higher levels of academic competency through the progression. They contended students' satisfaction levels with their academic performances influenced their intent to leave or enhanced their sense of academic integration.

"Attitudinal constructs have a bearing on both intentions and behavior" (p. 13) and academic integration is a reflection of students' competence and confidence (Eaton & Bean, 1993).

Eaton and Bean (1993) contended that social integration was also an attitudinal construct. Social integration evidenced student behavioral choices of engaging in the social systems of the institution, making friends, and socializing. Eaton and Bean (1993) gave less attention to the attitudinal construct in this model, but they did not discount the importance of social integration on intent to leave decisions. For both academic and social integration, they reasoned that

and Chickering (1989) suggested that adult learners faced the same developmental stages and that the failure to master these challenges led to attrition in educational contexts.

Chickering (1969) viewed the vectors as developmentally sequential and defined them in the following ways. The vector of developing confidence required students to gain a sense of confidence through coping with what happens. Students developed a sense of confidence through the development of intellectual competences necessary for success in professional and vocational choices, physical and manual competences for conducting life activities, and interpersonal competences from developing the ability to work cooperatively with others. Managing emotions necessitated developing self-control appropriate to circumstances. Autonomy required the development of independence and recognition of interdependence, moving away from the need of continual reassurance from significant others. Establishing identity followed the first three vectors and involved clarifying ideas about ones' physical needs and characteristics. Freeing interpersonal relationships pertained to developing one's tolerance and ability to respond to others as individuals rather than holding to preconceived notions and assumptions of others. The final vector of establishing integrity occurred when an individual developed a consistent set of beliefs to guide behavior.

Schlossberg, Lynch, and Chickering (1989) added additional factors impacting student learning experiences in addition to the seven vectors of development. "Mattering" (the belief that they matter to someone else and are an

object of attention) was critical for students. "Whether they are moving in, moving through, or moving on, they need to feel appreciated and noticed" (p. 21). They believed that for students a sense of mattering was essential, and, if it did not occur, student ability to progress through the seven vectors was compromised. They provided this example from their research:

A faculty member was forced to cancel a class lecture because of the flu. The class was large, with students from many departments and neighboring institutions. The faculty person, with the help of secretary, called every student in the class. The following week, students remarked that never in their experience as students had a faculty member had the consideration to call them; in fact, they had never received a phone call from either a faculty member or an administrator. They were amazed, touched, and grateful. This anecdote saddened us. Why should this be so unusual? Why should consideration of students be so startling? (p. 21)

Chickering (1969) believed that this represented an institutional effect on students that positively impacts student intent to persistence in a learning environment. In a study of adult learners, it was reported by the students that in the particular environment where they were that they mattered to their advisors and the institution and the feeling of mattering kept them engaged in learning (Schlossberg, Lynch & Chickering, 1989). Schlossberg, Lynch, and Chickering argued for viewing educational institutions from an ecological perspective, an interactive view:

Thus, to understand human development, we must be aware that although behavior is determined in part by the chance of the individual's birth, certain evidence exists to illustrate that when the environment is altered, behavior and performance will also alter. To talk about normal growth and development is all very well, but for those whose development does not follow the normal sequence, such questions arise as: What's wrong with me? What's wrong with the environment? Ecological questions instead ask: Why does one person fail in one setting but achieve in another? . . . The essence of the ecological perspective is that the onus cannot be

placed on either the individual or the environment; rather human behavior is a continuous interaction between the two. (p. 23)

Schlossberg, Lynch, and Chickering (1989) proposed that, along with an ecological perspective, the concept of learner-environment fit, introduced in the earlier work of Moos (1979), influenced the process of development for students. This “fit” referred to the congruence of learner goals, expectations, and commitments with the learning environment of the institution in which they participate. Institutions recruit and encourage potential students to apply for admission to their programs. Students review institutional literature, visit campuses, and apply for admission.

Schlossberg, Lynch, and Chickering called for a need of intentional exploration of environmental fit by both parties prior to acceptance and enrollment: “We suggest that by assessing individual learners and learning environments, it is possible to better predict learner involvement, retention, and satisfaction” (p. 26). Researchers following these earlier models of factors affecting student persistence adopted the construct of institutional fit as a consistent factor affecting student persistence.

Student involvement models (e.g., Astin, 1984) suggested student success resulted from the level of psychological and physical energy invested in their learning environments. Students investing high levels of both types of energy are more involved and more likely to persist in the learning environment (Astin, 1984). He proposed a five part student persistence model to use when examining persistence issues. Astin (1984) identified the following five components in his student involvement model:

1. Involvement refers to the investment of physical and psychological energy in various objects, either highly generalized (the student experience) or highly specific (preparing for a chemistry exam).
2. Involvement occurs along a continuum. Different students have different degrees of involvement in the same object, and the same student shows different degrees of involvement in different objects at different times.
3. Involvement has both quantitative and qualitative features. Involvement can be measured by how many hours a student spends studying (quantitative) and by whether the student reviews and comprehends the assignment or stares at the book and daydreams (qualitative).
4. The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program.
5. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. (p. 298)

Astin (1984) believed that any increase in student involvement had significantly positive effects on student persistence. Factors increasing the likelihood of persistence that Astin (1984) identified were living on campus, working on campus, interacting with faculty, participating with faculty in research projects, and joining extracurricular activities.

Viewing student experiences from the input-throughput-output perspective, Astin (1984) grounded his model in theories of organizational structure. Students represented objects of organizational manipulation, commodities or resources to move through the system. Later evolutions of his model placed more responsibility on students' involvement in the process of their education. Like much of the research conducted on the topic of student

persistence, his work focused on the experiences of traditional aged undergraduate students.

Astin (1984) neglected considering that the older students are, the more likely they were to have things outside of their institutional experience competing for their involvement and time. Schlossberg, Lynch, and Chickering (1989) noted this as a shortcoming in the student involvement theory when they suggested that the most precious student resource is time. The contribution of Astin's work was the evidence that increasing student involvement in social or academic spheres improved the likelihood to persist.

Critiques of these earlier models center on their lack of explanatory power relative to student subcultures and student-faculty interactions that are both individual and institutional in nature (Tinto, 1993). More recent models include an emphasis on the roles of student factors and institutional factors as well as internal and external forces. These models incorporate grounding from both psychological and sociological perspectives in an attempt to expand the depth of understanding relative to student persistence.

Spady (1970) introduced a theory of persistence focusing on the interactions between student characteristics and campus environments that relied heavily on the earlier sociological work of Emile Durkheim. Durkheim (1951) had identified several forms of suicide exemplified in various sociological contexts. Spady considered one of those forms, egoistical suicide, analogous to students' decisions to withdraw from college. Spady identified similarities between Durkheim's theory of suicide concerning an individual's willingness to

leave society and students' decisions to leave the community of higher education. Spady identified integration in the social and intellectual norms of higher education as essential if one was to avoid eventual withdrawal from the community. Spady, like many others after him (Bean, 1980; Pascarella, 1980; Tinto, 1975, 1987, 1993), became interested in the concept of institutional fit and its influence on the persistence of students.

An understanding of Durkheim's (1951) work provided grounding for the concept used in many researchers' persistence models. Durkheim postulated that suicide varied among the general population inversely with the degree of integration individuals experienced in religious, domestic, and political society. "So we reach the general conclusion: suicide varies inversely with the degree of integration of the social groups of which an individual forms a part" (p. 209). Durkheim's reasoning was that excessive individualism and separation from social groups led to a higher susceptibility for suicide. Inversely, integration into society reduces the susceptibility. "When society is strongly integrated, it holds individuals under its control, considers them at its service and thus forbids them to dispose willfully of themselves" (p. 209).

The integration of individuals into community relationships reduced the possibility for individuals to permanently separate themselves from their communities. Durkheim described individuals' integration in this way:

The bond that unites them with a common cause attaches them to life and the lofty goal they envisage prevents their feeling personal troubles so deeply. There is, in short, in a cohesive and animated society a constant interchange of ideas and feelings from all to each and each to all, something like a mutual moral support, which instead of throwing the

individual to his own resources, leads him to share in the collective energy and supports his own when exhausted. (p. 211)

Durkheim (1951) identified three types of suicide observable in the general human population. He gave them the nomenclature of egoistic, altruistic, and anomic.

Egoistic suicide results from man's no longer finding a basis for existence in life; altruistic suicide, because this basis for existence appears to man situated beyond life itself. The third sort of suicide . . . [anomic] results from man's activity lacking regulation and his consequent suffering. (p. 258)

Durkheim's egoistical suicide captured the attention of persistence theorists because it is described as that which one commits when one is not able to successfully integrate into a community setting. Durkheim described the process of integration as comprising of both intellectual and social components. Tinto (1993) noted:

In Durkheim's view, individual integration into the social and intellectual life of society and the social and intellectual membership which that integration promotes are essential elements of social existence in human society. Societies with high rates of suicide are those whose social conditions are such as to constrain such membership. (p. 102)

Spady (1970) adopted egoistical suicide as a vehicle to describe the behaviors people exhibit when withdrawing from college. Spady articulated two types of student experiences affecting their persistence: (a) normative congruence and (b) friendship support. The first related to establishing intellectual membership in the academy and consists of congruence between student expectations and the education environment. The second is comparable to Durkheim's social membership and emerges through the development of close relationships with others in the educational system (Spady, 1970).

According to Spady's model, students' decisions to withdraw from college parallel Durkheim's description of individuals' decisions to withdraw from society. Spady stressed the need for students to integrate socially and intellectually with their educational environment if they are to avoid eventual withdrawal. A person's willingness to persist in higher education and her willingness to persist in society is based on how she perceives her personal fit into that society (Creighton, 2004).

Spady (1970) first used his model of persistence at the University of Chicago to determine if freshmen made departure decisions mimicking people's decision making in Durkheim's suicide theory. Spady found considerable congruence with departure decisions and Durkheim's model, but there was not a strong enough correlation demonstrated in Spady's research for his model to gain acceptance as a true theory of student persistence.

Research following Spady's (1970) study relied on his adaptation of Durkheim's theory but added components to further develop more explanatory models of persistence. Tinto (1975, 1987, 1993) in particular took the work of Spady and used it as a cornerstone of his more elaborate longitudinal model of student persistence. Spady accomplished one of stated purposes for developing the model. He created a worthy framework for additional research on college attrition (Spady, 1970). Tinto (1993) believed that Spady's model addressed many of the shortcomings of earlier models examining educational environments but "[failed] to adequately distinguish among varying forms of departure" (p. 91).

Tinto (1993) constructed an interactionalist theory of student departure using Spady's research (1970), Durkheim's (1951) theory of suicide, and Van Gennup's (1960) theory on rites of passage. The addition of Van Gennup (1960) to the other two provided a consideration of the phenomena of separation, transition, and incorporation in the community context. Van Gennup (1960) believed his theory applied to a variety of social settings. Tinto (1993) concurred.

Many college students are, after all, moving from one community or set of communities, most typically those of the family and local high school, to another, that of the college. They too must separate themselves, to some degree, from past associations in order to make the transition to eventual incorporation in the life of the college. In seeking to make such transitions, they too are likely to encounter problems of adjustment whose resolution will spell the difference between continued persistence and early departure. Those difficulties are not, however, solely the reflection of individual attributes. They are as much a reflection of the problems inherent in shifts of community membership as they are of either the personality of the individual or of the character of the institution in which membership is sought. They are rooted in the character of college persistence and in the passages successful persistence entails. (p. 94)

The consideration of rites of passage is not limited to high school students moving to college for the first time according to Tinto (1993). He contended that older adult students have similar experiences, just in different ways. The following statement exemplifies this claim.

For many adults, the passage to college may be quite different. . . . Unlike their youthful colleagues who leave home to attend college, they typically retain their membership in their communities, families, and places of work. Their transition is not a physical one, but a phenomenological movement that calls for altered patterns of relationships, both social and intellectual, with those communities. Though not physical, their separation may be just as "real." (p. 95)

The addition of Van Gennup's model provides Tinto a framework and mechanism for examining student withdrawal by providing "three distinct stages

of . . . association of the individual with other members of the institution - stages . . . [referred] to as separation, transition, and incorporation” (p. 95).

Tinto (1993) described the beginning of a college career as separation from past communities. Students have a period of adjustment, moving from a familiar set of values, norms, behaviors, and intellectual styles to new ones. “[T]he process leading to the adoption of behaviors and norms appropriate to the life of college necessarily requires some degree of transformation and perhaps rejection of the norms of past communities” (p. 95).

The extent of differences between former community experiences and those encountered at college influences the level of anxiety students undergo during their transition to the new community. Students’ anxiety levels differ depending on their past norms and values. Tinto (1993) describes transitional issues in the following way.

Individuals who come from families, communities, and schools whose norms and behaviors are very different from those of the communities of the college into which entry is made face especially difficult problems in seeking to achieve competent membership in the new communities. . . . Their past has not adequately prepared them to deal with the future. . . . [T]his means that disadvantaged students, persons of minority origins, older students, and the physically handicapped are more likely to experience such problems than other students.
(p. 97)

Beyond issues of separation and transition, students are faced with the challenge of becoming integrated into the college environment; this is equivalent to the incorporation phase identified by Van Gennep (Tinto, 1993). Most colleges have programs aimed at addressing this issue that fall under a rubric of new student orientation programs and freshmen success courses. Tinto (1993)

pointed out that not all students participated in these types of programs and “are left to make their own way through the maze of institutional life” (p. 99). He contended that achieving incorporation is smoother with institutional assistance and without such many students leave “because they have been unable to establish satisfying intellectual and social membership” (p. 99). He borrowed from Durkheim’s belief that effective integration of individuals into the social and intellectual frames of society reduces rates of departure and maintains social stability. He argued that the power of community influences students’ decisions in a positive manner.

[I]t follows from this analogy that one approach to the question of institutional policy on retention is that which looks toward a restructuring and/or modification of the social and intellectual conditions of the institution and the creation of alternative mechanisms for the integration of individuals into the ongoing social and intellectual life. . . . Egotistical [sic] suicide provides the analogue for our thinking about institutional departure from higher education. It does so not so much because voluntary leaving may be thought of as a form of educational suicide, but because it highlights the ways in which the social and intellectual communities that make up college come to influence the willingness of students to stay at that college. (p. 104)

Tinto (1998) postulated that persistence resulted from the match between student motivation and academic ability and her experiences with the institution’s academic and social characteristics. “On a number of points, it now can be said that we do know what factors influence persistence” (Tinto, 1998, p. 167). Tinto’s model considers a longitudinal view of students’ experiences in the collegiate setting. His conclusion was that the more socially and academically students interact with members of the academic community (other students or faculty) and successfully integrate into the society of college “the more likely they are to

persist" (p. 168). This reiterates Tinto's (1993) earlier statement explaining how to enhance retention on college campuses:

Broadly understood . . . individual departure from institutions can be viewed as arising out of a longitudinal process of interactions between an individual with given attributes, skills, financial resources, prior educational experiences, and dispositions (intentions and commitments) and other members of the academic and social systems of the institution. The individual's experience in those systems, as indicated by his/her intellectual (academic) and social (personal) integration, continually modifies his or her intentions and commitments. Positive experiences - that is integrative ones - reinforce persistence through their impact upon heightened intentions and commitments both to the goal of college completion and to the institution in which the person finds him/herself. (p. 115)

Tinto contended that students who voluntarily withdrew from college did so as a result of experiences they have within college after they enter rather than what happened to them before college or what occurs outside of college. Students' backgrounds and personal attributes interact with other individuals within academic and social systems to influence their likelihood of persistence to graduation, but their predispositions alone do not determine whether they persist or not.

The contemporary models of student persistence provided parameters for identifying factors affecting student persistence. Debate between disciplines about which provides the most useful grounding for persistence models continues. The social sciences had the heaviest influence on the development of models used by academicians and policymakers at the time of this study. Testing the assertions made by these theorists appears in the review of the studies cited below.

Evaluation of Student Persistence Models

The researchers below used the contemporary models of persistence and examined factors identified as affecting persistence for undergraduate and graduate students. The researchers tested the assertions made through theorists' persistence models in attempts to validate assertions made and establish reliability. The studies demonstrated that many components of the models were valid and identified weaknesses where they existed.

Undergraduate Student Studies

The theories of student persistence (Astin, 1977, 1983, 1984; Bean, 1980, 1983; Eaton & Bean, 1993; Schlossberg, Lynch, & Chickering, 1989; Spady, 1970; Tinto, 1975, 1993), focusing on the influences of student characteristics, behaviors, interactions and perceptions, have survived nearly two decades of subsequent testing by researchers. Elements of both theoretical models appear throughout the literature and influenced programmatic decisions of administrators and faculty in higher education. This is most evident at the undergraduate level where programs and services developed to raise students' involvement in social systems and integrate them academically exist from freshmen year until graduation. Testing the effectiveness of such programs for improving student persistence became focus of much research.

Pascarella and Terenzini (1979) conducted a seminal study testing concepts espoused in Spady's conceptual model. They determined to examine the influence of informal relationships between faculty and college freshmen on

the student outcomes of academic performance, personal development, and intellectual development.

Devising a research project drawing on work conducted in earlier studies (Spady 1970, 1971; Wilson, Gaff, Dienst, Wood, & Bavry, 1975), Pascarella and Terenzini (1979) studied the “relationships between specific freshman year educational outcomes and different kinds of student-faculty informal interaction” (p. 184). They tested the merits of Spady’s assertion that informal relationships have a positive influence on intrinsic and extrinsic student outcomes while controlling for pre-enrollment student characteristics that Wilson et al. argued precipitated the frequency and sort of interactions students had with faculty.

Pascarella and Terenzini (1979) selected a random sample ($N = 528$) of freshmen from the total entering freshmen population of Syracuse University in the fall of 1975. The study was longitudinal in nature with data collected from the participants through use of a questionnaire prior to enrollment and an activities index at the point of enrollment. The first questionnaire queried student expectations of college and self-descriptions of background characteristics. The activities index was a multi-dimensional measure of personality needs. Later, participants completed another survey at the midpoint of their subsequent spring semester and the researchers obtained their freshmen year grade point averages from university records during the summer of 1976.

The dependent variables in the study were cumulative grade point average, an individual assessment of personal growth during the freshmen year, and an individual assessment of intellectual growth during the freshmen year

(Pascarella & Terenzini, 1979). "Cumulative freshman GPA was chosen as an essentially objective and extrinsic reward tied to academic performance, while the two measures of intellectual and personal growth were designed to measure educational benefits of a more intrinsic and personal nature" (Pascarella & Terenzini, 1979, p. 184).

The independent variables were the frequency of student-faculty contacts related to eight types of interactions. Fourteen pre-enrollment characteristics were controlled during an analysis that used a setwise multiple regression and partial correlation methodology. The researchers hypothesized that the eight independent variables accounted for a significant portion of variance in the three dependent variables when holding pre-enrollment characteristics constant (Pascarella & Terenzini, 1979).

Pascarella and Terenzini (1979) conducted a preliminary double cross-validation before analyzing the data from the entire sample by dividing the sample into two equal halves and applied the unstandardized regression weights from sample A ($N = 264$) to sample B ($N = 264$) to predict each criterion variable. They then reversed the procedure. In each cross-validation the results produced satisfactory R^2 values to those observed for the dependent variables and demonstrated reasonable stability in the correlational matrix. The researchers then combined the two halves and proceeded with their analysis of the entire sample ($N = 528$).

The results of the setwise multiple regression analyses demonstrated that the independent variables (student-faculty relationships) produced increases in

the explained variance of each dependent variable after controlling for the pre-enrollment characteristics (Pascarella & Ternizini, 1979). The incremental variance accounted for in each dependent variable (academic performance, $R^2 = .0927$, $p < .001$; personal development, $R^2 = .1172$, $p < .001$; intellectual development, $R^2 = .1051$, $p < .001$) supported the general research hypothesis.

Pascarella and Terenzini (1979) also found that the partial correlations between each dependent variable and each independent variable demonstrated positive relationships between student-faculty contact focusing on intellectual and course related matters ($r = .228$, $p < .001$) and intellectual development and academic performance ($r = .247$, $p < .001$). Student-faculty interactions focusing on career concerns had the strongest positive influence of students self-perceived personal development ($r = .233$, $p < .001$) and also positively impacted student academic performance ($r = .164$, $p < .001$) and intellectual development ($r = .104$, $p < .001$). The findings obtained statistical significance but individually were not large influences.

“The findings lend support to the general hypothesis of the study, and thus to part of Spady’s (1970) model concerning the influence of the student-faculty relationships on educational outcomes” (Pascarella & Terenzini, 1979, p. 187). Pascarella and Terenzini (1979) demonstrated that informal student-faculty contact (e.g., discussing career concerns, intellectual matters, campus issues, academic and course information, resolving personal problems, and socializing informally) accounted for statistically significant proportions of the variance in

intrinsic and extrinsic educational outcomes and are not merely the result of entering student characteristics. Pascarella and Terenzini (1979) concluded:

It would appear from the present findings that the frequency and strength of student-faculty informal relationships may make a significant contribution to variations in extrinsic and intrinsic freshman year educational outcomes, independent of the particular aptitudes, personality dispositions, and expectations which the student brings to college. (p. 188)

The researchers suggested that their findings encourage policymakers and administrators to develop institutional programs and policies creating organizational cultures that facilitate and encourage informal student-faculty contact.

Sidle and McReynolds (1999) studied freshman at a Midwestern, four-year university to determine if participation in a freshman year experience course increased social and academic integration and improved the likelihood of persistence to the second year. They found that students who participated in the course continued to the second year at a higher rate, completed more of the first academic year, earned higher cumulative grade point averages (GPA), and had a higher ratio of earned credit hours in relation to hours attempted.

The participants in this study ($N = 862$) enrolled as freshmen in the fall semesters of 1993, 1994, and 1995. The experimental group ($N = 431$) enrolled in a freshman year experience course designed to examine transitional issues and practice academic success strategies. The control group ($N = 431$) consisted of students who elected not to enroll in the course but matched the experimental group in student attributes. Chi-square analysis measured the differences in second year persistence and completion rates for the first year. T-tests measured

differences in cumulative GPA, percent of general education course completed, and the ratio of earned credit hours to credit hours attempted. Sidle and McReynolds (1999) used bivariate correlation statistical analysis to measure the association between all the variables. All statistical analysis assumed a .05 level of significance.

The findings in this study were that students continued their enrollment to the second year at significantly ($p < .05$) higher rates after enrolling in the course as freshmen (63% compared to 56%). For students who withdrew during the first year, they tended to complete more of the freshmen year after completing the course ($p < .05$). Mean GPA was significantly higher, 2.17 compared to 1.99, and ratio of hours earned to hours attempted was significantly higher. The correlation between taking the course and cumulative GPA was significant ($p < .05$) at .13 as was ratio of hours earned at .13. The adjusted R^2 indicates that participation in the freshman year experience course accounted for four percent of the variance in the variables measured. The results reached statistical significance but demonstrated only minimal positive influence resulting from freshmen year experiences courses.

Sidle and McReynolds (1999) determined that participation in freshman year experience courses increased persistence and improved student factors related to persistence at a significant level by increasing academic and social integration. They found support for institutional programming aimed at addressing student issues related to transition and integration.

Berger and Milem (1999) examined the role of student involvement and student perceptions of integration in a causal model of student persistence to determine the relationship between the two. They conducted the research at a research university in the Southeast. From a population of first-time freshmen ($N = 1547$), they collected data at three points throughout students' freshmen year in 1995 - 1996. Three surveys assessed student perceptions and generated data used for analysis. Two of the surveys were instruments that have high levels of validity and reliability established through use and testing on a national scale and the researchers developed the third survey for this project.

Participants completed the first survey, the Student Information Form developed by the Cooperative Institutional Research Program, at the end of freshmen orientation. Students completed the second survey, the Early Collegiate Experiences Survey, in October. The surveys assessed student perceptions and behaviors on a wide range of topics that directly and indirectly related to persistence. Topics included levels of satisfaction, stress, student involvement, perceptions of campus environment and campus climate, and faculty teaching behaviors. Students completed the third survey in March. The Freshmen Year Survey, originally developed by Pascarella and Terenzini (1980), tested Tinto's (1975) early theories about academic and social integration.

Berger and Milem (1999) matched data from all three surveys using social security numbers and constructed a longitudinal panel of 718 freshmen who participated in all three survey events. Because the institution used in the study had a historically low attrition rate (approximately 8%), they selected a random

sample of those persisting and not persisting to the sophomore year equal to just less than half of all those completing all three surveys. This procedure yielded a sample of 387 participants (330 persisters and 57 non-persisters).

Berger and Milem (1999) used seven independent variables. The independent variables were: "student background characteristics, initial commitment, mid-fall behavioral/involvement measures, mid-fall perceptual measures, mid-spring behavioral/involvement measures, academic and social integration, and subsequent commitment" (p. 646). The dependent variable was a measure of student persistence from the freshmen to the sophomore year (Berger & Milem, 1999). Five of the independent variables were derivatives of previous research. The mid-fall and mid-spring behavioral/involvement variable were derivatives of factor analysis.

Berger and Milem (1999) used path analysis to test their modified persistence model. PLS Path (Sellin, 1989) estimated the direct and indirect effects of the constructs in the model. "Each equation produces standardized partial regression coefficients, also known as beta weights (β)" (Berger & Milem, 1999, p. 647). Regression coefficients allowed the researchers to "understand the direct and indirect effects of each construct with the effects of all other constructs being held constant" (Berger and Milem, 1999, p. 647). The involvement factors initially identified reduced to a three-factor structure through the factor analysis.

The analysis of Berger and Milem (1999) identified significant causal effects related to variables of background characteristics, fall faculty and peer

involvement, fall noninvolvement, perceived peer support, spring noninvolvement, academic integration, and social integration. The researchers found the following variables having significant effects on persistence: (a) being black ($\beta = -.20, p \leq .001$), (b) fall faculty involvement ($\beta = .13, p \leq .01$), (c) fall noninvolvement ($\beta = -.31, p \leq .001$), (d) perceived peer support ($\beta = .13, p \leq .01$), (e) fall peer involvement ($\beta = .11, p \leq .05$), (f) spring faculty involvement ($\beta = .19, p \leq .001$), (g) spring noninvolvement ($\beta = -.31, p \leq .001$), (h) academic integration ($\beta = .10, p \leq .05$), (i) social integration ($\beta = .29, p \leq .001$), and (j) institutional commitment ($\beta = .38, p \leq .001$).

The findings of Berger and Milem (1999) demonstrated that the three factors having the most negative effects on persistence were the personal characteristic of being black, the personal choice of lack of involvement in the fall, and the personal choice of lack of involvement in the spring. This contrasted with the most positive effects of institutional commitment by the student, social integration by the student, and spring faculty involvement with the student.

The findings affirmed many of the presuppositions of Bean (1979), Astin (1984), and Tinto (1987, 1993) mentioned above. Students experiencing higher levels of social, peer, and faculty involvement demonstrated a higher predictability of persistence. "Early involvement in the fall semester positively predicts spring involvement and has significant indirect effects on social integration, academic integration, subsequent institutional commitment, and persistence" (p. 658). The same is true for those demonstrating higher levels of institutional commitment. The negative impact of ethnicity for black students was

troubling for the researchers. "While African-American students enter the institution with strong levels of institutional commitment, they are less likely to perceive the institution as being supportive and less likely to persist" (p. 657).

The value of this study was the use of both behavioral and perceptual measures at different times throughout the freshmen year to identify the levels of variance in persistence accounted for by different variables identified by earlier theorists. Berger and Milem (1999) noted that "this model illustrates how students come to make a departure decision as a result of an ongoing cycle whereby behaviors and perceptions continually modify each other" (p. 660).

DesJardins, Kim, and Rzonca (2003) examined the effects of selected factors on retention, graduation, and time to degree among freshmen at the University of Iowa. They examined three critical points of student progression to the bachelor's degree: (a) persistence after the first year, (b) graduation, and (c) length of time until graduation. The researchers incorporated Tinto's (1987, 1993) Student Integration Model (impact of level of academic and social integration with the institution on persistence) and Bean's (1979) Student Attrition Model (impact of intent to leave on persistence) into their study. The researchers reasoned the integration of the two adjusted for their perceived limited role of environmental factors in Tinto's model.

The sample ($N = 2,498$) for the study consisted of freshmen entering in the fall of 1990. Logistic regression measured the dichotomous variables in this study. The independent variables were pre-matriculation academic achievement, high school type, demographic characteristics, and student financial status. The

dependent variables were persistence to the sophomore year, graduation, and timely graduation.

DesJardins, Kim, and Rzonca (2003) found “that the independent variables are moderately effective in helping to explain dropout in the first year ($X^2, p = .001$)” (p. 415). A second model demonstrated effectiveness of the variable in explaining graduation ($X^2, p = .001$). A third model demonstrated effectiveness of the variables in explaining timeliness in graduation ($X^2, p = .001$). They concluded that students less academically integrated (i.e., took fewer credits hours, had lower GPAs) were (a) more likely to drop out, (b) less likely to graduate, and (c) less likely to graduate on time. Students who were less socially integrated (e.g., lived off campus) demonstrated they were (a) more likely to drop out, and (b) less likely to graduate, but those who graduated did so in a timely manner. Their results supported the predictions of Tinto’s (1987, 1993) model but were neutral in supporting the predictions of Bean’s (1979) model.

Cabrera, Castaneda, Nora, and Hengstler (1992) used Tinto’s Student Integration Model and Bean’s Student Attrition Model to “examine, empirically, the convergent and discriminant validity between these two theories and document the extent to which the two theories could be merged to illuminate better our understanding of the college persistence process” (p. 143). Their decision to merge the two models came from a belief that the two constructs have several commonalities. Cabrera, Castaneda, Nora, and Hengstler (1992) provide the following rationale:

Both models regard persistence as the result of a complex set of interactions over time. The two models also argue that pre-college

characteristics affect how well students subsequently adjust to their institution. Further, the two models argue that persistence is affected by a successful match between the student and the institution. . . . Unlike the Student Integration Model, the Student Attrition Model emphasizes the role factors external to the institution play in attitudes and decisions. (p. 145)

The researchers used Linear Structural Equation Models (LISREL 7) to analyze categorical and ordinal data. Participants ($N = 466$) were from a university in the southwest and were surveyed in the fall 1989. The questionnaire contained 79 items identified in the persistence models of Bean (1980, 1982, 1983), Metzner and Bean (1987), Pascarella and Terenzini (1983), and Terenzini, Lorang, and Pascarella (1981), measuring the constructs (a) intent to persist, (b) family approval, (c) institutional fit, (d) courses, (e) opportunity to transfer, (f) encouragement of friends, (g) academic, (h) social integration, (i) institutional commitment, and (j) goal commitment.

Cabrera, Castaneda, Nora, and Hengstler (1992) assessed Bean's (1979) Student Attrition Model and Tinto's (1987) Student Integration Model and using factor analysis. They identified five factors accounting for 61% of the variance in intent to persist in the Student Attrition Model. The five factors were (a) institutional quality and fit ($\alpha = 0.81$), (b) courses ($\alpha = 0.61$), (c) family approval and friend's encouragement ($\alpha = 0.68$), (d) opportunity to transfer ($\alpha = 0.54$), and (e) finance attitudes ($\alpha = 0.53$).

Support for the structural effect of external factors influencing persistence occurred only with family approval and encouragement of friends ($X^2 = 2.68$, $p = .101$). Their assessment of the Student Integration Model yielded eight factors producing high alpha values and accounting for 63% of the variance in

persistence: (a) frequency of contacts with faculty and academic staff (alpha = 0.80), (b) interactions with faculty and academic staff (alpha = 0.78), (c) faculty and academic staff concern for student development (alpha = 0.78), (d) academic and intellectual development (alpha = 0.72), (e) peer relations (alpha = 0.85), (f) values (alpha = 0.60), (g) certainty of institutional choice (alpha = 0.70), and (h) goal importance (alpha = 0.69).

The results of the Cabrera, Castaneda, Nora, and Hengstler (1992) study on Bean's Student Attrition Model demonstrated that the complete model accounted for 44% of the variance in persistence and 60% of the variance in intent to persist. Only six of 15 structural paths in the model, however, were statistically significant. "The analysis . . . also revealed significant effects not predicted by the model. . . . the direct effects of Finance Attitudes on Courses and GPA" (p. 152).

Cabrera, Castaneda, Nora, and Hengstler's (1992) test of Tinto's (1987) Student Integration Model found eight factors demonstrating high alpha values, ranging from 0.69 to 0.80 but the complete model accounted for only 38% of the variance in persistence and 36% of the variance in intent to persist with nine of thirteen structural paths significant ($p \leq .05$).

An examination of the underlying structural patterns in the quantitative model indicates that most of the effect of both integration constructs on Persistence are of an indirect nature and are channeled through Intent to Persist, a finding that is consistent with organizational behavior research which indicates that behavioral intents predict actual behaviors. (p. 154)

Cabrera, Castaneda, Nora, and Hengstler (1992) converged the two models using a two-step strategy. First, they used a polyserial correlation matrix

(recommended by Campbell & Fiske, 1959) to explore the extent of evidence of convergence across the two theories. Next, they modified Widman's strategy and tested the convergence between the constructs (a) Courses and Academic Integration and (b) Institutional Fit and Quality and Institutional Commitment. Various testing models included orthogonal and correlational methods. "Courses, a construct in the Student Attrition Model, had the highest correlations across the two non-cognitive indicators of Academic Integration, a construct in the Student Integration Model" ($r^2 = 0.453$ and 0.521 respectively) (p. 155).

The second test produced a high correlation ($r^2 = 0.789$) between Institutional Fit and Quality (Student Attrition Model) and Institutional Commitment (Student Integration Model). This correlation indicated that 79% of the variability in students' institutional commitment was influenced by institutional fit and quality. The completion of the convergence procedure produced results indicating that some of the constructs from both models measured the same things.

Cabrera, Castaneda, Nora, and Hengstler (1992) concluded that both theories were correct in proposing that persistence is the result of a complex set of factors interacting over time. They argued, however, that Tinto's (1987) Student Integration Model was more robust since it validated 70% of their hypotheses. This compared to only 40% of their hypotheses being validated by Bean's (1979) Student Attrition Model, although the second model accounted for more variance than did Tinto's (1987). Cabrera, Castaneda, Nora, and Hengstler (1992) observed that the two models contained many similarities.

The two models also argue that precollege characteristics affect how well students subsequently adjust to their institution. Further the two models argue persistence is affected by the successful match between the student and the institution. A close examination of the two theories, for instance, reveals that what the Student Integration Model refers to as Institutional Commitment, the Student Attrition Model identifies as Institutional Fit.

Unlike the Student Integration Model, the Student Attrition Model emphasizes the role factors external to the institution play in affecting attitudes and decisions. . . . While research on the Student Integration Model appears to suggest that academic integration, social integration, institutional commitment and, to some extent, goal commitment, exert the highest effects on retention, research on the Student Attrition Model emphasizes the role of intent to persist, attitudes, institutional fit and external factors (for example, family approval, encouragement of friends, finances, and perceptions about opportunity to transfer to other institutions) on persisting behavior. (pp. 145-146)

Hernandez (2002) used open-ended questions to conduct in-depth interviews with 10 Hispanic students examining their first-year experiences in college. Using purposeful sampling procedures, he collected data “representing the voices of 10 students . . . not intended to be viewed as representative of all latino [*sic*] students” (p. 71). The location of the study was a large public university with 24,454 undergraduate students. Hernandez sought to evaluate how minority students integrated into academic and social contexts at a predominantly white institution. The data analysis followed inductive analysis procedures that produced categories, patterns, and themes describing the student experiences.

Four themes emerged from the data related to issues all participants identified during their interviews: “academic and social adjustments, family support and encouragement, involvement opportunities, and ethnic and cultural identity” (p. 72). Participants defined the category of “academic and social

adjustment” as an unexpected lack of preparation for college by their high school experience and the inability to “make friends or meet people like me” (p. 73).

Family support and encouragement extended to each participant and was central to their personal development of confidence and assurance that going to college was the right decision. Some of the participants viewed participating in involvement opportunities as important while others preferred to focus their time on academic concerns. All the students felt a level of disenfranchisement at the university causing anxiety about their ethnic and cultural identity.

Nine out of 10 participants identified difficulty with academic and social adjustment during their first year of study (Hernandez, 2002). They described a sense of being ill prepared for the academic rigors they experienced. One participant reported the following:

I don't really think high school prepared me to go to college, you know the amount of work . . . I thought college was going to be more like high school . . . here in college you always have to be studying and doing your work and if you don't you'll fall behind and get in trouble. So I don't think high school prepared me to go to college . . . I used to take all honors classes and supposedly they were preparing me for college . . . but the work can't compare to college, the amount of work, the amount was little compared to here. If I knew about college, the way it is, in high school I would have put more effort in my classes. Even though I did good in high school I would have done a lot more work to get ready for high school. (p. 73)

Some participants discussed social adjustment and the difficulty of finding a cohort of students similar to them on campus (Hernandez, 2002). This increased their sense of isolation and reduced their perceptions of integration in social structures at the college. Others felt less stress in this area. All described the need to develop a coping strategy for addressing this issue. A female

participant related the most negative expression of this factor on her intentions to persist:

I hate it here . . . I was born in the Bronx, raised part of my life in East Harlem, moved to New Jersey, all of my life I've been surrounded by Puerto Ricans, I come here and I thought I was the only Puerto Rican in the school. There's no Spanish food anywhere . . . I would go home like every other weekend. I still can't stand it here but I've learned to tolerate it. I don't think I want to stay next year. I'm not fitting in very well, there's really no one to talk to about back home, nobody understands where I'm coming from, like there's nobody from my environment here, that's why nobody understands me. (p. 74)

This participant's experience was unique, but others discussed similar issues on a smaller scale that required their adaptation to the predominantly white environment (Hernandez, 2002). This required that they seek guidance from someone that they had little in common with at first glance.

All the participants described incidents of family support that were essential to their remaining in college (Hernandez, 2002). One participant related examples of family support this way:

There's been a lot of support, they've [family] stress it since I was little . . . my mom was the one to say "go to college" and here I am and happy for it. There is a lot of support. They never pushed me real hard but they were always sort of like a lasting presence always putting in a word when they could . . . college was definitely hinted at, they'd say "go to college" but they never said "you have to go to college" so there's been plenty of family support. (p. 75)

Each student related that opportunities for involvement existed on campus (Hernandez, 2002). Hernandez (2002) reported that the participants split almost in half between those becoming involved and those choosing not to do so. Those that chose not to be involved (four participants) in extracurricular activities made

the choice because they felt their time was too limited and involvement reduced their opportunities for study. A participant described her choice:

I've had opportunities [for involvement] but my first year I really haven't wanted to be involved at all, I just wanted to get used to college, to my studies, do well academically, so I didn't want to get involved in any activities . . . I wanted to see what it was like and see how my first year went by and see if I do have a lot of free time, then maybe I can get involved. (p. 76)

The choice not to become involved was their behavioral response to an opportunity for involvement. Hernandez (2002) suggested that students need to have the option to choose involvement even if they do not exercise the option.

Issues related to ethnic and cultural identity were less substantial than anticipated (Hernandez, 2002). The majority of participants reported they attended predominantly white high schools and already developed strategies for coping with this dilemma with the exception of the data presented above.

Hernandez (2002) concluded that students viewed "the academic and social environment as a dichotomy" (p. 77) and indicated that students spoke about the two independently without acknowledging the possibility that they influence each other. Data affirmed factors identified in student persistence models as being important for successful adjustment and adaptation (Bean, 1979) to the collegiate environment, conquering developmental issues (Chickering, 1969), involvement issues (Astin, 1984), and integration issues (Tinto, 1987). Hernandez concluded that students described their first year of study as a combination of academic and social adjustments.

Pascarella, Pierson, Wolniak, and Terenzini (2004) studied first-generation college students and their college persistence and transitional experiences

compared to that of their peers. First, Pascarella et al. (2004) analyzed the net differences between first-generation students and their peers relative to their academic and nonacademic experiences during college. The second level of analysis estimated the total and direct effects of parental education levels on all students in the sample. The final analysis performed sought to determine the presence of interaction effects, or the level to which nonacademic and academic experiences during college differed in importance to first-generation college students and their peers.

Pascarella et al. (2004) generated data for the sample using data collected from students participating in the National Study of Student Learning at 18 colleges and universities across the United States. Institutions chosen represented differences in colleges and universities nationwide and were present in the National Center on Education Statistics Integrated Post-Secondary Education Data System (IPEDS). Data collection occurred over three years between 1992 and 1995. The final sample ($N = 1054$) comprised students who continued to participate in the longitudinal study and completed each survey during the data collection process.

Pascarella et al. (2004) used ordinary least squares regression to perform their analysis. In attempting to assess the net effects of being a first-generation college student on attainment outcomes, Pascarella et al. selected nine dependent variables, four were standardized measures of students' learning, four were psychosocial and assessed orientations to diversity and learning, and one sought to assess aspirations and degree plans. Relying on earlier work by Astin

(1993), Chickering (1969), Pascarella (1985), and Pascarella and Terenzini (1991), Pascarella et al. (2004) remarked that studying student outcomes requires attention to the following conceptual framework.

[F]our types of influences need to be taken into account to accurately estimate and understand the impact of college on students: (1) student demographics and precollege characteristics; (2) organizational or structural characteristics of the institution attended; (3) students' academic experiences; and (4) students' nonacademic experiences. (p. 256)

Pascarella et al. (2004) divided the sample into three groups; (a) those with two parents having baccalaureate degrees or higher (high level), (b) those with one parent having baccalaureate degrees or higher (moderate level), and (c) those with no parents having baccalaureate degrees (low level). They found that "compared to their first-generation counterparts, student having parents with a high level of postsecondary education attended institutions with higher . . . academic selectivity ($\beta = 0.119$, $p < 0.01$)" (p. 264). They found no difference in those whose parents had moderate levels of education. Compared to students whose parents had high levels of education, first generation students demonstrated significantly fewer credit hours earned ($\beta = 0.098$, $p < 0.05$) by the third year, work significantly more hours per week ($\beta = -0.087$, $p < 0.05$), and were more likely to live off-campus ($\beta = 0.151$, $p < 0.01$) than their peers.

Pascarella et al. believed these findings contributed to the analysis demonstrating that first-generation students were less likely to be involved in extracurricular activities and volunteer work than their peers. The final consistent negative effect found from the analysis pertained to degree plans. "[T]his disadvantage for first-generation students remained statistically significant even

when differences in academic and nonacademic experiences were taken into account” (p. 267).

Pascarella et al. (2004) concluded that the extent of first-generation student involvement in academic and social settings in higher education had strong positive effects on performance and degree attainment. Another significant positive effect on degree attainment was attendance at a highly selective institution which first-generation students were less likely to attend. The final finding of note was that first-generation students were less likely to be involved in nonacademic aspects of college and this produced negative effects on their degree attainment. “There is mounting evidence that extracurricular involvement and interaction with peers can play a significant role in both intellectual and personal development during college” (p. 276).

The studies conducted on undergraduate populations above served to reinforce theories of student persistence emphasizing student involvement, academic integration, social integration, and institutional fit for undergraduate student success in the academy (Astin, 1979; Bean, 1980; Chickering, 1969; Pascarella & Terenzini, 1991; Tinto, 1987, 1993). For most undergraduates, critical crossroads in their experiences included the transition from freshman to sophomore year and sophomore to junior year. The freshman to sophomore year transition improved for students if they accomplished significant levels of social integration and involvement in the community. The sophomore to junior year transition relied more on academic integration and involvement as their specific areas of academic concentration emerged.

Graduate Student Studies

Graduate student experiences are less demarcated than that of undergraduates, but students tend to exhibit transitional stressors at the initial phase of a program, at the point of comprehensive exams, and the process of developing and completing a dissertation. The studies below demonstrated a need for academic and social integration by students, but indicated that for graduate students the context for both tends to be confined to the parameter of a department within one school and occur simultaneously throughout students' time in the degree programs.

Many universities develop programs to assist new graduate students with transitional needs experienced at the beginning of their programs. Barker, Felstehausen, Couch, and Henry (1997) explored "the usefulness of orientation programs for students aged 27 and older" (p. 57) for their integration into the college environment. Their study examined graduate student perceptions of orientation programs aimed at relieving their stress and easing their transition to graduate school.

Barker et al. (1997) randomly selected 454 participants for the study from graduate students attending Texas Tech University. Using a questionnaire of 38 items developed from the literature about the needs of older students, they asked respondents to rate the level of importance of topics included in a graduate student orientation program on a four-point Likert scale, ranging from four representing very important to one representing not important. They piloted the questionnaire using experts in the field and evaluated it for content and validity.

The results produced an instrument with a reliability of .82 on Cronbach's alpha test for internal consistency. The researchers conducted their analysis of the resulting data from the instrument using descriptive statistics, one-way ANOVA, and the Scheffe test ($\alpha = .05$).

Barker et al. (1997) reviewed the mean scores of each item on the survey. They rated items generating means of greater than 3.0 as very important for inclusion in an orientation program. The items receiving a rating of very important included (a) library services, (b) conducting a library search, (c) technical writing, and (d) time management. Six topics generated means of greater than 2.0 and less than 3.0 and received a rating as important. The items receiving a rating of important were (a) assistantships, (b) study skills, (c) medical services, (d) stress management, (e) career counseling, (f) test taking skills, and (g) financial counseling. Items receiving a rating of not important were (a) cultural activities, (b) social activities, (c) tutoring services, (d) family/marriage counseling, and (e) religious activities.

The researchers organized the participants into three groups (Barker et al., 1997). They arranged the groups by the number of years since participant last enrolled in higher education (<5 years, 5-10 years, >10 years). The researchers wanted to determine if graduate students' perceived needs changed depending on the length of time since their last enrollment. The only significant differences ($\alpha = .05$) among the items identified as very important occurred between the group of less than five years and the group of greater than ten years and the difference pertained to assistantships. The same groups were also

significantly different ($\alpha = .05$) only once in items rated as important, medical services. A large majority of participants (82%) indicated orientation programs were helpful with no significant differences between groups, and a large majority indicated a willingness to participate (81%).

Barker et al. (1997) concluded that orientation programs for graduate students should exist and offer information designed to meet their needs. Findings indicated a need for further study and a need to compare older graduate student needs with those of older undergraduate students. They also suggested that program directors consider a cafeteria style format, allowing attendance based on interest in particular session topics. This study produced less indication of the need to address community and social needs. One implication drawn from the list of items is that older students returning to graduate school after a period of absence have concerns about their basic academic competencies and need opportunities to renew and practice those skills in a low risk environment.

Golde (1994) conducted an in-depth study of the educational experiences of 10 doctoral students who dropped out of their programs. Her study purposed to identify reasons for student attrition in doctoral programs. The researcher focused on attrition rather than persistence reasoning that most previous studies identified factors that increase persistence rather than focusing on factors that increase attrition. She proposed to determine if institutional or structural barriers contributed to attrition, identify ways that personal characteristics and organizational policies interact, and use the voice of doctoral students to describe

their experiences to “allow the reader to see the student’s experience in its entirety” (Golde, 1994, p. 2).

Golde (1994) conducted 10 interviews lasting one hour each with students who had dropped out of their respective doctoral programs. The participants included seven females and three males enrolled at six different universities in seven different departments. The protocol for the hour long interviews comprised questions attempting to elicit from the participants reasons why they dropped out of their individual programs. The data reported included an account of the overall student experience followed by a long description of the students’ careers. Golde (1994) used the constant comparative method to interpret and analyze the data after each section of data reported. Data from three participants circumscribe the limits of the data reported for this study.

Data reported from an interview with a female student who withdrew from the university after the end of her first year of study (Golde, 1994) described her experiences as a first-year doctoral student. The student described “an altercation [she had] with her adviser” (Golde, 1994, p. 4) during her first semester and explained she never made a clear connection with anyone in her department after that experience. “I think one of the main reasons I left is that I didn’t think there was anyone there that I could work with. . . . the problem is that you don’t know what the department is like until you are in it” (Golde, 1994, p. 5). Departmental relationships were keys in her decision to leave the program. The student continued, “And in some ways you would think it would be a priority for the faculty, to keep students around, and to help them out . . . But it seems like

they don't care (Golde, 1994, p. 8). The first theme Golde (1994) identified emerging from the data indicated that students needed positive interactions with faculty from the department to avoid leaving their programs.

The second data set detailed the experiences of a male doctoral student who was originally a full-time student but then shifted to part-time status to accommodate employment responsibilities. During his full-time status, this participant earned a master's degree in route to his doctoral degree. Unlike the experiences described in the first set of data, this student had positive interactions with faculty in his department and felt integrated in the academic setting. He described his experiences, "The department had weekly brown bag lunches where . . . everyone after their first year in the department presented a topic for the full length of the lunch. . . . It was a real community and I enjoyed it a lot" (Golde, 1994, p. 12). A second theme emerging from the data, according to Golde (1994), was the reluctance on the part of doctoral students to be direct in telling their advisors or departmental administrators of their intentions to leave their programs.

Golde (1994) reported that after accepting new employment and moving away from the university, the data demonstrated how the experience changed due to the distance apart. Initially, the student spoke with his advisor regularly but that changed as time extended and job responsibilities increased. The student reached the decision to drop out of the doctoral program after about a year away from the program, but was reluctant to inform his advisor and family members.

And I was getting pressure at the same time from my family, "Are you going to finish that degree?" So, I continued under the increasingly

stronger façade of working on my dissertation stuff, when in fact I was spending less and less time working on it, and was having less and less frequent conversations with my advisor, and I was spending more and more time working on my work. (p. 11)

A final account of making the decision to leave a doctoral program given by a female student provided data delineating the theme of a student expectation of a caring advisor and a nurturing community. This student described a trouble free first two years followed by a personal shift in focus that displeased her advisor. The displeasure led to the termination of their working relationship, months of inactivity by the student, initiation of a new working relationship, and ultimately a reassessment of the student's commitment to academia and her decision to withdraw (Golde, 1994).

This student decided to pursue a doctoral degree four years after finishing her undergraduate program. She had worked in a professional environment suited for academic background. She described having an "instant connection with her advisor and being accepted into his inner circle" (Golde, 1994, p. 13) of graduate students. She continued to describe experiences of high success during her courses and movement toward the development of a proposal topic. Then she detailed an abrupt change in her relationship with her advisor due to a disagreement over her analysis of a mutually agreed upon topic for her dissertation proposal.

So we had a meeting where he just basically said, "I don't think you have the capacity to do this kind of work. I don't think you can actually do a dissertation." This is the man who was giving me A+++ . . . and really developing me as a scholar, and suddenly he told me in this meeting around August or September, he said he didn't think I was capable. . . . It was horrible. . . . So that was that. (p. 14)

The data indicated that the student regrouped by the midpoint of the academic year and began working with another advisor on a new proposal. By the end of the academic year, however, the data indicated the student made the decision to leave her program:

Before I was quite finished with the proposal, I just decided I didn't want the whole thing. It was really weird. It's like, "I am going to get it all the way I want it to be." I am going to get my own dissertation topic, a good advisor, and then, when it is all set, when all the ducks are in a row, I decide, I made the decision not to do it. . . . I quit and I never regretted it at all. (pp. 14 - 15)

There was no evidence from the data that the institution made any effort to determine why the student decided to leave. This is another theme that emerged from the data consistently is illustrated by the following:

[She] talked to other faculty. She depicts the chairman as "noncommittal" and says the department made no "attempt to follow-up and find out what happened." Only one faculty member offered her support. She suspects that his sympathy stemmed in part from "personal reasons," as he was kind of kicked around the department, too. (p. 15)

Golde (1994) identified four themes emerging from the data that indicated similarities in the experiences of the students interviewed. Each source of data indicated (a) belief among the students that they had the academic ability to do the work necessary to earn a doctoral degree, (b) an explicit expectation of a caring advisor and supportive community, (c) a reluctance to share their consideration of leaving their programs with others for fear of disappointing them, and (d) an interplay of structure and agency between organizational structures and personal motives (Golde, 1994).

Golde (1994) argued that in accordance with the first theme, some viewed attrition as a natural "weeding out" process (e.g., Bowen & Rudenstine, 1992)

that occurred in all programs. Her concern was that this process seemed to increase at the dissertation stage of doctoral programs. She reported that more than 10% of those quitting doctoral programs do so after they begin their dissertations. She argued this is less an indication of the lack of academic ability and more of an indication of something else.

Students appreciated a “supportive community and caring advisor” when they experienced it and felt deprived when they did not (Golde, 1994). Golde (1994) noted that students expressed this expectation of support from faculty, the department, and the institution. Lack of experiencing it increased the likelihood of making the decision to leave their respective programs.

“Prevaricating” (Golde, 1994) about telling others of their decision to leave their programs is a theme that emerged from the data provided by students whose expectations about their departments were not met. Golde (1994) contended that had the students experienced support at a level closer to that expected, the likelihood of their discussing considerations of quitting their programs with advisors or someone else in the department increased, providing an opportunity for intervention on the part of the university.

Golde (1994) discussed the final theme of “structure versus agency” as one where students negotiated and attempted to make sense of organizational structures extant in their doctoral programs. She described doctoral students as people who historically always succeeded in the academic arena. Student decisions to leave programs proved defeating experiences. Each student

described a process of reclaiming agency as he or she moved from a position of feeling defeated to one of reestablishing self-acceptance.

A contribution of Golde's (1994) study which chronicled and contextualized student experiences was the elucidation of the complexity of the phenomenon of doctoral student persistence. Another contribution of the study was the incorporation of student voices into the examination of persistence. This contribution demonstrated the interplay that existed among organizational structures, student attributes, and relative policy issues and the need for a holistic understanding of the doctoral student experience.

Golde (1998) also examined attrition among first-year doctoral students to determine if factors influencing their persistence decisions were unique to their subset. According to Bowen and Rudenstine (1992) and Golde (1996), first-year attrition rates account for one-third of all dropouts from doctoral programs. Golde (1998) cautioned academicians and policymakers to consider the following:

Attrition during the first year, then, is an important window into how things can go wrong for students. Such a "bad beginning" is often explained at the individual level. Either the student did not have 'the right stuff' intellectually, emotionally, or temperamentally [sic], or some external event (family, illness) intervened. It is tempting to explain away attrition in this way; not only does it allow for individual variation and nuance, but it removes responsibility from the institution or the department (Golde, 1996; Lovitts, 1996); Nerad & Miller, 1996). Individual explanations are insufficient, however. To understand doctoral-student attrition, we must critically examine the role of discipline and program in shaping student experiences. (p. 55)

Golde (1998) used socialization theory to frame her study. The "socialization process is one in which a newcomer is made a member of the community - in the case of graduate students, the community of an academic

department in a particular discipline” (Golde, p. 56). Golde argued that graduate students experience a “double socialization” (Golde, p. 56) process when transitioning into the life of a graduate student because they simultaneously transitioned into the academic profession.

First-year doctoral students, according to Golde (1998), required mastery of four transitional tasks during their socialization process: (a) “intellectual mastery” (competency demonstrated through performance in the classroom), (b) “graduate student reality” (determining the desirability of the life of a graduate student), (c) “professional development” (learning and accepting the rigors of the profession), and (d) “integration” (determining if they experienced an “institutional fit” in their departments).

Golde (1998) collected data for her study through interviews with students who began, and then left, two departments (science fields and humanities) at one doctoral research university between the years of 1984 and 1996. Eighteen students left during their first year of the doctoral programs and were the subset for her study.

Across programs data emerged that identified common reasons for leaving while additional data identified specific reasons for leaving for various fields of study. One common reason for leaving was the realization that the time necessary to complete the degree was not what the students wanted. This was illustrated by the following:

I knew that it was going to be five to seven years, but it hadn't really hit me that in order to be five to seven years on campus here doing this, it means that you're not somewhere else doing something else. (p. 57)

The time commitment necessary to complete the program was greater than originally imagined. Once students clarified in their minds the reality of time commitment, they chose to leave the program. The students came to the conclusion that the program was not the correct choice for them.

In addition to the common reason for both programs given above, students in the science department identified three main reasons for leaving that were particular to their experience (Golde, 1998). For the science students who left, the common themes from the data included (a) the department was the wrong place to study, (b) worries about job placement, and (c) incongruence with an advisor.

Reasons emerging from the data that were particular for the departure of humanities students included: intellectual reasons, practicing the discipline did not meet expectation, and faculty life was not desirable (Golde, 1998). Data from one student provided the following example:

I really began to have questions as to whether I really wanted to do research for the rest of my life. In history it is a very isolating kind of work to be doing. Most of my friends, both undergraduate and in graduate school, were in the sciences, and they would work with their professor on a project and work with other students in the lab, so they would not be focusing only on their work. I really began to find that wearing after a while, just showing up at the library, being the only one working on a project, having relatively little human interaction as a necessary part of the job. (p. 60)

Golde (1998) contended the data indicated that “rather than locating ‘goodness’ or ‘badness’ solely in outcomes-persistence versus attrition-it might be helpful to assess the authenticity of the socialization process” (p. 63). She concluded that a good practice for graduate faculty would be to deliberately

expose first-year doctoral students to the life they were about to enter, to orchestrate observation of the lives of professional practitioners, and to facilitate interactions with students at various stages of the doctoral programs. "I would argue that structuring experiences in order to help students answer all four of the socialization questions during the first year is in the best interest of all concerned" (Golde, 1998, p. 64).

Golde's study of doctoral student completion grew with the initiations of the Council of Graduate Schools Ph.D. Completion Project. The Completion Project collected data from 27 institutions on their completion rates for doctoral students in the fields of engineering, humanities, life sciences, physical science and mathematics, and social sciences. The database contained information on 44,227 students enrolled in 279 different degree programs. The database, however, lacked any data on students enrolled in any doctoral programs in the fields of education.

Stallone (2003) studied factors associated with doctoral student attrition in an educational leadership cohort program. Using mixed methods design, she sought to determine the relationships among program culture, faculty-student relationships, cohort experiences, individual psychological factors, and doctoral student persistence. Stallone focused on human factors that influenced doctoral student persistence or attrition.

Stallone's (2003) study design used quantitative and qualitative methods to create descriptive results. She collected data using a survey questionnaire and open-ended survey questions with additional follow-up interviews. Two regional

universities in the southwest were the sites used for data collection. The survey collected data pertaining to students' perceptions of program culture, faculty-student relations, cohort experiences, individual factors, and their individual demographics.

Stallone's (2003) sample completing the questionnaires ($N = 57$) represented 41% of a doctoral student population totaling 140. The survey contained 40 items, three items pertained to demographics, four items measured current student status in the doctoral program, 26 items measured student attitudes pertaining to the degree program using a five-point Likert scale (ranged from strongly agree to strongly disagree), and five open-ended questions requiring a written response. Stallone designed the instrument for this project and used a panel of experts ($N = 5$) to evaluate the instrument for content validity. Stallone tested the reliability of the survey using a pilot study with 33 volunteers from a similar doctoral program. Coefficient alpha values ranging from .66 to .73 resulted from the pilot study.

Analysis of the responses to the survey items indicated that doctoral students perceived program culture factors ($t = 7.11, p < .001$), faculty-student relational factors ($t = 7.79, p < .001$), and cohort factors ($t = 3.53, p < .001$) as significantly more important than individual factors for doctoral degree completion (Stallone, 2003).

The open-ended questions produced data indicating that lack of program structure and inconsistent guidelines hindered degree completion (Stallone, 2003). Stallone (2003) included the question, "How would you describe the

doctoral program culture or atmosphere that you experienced” (p. 132)? Data produced by responses to the question included the following examples from four participants.

I did not complete the degree - I need more support with the dissertation format, research, and narrowing down the scope of the dissertation.

What hindered me most was the lack of focus during the dissertation phase. I needed more guidance at that stage.

I would like more direction on the dissertation phase of the program. I feel that there was a lack of communication between the two campuses.

The dissertation phase is so difficult because of many reasons. It was hard to try and coordinate it all around so many different people. (p. 82)

Findings from Stallone’s (2003) study indicated that program culture impacted doctoral students’ perceptions about the probability of their completion of a dissertation.

Stallone (2003) identified constructive faculty-student relationships as being of great importance to students’ progression toward their degrees. Stallone presented the following data from responses to the question “What assisted you most in completing the doctoral program” (p. 132)? Six participants answered in the following ways:

Meeting regularly with professors really helps. With my chair, we have a set day and time that we meet every week. After the comps, the most important thing you have is a chair that’s working with you and talking to you, making sure you’re working in the right direction. Contact is very important.

The professors keep in touch. My chair keeps in touch. He calls, making sure I’m doing what I’m supposed to be doing. He’s even come here to see me. I go there to visit with him, too. He checks on me.

Some of the professors gave incredible encouragement and support. This really is what helps get you through the program.

What most assisted me in completing the program was my dissertation chair who contacted me and urged me to send in my chapters.

The professors were very helpful. The guidance received from them was very valuable in moving toward graduation.

(My chair) gave outstanding support and is a wonderful dissertation chair. He encourages and pushes when necessary. (p. 88)

Results indicated the value placed on constructive faculty relationships in relation to their degree completion (Stallone, 2003). Other students alternatively reported negative experiences with faculty members that discouraged their progress. The following data from one participant exemplifies this perspective. "We really needed to be mentored. . . . We didn't have any guidelines or guidance" (p. 90).

Stallone (2003) reported data generated by posing the question, "What hindered your program completion the most" (p. 132)? The following data from four participants is representative of the responses.

All of the professors we started with are now gone. Turnover of professors makes it really hard. . . . A big problem in the program is attrition of the professors.

The turnover of professors was bad. Changing my chair so many times made it hard for me, and I really think that's why I still haven't finished the program.

What most hindered my program completion was the change of advisors and directors due to retirements and reassignments.

What most hindered my completion was the retirement of my dissertation chair. (p. 91)

Stallone (2003) concluded from these data that doctoral students focused in large part on their relationships with faculty advisors when describing factors

affecting their completion of a dissertation. The intensity of the relationship and professor turnover impacted their perceptions of their progress significantly.

Stallone (2003) summarized her findings by stating that the results of her study supported her hypothesis that “doctoral students would rate program culture, faculty-student relationships, and program structure as more important than individual factors in assisting doctoral degree completion” (p. 96). Results from the qualitative portion of the study affirmed the quantitative results. “Student relationships, program culture, and the level of collegial support” (p. 97) was significant in assisting their degree completion.

Poock (2004) surveyed 191 graduate students in 2003 through the use of an online questionnaire to examine topics covered during orientation sessions and determine if the topics addressed actual student needs. Participants were graduate students from Doctoral/Research Universities-Extensive, Doctoral/Research Universities-Intensive and Master’s Colleges and Universities I. Graduate enrollment at the institutions ranged from less than 2000 to greater than 5000. Seventy-three percent of the participants indicated their institutions offered some form of orientation program. The majority of the respondents (59.7%) indicated the graduate school was responsible for their orientation program with the remainder indicating various other administrative units had responsibility for their programs.

Topics covered during the orientation programs at these institutions totaled 33 (Poock, 2004). Not all institutions covered each topic. For the purpose of this study, only those topics identified by at least 45% or more of the

participants appear below. The topics meeting this criterion included (a) graduate school/university policies, (b) student services available to graduate students, (c) computer facilities, libraries, (d) health care/health insurance, (e) academic advising, (f) student organizations, (g) registration, (h) email accounts, (i) financial aid, (j) academic deadlines, and (k) parking. These compared to topics identified as most important to the students which included: (a) childcare, (b) employment or educational opportunities for a spouse or partner, (c) housing, recreational and social opportunities, and (d) a tour of the local community (p. 478).

Poock (2004) concluded that most topics addressed at orientation concerned academic policies. This was not surprising since the majority of the orientation programs were under the direction of the graduate school. "Somewhat surprising, however, is the limited attention given to family issues of graduate students" (p. 481). Poock's findings identified a disconnection between issues deemed important for graduate studies by institutional leaders and items identified as important by graduate students. The specific issues identified by graduate students are not the same as those that undergraduates might describe, but they demonstrate a desire among graduate students to address issues related to involvement and integration into a community context.

Cusworth (2001) examined the satisfaction level of graduate students with their orientation program by interviewing first-year doctoral students at a large private university. The purpose of the research was to identify dissatisfaction or differences among the respondents rather than concentrating on similarities. She

pursued this study because “research has addressed specific aspects of graduate student orientation and retention. . . . However, little has been done to evaluate the entire [graduate student] orientation experience” (p. 3).

Nine graduate students provided the data analyzed by Cusworth (2001). She used constant comparative analysis to identify emergent categories from the data. The results of her interviews produced data identifying four distinct differences.

Dissatisfaction with graduate student orientation programs designed to assist integrating graduate students into the social and academic environments of the university related to the four broad concerns described by the participants (Cusworth, 2001). Topics administrators omitted or gave minor attention became the identified categories. The categories identified from the data generated by interviews were (a) immediate concerns, (b) mentorship programs, (c) administrative issues, and (d) the formal orientation meeting (p. 6).

The category “immediate concerns” related to unanswered student questions. Data indicated that those managing the program were unqualified or unable to address many student concerns in an effective way. “Mentorship programs” categorized concerns students had about the lack of a formalized method for initiating a mentoring relationship with a faculty member or another student immediately upon their initial enrollment. “Administrative issues” categorized concerns graduate student had with learning the organizational structure of the institution and developing an understanding of which offices student interact with most often. “Formal orientation meeting” categorized the

official university program provided for graduate students at the beginning of the academic year. All four categories identified important issues for the students and opportunities for improving university programming to enhance the likelihood of student persistence.

According to Cusworth (2001), the limited number of interviews and the fact that all the students attended the same program limited the generalizability of the results. Conclusions drawn from the data that inform policymakers include students' desires (a) to have immediate issues addressed by qualified university representatives, (b) to make connections with other students and faculty early in their program of study, (c) to understand basic organizational structures of their institution, and (d) to address those issues during a formalized university program.

Girves and Wemmerus (1988) presented a model of graduate student progress and tested it to determine its usefulness in identifying the weight of variables affecting student degree progress. Their model suggested students move through two phases during their degree progress. The first phase comprised preexisting variables of department characteristics, student characteristics, financial support, and perceptions of the faculty. The second phase consisted of variables related to students' experiences during their programs of study. The variables identified included grades, involvement, satisfaction with the department, and alienation.

Girves and Wemmerus (1988) relied on Tinto's model and reconfigured many of the same variables. The "added value" of this model is the use of the

terminology of “degree progress.” “At the doctoral level there are three steps [in degree progress]: (1) courses beyond the master’s are completed, (2) the general examination is completed admitting the student to doctoral candidacy, and (3) the doctoral degree is earned” (p. 166). Degree progress considered students’ intentions for use of the degree, not merely their compliance with an arbitrary timeline for graduation.

A major Midwestern university served as the location of the study for Girves and Wemmerus (1988). They surveyed 162 doctoral students to determine their perceptions of the most influential variables in their progress to degree. The results indicated that involvement in one’s program (relationships with departmental faculty), the role of a faculty advisor, financial support, and departmental norms are the most influential variables affecting degree progress.

This study demonstrated that academic and social integration for doctoral students was most effective when centered in the school or department where they enrolled. This differs from Tinto’s (1987) undergraduate model that emphasized social integration efforts for institutions proceeding from the student affairs arena. Girves and Wimmerus (1988) demonstrated that doctoral students indicated a need for socialization occurring among their colleagues and the faculty supervising their work.

Lovitts (2008) explored the problem of students have making a successful transition from student to independent scholar. Lovitts (2008) sought to determine why 25% of candidates never complete their doctoral degree (Benkin, 1984; Bowen & Rudenstine, 1992; Nerad & Cerny, 1991). Lovitts (2008) explored

questions posed to focus groups of doctoral advisors in an attempt to determine what facilitates or impedes doctoral students' transition from student to independent scholar.

Lovitts (2008) conducted 14 focus groups with faculty participants ($N = 55$) from two research universities. The faculty represented seven academic departments from the sciences, social sciences, and humanities. The participants were solicited from names provided by their departments after being identified as "high-PhD-productive faculty" (p. 299). The participants' average profiles described them as being a professor for 25 years, advising over 15 dissertations, and having served on 36 dissertation committees. Forty-one of the participants were male. The participants were queried about factors that facilitated or impeded students' movement to independent scholarly work. "In particular, they were asked to talk about a student or students who had difficulty making the transition to independent research or who did not make it at all and to address why it was hard for those students" (Lovitts, 2008, p. 300).

Lovitts (2008) recorded the focus group session and transcribed the tapes for analysis. The transcripts were coded by question and analyzed using a qualitative data analysis software program. Data were coded by question and transcribed to eliminate the possible identification of participants via voice recognition. Lovitts (2008) identified six major theoretical constructs among the data.

It is organized by each of the six major theoretical constructs and their subconstructs: intelligence (analytical, practical, creative), knowledge (formal and informal), thinking styles, personality (various traits), motivation (intrinsic and extrinsic), environment (macro, micro). (p. 301)

Lovitts (2008) reported that focus groups indicated intelligence divided into three subconstructs: analytical, practical, and creative. The focus groups indicated no real differences in analytical intelligence (e.g., as measured by graduate admissions tests) between students completing a dissertation and those who did not. Differences were noted in practical intelligence, the ability to think, work, and make decisions on their own. Focus groups described successful students as having this ability as opposed to those having difficulty with making the transition. Those having difficulty were described as needing to be given each step in the process of writing and being dependent on their advisor to make progress. Creative intelligence, “the ability to formulate good problems and good ideas” (p. 304), was also a distinction between the degree completers and those not completing. Students making the transition were “idea factories” (p. 304) in comparison to those struggling with the transition who were not able “to come up with their own questions” (p. 305).

Lovitts (2008) reported that the focus groups described two constructs related to knowledge. Focus groups defined formal knowledge as the “acquisition of domain relevant skills – facts, principles, concepts, theories, paradigms, attitudes, and opinions” (p. 305). These types of knowledge were gained through the classroom experience and acquired by most students whether they were successful or unsuccessful in making the transition as demonstrated on successful completion of comprehensive examinations. A few focus group participants identified some unsuccessful students as lacking this type of knowledge and that impeded their ability to formulate questions. Informal

knowledge (e.g., tacit knowledge about doing research) was more distinct.

Participants indicated that students not making the transition successfully lacked this type of knowledge defined as “knowing how” (p. 307) rather than “knowing what” (p. 307).

Thinking styles, “how one capitalizes on and directs one’s intelligence(s)” (Lovitts, 2008, p. 308), led four focus groups to draw distinctions between the two types of students. Lovitts (2008) reported that participants indicated a noticeable difference in successful and unsuccessful students’ abilities to think in ways that were “congruent with the tasks of independent research or becoming a professional in their disciplines” (p. 308).

Lovitts (2008) reported that the focus groups described certain personality traits as being associated with degree completion. Focus groups described three personality traits that were associated with students who successfully completing degrees: patience and willingness to work hard, initiative and persistence, and intellectual curiosity. These personality traits seemed to lend the degree completers an edge when working through the process of independent research. Lovitts (2008) indicated that the focus groups described students having difficulty making the transition as displaying personality traits such as an inability to deal with frustration, fear of failure, intolerance of ambiguity, an inability to delay gratification, and lacking self-confidence.

Motivation, intrinsic and extrinsic, was described as the “nature and strength of a persons’ desire to engage in an activity . . . and a key factor that mediates what a person can do and what a person will do” (Lovitts, 2008. p.

313). Lovitts (2008) reported that the focus groups distinguished between the degree completers and those unsuccessful by indicating that generally the degree completers demonstrated more intrinsic motivational characteristics (e.g., positive reaction and enjoyment of task, interest, willingness to spend time on task) while students who were unsuccessful demonstrated more extrinsic motivational characteristics (rewards and factors incidental in the task). The focus groups indicated that degree completers were more likely to desire earning the doctorate for themselves and demonstrated enthusiasm for the research field.

Lovitts (2008) indicated that only two groups discussed the affects of macroenvironment on student success or lack thereof. In the case of success, students were successful due to involvement in research that was an emerging topic in their discipline. In contrast, microenvironments were described in most focus groups and related to both types of students. For both types of students, the focus groups "identified the advisor as the single most important factor in success or failure" (Lovitts, 2008, p. 316). This factor rose above all departmental and university environmental factors as influencing the success or failure of students completing their doctoral degrees.

Lovitts (2008) concluded that the successful transition from coursework to independent research resulted from the interplay of personal and environmental factors. Students negotiating this transition ultimately achieved one of three outcomes: an easy transition to independent research and degree completion, struggled with transition but completed their degrees, or struggled with their

transition and did not complete their degrees. Lovitts (2008) reported that degree completers have “high levels of practical and creative intelligence . . . good informal or tacit knowledge . . . learning styles congruent with research . . . strong intrinsic interests . . . [and] good advisors” (p. 319 – 320). Conversely, Lovitts (2008) reported that undistinguished completers and non-completers have “lower levels of practical and creative knowledge . . . less tacit knowledge . . . learning styles incongruent with research . . . [and were] not intrinsically motivated in their research” (p. 320).

An additional question that emerged from the literature was whether a particular unit in the academy is best suited for guiding university efforts assisting doctoral students with issues of social and academic integration. The topics covered in the programs studied above reflected a definite influence relative to the unit providing the service. Is one unit better prepared to cover the topics of interest than another, or should responsibility for integration and involvement programs be shared by units across the academe?

Greenlaw, Anliker, and Barker (1997) sought answers to this dilemma. They reported a growing debate between student affairs professionals and academic affairs professionals concerning the appropriate location for the programs. Greenlaw et al. cited Gardner and Hansen (1994) who argued that academic affairs units should guide programs. Gardner and Hansen (1994) stated that “today’s new students consider orientation a more beneficial service because programs have shifted from a ‘fun and games’ mentality [of student affairs] to one focusing on the more serious academic aspects of acclimation to

the campus environment” (p. 304). Greenlaw et al. (1997) determined to identify any emerging trends in the shift of location in the academy for orientation programs by conducting a survey.

Greenlaw et al. (1997) constructed a “one-page survey, consisting of two closed-ended and four open-ended questions” (p. 305) and mailed to academic and student affairs administrators. They received responses from participants ($N = 95$) at universities across the United States (response rate of 69%). They hoped to determine the administrative location for new student orientation programs and the advantages and disadvantages of the location.

Greenlaw et al. (1997) reported the results of the survey using descriptive statistics. Sixty-six percent of the respondents reported that the student affairs division was responsible for new student orientation; 16% reported academic affairs was responsible; 6% reported shared responsibility between the two units; the remainder reported other offices on campus having responsibility. Movement from one of the two major units to the other happened regularly in recent history with the majority of the movement being from student affairs to academic affairs. Greenlaw et al. (1997) concluded the following from the data.

There may be several explanations for this trend. An orientation program that reports to an academic affairs division that has a more secure budget may place a greater emphasis on academic rather than social aspects of college life and may garner more support from faculty members. The disadvantages reported include less freedom to experiment, less emphasis on the holistic development of students, and the smaller commitment of faculty members and faculty and academic affairs administrators towards a function that has been traditionally associated with student affairs. (p. 306)

Greenlaw et al. (1997) found that new student orientation programs at all levels of higher education moved from the purview of student affairs to academic affairs at a rate five times greater than from academic affairs to student affairs in recent history. They argued this trend needed to be reviewed to determine if the move served the mission of institutions or whether it was the result of perspectives deemed more important by decision makers (e.g., academic concerns versus student life concerns). Greenlaw et al. (1997) surmised that “administrators in academic and student affairs departments should disregard previously held stereotypes and use the institution’s mission statement to clarify objectives [for orientation programs]” (p. 312).

The possibility of shared responsibility for integration programs that meet the needs of students presents itself as an alternative solution to the problems presented in the research above. Bair, Haworth, and Sandfort (2004) explored this option in their recent research. They interviewed 148 doctoral faculty, students, administrators, alumni, and employers to determine the comprehensiveness of the roles exercised by doctoral faculty. Their purpose was to determine if it is beneficial for doctoral faculty to establish partnerships with student affairs professionals to meet the needs of their students.

Bair et al. (2004) “conducted in-person interviews with 148 individuals in 12 doctoral programs” (p. 711). The interviews were semi-structured and used purposive sampling criteria. They analyzed the data using the constant comparative method to identify themes within and across the interviews. All members of the research team read and coded each interview. They enhanced

the trustworthiness of the data through triangulation, development of an audit trail, and the use of negative cases analysis in the coding of and verification of themes (p. 713).

Bair et al. (2004) inductively identified four major themes to describe the roles and responsibilities of doctoral faculty: (a) scholarly activity and research productivity, (b) advising and mentoring, (c) selection and retention of students, and (d) defining and shaping program culture.

Bair et al. (2004) supported the assertion that scholarly activity and research productivity was a major role with data from a nursing professor who stated, "Our most important responsibility as faculty is to be role models for doing research" (p. 715). An administrator supported the assertion of the importance of advising and mentoring students as a mechanism to integrate students into the profession:

We have a larger responsibility for these students and their development as persons. Of course we must get them ready for their professional careers, but we are also working with personalities of young people who are still malleable. They are all different persons . . . Some require considerable guidance, some work best alone. The professor needs to nurture different talents and they must develop different approaches for different students. (p. 715)

A clinical psychology student affirmed the researchers' assertion that a major faculty role is student selection and student retention. The student stated, "They had a 'we accept you, we want you attitude,' not we are trying to weed you out" (p. 717). Bair et al. (2004) concluded that this role helped many students feel integrated into their programs.

The final assertion made by Bair et al. (2004) was that the role of defining and shaping program culture was vital. The data provided by a clinical psychology professor supported this: "What we try to do is create a collegial spirit among students and faculty. Students tend to be on a first name basis once they get used to us" (p. 718).

The findings of Bair et al. (2004) concurred with the literature on doctoral student integration and indicated doctoral faculty served key roles in the process. Their discussion of ways student affairs professionals might partner with doctoral program administrators and faculty yielded suggestions and recommendations about possible collaboration opportunities. They suggested student affairs professionals approach academic administrators and doctoral faculty and offer to enhance orientation programs by conducting student needs assessments, by providing programs aimed at reducing attrition, by encouraging students to participate in professional growth opportunities provided by student affairs, and by conducting exit interviews with students leaving the programs. The researchers suggested providing these services because many student affairs professionals practice such services as part of their daily work and have expertise in these areas. Bair et al. summarized their conclusions this way.

A shared approach to doctoral student learning and development has the potential to ensure that (1) doctoral students' needs are adequately addressed; (2) student programs and opportunities are intentionally designed and adequately planned; (3) roles and responsibilities of faculty, administrators, and student affairs educators are mutually understood; and (4) an atmosphere of trust and interdependence is fostered. (p. 725)

The need for a shared approach to guide programs aimed at increasing the social and academic integration of doctoral students seems reasonable.

Many of these decisions rest on decisions made from studies of undergraduate students or new graduate students. The integration needs of doctoral students are less known.

Weiderman, Twale, and Stein (2001) argued for decisions that consider the unique nature of graduate programs and doctoral students. "No two graduate or professional programs are identical, and no two students experience graduate or professional school in quite the same way" (p. 2). Their contention was that studies conducted examining and exploring the experiences of doctoral students best leads to the development of models of doctoral persistence. "If entering graduate students are to succeed in their new environments, they must learn not only to cope with the academic demands but also recognize values, attitudes, and subtle nuances reflected by faculty and peers in their academic programs" (p. 2). Their argument calls for research that gives closer attention to individual academic programs and individual doctoral students. Tinto (1993) affirms this statement, "[T]he process of doctoral persistence . . . is more likely to be reflective of, and framed by, the types of student and faculty communities that reside in the local department, program, or school" (p. 232).

Summary

Student persistence as outlined by theorists (e.g., Astin, 1984; Bean, 1980, 1983, 1990; Schlosberg, Lynch, & Chickering, 1989; Pascarella & Terenzini, 1979; Spady, 1979; Tinto, 1975, 1987, 1993) and the completion of doctoral degrees (Golde, 1994, 1998; Hernandez, 2002; Pascarella & Terenzini, 1991; Stallone, 2003; Tinto, 1993) had application to the realm of education

administration programs. Academicians desired educational outcomes for doctoral students, in part, center on program completion and graduation.

This educational outcome also was of interest to policymakers (e.g., legislators, federal and state agencies, Department of Education, The National Center for Public Policy and Higher Education, and Council on Post-Secondary Education), as indicated by House (1994) and Pew Charitable Trust (2005), and their examination of the use of taxpayer money and organizational efficiency for students finishing or not finishing programs of study. Policymakers seek tangible results indicating that investments in higher education produce the desired outcomes.

Studies, such as those noted above, tended to deal with factors primarily extrapolated from undergraduate persistence models. The problem was, therefore, the lack of a holistic examination of the factors affecting doctoral students leading to attrition or persistence, specifically in education programs leading to doctoral degrees in education administration. This study examined factors affecting doctoral students during the final stages of their programs to determine what influenced their decisions to complete or withdraw from their programs.

This study used inductive methods with research questions informed by student persistence models describing student behaviors (Bean, 1980, 1983), developmental issues (Chickering, 1969), institutional fit (Spady, 1973), student involvement (Astin, 1977, 1985; Pascarella & Terenzini, 1979, 2004), and social and academic integration (Tinto, 1987, 1993) as a mechanism for a holistic

examination of doctoral student persistence. This study served as an exploratory examination of doctoral student persistence. It identified categories and themes portraying the experiences of doctoral students and the issues that influenced their decisions about continuing to pursue their degrees. It also was useful for policymakers seeking to establish criteria to determine if institutional leaders established organizational cultures and structures promoting the desired educational outcomes of degree completion.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine doctoral student persistence by investigating the factors impacting student persistence to degree completion or to dropping out.

Research Design

The research design used was interpretive and exploratory examining the phenomenon from the doctoral student point-of-view. The study relied on qualitative methods in contextualizing how doctoral students made sense out of their experiences (Wolcott, 1994). This study described, analyzed, and interpreted data gathered through survey and interview.

The researcher developed multiple, holistic, student portraits describing the phenomenon of doctoral student persistence among students enrolled in education administration programs. The researcher learned from doctoral students the personal nature and individual nuances of factors impacting their individual experiences through their descriptions and interpretations of the process (Wolcott, 1994).

Numerous previous studies (e.g., Barker, Felstehausen, Couch, & Henry, 1997; Berger & Milem, 1999; Cabrera, Castaneda, Nora, & Hengstler, 1992;

DesJardins, Kim, & Rzonca, 2003; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Pascarella & Terenzini, 1979; Sidle & McReynolds, 1999) relied on survey design for data collection and correlation methods for data analysis and compartmentalized variables to weigh their relationship to student persistence. The “end product” of this study was a holistic understanding of doctoral student persistence and required a research framework exploring the participants’ perspectives. The interpretive design generated data depicting a holistic understanding of doctoral student persistence and was highly contextualized within their “life contexts.”

The researcher used semi-structured interviews and a survey to collect the data. Semi-structured interviews were used so the interviews could follow the responses of participants when needed through probing questions and allowed for in-depth interviews that were conversational in tone (Marshall & Rossman, 1999). Survey was used to collect demographic data in a consistent manner. Both the semi-structured interviews and the survey were informed by contemporary models of student persistence (Astin, 1984; Eaton & Bean, 1993; Pascarella & Terenzini, 1991; Spady, 1970; Tinto, 1993) and recent studies that identified factors affecting student persistence (Berger, 1998; Berger & Milem, 1999; Cabrera, Castaneda, Nora, & Hengstler, 1992; Cusworth, 2001; DesJardins, Kim, & Rzonca, 2003; Girves & Wemmerus, 1988; Golde, 1994; Golde, 1996; Golde, 1998; Greenlaw, Anliker & Barker, 1997; Hernandez, 2002; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Pascarella & Terenzini, 1979; Pascarella & Terenzini, 1991; Poock, 2000; Seymour, 1995; Sidle &

McReynolds, 1999; Stallone, 2003, Weidman, Twale, & Stein, 2001; Woodard, Mallory, & Deluca, 2001). These data presented a detailed portrait of student experiences. Conceptual ordering (Strauss & Corbin, 1998) classified the events and provided a scheme that illuminated factors impacting doctoral student persistence. This approach relied on research questions and methods that elicited dialogue attempting to gain an understanding of phenomenon through the language of participants (Denzin & Lincoln, 1998).

Research Questions

The following research questions guided this study in developing a useful portrait of student persistence for doctoral students enrolled in education administration programs. Consistent with the interpretive design, each question is followed by underlying assertions. Literature grounding the assumptions underlying the research questions appears in Table 1 below.

1. Do the demographics of doctoral students persisting to degree completion in education administration differ from those not completing their programs?

Differing demographics might influence persistence to degree completion.

2. Do doctoral students in education administration programs articulate experiences of academic integration as influencing their persistence? Doctoral students might articulate that positive interactions with faculty and active involvement in the academic community increase their likelihood of successfully completing a research agenda.

3. Do doctoral students in education administration programs articulate experiences of social integration as influencing their persistence?

Doctoral student needs for social integration with their peers might be less influential than the literature on undergraduate students asserted.

4. Do doctoral students in education administration programs attribute commitments to external obligations as influencing their persistence decisions?

Doctoral students might articulate that commitments to external obligations impacted their persistence decisions at a level equal to or greater than other categories.

The researcher anticipated certain categories to emerge from the data that impacted the persistence of participants in the study. Table 1 (see below) lists categories of influential factors related to the literature under four major headings. The literature associated with each category grounds Research Questions 1, 2, 3, and 4 (RQ1, RQ2, RQ3, RQ4). *Demographics* grounds RQ1, *Academic Integration* grounds RQ2, *Social Integration* grounds RQ3, and *External Obligations* grounds RQ4. *Demographics* subsumed factors related to personal characteristics (e.g., prior educational experiences, age, ethnicity, etc.) attributed to doctoral students during their programs of study. *Academic Integration* related to the extent students adjusted to the academic norms of their institutions and the academy. *Social Integration* categorized factors of adjustment to the social norms pertaining to interactions with their peers at their institutions.

Table 1

Conceptual Organizers for Research Questions

	DEMOGRAPHICS (RQ 1)	ACADEMIC INTEGRATION (RQ 2)	SOCIAL INTEGRATION (RQ 3)	EXTERNAL OBLIGATIONS (RQ 4)
Astin (1977, 1979, 1984, 1985)	X	X	X	X
Bair, Haworth, & Sandfort (2004)	X	X	X	
Barker, Felstehausen, Couch, & Henry (1997)	X			
Bean (1980, 1983, 1986, 1990)	X			
Bean & Hull (1984)	X	X	X	
Berger (1998)	X	X	X	
Berger & Milem (1999)	X	X	X	
Cabrera, Castaneda, Nora, & Hengstler (1992)	X	X	X	
Cusworth (2001)		X	X	
DesJardins, Kim, & Rzonca (2003)		X	X	
Eaton & Bean (1993)	X			
Girves & Wemmerus (1988)		X	X	
Golde (1994, 1996, 1998)	X	X	X	X
Greenlaw, Anliker, & Barker (1997)		X		
Heilburn (1965)	X			
Hernandez (2002)	X	X	X	X
Marks (1967)	X			
Pascarella (1980, 1985)	X	X	X	X
Pascarella, Pierson, Wolniak, & Terenzini (2004)	X	X	X	X
Pascarella & Terenzini (1977, 1979, 1991)	X	X	X	X
Poock (2000, 2004)		X	X	
Schlosberg, Lynch, & Chickering, (1989)	X	X	X	X
Seymour (1995)	X	X	X	
Sidle & McReynolds (1999)		X	X	
Spady (1970, 1971)	X	X	X	
Stallone (2003)	X	X	X	
Stoecker, Pascarella, & Wolfe (1988)	X	X	X	
Terenzini (1987)	X	X	X	
Tinto (1975, 1987, 1989, 1993, 1998)	X	X	X	X
Weidman, Twale, & Stein, (2001)		X	X	
Woodard, Jr., Mallory, & De Luca (2001)	X	X	X	

External Obligations categorized factors related to student commitments to family, work, or other obligations existing during programs of study that are not directly associated with the pursuit of the degree.

Data Collection Procedures

The researcher used interview and survey to collect data. The interview method provided data to construct contextualized portraits of participant personal experiences and detailed participant experiences over a period of time (Denzin & Lincoln, 1998). The interview data were collected using a digital recording device. The survey method provided data pertaining to individual characteristics of the participants and allowed for some quantitative grouping within the sample.

Sample and Site Selection

Although there was no recommended number of participants for inclusion, the initial goal of 30 participants was set with a caveat that additional participants be added if needed to present a convincing holistic depiction of student persistence. The researcher based his decision for an appropriate sample size for this study on a review sample sizes used in previous qualitative studies using interview and survey (Bair, Haworth, & Sandfort, 2004, $N = 148$; Cusworth, 2001, $N = 9$; Golde, 1994, $N = 3$; Golde, 1998, $N = 18$; Stallone, $N = 57$). The studies with small samples examined a single program; those with larger samples studied multiple programs. The decision to sample two groups of 15 students at two locations for a total sample of 30 participants was appropriate for this study.

The researcher selected a purposeful sample for this study. Merriam (1998) affirmed the use of purposeful sampling to identify and select participants

because of their “special competence and expertise” (p. 61) with the subject under investigation. Denzin and Lincoln (1998) described purposive sampling as seeking “out groups, settings and individuals where . . . the processes being studied are most likely to occur” (p. xiv). One group ($N = 15$) consisted of students who recently completed their dissertations and earned their degrees. The second group of students ($N = 15$) were identified as All But Dissertation (ABD) and had completed their comprehensive exams but ended their programs at varying times before having a dissertation proposal approved. Both groups in the sample were education administration doctoral students from comprehensive research universities. Qualitative researchers usually work with small samples of people, nested in their context and studied in-depth (Miles & Huberman, 1994).

The researcher based site selection decisions on the following criteria. First, the site must have been a comprehensive research university with students enrolled in programs leading to a degree in education administration for higher education or K-12 environments. Second, the site must have had a cadre of students who withdrew before completing dissertations. Third, there must be a cadre of recent doctoral program graduates who successfully completed their dissertations.

Participant Recruitment

Before recruitment of participants began, submission of the study proposal to the University of Louisville (U of L) Institutional Review Board (IRB) occurred. Approval of IRB implied that the study conformed to regulations and guidelines established for the protection of human subjects. IRB approval also was secured

from both research universities where samples were selected. The researcher submitted a verification of Collaborative IRB Training Initiative (CITI) certification to IRB as part of the proposal process.

An introductory letter was mailed each university Department Chair detailing the study and its approval. Each Department Chair was contacted directly by telephone to explain the purpose of the study. The researcher forwarded copies of the written proposal of the study and an example of the consent form to each university IRB Office for their records.

The researcher solicited names of potential participants from the Department Chair based on knowledge of recent graduates and those who left the program under the definition of ABD for this study. The researcher mailed invitation packets to recent graduates and former doctoral students of the institutions inviting their participation in the study. To increase the response rate, the researcher implored techniques described by Dillman (2000). The packets included written descriptions of the study, consent forms, and contact information forms to be returned to the researcher. One week after the initial mailing, the researcher telephoned potential participants to assure the receipt of the mailing and solicit participation directly. Telephone generated a sufficient number of participants for the study. The researcher used follow-up letters two weeks later to thank for participants for agreeing to join the study and then a month later to remind them of their appointment. Potential participants' contact information was obtained from student directory information provided by their institution in

accordance with disclosure regulations defined by the Federal Education Rights to Privacy Act.

Survey Instrument

The researcher created a survey instrument to collect data pertaining to the demographics of the participants (RQ 1). The survey instrument (see Figure 3 below) was a single page in length and participants completed the instrument at the conclusion of their interview session. Dillman (2000) advised researchers to collect demographic data at conclusion of interview sessions. This procedure improved participant investment in responses to in-depth questions during their interviews. "Respondents who have been told that their response is important . . . are likely to be unpleasantly surprised to . . . discover that they are about [to answer questions concerning their] age or education" (p. 94).

The survey gathered data from each participant related to date of birth, ethnicity, gender, previous degrees earned, undergraduate graduation date, profession, number of years practicing profession, standardized test score, years in doctoral program, major area of concentration, and point of progress in the doctoral program. Numerical sequencing coded the surveys for assurance of matching survey responses to interview responses while providing participant providing anonymity.

PARTICIPANT SURVEY FORM			
1	DATE OF BIRTH	xx/xx/xxxx	
2	ETHNICITY	CIRCLE ONE	WHITE/CAUCASIAN HISPANIC NATIVE AMERICAN BLACK ASIAN OTHER
3	GENDER	CIRCLE ONE	MALE FEMALE
4	UNDERGRADUATE DEGREE YEAR	Xxxx	
5	PREVIOUS DEGREES EARNED	LIST ALL	
6	AREA OF CONCENTRATION		
7	POINT OF DEPARTURE FROM DOCTORAL PROGRAM IF ABD	CIRCLE ONE	Comprehensive exams Proposal
8	GRADUATION YEAR FOR PHD		
9	YEARS IN DOCTORAL PROGRAM	CIRCLE ONE	< 3 yrs ≥ 3 yrs
11	EDUCATION LEVEL OF MOTHER	CIRCLE ONE	no college undergraduate degree some college graduate degree
12	EDUCATION LEVEL OF FATHER	CIRCLE ONE	no college undergraduate degree some college graduate degree
13	MARITAL STATUS	CIRCLE ONE	single married
14	CHILDREN	CIRCLE ONE	yes no
15	CURRENT PROFESSION		
16	NUMBER OF YEARS IN PROFESSION	CIRCLE RANGE	< 3 yrs ≥ 3 yrs
17	GRE TEST SCORE	CIRCLE RANGE	< 1000 ≥ 1000

Figure 2. Participant Survey

Semi-Structured Interviews

The use of semi-structured, in-depth interview was repetitive and allowed the researcher to pose the same questions to all participants. This type of interview served two primary purposes: (a) exploring, gathering, and collecting narrative material that created a deep and rich understanding of the phenomenon, and (b) developing a conversational relationship with the interviewee about his or her particular experience.

“In a qualitative study the investigator is the primary instrument for gathering and analyzing data and, as such, can respond to the situation by maximizing opportunities for collecting and producing meaningful information” (Merriam, 1998, p. 20). This distinction required that the researcher assume the role similar to that of a “detective” and “search for clues, to follow up leads, to find missing pieces, to put the puzzle together” (Merriam, 1998, p. 21). The semi-structured interview allowed the researcher to interject probing questions when appropriate and to follow cues from the participants to explore unforeseen opportunities when presented.

The interview protocol used questions developed from the literature. The insertion of additional probing questions occurred as needed for clarification. The researcher avoided the interjection of personal opinions during the interviews so that the data collected were truly the participants’ perspective on the phenomenon (Fontana & Frey, 2000).

The researcher field-tested the interview questions with doctoral students in an education administration program at a local university. The researcher

prepared an interview protocol to provide stability during the data collection phase (Merriam, 1998). The field test examined the questions for clarity and determined if they generated useful data and elicited answers addressing the research problem (Fowler, 1993, 1995). Questions leading to confusion or not producing useable data were reworded or removed.

Interview Questions. The types of questions included on the interview guide were (a) specific questions, (b) open-ended questions, and (c) probing questions (Merriam, 1998). The researcher interviewed each doctoral student on one occasion. The following sets of broad questions comprised the interview guide used in each interview. The questions elicited responses providing data relating to Research Questions Two, Three, and Four. The researcher asked each question individually with each subsequent question probing for deeper understanding of the participant point-of-view.

1. How would you describe your experiences with your faculty adviser during your program of study (Table 1, Academic Integration, RQ2)?
 - a. Did you work with a faculty adviser during the coursework phase of your studies?
 - b. How did you select an adviser?
 - c. Did you work on any research projects for publication or presentation with a faculty adviser during your program before you began working on your dissertation?
 - d. What was your role in those projects if they occurred?

- e. How would you describe the process of choosing a dissertation topic?
 - f. How did you or are you working through the process of completing the project?
2. How would you describe your experiences with your student peers during your program of study (Table 1, Social Integration, RQ3)?
- a. How much interaction do you have with them, and what is the nature of those interactions?
 - b. Did you associate with your peers outside the normal course of your classes?
 - c. Did these relationships influence your decisions about persisting in the program?
3. What types of external obligations do you have beyond the arena of your doctoral program (Table 1, External Obligations, RQ4)?
- a. If you were to determine the percentage of time you commit to your doctoral studies versus other obligations, what would the division of the time resemble?
 - b. Are there barriers to your doctoral program that external obligations create?
 - c. Describe sources of external obligations that supported your pursuit of doctoral studies?

Data Analysis

The constant comparative analysis of data occurred throughout the data collection process: "Analysis does not refer to a stage in the research process. Rather, it is a continuing process that should begin just as soon as your research begins" (Glesne, 1999, p. 84). Throughout the interview process, the researcher considered the relationships between the data and identified emerging categories and themes during the data collection process. This method prepared the researcher for later focused analysis of data collected.

Compilation of interview data occurred through the use of handwritten field notes and a digital recorder during the interview sessions. The researcher used memo writing and analytic files (Glesne, 1999) to "store" data as they were gathered. The researcher reviewed the handwritten field notes and recordings after each interview session. Memos describing thoughts during the preliminary review of the data provided a reflective log concerning the data. Analytic files provided broad generic categories as the data grew and served to organize them according to categories and themes.

The recordings of the interviews were downloaded into a computer and transcribed. Transcription of field notes and the interviews followed each fieldwork session. Transcripts of the interviews and field notes were edited so that all potentially identifying information was modified. Common language and speech components (e.g., "um," "eahh," "like," "kinda") were eliminated for clarity. The researcher supplemented data collection by completing contact summary forms (Miles & Huberman, 1994) at the conclusion of each interview.

In-depth, constant comparative analysis of the data by the researcher employed a seven-step process prescribed by Miles and Huberman (1994) and organized the data in a meaningful way:

1. Highlight key phrases and terms throughout the transcripts.
2. Repeat the key phrases and terms in marginal notes.
3. Reduce the key phrases through coding and develop clusters around particular codes.
4. Reduce clusters through combining similar groups and comparisons to assure distinction between clusters.
5. Develop generalizations or propositions from emerging core themes.
6. Generate minitheories by positing explanations, usually appearing through memo writing.
7. Integrate theories into an explanatory framework for the phenomenon. (pp. 87 - 88)

The data were read and re-read multiple times to identify recurring categories and themes of factors influencing doctoral student persistence. Monthly reports (Glesne, 1999) measured the progress of the analysis and served to maintain focus during the process. The use of constant comparative analysis identified emerging categories and themes both within and across the interviews.

The transcripts of the interviews were read and coded after each interview. The researcher developed thematic matrices from the literature (Miles & Huberman, 1994) to organize the data throughout the analysis. (The researcher also assumed that additional codes for the data would emerge during the analysis.) The process of data coding was progressive, sorting and defining data as they yielded large categories and then smaller themes within categories provided direction for coding.

Survey data were tabulated. The data were displayed below in Table 2 (Chapter 4) demonstrating the demographics of the two groups. Comparison of these data with data from the interviews attempted to determine if particular demographics were evident among the persisting students or those who chose to withdraw from their programs.

After completing data coding, the researcher arranged the data to allow for a reasonable display of what was learned from the participants in the study about the doctoral student persistence (Glesne, 1999).

Trustworthiness of the Data

The questions of validity, generalizability, and reliability for qualitative studies relate most directly to the credibility of the study. Primarily, qualitative researchers must ask if the explanation and interpretation of the phenomenon described seems credible. Glesne (1999) and Miles and Huberman (1994) described methods for enhancing validity. Strauss and Corbin (1994) provide guidance for generalizability. Miles and Huberman (1994) offered suggestions for improved reliability. All were used by the researcher for this study.

The use of modified member checks, an audit trail, and thick descriptions enhanced the trustworthiness of the data (Glesne, 1999) to increase validity. The modified member check used outside readers to serve as auditor, checking the work of the researcher by reviewing his field notes and interview transcripts for accuracy (Denzin & Lincoln, 1998). The researcher elicited the critiques of academic colleagues to determine if the data analysis was cogent and reasonable. "Interpretation is not an autonomous act, nor is it determined by any

particular force, human or otherwise. Individuals interpret with the help of others . . . but others do not do it for them” (Bogdan & Biklen, 1982, p. 33). The audit trail resulted from following the prescribed procedures for data collection and analysis and documenting the process throughout using memos, thematic matrices, and field notes that can be replicable in later studies (Miles & Huberman, 1994). Presentation of results provided thick descriptions and data displays that served to document the trustworthiness of the data through the words of the participants and self-descriptions. The approach used increased validity for this interpretive and exploratory study because the accounts obtained from the participants represented their lived experiences (Miles and Huberman, 1994).

For a study to be generalizable it must accomplish what it set out to accomplish (Strauss & Corbin, 1998). This study attempted to offer an explanation of factors influencing doctoral student persistence. Explanatory studies are generalizable to some extent according to Strauss and Corbin (1998):

Explanatory power means ‘predictive ability,’ that is, the ability to explain what might happen in given situations . . . the real merit . . . lies in its ability to speak specifically for the populations from which it was derived and to apply back to them.
(p. 267)

An approach used here to enhance generalizability was the inclusion of multiple participants ($N = 30$) from two locations in an effort to expand the samples representation of the population (Miles & Huberman, 1994). The study demonstrated generalizability after its conclusion through its “transferability,” or the usefulness of the findings for others in similar situations (Marshall & Rossman, 1999).

Miles and Huberman (1994) argued that reliability is improved through triangulation and triangulation is achieved by using multiple data sources. Data sources “can include persons, times, [or] places” (Miles & Huberman, 1994, p. 267) to achieve triangulation. This study improved reliability by interviewing multiple participants (persons) from two locations (places) who were doctoral students in overlapping time periods (times). Triangulation increases reliability of data about a phenomenon “by showing that independent measures of it agree with it, or, at least, do not contradict it” (Miles & Huberman, 1994, p. 266).

Limitations of the Study

A limitation of this study pertained to the uniqueness of each doctoral student experience during his/her program of study. This study attempted to gather data on the experiences of doctoral students in education administration programs and contribute to an explanation of doctoral student experiences and factors associated with their persistence. Rich, thick descriptive details of student experiences in their doctoral programs were needed to present a holistic, highly contextualized description of factors influencing their decision-making process related to persisting in their programs. This study was a “first- step” in the development of a systemic model of doctoral student persistence for education administration students. Additional studies will enhance the understanding of this phenomenon.

Another limitation resulted from the sample size and selection process. The participants for this study were enrolled in a single academic program and in similar stages of the program with one other in the progression toward degree

completion. The researcher anticipated a third limitation in the generalizability because of the study's purposive sample.

Summary

The purpose of this study was to create highly contextualized portraits of doctoral students and glean from them factors influential on their persistence. Using the results of the study could improve the educational outcomes of doctoral students and decisions impacting their outcomes made by academicians and policymakers.

The research design employed in this study was qualitative and exploratory in nature. Semi-structured interviews and a survey instrument generated data for the study, and constant comparative analysis served as the primary method to analyze the data.

This study collected data on factors affecting doctoral student persistence from the point-of-view of the participants and analyzed those data to develop a holistic portrait of doctoral students who persisted and those who did not.

Making informed decisions for improving doctoral student persistence results from research conducted on samples extracted from population of concern. The design and method of analysis employed in this study provided a procedure for collecting the data necessary to present holistic portraits of the factors influencing doctoral student persistence decisions.

CHAPTER IV

RESULTS

This study examined factors influencing doctoral student persistence. The researcher used survey and interview to collect data from participants who were either degree completers or all but dissertation (ABD) at one of two research universities in the southeast.

Overview of Presentation of Results

Chapter IV includes sections for each of the four research questions. Findings from survey used to collect demographic data exploring Research Question One (RQ1) for degree completers and ABD participants were compared and contrasted and survey results were tabulated. Interview explored Research Questions Two, Three, and Four (RQ2, RQ3, RQ4) and findings for degree completers and ABD participants were compared and contrasted to explore influential differences between groups.

Demographics, academic integration, social integration, and external obligations served as conceptual organizers drawn from Chapter II to explore influential dimensions resulting in finishing doctoral programs or not. Findings related to the conceptual framework varied between the degree completers and ABD participants. An overview of the findings is presented below.

Degree Completers

Findings from degree completers related to demographics demonstrated no differences between them and ABD participants. Demographics for degree completers as tabulated in Table 2 below for comparison to ABD participants.

Findings were derived inductively from experiences articulated by degree completers using the conceptual organizers to explore RQ2, RQ3, and RQ4. Findings for the conceptual organizer academic integration (RQ2) were (a) positive research experiences, (b) compatible academic advisors, (c) a clear research agenda, and (d) fellowship or assistantship. Findings for the conceptual organizer social integration (RQ3) were (a) interaction with peers and (b) peer support. Findings for the conceptual organizer external obligations (RQ4) were (a) family support, (b) employer support, and (c) family expectations.

The findings for degree completers described how dimensions related to each conceptual organizer had sustaining effects on them during their programs and were influential on their persistence. Tables following each research question below demonstrate the relationships between conceptual organizers and findings articulated by degree completers.

ABD Participants

Findings from ABD participants related to demographics demonstrated no differences between them and degree completers. Demographics for ABD participants are tabulated in Table 2 below for comparison to degree completers.

Findings were derived inductively from experiences articulated by ABD participants using the conceptual organizers to explore RQ2, RQ3, and RQ4.

Findings for the conceptual organizer academic integration (RQ2) were (a) negative departmental experiences, (b) incompatible academic advisors, (c) and lacked a clear research agenda. The finding for the conceptual organizer social integration (RQ3) was isolation from peers. Findings for the conceptual organizer external obligations (RQ4) were (a) financial concerns, (b) family responsibilities, and (c) employer responsibilities.

The findings for ABD participants described how dimensions related to each conceptual organizer had restraining effects on them during their programs and were influential on their persistence. Tables appear following each research question below demonstrate the relationship between the conceptual organizers and findings articulated by ABD participants.

The presentation of findings used an interpretative and exploratory study design for analysis. Demographics were contrasted between the two participant groups and explored to determine if differences existed between degree completers and ABD participants. Findings for academic integration, social integration, and external obligations were compared and contrasted between the degree completers and ABD participants and explored and interpreted to determine which experiences students described as being influential on their persistence as doctoral students.

RQ1: Do the Demographics of Doctoral Students Persisting to Degree Completion in Education Administration Differ from Those Not Completing Their Programs?

The researcher anticipated that demographics of degree completers would be noticeably different from those of ABD participants. Data indicated this assertion was not true. The demographics reported by both groups were similar and demonstrated no differences between degree completers and ABD participants.

Demographics reported by degree completers were (a) *M* age at graduation of 43 years, (b) 14 White/Caucasian and one Black, (c) five male and 10 female, (d) 15 held two or more degrees, (e) five educational administrators and 10 other education professions, (f) 14 were ≥ 3 years in their current profession, (g) 15 spent ≥ 3 years in their programs, (h) 15 scored ≥ 1000 on a graduate entrance exam, (i) three had mothers and three had fathers who earned college degrees, (j) 13 were married, and (k) nine had children at home during their programs.

Demographics reported by ABD participants were (a) *M* age when departing programs of 39 years, (b) 14 White/Caucasian and one Black, (c) six male and nine female, (d) 15 held two or more degrees, (e) two educational administrators and 13 other education professions, (f) 15 had ≥ 3 years in their current profession, (g) 15 spent ≥ 3 years in their programs, (h) 13 scored ≥ 1000 on a graduate entrance exam, (i) five had mothers and two had fathers who earned college degrees, (j) 14 were married, and (k) six had children at home during their programs. Table 2 tabulates the findings for degree completers and ABD participants for comparison.

Table 2

Tabulation of Demographic Data

DEMOGRAPHIC CATEGORY	RESULT	DEGREE COMPLETERS	ABD
AGE	GRAD or DEPART	43	39
ETHNICITY	WHITE/CAUCASIAN	14	14
	BLACK	1	1
GENDER	MALE	5	6
	FEMALE	10	9
DEGREES BEFORE DOCTORATE	≥ 2	15	15
CURRENT PROFESSION	ED ADMIN	5	2
	ED OTHER	10	13
YRS IN PROFESSION	≥ 3	14	15
GRAD SCORE	≥ 1000	15	13
	< 1000		2
YRS IN DOCTORAL PROGRAM	≥ 3	15	15
MOTHER'S EDUCATION LEVEL	NO COLLEGE DEG	12	10
	UNDERGRADUATE	3	5
FATHER'S EDUCATION LEVEL	NO COLLEGE DEG	12	13
	UNDERGRADUATE	3	2
MARITAL STATUS	SINGLE	2	1
	MARRIED	13	14
CHILDREN	YES	9	6
	NO	6	9

The similarities of the demographic data reported by degree completers and ABD participants indicated that no differences existed between them. The data portrayed doctoral students as individuals entering their middle adult years in age, practicing education professionals, primarily white, majority female, and having families while pursuing their doctoral programs. The lack of demographic

differences between degree completers and ABD participants provided no indicators for the researcher to identify as predictors of persistence or departure for doctoral students.

Interview data from degree completers and ABD participants are presented in detail in the following sections and demonstrate the relationships between conceptual organizers and findings articulated by individual participants.

RQ2: Do Doctoral Students in Education Administration Programs Articulate Experiences of Academic Integration as Influencing Their Persistence?

Academic integration was a conceptual organizer explored during interviews with both degree completers and ABD participants. Findings differed between degree completers and ABD participants for this organizer.

Findings articulated by students describing positive experiences related to the conceptual organizer academic integration and indicated an increased likelihood of persistence to degree completion as compared to negative experiences that decreased the likelihood of completion.

Degree Completers: Academic Integration

Four findings related to the conceptual organizer academic integration emerged from the data provided by degree completers. Findings comprised the dimensions (a) positive research experiences, (b) a compatible academic advisor, (c) entering their program with a clear research agenda, and (d) receiving a fellowship or assistantship. Table 3 is a matrix for findings degree completers articulated when describing experiences related to academic integration.

Table 3

Four Findings Comprising Academic Integration for Degree Completers

RQ 2: Academic Integration

The data showed that degree completers encountered four forms of academic integration that sustained them during their programs. Academic integration is the success students have infusing themselves into academic norms of their particular institutions, departments, and fields of study.

Positive Research Experiences

Degree completers described opportunities for meaningful participation with faculty advisors on research projects during the coursework phase of their programs as vital to creating and developing a sense of acceptance in the academic community.

Compatible Academic Advisor

Degree completers defined compatibility as coexistence and congeniality with their advisors over the extended dissertation process.

Clear Research Agenda

Having clear research agendas from the outset of their programs provided degree completers with a focused research goal.

Fellowship or Assistantship

Degree completers described the duties of teaching and research required for their stipends as providing opportunities for active participation in their academic departments.

Academic integration / positive research experiences. Eight participants who earned their doctorate indicated they had positive research experiences with faculty members. Degree completers considered these activities positive research experiences. Participants reported that the experiences with their advisors during the time they were completing their coursework as invaluable. They described experiences of assisting on research projects as an opportunity to develop their skills as a researcher and work with faculty in a collegial way on

significant academic projects. These research experiences transcended their coursework experiences and provided confidence for completing a dissertation.

Sue reported working on a research project with her advisor where she collected data and organized it for later analysis by her advisor. Sue indicated that the success she experienced while working on the research project affirmed her decision to pursue her doctoral degree and served as an early indicator to her advisor that she was a capable researcher: "Collecting data was a whole lot of fun. It was challenging; she by no means let me off easy. It really prepared me for the dissertation process" (interview, 20 February 2008).

Rebecca indicated that she entered her doctoral program after making a career change. She described entering her program with confidence in her ability to complete small projects based on her previous profession, but that completing a dissertation on a research topic of importance in educational administration seemed daunting. Rebecca described how the experience of working with a faculty member on a research project during the early stages of her doctoral program provided her with an opportunity to experience success in the academic environment:

Before I actually started my dissertation . . . we worked on projects collecting data from other students and from some action learning interventions [my advisor] was working on with other organizations. Doing qualitative analysis of it and then working on writing and offering that up for submittal at conference presentations. (interview, 21 September 2007)

The experience provided Rebecca with the sense that she could complete a research project for her dissertation. The positive experience confirmed that she could be successful in the academic arena.

Lincoln portrayed a similar experience with his professor. Lincoln discussed an opportunity he was afforded to visit another city and mine historical documents for a publication project: "So, I went to Savannah on practical research . . . [and] brought all my findings [to my professor]" (interview, 12 September 2007). Lincoln described this experience as an opportunity to conduct original research before beginning work on his dissertation. The project provided Lincoln confidence in his ability to complete a major research project.

Janet told of being asked to assist with research on an article her advisor hoped to publish: "It was really exciting. My name could appear on a published article just for helping find literature on a topic" (interview, 17 October 2007). Her participation provided a positive research experience and an opportunity for success in the academic environment.

Scott assisted a faculty member who eventually became his dissertation chair with data collection. It was relatively early in his program. The faculty member was collecting data on school teachers and asked him to assist her: "She asked [me] if I'd help on that. So, we had the chance to work together before the official project" (interview, 19 February 2008). Her invitation served to affirm his choice to pursue the doctoral degree amidst his internal questions about his ability to be a successful student.

Hazel's interview yielded additional evidence for this finding. Hazel decided to pursue doctoral studies near the end of her professional career. She had been a successful teacher and administrator before entering her doctoral program, but was hesitant about pursuing the doctoral program at the later stage

of her life. She wondered if she had the academic acumen and personal dedication necessary to complete a program. Hazel related that interactions with her program advisor, later to become her dissertation advisor, quelled those concerns early in her program. Hazel detailed participating in presentations at national conferences and on several writing projects. Hazel recounted an extraordinary opportunity her advisor provided: "We co-wrote a book that came out while I was still working on my dissertation. We collaborated; she was a real collaborator" (interview, 16 October 2007).

John worked with his advisor on multiple conference presentations. He described the opportunities and depicted his experience as evidence of his successful emersion into the academic community:

I worked on several conference presentations. . . . I didn't work on any large scale research projects. I worked with her on one particular presentation for [a local] school district. . . . We even did one presentation on doctoral programs in education with several other professors in the department. (interview, 13 November 2007)

The experience of assisting with preliminary research and putting together materials for presentation gave John multiple positive research experiences very early during his program.

Lola encountered experiences she described as invaluable to her early on her program. Unlike her experiences in undergraduate and master programs, Lola's advisor operated as if it was assumed she had the skill to be a scholar at the highest level. She described an experience from early in her program when departmental faculty members were traveling to a professional conference and her advisor encouraged her to join them: "He said, 'You have what it takes,

come on.' I immediately felt like I belonged. No one had ever said that to me" (interview, 15 June 2007).

Positive research experiences provided these degree completers with an opportunity to develop a sense of membership in the academy. These experiences affirmed for degree completers that they possessed the skills and abilities necessary to later complete a research project of their own.

Academic integration / compatible academic advisor. A second finding that emerged from degree completers related to the conceptual organizer academic integration was having a compatible academic advisor. Compatibility, as presented below, described the students and advisors coexistence and congeniality with each other over the course of the extended dissertation process. Degree completers portrayed relationships that were professional, but also affable in nature. Degree completers indicated that compatibility with their advisors aided them with their academic integration in the community and sustained them during their programs.

Participants illustrated how advisors encouraged them in effective ways that suited their individual approaches to learning. Lynn described her advisor as "supportive and helpful" (interview, 21 August 2007). Elianne described her advisor as "excellent, couldn't have been better" (interview, 21 September 2007). Both Lynn and Elianne indicated that their advisors provided support and assistance at a level that was appropriate for them.

Lola described the evolution of the relationship with her advisor using admirable language: "He was a wonderful man. . . . Our relationship just sort of

grew. . . . I told him I want to be more like you” (interview, 15 June 2007). She described him as agreeable and easy to work with even when the work was hard and challenging.

Scott described his advisor and his compatibility with her using glowing language:

She was an awesome lady. . . . She was nothing but supportive from the very first time I met her. Very professional, very approachable, she went out of her way to make sure I felt comfortable with anything. She also went out of her way to make sure I didn’t feel as though I was being taken advantage of while we were working together. (interview, 19 February 2008)

Jane also used affable language describing her advisor. “My major professor was great. We cried and laughed together many times” (interview, 4 December 2007). Her advisor encouraged her and motivated her when she needed it most. “Endurance is really what the whole thing is about. He made sure I kept going” (interview, 4 December 2007).

Rebecca represents a similar, affable relationship: “I had one of the most wonderful life experiences with my [advisor]. [She] was probably one of the most brilliant people I’ve ever known. A real compassion for people and learning” (interview, 21 September 2007).

Sue recollected fond memories and described compatibility that grew over time: “She stimulated in me something about learning. . . . She was identified as my advisor at the very beginning” (interview, 20 February 2008). She described how their relationship grew over time from one that was purely professional into a “significantly meaningful relationship” (interview, 20 February 2008).

John described that he struggled with completing his dissertation and compatibility with his advisor was an essential factor in his degree completion: "She was extremely supportive. . . . In fact, when I got down to writing the prospectus or dissertation and so forth, she would sit down and have me write while I was there with her and do things like that" (interview, 13 November 2007).

Janet recounted another example of compatibility with her advisor. Janet found the environment of the university daunting when she entered her program. Although initially she only took a few courses from her dissertation advisor, he struck a harmonious cord with her. Janet reflected on their relationship: "This man, this man, I loved him. He listened to everything I was saying. He was so supportive of my entire process" (interview, 17 October 2007). Her advisor encouraged Janet to discuss her experiences in various courses with him as she progressed through the program. Janet described how she emailed him regularly about issues she encountered in various courses: "He became my pen pal . . . he was setting a stage, a platform, for a topic for my dissertation because he already had an idea about what I was passionate about" (interview, 17 October 2007).

Janet's compatibility with her advisor sustained her: "I found my voice; I kept emailing my professor and he told me to keep a file with my feelings" (interview, 17 October 2007). The compatibility she felt with her advisor resulting from discussing her reactions to subject matter examined in other courses, interactions she had with other faculty, and challenges she faced during the completion of her dissertation proved extremely motivational to her.

Compatibility was not always described in terms of closeness, sometimes just as appropriate levels of support. Jewell described how her advisor was available and supportive but was not overbearing. This relationship worked better for her than if her advisor required regular interaction. "I was really own my own which really suits me. I don't need a lot of support. I can get my support elsewhere" (interview, 11 December 2007). Jewell sought out her advisor based on faculty reputations among her peers and her personal preference for approaching research. She knew what she needed from an advisor and sought it out: "I just kind of went and found someone that would share my interest and approach" (interview, 11 December 2007).

Robert described a compatible relationship with his advisor, albeit more distant: "He didn't hold my hand in the process . . . but he would ask me the questions he knew would encourage me to work" (interview, 8 April 2008). Robert indicated that his advisor knew how to ask questions about his work that led to further investigation and research.

Jim described his advisor with similar language: "She helped us select a topic and then offered guidance and support as needed" (interview, 12 September 2007). Jim's advisor was available when he needed her.

Jodi described compatibility as assistance with topic formation: "She gave me information [that I needed] and assisted me with my vision of my topic" (interview, 18 January 2008).

Lincoln recalled that his relationship was primarily professional: "I looked at him as someone I came to for [guidance]. I think if had he offered friendship, I

could not have taken it. I still call him doctor even though he said to call him [by his first name]" (interview, 12 September 2007).

Hazel needed an advisor to help her think more scholarly than she was accustomed in the daily practice of her profession. Her advisor provided this and encouraged her to explore her dissertation topic at greater depths than she would have if she were left on her own. Hazel understood this about herself and knew this was something she needed from an advisor to complete a meaningful research agenda. Hazel recalled her advisor's knack for eliciting thinking from students, guide them through their thinking: "This particular person was, I think, the quintessential [advisor]. [She] knew how to relate to people on a personal level. . . . She would coax your own thought out without veering you in one way or another" (interview, 16 October 2007). This approach suited Hazel well. Her advisor's approach was similar to way Hazel taught her own students in her classroom. Her compatibility with her advisor provided Hazel with a comfortable relationship with her advisor from the outset of her program.

Findings presented from degree completers described a variety ways in which compatibility with an academic advisor was important for the completion of a successful research project. Degree completers described compatibility in terms of a collegial relationship between student and advisor, advisors understanding the particular needs of students, and advisors serving as mentors guiding them into productive roles in the academic community.

Academic integration / clear research agenda. Having a clear research agenda early in their doctoral programs provided degree completers with positive

experiences of academic integration. Eleven of the degree completers described having clarity about a topic for their dissertation either prior to starting their degrees or in the early stages of their studies.

Hazel began her doctoral program with her dissertation topic in mind: "Before I decided to do my dissertation I became interested in the organizational structure of classrooms . . . I knew exactly what I wanted to do" (interview, 16 October 2007).

Lynn articulated a passion for a particular area of study and examined an issue in depth early in her program. She detailed experiences that led to rapid and meaningful academic integration: "I knew I wanted to do this, no matter what" (interview, 21 August 2007).

Scott characterized admissions interview as an opportunity to expound upon his plans for research: "When I went in to the interview, the professors and the department chair, pretty much everyone, asked the same question, 'What do you want to do your dissertation on?'" (interview, 19 February 2008) Scott said there was no hesitation in his response because he knew exactly what questions he wanted examine. Having this clarified in his mind before starting his program allowed him to direct his attention toward that topic throughout the coursework phase of his program. Scott described how during his interview he clarified to the committee that his research agenda was the reason for applying to that university: "I even told a couple of the professors that if you guys don't think I can do it here, I need to go to a different institution because that's what I'm going to do my dissertation on" (interview, 19 February 2008).

Lola was encouraged in the same way by her advisor: "Make it fit into what you're really passionate about. . . . Stay focused from day one" (interview, 15 June 2007). For both Lola and Sue, the rationale for selecting a research agenda early was more pragmatic than for others, but the advantage was the same. Having clarity on their topics sustained them through all phases of their programs.

Jodi discussed the importance of working on a project that was hers, something she implemented and considered her own idea, rather than one she was coaxed into by her advisor. She recalled: "I had always been interested in the topic, just as a teacher early on, and then as an administrator" (interview, 18 January 2008). She indicated that she knew her topic before entering her program as others above described.

Lincoln was adamant that the questions he came to the program to answer remained his topic for research: "The research was really rewarding because they were my questions. . . . I came to pursue my own ideas. . . . My questions helped me understand . . . how these people were educated" (interview, 12 September 2007). Lincoln said he never abandoned those questions.

Rebecca reported that she knew what topic she wanted to explore and recalled a conversation with her advisor that affirmed her thoughts: "I remember the discussion with my advisor . . . within in a few seconds it solidified what I wanted to research" (interview, 21 September 2007). These participants came to

their programs with a general idea about their research agendas and had those ideas confirmed as viable early on.

Jane had a basic concept in mind concerning a possible research agenda for her dissertation: "I was working in public schools . . . during that particular time . . . and I was interested in the perception of educators [concerning] the teacher certification test" (interview, 4 December 2007). Soon after she began her program, she reached an agreement with her advisor to proceed.

Elianne related a comparable scenario from before she entered her program: "I was interested in how one could do a better job of structuring an environment effective for learning. It was a eureka moment" (interview, 21 September 2007).

Janet provided a final example of the importance of having a clear research agenda: "Other people were floundering . . . I knew what I was doing from the outset" (interview, 17 October 2007). She was clear about her topic before she began her program.

Two degree completers chronicled varying rationale for developing a clear research agenda at the outset of their programs. Sue stated: "I remember someone telling me very early on in my program that it's important to select a topic early on in the program, so all your projects and research are around that same topic" (interview, 20 February 2008). She was advised by student colleagues who were further along in their programs to solidify her topic choice early and work on smaller projects related to that topic during her coursework.

Sue explained: "That way, by the time you do your lit review, you have most of that done. I did that" (interview, 20 February 2008).

Whether recounting that they entered their doctoral programs with a research agenda or developed a research agenda early on in their programs, having a clear research agenda enhanced degree completers' academic integration in their departments and served as a sustaining factor for them during their doctoral programs.

Academic Integration / fellowship or assistantship. Six degree completers received fellowships that required additional research commitments or teaching assignments during all or a portion of their programs. Degree completers receiving this opportunity spent an extended number of hours on campus each week completing their duties for the fellowships or assistantships

The financial assistance provided by the fellowships or assistantship supplied resources for the subsistence of the six degree completers. The level of financial support was adequate for some while others combined it with additional resources to sustain them during the programs. In either situation, the value of a fellowship or assistantship was providing degree completers the opportunity to work in their department on a daily basis. This enhanced the students' academic integration by offering teaching and research opportunities for the students. These opportunities provided the degree completers experiences that made them feel more like professors than students. The teaching and research opportunities were more beneficial for degree completion than the stipends they received.

John remembered his assignment and the work he completed to fulfill his duties: "Money problems weren't an issue to great extent. I was working as a grad assistant making enough money to get by. So, money problems weren't an issue to great extent" (interview, 13 November 2007). In addition to his stipend, his tuition and fees were paid by the university. John expounded: "I made enough money to keep the lights on and food on the table. So, as a grad assistant that's all I really needed at the time" (interview, 13 November 2007). He discussed how requirements for his fellowship were that he assist professors with research projects and teach undergraduate courses. John described this opportunity: "It made me feel like a real professor. . . . Ever since I was a kid I assumed I would be a professor, [the assistantship] allowed me the first shot at doing that" (interview, 13 November 2007).

Lincoln's experience was similar. He attended the university as a foreign scholar on a Fulbright Scholarship. The scholarship provided him with the financial means necessary to primarily focus on his academic requirements. Lincoln explained: "Since I didn't have a family, it wasn't as bad as my colleagues. . . . I came to the U.S. on a Fulbright Scholarship . . . that helped me stay focused and get finished" (interview, 12 September 2007). The fellowship also provided him an opportunity to conduct original research with a professor from his department over an extended period: "So, I used that money along with money from my university to assist him on a research [project] in his specialty" (interview, 12 September 2007).

Four of the degree completers had families and fulltime employment when they entered their programs. Either at the beginning of their programs or at a point during the coursework phase of their programs, all four chose to resign their fulltime employment positions and accept assistantships with their universities. They described the experience as a financial risk but also essential to completing their degrees.

Elianne recalled: "I took a leave of absence from my regular job and worked as a grad assistant. . . . I just told [my husband] I am going to spend a year as a grad assistant in grad school" (interview, 21 September 2007). Elianne said it was essential for her to "find out if she could be successful" (interview, 21 September 2007) in an academic department at a university on a daily basis.

Scott accepted a graduate assistantship and described working with one professor on research project that lasted over three years: "The dean of teachers at the middle school called the university and said, 'We want someone to come out and collect data for the next three years and tell us what you find'" (interview, 19 February 2008).

Hazel was married, teaching fulltime, and was "also working as a part-time graduate assistant" (interview, 16 October 2007). Hazel insisted that this provided her with opportunity to work closely with a professor and publish prior to graduation, something that would not have happened without the assistantship.

Robert described teaching at two remote locations for the university to meet the obligations of his assistantship: "I really enjoyed teaching in the college environment" (interview, 8 April 2008).

The degree completers indicated that the fellowship or assistantship provided them enhanced experiences of academic integration at their institutions. Findings from the six students who served as graduate assistants or received research fellowships intimated that their academic experiences, teaching and conducting research, had a significant sustaining effect on their degree completion.

The four findings (a) positive research experiences (b) a compatible academic advisor (c) entering their program with a clear research agenda, and (d) receiving a fellowship or assistantship portrayed experiences related to the conceptual organizer academic integration that were influential on the persistence of degree completers.

ABD Participants: Academic Integration

The researcher found that students experiencing difficulty with academic integration were less likely to complete their degree programs. Three findings related to conceptual organizer academic integration emerged from data provided by ABD participants. Findings for ABD students comprised the dimensions (a) negative departmental experiences, (b) an incompatible academic advisor, and (c) lacking a clear research agenda when entering their programs. Table 4 is a matrix for findings ABD participants articulated when describing experiences related to academic integration.

Table 4

Three Findings Comprising Academic Integration for ABD Participants

RQ 2: Academic Integration

Data showed that ABD participants encountered three negative experiences related to academic integration that restrained them during their programs. Academic integration is the success students have infusing themselves into academic norms of their particular institutions, departments, and fields of study.

Negative Departmental Experiences

ABD participants described negative encounters with members of their departments that deterred their progress toward degree completion.

Incompatible Academic Advisor

ABD participants described negative experiences with their advisors that prevented establishing a collegial relationship.

Lacked Clear Research Agenda

Lacking a clear research agenda from the outset of their programs deterred ABD participants from establishing a focused research goal.

Academic integration / negative departmental experiences. ABD

participants described experiences that encompassed a broad spectrum of academic encounters when detailing examples of negative departmental encounters. Students' negative departmental encounters varied but ABD participants sensed that they could not complete their programs in their particular academic communities because of the encounters.

When queried about experiences affecting his academic integration, Donny recounted an encounter with his program advisor from when he was exploring dissertation topics. His program advisor suggested that he pick something relevant from topics other researchers in the department were currently exploring and extend their work in some way. Donny interpreted this

encounter as negative and felt the advice was ineffective because he wanted to explore something more novel. He said none of the topics the departmental faculty were exploring particularly interested him. Donny stated:

My advisor told me that a dissertation topic really was not important because few were going to read it other than my committee. My advisor said it just wasn't going to matter that much. That kind of bothered me. Why bother if nobody cared? His advice was to do something the department faculty were doing and get done; worry about novel research for after the degree. (interview, 3 March 2008)

Donny reported that this discussion was repeated during several subsequent visits. He was not able to find anyone in the department that would allow him to explore a topic significantly different from their research agendas.

June articulated that she experienced frustration with her advisor and the department as she attempted to transition from coursework to the dissertation phase of her program. "At points it was very frustrating. . . . All my communication was through email. . . . She also [was] one of those with a very strong personality" (interview, 22 October 2007). June discussed how she made some early attempts to organize a committee and failed to get a requisite number of faculty members to agree to serve. June concluded: "So that was a pain in my behind" (interview, 22 October 2007).

Another ABD participant described negative experiences that she attributed to her ethnicity. Kimberly believed that a resistance to African American students existed within the department among particular faculty including her advisor during her time at the university. She stated: "During that time there were many roadblocks to African American students, both male and female" (interview, 19 February 2008). She described the experience as one of

being isolated, feeling excluded from the opportunity to partner with faculty in the program. She continued: "There were a lot of bad attitudes in the leadership department during that time" (interview, 19 February 2008). Kimberly was convinced that faculty attitudes in her department restrained her ability to move forward beyond the point of her courses. She contended that the opportunity to work on projects with faculty was not afforded to her as they were to majority students.

Three ABD participants described experiencing negative departmental encounters during their attempts to organize a committee or have their prospectuses approved. Rita told of an advisor who was not able to provide clear direction during the development of her prospectus and her frustration with feedback from other committee members: "My frustration began when I would give her things and she would say great, great, great and then she would send it to my committee and the committee would just eat it up" (interview, 18 October 2007). Rita eventually abandoned the process after a year of struggling with this issue.

Nikki recalled political issues occurring within her department and the impact those issues had on faculty. Because of the political issues, there was an unwillingness of some faculty to work on committees together. Nikki described problems she wanted to avoid: "There were a lot of problems going on that I didn't want to make my problems" (interview, 18 January 2008).

Ashley discussed a similar situation that led to her frustration with the process: "There were a lot of attitudes in the department. People wouldn't talk to

each other. I just couldn't go back after that. I had a master's and specialist degree and I really didn't need the degree for professional advancement" (interview, 27 March 2008).

Teresa described negative departmental encounters differently. When considering possible committee members, her advisor wanted to include an assistant dean from the graduate school and a particular faculty member from another department. Teresa stated: "Part of the problem was the committee I put together. One was an assistant dean in the graduate school, one from another department. I would advise never doing either" (interview, 31 January 2008). Teresa indicated that the assistant dean's limited availability and the departmental responsibilities of the external faculty member proved to slow the process significantly, ultimately causing Teresa to lose momentum for her program.

Negative departmental experiences were restraining to the progress of half of the ABD participants working toward the completion of their programs. The negative encounters resulted from various reasons as perceived by the participants. ABD participants indicated that attitude, poor guidance, committee composition, departmental politics, and inequities were representative of negative departmental encounters. The negative departmental encounters restrained ABD participants' efforts at completing their programs.

Academic integration / incompatible academic advisor. The finding incompatible academic advisor emerged during interviews with ABD participants on seven occasions. This finding described interactions between participants and

their advisors that hampered their successful academic integration. In each instance, a restraining impact on participants' progress resulted.

Conflicts between and among faculty affected ABD participants' interactions with their advisors indirectly and caused some participants to experience incompatibility with their advisors. Ruth illustrated such an occurrence: "It didn't take long to get the lay of the land. I had to really be careful in my selection. . . . [The] department size and number of members required for a committee would make it impossible to form a committee" (interview, 13 July 2007). She said her advisor confided in her that the composition of the department was changing in the near future and things would improve. Ruth recalled: "My advisor wanted me to wait until new people were on board. I found that ridiculous. I lost a lot of respect for her" (interview, 13 July 2007). Ruth found it frustrating that her advisor asked her to delay rather than work with particular departmental faculty.

Perry's comments exemplified a similar situation. She began: "A lot of external problems were going on [affecting the department]" (interview, 26 March 2008). Perry explained that many ongoing issues impacted the interactions of faculty within the department and stymied her attempts to organize a working committee. Perry explained: "If I took one individual, I couldn't take another. My advisor agreed to be my chair but wouldn't work with others I wanted on the committee. With only a few in the department, others couldn't serve as my chair because they were full" (interview, 26 March 2008). Her frustration with the ongoing issues caused her to begin to drift.

Nikki discussed how her advisor's unwillingness to work with other faculty in the department led to her incompatibility with him: "At the time I entered the program, there was a lot going on. My [advisor] would not work with particular individuals" (interview, 18 January 2008). Her advisor would not agree to a particular individual joining the committee, one who Nikki considered vital to her topic. Because of this, she was unable to form a committee from within her department since it was small in number. Her advisor asked her to seek members from other departments. This frustration stalled her efforts to form a committee and complete a prospectus.

Kimberly characterized her relationship with her advisor as incompatible: "I worked with other individuals but not my advisor" (interview, 19 February 2008). When probing questions explored why this was the case, Kimberly explained: "Just didn't get along" (interview, 19 February 2008). She described her department as small with just a few graduate faculty members working with multiple doctoral students so options for reassignment to another advisor were minimal. Kimberly approached another faculty member with whom she had completed a research project and asked her to consider supervising her while she researched her topic. The second faculty member was unwilling to accept Kimberly because "her area was not my area" (interview, 19 February 2008). The faculty member asked her to consider changing her research area but the new topic did not interest Kimberly enough to pursue it for her dissertation: "I weighed the situation, weighed what was going on and tried to decide whether to go on

after comps. I could write a book. . . . I decided to move on” (interview, 19 February 2008).

Dave presented incompatibility with his advisor as divergent purposes: “He told me I needed to find something that hadn’t been studied before in a deep way. I just could never find that” (interview, 13 November 2007). Dave expressed he felt distant from his advisor and that made him reluctant to risk his ideas: “When I did have conversations about topics with him during my courses, he would say things like, ‘That’s way too broad’ or something like that. He never really suggested [how to narrow] things, only said why something wouldn’t do” (interview, 13 November 2007).

Tyler described his advisor as one who seemed disinterested in helping with dissertation topic formation. Tyler recalled a hallway conversation with his advisor that he paraphrased: “My advisor said come see me when you have a topic finalized” (interview, 25 June 2007). Tyler related that he was unsure as to whether his advisor was uninterested or overburdened: “We just never seemed to click” (interview, 25 June 2007).

Donny related a similar sentiment of incompatibility. Donny stated that his program advisor became his dissertation advisor by default: “He was assigned to me by the school” (interview, 3 March 2008). He continued by describing the department as small with limited options. Donny explained that his areas of interest for possible topics were not the areas of expertise of his advisor: “What I was interested in wasn’t something he knew a lot about. We just never had much

in common. He was a good guy; we just didn't have much in common" (interview, 3 March 2008).

A finding influencing ABD participants' progress in their programs was incompatibility with academic advisors and related to the conceptual organizer academic integration. Whether described as a resistance to the participants' desires for committee formation, personality differences, or personal distance, ABD participants voiced incompatibility with academic advisors as having a negative influence on their ability to complete their doctoral programs.

Academic integration / lacked clear research agenda. The dimension lacking a clear research agenda emanated from data participants provided when detailing their experiences of transitioning from coursework to the dissertation phase of their programs. Lacking a clear research agenda at the outset of their doctoral programs proved detrimental to ABD participants. Some participants never settled on a particular topic, while others were encouraged to move toward topics that held their advisors' favor but were not of particular interest to the students. In either case, the data indicated that the students did not enter their programs with a particular research interest and failed to develop an agenda during the coursework phase of their programs. This lack of clarity became apparent either during their coursework or soon after the completion of their comprehensive exams during early attempts to formulate a prospectus for approval.

Many ABD participants described entering their doctoral programs with the hope that a topic for research would emerge during the coursework phase of

their programs. Larry described a strong desire to pursue a doctoral degree but not a particular area of interest for research: Larry described his motivations: "And so, I thought I would like to work on [another] graduate degree. . . . and it would just be an extension of the master's degree" (interview, 19 February). Larry was interested in being a doctoral student and taking more courses but did not have a particular research interest.

William detailed that he was comfortable completing courses, enjoyed the learning experiences of doctoral courses, and performed well on his comprehensive exams. He was successful in his doctoral courses but he did not have an educational issue planned to explore for the dissertation phase of his program. William stated: "Everybody at my institution in my department just assumed that I would keep going because I made it through courses right on schedule. And, to my surprise, it just sort of fell apart" (interview, 4 March 08). After the completion of his courses, he struggled to identify a topic of research adequate for a dissertation. Eventually, he took a teaching position at a small college in another town before settling on a topic.

Eddie portrayed a scenario of having general areas of research interest but an inability to focus on a reasonable research agenda to the satisfaction of his advisor. Eddie recalled:

Initially my prospectus wasn't approved because it was too narrow, which is very unusual, normally it's too broad. The process of writing a prospectus for the dissertation and my hopes of extending research I completed for some of my courses wasn't approved by my advisor. He and the other professors on my committee were very interested that I try something else for the PhD. (interview, 12 June 2007)

Eddie considered his area of interest adequate and never on an adequate research agenda. Eddie concluded his thoughts: "Because of the prospectus that didn't get approved, that kind of put me in a limbo place" (interview, 12 June 2007).

Other ABD participants attempted to assume the research agendas of their advisors rather than developing their own interest. This led to frustration for some because they were working on topics that that did not hold their attention or create a sense of personal academic accomplishment. Rita recalled: "[My research agenda] was set primarily by my advisor. I think part of that was from the fact she had not published . . . and needed to get her publications list back on track" (interview, 18 October 2007).

Teresa described a similar situation with her advisor. She approached her advisor about choosing a different agenda for a possible dissertation topic: "I wanted to change at one point and went to my advisor and said I wanted to research another aspect of student teachers . . . and she dissuaded me" (interview, 31 January 2008).

June also described her situation as being limited by her advisor's agenda: "I was doing program evaluation [for my advisor]. . . . Free labor, free research" (interview, 22 October 2007). In each of these scenarios, students worked on their advisors' research agendas but not ones with which the students held an equal level of interest.

ABD participants who lacked a clear research agenda often found other places to focus their energies while contemplating possible topics. Lea recalled

that her focus began to wane as time passed: “I started developing other interests. . . . I put doctoral studies on the back burner. I became interested in professional activities and organizations around the state and put my time and energy there” (interview, 20 May 2007). As the prospect of identifying a topic for research declined and new interests developed away from their programs, students became resolved to the notion they would not finish their degrees.

Dave recalled that he began to focus more on his job and avoid searching for a dissertation topic:

I looked for awhile at things that might work, but I couldn't decide on anything that was unique. . . . I didn't see how I could create something different with what was already out there. I accepted some additional responsibilities at work that took a good deal of my time. (interview, 13 November 2007)

Donny described disappointment because of his inability to develop a topic: “I never put a proposal together. I guess I just came to the conclusion that things wouldn't be different if I had a degree or not. (interview, 3 March 2008).

Tyler discussed how the lack of a clear research agenda led to feelings of failure: “I hoped that something would come to the surface during the courses I took, but it really never did. . . . Nothing was ever just head and shoulders above something else and that was disappointing” (interview, 25 June 2007).

Many ABD participants lacked a clear research agenda to develop into a dissertation topic. Some advisors attempted to coax students toward a topic that would hold their attention or be congruent with the advisors' areas of expertise. Other advisors took a less direct approach, waiting for ABD participants to identify a topic. As Teresa noted, some attempts by advisors to engage ABD

participants in research activities were even viewed as self-serving: “So, by pushing me in one direction, it really helped her more than me” (interview, 31 January 2008).

Lacking a clear research agenda created doubt among ABD participants as to whether they belonged in the academic community. As the students became increasingly cognizant they lacked a clear research agenda, their level of involvement in individual academic activities waned and they began to decrease their interactions with their advisors and academic departments and increased their involvement in other activities.

The three findings (a) negative departmental experiences, (b) an incompatible academic advisor, and (c) lacking a clear research agenda portrayed experiences related to the conceptual organizer academic integration that were influential on the persistence of ABD participants.

RQ3: Do Doctoral Students in Education Administration Programs

Articulate Experiences of Social Integration as Influencing Their Persistence?

Social integration was a conceptual organizer explored during interviews with both degree completers and ABD participants. Findings related to social integration differed between degree completers and ABD participants for this organizer.

Findings articulated by students describing positive experiences related to the conceptual organizer integration and indicated an increased likelihood for persistence to degree completion as compared to negative experiences that decreased the likelihood.

Degree Completers: Social Integration

Two findings related to the conceptual organizer social integration emerged from the data provided by degree completers. Findings comprised the dimensions (a) interactions with peers and (b) peer support. Table 5 below is a matrix of findings degree completers articulated when describing experiences related to social integration.

Social integration / interaction with peers. Interaction with peers was a finding for the conceptual organizer social interaction that degree completers articulated. The nature and context of the social interactions included both structured and unstructured student groups and occurred in settings considered social in nature. Descriptions of these interactions indicated that interactions with peers provided students an opportunity to explore and examine their academic

Table 5

Two Findings Comprising Social Integration for Degree Completers

RQ3: Social Integration

The data showed that degree completers encountered two forms of social integration that sustained them during their programs. Social integration is the success students have becoming members of a social network of peers in their particular institutions and departments.

Interaction with Peers

The nature and context of interactions with peers for degree completers included both structured and unstructured encounters.

Peer Support

Degree completers defined peer support as encounters with other students that developed into substantial interpersonal relationships.

and personal interests in an environment free from the normal assessment or evaluation processes experienced with similar discussions with faculty or in the classroom.

Several degree completers described interactions with peers that occurred through structured social gatherings of student groups organized by their universities. Lincoln described the graduate student group at his university: "We had an organization of graduate students at [that] helped me tremendously through the program, figuring out how the department worked. . . . All in all, very encouraging" (interview, 12 September 2007). Such groups, often organized by the university, served to facilitate the social integration of graduate students normally initiating the gatherings around academic concerns.

Lola illustrated such an attempt by her university. She detailed how her university president encouraged graduate students to form small groups within their departments to discuss academic issues: "He met with us and said to form our own committee and have meetings to discuss issues" (interview, 15 June 2007). Lola indicated that her small group remained together throughout her program and often gathered for social reasons.

Jewell, Robert, and Janet recounted similar experiences with graduate student support groups that gathered together to discuss programmatic issues and read each other's work and offer comments. The participants considered the groups as social organizations although topics of discussion were often academic in nature. Jewell described gatherings with her peers this way: "[We] were reading, sharing things we had written, just sort of a supporting kind of

relationship” (interview, 11 December 2007). Robert described valuable feedback he received in a social context: “I presented each one of my chapters and they gave me feedback. . . . All very, very encouraging” (interview, 8 April 2008). Janet discussed that social groups offered opportunities to discuss their programmatic concerns: “We discussed courses, coursework, who to take, who not to take, and it was very safe for us to do that” (interview, 17 October 2007). The social nature of the groups encouraged open dialogue about academic issues and concerns between the students during their programs.

Other social interactions resulted from serendipitous circumstances and relationships with student peers that developed during their programs. Degree completers described even stronger levels of interaction with peers when this occurred. Rebecca recalled a group of six students that became very close and remained close even after completion of their programs: “Even when things started winding down, six or seven of us were close socially and we still are. That core group stayed together the whole time” (interview, 21 September 2007).

Scott discussed a group that varied in size from as few as a “couple of guys” to as many “ten or so” as he went through his program. Scott described discussions and time spent together: “The major focus was academic, but when we attended these conferences and presented various topics it was also social” (interview, 19 February 2008).

Sue recounted how a group formed among the students in her program and met on a monthly basis to informally discuss their program: “We pulled

ourselves together and had some informal chats about our programs . . . our research processes, just strong networking” (interview, 20 February 2008).

John described the closeness of the interactions of a peer group in his program: “We had a close knit group of people. We all took our classes as a cohort situation, same classes, same times. We didn’t spare each other arguing philosophical differences, the finer points of things we were studying” (interview, 13 November 2007). When asked how he characterized the nature of group, John responded: “It was a social kind of peer group” (interview, 13 November 2007).

Jim’s perception of the group he interacted with during his program was also social even though the group evolved in the academic environment. Jim responded after thinking for a moment: “On occasions we would grab something to eat and go study. So, I guess primarily . . . it was social even though we mostly met to study” (interview, 12 September 2007).

Hazel gave an account of how a peer group formed quickly and stayed together throughout her program: “There ended up being five of us and we took our courses, doctoral classes, together, all of them” (interview, 16 October 2007). Her portrayal of this group centered on the trust and friendship she shared with her academic colleagues. The sense that this was a safe group with whom to test thoughts and theories permeated Hazel’s conversation: “We were really hammering each other . . . where did you get that information, what are you basing it on?” (interview, 16 October 2007) She returned to the point that the group was grounded in friendship, and no matter the topic or level of intensity of

the discussion, maintaining the integrity of group was essential. Hazel ended her comments: "We didn't mind challenging each other at all. It was all done in good fun; everybody liked everybody else" (interview, 16 October 2007).

The dimension of interactions with peers defined social encounters of degree completers that often centered on academic discussion but were considered social by participants. Degree completers described social groups that met formally or informally to discuss their academic departments, faculty encounters, and their own research projects. Interactions with peers as detailed by degree completers affirmed the inclusion of the dimension among influential factors related to social integration.

Social integration / peer support. Degree completers described peer support as a second finding related to social integration. Degree completers described peer support as interpersonal relationships that extended beyond academic concerns into the personal lives of the students. These peer relationships often began as collegial, professional relationships and then intensified during the participants' programs of study. Degree completers who described these experiences were fewer in number than those for the previous dimension and they detailed support that often assumed a surrogate family role for these degree completers.

Sue described a support group that gathered regularly and for extended periods: "[We] had quite a bit of interaction. Several of us got together in the school of education. . . . kind of informally pulled together and met monthly [away from the university] and, you know, had some informal chats" (interview,

20 February 2008). She described how the group originally formed to discuss their program concerns and their research but as she progressed through her program the group continued support by gathering together for social and family functions. Sue described the group:

We started out talking about the things we were doing, studying, how to improve our research processes. As things started winding down, the peer group was close socially and we still are. That core group stayed together and still meets regularly for social functions at each other's homes today. We became like family, going to weddings, funerals and other functions. (interview, 20 February 2008)

Rebecca, who was a member of the same social network, echoed Sue's sentiments: "My husband does not have a college degree. . . . So, the core group really helped me a lot. Sustained me and helped me. They understood what I was going through" (interview, 21 September 2007). Rebecca explained that the peer group offered support she could not find elsewhere.

Lola described familial types of experiences that provided the support she believed necessary for her degree completion. Lola recalled support she received: "We met at someone's house once a month for pot-luck. We discussed which research courses to take. They were supportive of you and your topic" (interview, 15 June 2007). For her, the peer support groups provided a place where she could discuss things that she was not afforded in other social contexts at the university, home, or work.

Scott detailed group support in both personal and professional ways during his program: "It's like you sit down with a group of people you don't really know but you want to get to know. You say, OK, from now on, if I have something green in my teeth, tell me!" (interview, 19 February 2008) He said that

this group became the people he went to when he needed acceptance and support that others close to him, his advisor and family, could not provide: “We sat down and said if we try to compete with each other we are just going to add more stress. . . . We were more supportive, you know?” (interview, 19 February 2008)

Jim portrayed experiences of peer support that sustained him through his program: “Five of us got really close. It was almost like a different kind of family because some of the spouses, girlfriends, and boyfriends didn’t understand what we were doing; not because they were unintelligent, they just didn’t understand” (interview, 12 September 2007). He described the unique nature of the doctoral program in comparison to other degrees he had finished and how it was difficult for his family members to understand the nature of the process. Peer support was extremely important for Jim because it offered support from others who understood the process of completing the program. Jim described the support:

With my other degrees, there was take this class, check it off, take this class, check it off. But the doctoral program, it’s not like that. [My wife] would say, ‘How much left? Where are we in the process?’ But the other students [knew]. It was a great group; it was just a great group of people. (interview, 12 September 2007)

Degree completers portrayed peer support as extending beyond levels of support that are normally experienced in a professional setting. For this cadre of students, the dimension peer support was influential on their persistence.

ABD Participants: Social Integration

ABD participants detailed experiences that led to the emergence of a single finding related to the conceptual organizer social integration. The finding of

isolation from peers emerged when ABD participants were discussing their experiences of social integration. Table 6 below is a matrix of findings for social integration articulated by ABD participants.

Social integration / isolation from peers. Findings indicated ABD participants experienced significantly less intense levels of social integration than that detailed by degree completers. ABD participants described scenarios where isolation and distance characterized interactions between them and their peers.

ABD participants often described isolation from peers as their personal choice. During the coursework phase, this approach did not affect their progress significantly. However, as they moved closer to the dissertation phase, the lack of peer support had a negative effect on their persistence. Isolation from their peers limited ABD participants' opportunities to have conversations with colleagues about academic and programmatic concerns, explore options for possible dissertations, or develop strong personal bonds with peers.

Table 6

Findings Comprising Social Integration for ABD Participants

RQ3: Social Integration

The data showed that ABD participants avoided opportunities for social integration with peers and that restrained their progress toward degree completion. Social integration is the success students have becoming members of a social network of peers in their particular institutions and departments.

Isolation from Peers

Isolation from peers by ABD participants described their choice to avoid extended interactions with other students during their programs.

Ashley described her reasoning for choosing to remain distant from her peers as resulting from a lack of time for social interactions. Ashley described her student experience this way: "I was a bit of a loner. I was too busy for much interaction with peers outside of course work; I just didn't have the time" (interview, 27 March 2008). Ashley indicated that she preferred to work alone and her time was too limited for what she considered friendly relationships.

Kimberly described her choice to remain distant from peers as her personal preference. She detailed her approach to doctoral studies:

I am more of an individualist as opposed to a group person. They initially approached me for a study groups. I did my preparation alone. I found [study groups] a waste of time . . . talking and interacting, socializing and complaining rather than studying. (interview, 19 February 2008)

Ruth detailed isolation and distance from her peers as a matter of circumstance. She was a part-time student and many of her peers were fulltime students. Ruth described the difference this way: "They [fulltime students] were more of group. . . . They went out for coffee with professors and the mingled more" (interview, 13 July 2007). Ruth said she was not on campus when most of her peers gathered for social occasions. She believed this created a different environment for her.

Nikki preferred solitude over group encounters. Nikki described herself as a "different type" of student from most of her colleagues. She was employed in a school system and traveled over an hour to the university to attend classes. She depicted herself as a student that arrived on campus just in time to enter the classroom and then dashed away as soon her classes ended for the trip home: "I was not a typical graduate or doctoral student at the university in the college of

education, traveling in from out-of-town. That alone made me a little bit different” (interview, 18 January 2008). By viewing her status as being different from most students in her program, Nikki declared she was “a lone agent” (interview, 18 January 2008). Nikki felt she was obscure in the department and believed the residential students held a different view of the commuter students.

Donny said that the location of his job created isolation from his peers and impacted his ability to interact with other students:

Sometimes we would have a group presentation or projects to work on. Most of the group worked at the university either as graduate assistants or employees. Maybe they got together more often. But I worked at another college, so I only went over the university for classes or to work on a project. (interview, 3 March 2008)

Donny believed his student peers developed close relationships during their daily activities at the university that carried over to other social venues on and off campus.

William was a fulltime student during the coursework phase of his program but did not live in the city where the university was located. William described the distance he lived from the campus as an impediment to developing a support group among his student peers: “I lived thirty miles from campus. My work day was many, many hours that [I] spent right there but after classes ended each night, I was ready to make the drive back home” (interview, 4 March 08). He had friends in the program but never developed any sense of camaraderie with a small peer group during his studies.

Findings from these ABD participants indicated that isolation from peers created a student experience differing from the degree completers and precluded

ABD participants from experiencing support from their peers. The lack of an identifiable support groups among their peers had a restraining effect on ABD participants' progress to degree completion because they often found themselves working in isolation.

RQ4: Do Doctoral Students in Education Administration Programs Attribute Commitments to External Obligations as Influencing Their Persistence Decisions?

External obligations was a conceptual organizer explored during interviews with degree completers and ABD participants. Findings differed between degree completers and ABD participants for this conceptual organizer.

Findings articulated by degree completers describing experiences related to the conceptual organizer external obligations that portrayed an ability to negotiate personal commitments while enrolled in doctoral programs and depicted students who were more likely to successfully complete a dissertation. Findings articulated by degree completers portrayed difficulty with negotiating commitments and depicted students who were less likely to persist.

Degree Completers: External Obligations

Degree completers described three dimensions of the conceptual organizer external obligations that influenced their persistence. Findings comprise the three dimensions (a) family support, (b) employer support, and (c) family expectations. Table 7 below is a matrix of findings for degree completers articulated when describing experience related to external obligations.

The researcher found that commitments to external obligations had a significant influence on the persistence of doctoral students. It was found that

family and employment commitments created external obligations that influenced the persistence of degree completers. Findings portrayed circumstances related to external obligations that hindered or slowed their progress during their degree programs but did not lead them to depart from their programs.

Table 7

Three Findings Comprising External Obligations for Degree Completers

RQ4: External Obligations

The data showed that degree completers encountered three external obligations of which they effectively negotiated the demands in ways that sustained them during their programs. External obligations are roles doctoral students are responsible for executing related to family, work, or other obligations during their programs of study that are not directly associated with the pursuit of their degree.

Family Support

Degree completers negotiated their customary family roles with others to allow them to focus their attention on their programs.

Employer Support

Degree completers negotiated their customary work roles with others to allow them to focus their attention on their programs.

Family Expectations

Degree completers described family expectations relative to the completion of their degrees as placing high external demands on them for program completion.

External obligations / family support. Degree completers indicated that family support had a sustaining effect on their progress. Family support was described as a dimension by all but two degree completers. Family support emerged as a dimension for the conceptual organizer external obligations as the degree completers described scenarios where family members assumed duties, roles, and responsibilities the degree completers formerly held. Family support

allowed degree completers to focus their immediate attention and energy on their doctoral programs.

Hazel described family support this way: "I really didn't do anything. He (her husband) did everything around the house. I only had to study. He said, 'You do that, I'll do the rest'" (interview, 16 October 2007). With regularity, Hazel described the sustaining effect family support had on her during her program. Hazel recalled: "My son was gone off to the Army." (interview, 16 October 2007). She described how personal obligations had lessened at home; her husband had retired, but returned to work while she completed her program. She said her husband provided additional income while she completed her program: "He had been an engineer . . . and was out of work for six years. . . . He went back to work and [started] building houses" (interview, 16 October 2007). The external obligations of family she normally managed were assumed by her husband during her doctoral program.

Scott had a large family that relied solely on his income for financial support at the time he decided to pursue his doctoral degree. Additionally, he described very close relationships with his children and how he committed large amounts of his personal time to family activities prior to beginning his doctoral program: "When I first got started, the majority of my time was spent with coursework primarily, my graduate assistantship, my beginning of the dissertation, and then family, which is sad to say out loud" (interview, 19 February 2008). He voiced a sense of guilt related to family obligations that he put aside during the pursuit of his degree: "But then I got better at being a

doctoral student and my family got better at understanding. [They knew] OK, when he goes in there and closes the door he's not angry, he's just in his room" (interview, 19 February 2008).

Scott indicated a sense of guilt related to neglecting his family relationships. Guilt from neglecting family obligations was linked to the change in his financial contributions to the family. Scott explained his feelings of receiving family support in this way:

When my wife and I were dating it was pretty much a mutual agreement that she wanted to be home and I wanted her to be home. . . . She really only worked during our marriage during those three years. We couldn't sell our house in our hometown . . . so [she was working to pay] two house payments. I would dream I was under water swimming toward the surface and waiting to grab a breath of air. (interview, 19 February 2008)

Scott understood that his family supported his pursuit of his degree, both emotionally and financially. He described their willingness to assume many of the responsibilities he normally held. Without their support, Scott indicated he was unsure he would have finished his degree.

Jodi described family support in terms of compromises reached: "[If my husband] didn't get his attention it was not a happy family" (interview, 18 January 2008). Although she viewed her husband's support through the acceptance of family responsibilities as negotiated, she indicated he agreed to assume some of the duties she traditionally executed. She described verbal support as essential: "My husband was supportive, especially with his words" (interview, 18 January 2008). Jodi explained that her family structure had been strained by many factors over time, including a child with special needs. She said she knew her husband was fearful about how they would make ends meet with the additional costs of

her degree. She knew this concern was paramount to her husband: "I worked extra at school for after school programs because the additional money helped, he agreed to assume more responsibility in caring for their children on a daily basis" (interview, 18 January 2008).

Jodi discussed family support as she described "getting up early in the morning and studying until time for her to go to her school" (interview, 18 January 2008) so that in the evenings she could assist with caring for their child. Jodi indicated that her husband took on all the care giver duties on the weekends so she could concentrate on her studies. Jodi described her weekend studies with a sense of guilt:

I stole the weekends, which was really a compromise I made with my husband. I would get up early [on Saturday] and write . . . until that evening with old movies on the television in the background. On Sundays, I would go to church and then come back home and plant myself in front of the computer and type until about 10 at night. But my family allowed me those times on the weekends, which was nice. (interview, 18 January 2008)

Although Jodi described family support as negotiated and used language that communicated some level of guilt for accepting it, she indicated that without family support her degree completion would have been difficult.

John described family support as something occurring at a critical juncture in his program. He considered leaving his doctoral program after he completed his comprehensive exams. John's parents lived in another city and he relocated there while he sorted out his thoughts about his program and whether to write a dissertation. John explained: "I hadn't ruled out that I would go back but I hadn't decided I would go back either. . . . For various reasons, primarily my family . . . I

made the decision [to finish]" (interview, 13 November 2007). John said his family made it clear that they were supportive of him regardless of which decision he ultimately made. This family support led him to make the decision to return and complete his program when he was certain that the degree was what he wanted.

Jewell and Elianne detailed how family members palliated their family responsibilities and allowed them to focus on their studies and the feelings of guilt and selfishness those gestures created for them. Elianne recalled: "I felt selfish because they offered support but I was there [in the doctoral program] for me, no other reason" (interview, 21 September 2007). Likewise, Jewell described her family's support as creating feelings of selfishness: "My family allowed me those times to neglect things at home. . . . I didn't lift a finger or anything" (interview, 11 December 2007). In both instances, the women considered the support given them by their families as essential for their degree completion, but for each it was difficult to accept.

Sue described family support in terms of sacrifice: "We gave up a lot for me to be able to do that" (interview, 20 February 2008). Sue described how her husband supported her emotionally and their family financially: "We gave up a lot in terms of what I was doing economically both before and what it would be like after, because I was making very good money" (interview, 20 February 2008). Her change in professional direction and the reduction in financial security for her family produced feelings of selfishness for Sue. She detailed how the desire to earn the doctorate degree was a decision that came later in life. Sue described her husband's support even though initially she feared not having it: "He was

certainly supportive” (interview, 20 February 2008). She said several times during her program she questioned if she should continue, if she could do the work. She said her husband supported her through those times of self-doubt as well. “I remember at one point . . . I had mounds of data on my desk at home . . . I thought, I cannot do this” (interview, 20 February 2008). She went on to describe the emotional support he provided her. The family support Sue received from her husband sustained her in a vital way through her degree completion.

Jim described awareness of family support before he started his program. He recalled what one professor asked him during an admission interview: “How’s your marriage? Because, this is going to be hard” (interview, 12 September 2007). Jim said he knew he had the full support of his wife. She had encouraged him to pursue his program even though it required many adjustments in their roles at home. He, like other degree completers, stated that his wife provided emotional support that kept him going during the dissertation phase: “I mean you get so discouraged . . . [when you] have to rewrite a chapter again. But she would always say it’s just part of the process” (interview, 12 September 2007). Jim described the support he received from his wife as being as important as his own motivation for completing his program: “I guess it was equally my wife’s support and my desire to finish that ultimately led to me finishing the program” (interview, 12 September 2007).

Janet illustrated examples of family support through accounts of the actions of her mother and grandmother. Janet indicated that she was the first in her immediate family to earn a college degree and the first in her extended family

to earn a graduate degree: "I grew up poor, had a baby when I was a teen, but mom always told me I had it. My granny told me I was going to change the world" (interview, 17 October 2007). She articulated that this narrative of family support continued throughout her doctoral program. She told how her mother provided childcare so she could attend classes. Her grandmother came to her home and cooked meals for her children and husband while she worked in the library and conducted her research. "My granny said she did it because I was special. She could do that for me so I could do special things for others" (interview, 17 October 2007). Janet's mother and grandmother assumed many of Janet's responsibilities at home while she pursued her degree. Their family support allowed Janet to focus on her degree without fearing that her traditional roles at home were being neglected.

Jane, Lynn, and Lola related sentiments of family support that allowed them to focus on their degree programs, though not as remarkable as many of those above. Lola was married with children and described how her husband and children "pitched in around the house" (interview, 15 June 2007) so she could place her energies on her studies. Lynn was a single parent when she began her studies. Like most graduate programs, her classes were in the evening. Lynn's family provided childcare until she came home from the university. Jane worked in a community away from the university and commuted to classes. She needed to leave work early on the days she had classes and didn't return home until late in the evening. Her parents were retired and picked her children up from school, provided them a supervised place to stay, and helped them with their school

work on days that their father was unavailable. Jane stated: "They just did whatever needed to be done. I couldn't have made it through the classes without them" (interview, 4 December 2007).

Rebecca provided details of family support given by her husband. She experienced significant family changes during the time she was completing her degree program. Her mother and two of her sisters passed away during the dissertation phase of her program. Her parents and siblings lived in another state. Rebecca described how each illness and subsequent death required travel and time away from her studies and explained experiencing her husband's support during those difficult times:

I spent a great deal of time away during the last days of my study. His efforts to take a leading role at the family gatherings on her behalf and by providing her with the comfort she needed during those difficult times. It was difficult to keep going. (interview, 21 September 2007)

Unlike other instances of family support from the data where daily responsibilities were shifted among family members, Rebecca's account of her husband's attention to her needs and those of her extended family demonstrated a unique example of family support. In this instance, her husband provided her with family support by attending to the needs of extended family and allowing her remain focused on her dissertation to a greater extent than otherwise she could have given the circumstances.

Degree completers indicated that the finding family support sustained them while completing their degree programs. Degree completers articulated how family members often assumed obligations normally accomplished by them.

External obligations / employer support. Findings from four degree completers described instances where employers encouraged them to return to graduate school for professional development. Each discussed how their employer encouraged them to pursue the opportunity to complete a doctoral program and modified their responsibilities at work to accommodate their pursuit.

Hazel described a change in working assignment that her school administrator provided for her to create a lighter teaching load during her studies during her first year of studies: "While working on my coursework I decided to be a connections teacher" (interview, 16 October 2007). She indicated that connections teachers focused on things such as academic enrichment, academic remediation, or other special projects that did not require the extensive preparation and assessment that normal teaching duties required. This assignment change allowed her to reduce her daily contact hours and her need to attend to other school community responsibilities in the evening. Hazel detailed the change: "By being a connections teacher it freed up so much more of my time to do things at night. I was able to study and go to class without problems" (interview, 16 October 2007). Her employer's support allowed her to concentrate more intently on her doctoral studies without fear of neglecting her daily teaching responsibilities.

Janet described a similar level of support, but indicated her employer was motivated by reasons other than just her professional development. She was teaching at a college and noticed high failure rates among African American students in a particular course within her department. She discussed the problem

with her chairperson and found that the department was aware of the problem but did not have a clear understanding of the phenomenon. Janet recalled a conversation with her department chairperson during a faculty meeting: "I said, 'Why?' The chair looked at me and said, 'It just happens; I don't have an answer why, but that's probably something you should check into'" (interview, 17 October 2007).

Janet asked her chairperson what she meant by the comment. She wondered if the chairperson wanted her to do some sort of analysis of the program. Janet said she was amazed at what her chairperson told her: "Go back to school and get your doctorate and figure it out and come back and teach us why" (interview, 17 October 2007). She said this exhortation in the presence of her colleagues was significant and indicative of the support her employer provided throughout her doctoral program: "I was the first black faculty member in this department . . . and I was challenged by her to find out why [this occurred]" (interview, 17 October 2007). Janet remarked that on many occasion during her program the chairperson arranged her teaching schedule or departmental meetings around her program requirements.

Jane recalled that she was working as a lead teacher for second grade when she began her program. She indicated that her principal approached her and asked if she preferred to let go of those duties while she focused on her doctoral program. "[Although] it was something I was doing other than work, it really shaped my philosophy about [how to treat] students" (interview, 4 December 2007). She accounted that this was a significant gesture of support on

the principal's part. Her principal devised a plan that allowed her to relinquish a portion of her obligations at school temporarily while pursuing her degree. This employer support created an opportunity for her to focus on her degree program without fear of being perceived as derelict in her employment obligations.

Jodi also indicated employer support as being a substantial influence on her progress through her doctoral program. The support her employer provided allowed her to lessen her obligations at her school without jeopardizing her position there. This was exceptional in her circumstance because she served as a specialist in her school and there were no other teachers who could assume any portion of her normal duties. In Jodi's situation, her assistant principal volunteered to complete duties that she could not execute when they conflicted with her doctoral program schedule: "Many times I would leave an hour before class was over to [travel]. I could do that because my supervisor gave me permission. . . . It took a lot of planning, but something that could have been an obstacle, just wasn't" (interview, 18 January 2008). The support Jodi received from her employer lessened the conflicts between her obligations at her school and the requirements of her doctoral program.

Findings indicated that degree completers' employers supported their pursuit of doctoral degrees by adjusting work schedules and reducing duties for their employees. This support provided them with a sense of being encouraged to focus their energies on studies, energies that might have otherwise been reserved for their places of employment.

External obligations / family expectations. The finding of family expectations was a final dimension for degree completers. This finding brought with it expressions of emotion from the participants not observed at any other points during the interviews. Seven of the participants described family expectations as an external obligation affecting their completion of a doctoral degree. Family expectations were identified as a dimension for the organizer external obligations because the participants described it with language that clearly attested to a sentiment that they felt obliged to their families to complete their doctoral programs. The obligation to meet their family's expectations of degree completion served to sustain the participants throughout their doctoral programs.

Rebecca stated feeling the obligation of meeting family expectations for completing her doctoral program plainly: "I really got the doctorate for my mother" (interview, 21 September 2007). She described how her mother encouraged her to pursue further education: "She always told me to keep going because if I ever stopped I wouldn't go back" (interview, 21 September 2007). Her mother's death in the midst of her doctoral program enhanced the impetus of her efforts to complete her program. She emphasized how she felt obligated to complete her program "for my mother's sake" (interview, 21 September 2007) if for no other reason.

Scott related a similar scenario: "My mom just really wanted me to get my doctorate" (interview, 19 February 2008). He explained that he was older than most students when he began considering doctoral programs. He had a family, a

home, and a good job. He was intrigued with the thoughts of pursuing a doctoral degree but not sure if he could make the commitment necessary to complete the degree. Scott stated his mother's persistence: "Once she said while I was working on my specialist degree, 'You know, you only got one more degree to go'" (interview, 19 February 2008).

Scott communicated a shift in his thinking concerning the encouragement to pursue doctoral studies his mother espoused. The shift moved him from hearing her words as encouragement to hearing them as an expectation Scott felt obliged to honor. Scott said it was at that point that he began to apply to doctoral programs. He remembered the excitement in his mother's voice when he told her he was beginning a doctoral program. Scott's mother became ill and his feelings of obligations increased: "So, then she got real ill and I thought, you know if I'm going to do this within her lifetime, I need to get going" (interview, 19 February 2008). His mother's did not fully recover from her illness while he was completing his degree and he felt pressure to earn his doctoral degree before she passed away: "When I graduated she wasn't able to go to the school, so I went to her home and did a circle in her living room in my cap and gown. She passed away less than a year later" (interview, 19 February 2008).

Sue's narrative demonstrated how her mother's expectations created feelings of obligations for her. Sue said her mother always strongly supported education and encouraged her to pursue as much education as possible: "I can remember [mom] saying that she wanted so many things and she was too old to do many things. I always had it in the back of my head that I wanted to earn a

doctoral degree” (interview, 20 February 2008). Sue voiced concern that she might someday be repeating her mother’s words of having let the opportunity pass by without attempting it: “So, I turned in my resignation and started the process; mother’s regret was probably the greatest motivation for me to start and finish” (interview, 20 February 2008).

Janet described feeling an external obligation through the expectations voiced by her family. She experienced the loss of her mother during her program and described a profound sense of obligation to her mother to complete her doctoral program: “My mom got sick [during my program]. . . . My promise to mom was to be a doctor” (interview, 17 October 2007). Janet remembered a visit with her mother in the hospital when she made a promise that she would complete her degree: “She held my hand and put her finger out for me to touch because that was our way of connecting. ‘You are going to be a doctor, OK? I am so proud of you!’” (interview, 17 October 2007). Janet said soon after that her mother closed her eyes and died. Janet articulated that she felt obliged to honor her promise and meet her mother’s expectations for degree completion.

“Expectations, my family’s,” (interview, 13 November 2007) John responded directly when asked about obligations he felt during his program. John explained that being from a family of educators, expectations about completing doctoral studies were the norm for all his siblings: “My father was a professor of education and I guess there hasn’t ever been a time that I didn’t think I was going to graduate school” (interview, 13 November 2007). John’s family expectations obliged him to complete a doctoral degree as a rite of passage: “Ever since I was

a kid I just assumed I was going to be a professor of education” (interview, 13 November 2007). John articulated that his family’s expectations for him were never discussed openly but he understood they existed. The expectations were not counter to counter to John’s desires about doctoral studies: “I always thought I would earn my degree” (interview, 13 November 2007). John described family expectations providing additional motivation for him in the fulfillment of personal goals: “I knew I wanted to be a professor and this was the only way to reach that goal. . . . I think it’s just got a lot to do with following in the footsteps of my parents” (interview, 13 November 2007).

Jim described similar sentiments: “My mom graduated from college, my dad didn’t. . . . My mom just assumed I would get the doctorate” (interview, 12 September 2007). Jim talked about being a teacher and moving through various levels of education over time: “She just thought, why wouldn’t you?” (interview, 12 September 2007). When asked if he felt obligated to meet family expectations of completing a doctoral program, Jim responded that he did.

Lola provided a final representation of family expectations as an external obligation. She said her parents wanted her to complete a doctoral degree and “spoke of it often” (interview, 15 June 2007) after she earned a master’s degree. She entered a doctoral program and after a few years she considered dropping out. Lola said she struggled to find balance between her work and program requirements and thought that ending her doctoral pursuit was the best option. She recalled a conversation she had with her parents: “They just wouldn’t entertain the topic” (interview, 15 June 2007). She characterized her family’s

expectations about her degree completion “as matter of fact” (interview, 15 June 2007). She said she knew her parents meant well, wanted the best for her, and tried to keep her motivated. However, the comments Lola’s parents offered created a sense of obligation for her: “I really felt as though I couldn’t stop. I remember my mom saying ‘you are making a big mistake if you don’t do it.’ I decided to continue and I’m glad I did” (interview, 15 June 2007).

The sense of obligation created by family expectations provided a powerful, sustaining motivational force for degree completers. Degree completers desire to attain the doctoral degree was intensified by the external obligation of family expectations.

ABD Participants: External Obligations

Findings for the conceptual organizer external obligations indicated that dimensions had negative effects on ABD participants’ ability to complete their degree programs. Findings indicated that ABD participants portrayed circumstances related to external obligations that hindered or slowed their progress during their degree programs.

Three dimensions emerged related to the conceptual organizer external obligations that restrained ABD participants’ persistence during their programs and hindered their ability to complete their programs. The three findings were (a) financial concerns, (b) family responsibilities, and (c) employer expectations. Table 8 is a matrix for findings ABD participants articulated when describing experiences related to external obligations.

Table 8

Three Findings Comprising External Obligations for ABD Participants

RQ4: External Obligations

The data showed that ABD participants encountered three external obligations which ultimately caused them to determine that they could not manage the obligations of both personal and academic life. External obligations are roles doctoral students are responsible for executing related to family, work, or other obligations during their programs of study that are not directly associated with the pursuit of their degree.

Financial Concerns

ABD participants indicated that financial concerns were a restraint on their ability to meet their academic program obligations.

Family Responsibilities

ABD participants identified a cadre of responsibilities related to their family roles that superseded their program obligations.

Employer Expectations

An ABD participant identified expectations related to her employment duties that superseded her program obligations.

External obligations / financial concerns. Finding from eight ABD

participants indicated that the dimension financial concerns had a restraining influence on them during their programs. The need to increase or supplement income to meet financial obligations caused ABD participants to seek additional sources of funding and became a contributing factor for leaving their programs before completion. This dimension was a large concern for the ABD participants who had families.

William indicated that financial concerns created a significant external obligation during his programs. William's financial concerns related to primarily to supporting his family's needs and not the expense of completing his program.

William comment exemplified this concern: "I think my family made a huge, huge sacrifice during that time" (interview, 4 March 08). William indicated that the needs of his family required him to seek more lucrative employment: "In education if you need to make more money, you have to do more things" (interview, 4 March 08). William needed additional income to address his financial concerns and this required focusing more personal time on employment.

Lea described financial concerns this way: "I had a child at the time. I did have family support to assist with child care but it [finances] was still a problem" (interview, 20 May 2007). As a single parent, her obligation to provide for her daughter's needs was greater than her program commitment.

Larry was serving as an instructor for the university but had to leave to accept a position with more income: "I had to quit the teaching part-time because I couldn't live off what they were paying me. . . . I knew the statistics [attrition rates] for students who leave campus were high" (interview, 19 February). Larry understood that the likelihood of not completing his degree would increase if he left the university but he felt his financial obligations to his family left him with no alternatives.

Tyler described how poor planning created financial concerns for his family: "Yeah, we took some really bad financial advice. We met with a person, he said to resign from my county job, take out my retirement and live on it so I could avoid student loans. That sounded good" (interview, 25 June 2007). Tyler described financial stress at home with his family and the obligations he felt to remedy the situation by returning to fulltime employment: "What was going to last

three years lasted almost a year and a half. So, I ended up with having no retirement . . . the financial was the biggest stress, we were really, really hurting” (interview, 25 June 2007). Tyler returned to work fulltime and concentrated on correcting his financial situation.

Perry discussed how financial concerns at home changed while pursuing her degree: “I [was] trying to make sure that I had my tuition saved up as well as being able to meet family obligations” (interview, 26 March 2008) Soon after Perry began her program her financial situation changed: “The financial part became a complication. . . . My grandson and daughter moved back in the house [during the program] and he was one and half” (interview, 26 March 2008). The increased financial obligation of raising a daughter and granddaughter quickly exhausted the funds she saved for her program costs.

Eddie detailed how adult children created unexpected financial obligations for him during his program. Eddie’s adult children continued to return home at different times and the unexpected additional expenses were an obligation he could not avoid. He detailed this obligation as one he could not ignore: “I have a large family. Their troubles are my troubles. Their financial challenges are mine, too” (interview, 12 June 2007). Eddie was unable to complete his program because he had to seek employment providing a higher income to meet his financial obligations for his family.

Ruth recounted that a state funding program for doctoral students ended after her second year of study. Ruth depended on the state program to provide supplemental funds so she could work part-time rather than full-time during her

studies and still help provide for her family. Ruth explained: "There was a state program that gave students \$10,000 per year. . . . The state changed the program, the amounts of money" (interview, 13 July 2007). The change in the funding program caused her to withdraw from her program after she completed her courses and return to a fulltime teaching position.

Financial concerns significantly affected ABD participants and their families during their programs. This external obligation created scenarios for the students that restrained their progress by forcing them to find additional means of income to assuage the financial pressures they encountered. ABD participants described scenarios that supported the inclusion of the finding financial concerns as a restraining dimension for the conceptual organizer external obligations.

External obligations / family responsibilities. Findings from ABD participants portrayed other family responsibilities that were not financial in nature but created obligations that restrained their efforts.

Two ABD participants' identified family responsibilities as the predominate issue that hindered their degree completion. Nine other ABD participants identified the dimension as contributing to their decisions to leave their programs.

June explained how her family responsibilities had a negative effect on her progress toward degree completion: "I took a hiatus at a point in my program" (interview, 22 October 2007). Her rationale for "taking a break was primarily due to something going on in my extended family" (interview, 22 October 2007). After being away from her program for an extended period, she described how she developed a desire to do something different from doctoral studies altogether.

She accepted a position in a local school system close to her family home and moved away from the university. This diversion from her program to attend to a family crisis combined with other restraining categories to derail her progress and she never returned to pursue the completion of her degree.

Larry described how his family responsibilities changed after his divorce. Family responsibilities presented challenges as he attempted to maintain relationships with his children: "From my perspective, the worst thing that happens is the awful realization that because of meeting their needs . . . too much time has passed [to return]" (interview, 19 February). The family responsibilities he exercised while attempting to meet the needs of his children and maintain a connection with them superseded his desire to continue in his doctoral program. The amount of time that passed between attending to transitions in his family responsibilities and the point he could return to his program was beyond the time limits of his department for his program.

Family responsibilities related to dynamic family changes appeared in the account Dave provided. Dave discussed marital problems he experienced during his program and the responsibility he felt to make an attempt to resolve them: "My ex-wife and I went through some really tough times for about a year after I finished my courses" (interview, 13 November 2007). He accounted for the hours he spent attempting to reconcile his marriage and working through his situation: "We ultimately got divorced. But for a while I couldn't focus on anything else" (interview, 13 November 2007). The energy Dave expended on his family responsibilities distracted him from his program and ultimately factored in his

decision to terminate his efforts. Dave concluded: "By the time I had family things sorted out, too much had changed to return" (interview, 13 November 2007).

Teresa detailed accounts of family conversations she had concerning the investment of time required to complete her program and how those conversations led her to develop the sense that she was neglecting her family obligations. Teresa described how she came to view her pursuit of a doctoral degree as a selfish act in light of her family discussions: "I think my family made a sacrifice. It took me three years until I passed my comps; then I worked on a proposal for a while" (interview, 31 January 2008). Teresa said she felt as if she neglected her family responsibilities many times by attending classes in the evening while her children participated in school and church functions or sporting events. She asserted that once she finished her courses and began to spend more time with her family her priorities changed: "I realized that I was missing too much of their lives and I didn't want that to continue" (interview, 31 January 2008).

Nikki reported some of the same emotions: "My husband and I were the parents of a small child . . . you could not read your statistics while you were going to baseball. I had to do what I had to do" (interview, 18 January 2008). Nikki's feelings of obligations to her husband and child were so strong that continuing her program seemed like a poor option for her. She became convinced that spending time with her child held greater value for her than completing her degree.

Perry detailed how she proceeded through a series of questions in her mind when considering her situation: "The family had to come first, they were kids, right?" (interview, 26 March 2008) Perry detailed her perception that her family needed her to provide them with her support: "My husband and children needed my attention" (interview, 26 March 2008). She was convinced that her family needed her to resume a role she relinquished when she began doctoral studies for her family to remain stable.

Rita also said she felt as though she had abandoned her role in the family. This was contrary to expectations she and her religious community held about the role of a mother. Rita remarked: "I woke up my husband at 5:00 a.m. one morning and remember telling him I can't do this . . . it's taking too much time away from the family" (interview, 18 October 2007). Rita held strong convictions about her role in the family and expressed sensibilities that she was obligated to fulfill that role.

Two participants expressed a sincere level of conviction that their family responsibilities contributed to their departure from doctoral programs but with less emotion than those above. William's immediate response to questions about external obligations: "The distractions of family, my daughters" (interview, 4 March 08). He described how one daughter was in high school and the other was beginning college and experiencing a great deal of change in their lives. He alluded that he felt he needed to be a stronger presence in their lives during this time.

Ashley discussed giving birth during the second year of her program and how it changed the dynamics of family responsibility for her in a severe way: "I had a child during the time I finished my courses. It was just me in the beginning. I was on my own" (interview, 27 March 2008). Ashley had to change her priorities to provide care for her newborn.

Family illnesses produced family obligations for ABD participants that required some to make adjustments to their personal priorities. Donny's extended family lived in another city. His father's health declined and he needed to assist his family with care giving responsibilities. Donny replayed the situation in his mind while he discussed the issue: "My dad got sick and I really needed to move closer to home to help mom take care of him I could not do this without relocating" (interview, 3 March 2008). He explained that his father had a stroke and he needed to assist his mother with home care needs. Family responsibilities contributed to his decision to stop pursuing a degree.

Ruth reported that her husband's health declined during the coursework phase of her program. After she completed her comprehensive exams, Ruth described how his health worsened: "My husband got sick and had to stay home for a while. I needed be able to take care of him" (interview, 13 July 2007). She explained that his illness required she assume additional family responsibilities that he normally managed in addition to her normal roles.

Findings demonstrated that eleven ABD participants identified family responsibilities as contributing to their ABD status. This dimension influenced

ABD participants' persistence by creating family responsibilities that required their primary attention.

External obligations / employer expectations. Findings demonstrated that one ABD participant experienced employer expectations as creating an external obligation that negatively affected her persistence.

Lea believed her supervisor did not support her pursuit of a doctoral degree. She indicated her supervisor thought doctoral program requirements would conflict with her work obligations. Lea described a situation where her employer expressed his concern after he learned of her desires for further education: "He was afraid I would need schedule and assignment accommodations that the school could not provide. . . . We were in a small school in a small system" (interview, 20 May 2007). Lea indicated she decided to begin her program in spite of his concerns but that his fears were realized after she completed her comprehensive exams: "I completed my coursework before my principal even knew it. . . . It sounds very sad, but that was the way it was" (interview, 20 May 2007). She described the difficulty of attempting to meet with an advisor around her teaching schedule to begin exploring a dissertation topic. This became too difficult for her to negotiate. Employer expectations combined with other categories affecting her continuation of the program led to her departure from the university.

Findings demonstrated that employer expectations created an external obligation for one ABD participant. The expectations of this participants'

employer created an external obligation that influenced her persistence in a negative way.

Summary

Demographics, academic integration, social integration, and external obligations served as conceptual organizers used to explore dimensions of doctoral student experiences that degree completers and ABD participants described as influential on their persistence to degree. The findings demonstrated similarities between degree completers and ABD participants for demographics and differences between them for academic integration, social integration, and external obligations.

Findings for the conceptual organizer demographics portrayed doctoral students as individuals entering their middle adult years in age, practicing education professionals, primarily white, majority female, and having families while pursuing their doctoral programs. No demographic differences between degree completers and ABD participants were indicated.

Findings for the conceptual organizer academic integration indicated that dimensions for this organizer differed between degree completers and ABD participants. Findings comprising academic integration for degree completers included the dimensions (a) positive research experiences, (b) compatible academic advisor, (c) clear research agenda, and (d) fellowship or assistantship. Findings comprising academic integration for ABD participants included the dimensions (a) negative departmental experiences, (b) incompatible academic advisor, and (c) lacked a clear research agenda. Degree completers and ABD

participants indicated that their experiences pertaining to academic integration were influential on their persistence to degree completion.

Findings for the conceptual organizer social integration indicated that dimensions for this organizer differed between degree completers and ABD participants. Findings comprising social integration for degree completers included the dimensions (a) interaction with peers and (b) peer support. Findings comprising social integration for ABD participants included the dimension isolation from peers. Degree completers and ABD participants indicated that their experiences pertaining to social integration were influential on their persistence to degree completion.

Findings for the conceptual organizer external obligations indicated that dimensions for this organizer differed between degree completers and ABD participants. Findings comprising external obligations for degree completers included the dimensions (a) family support, (b) employer support, and (c) family expectations. Findings comprising external obligations for ABD participants included the dimensions (a) financial concerns, (b) family responsibilities, and (c) employer expectations. Degree completers and ABD participants indicated that their experiences pertaining to external obligations were influential on their persistence to degree completion.

CHAPTER V

SUMMARY OF RESULTS AND DISCUSSION

Chapter V includes the following sections: (a) statement of the problem and review of the study design, (b) discussion of findings, (c) contributions to theory, (d) suggestions, and (e) conclusion. The statement of the problem and review of the study design revisit the rationale and framework for the study. The discussion of findings explores findings for degree completers and ABD participants pertaining to each research question and presents summary tables and matrices for both groups. Contributions to theory include consideration of previous studies and the contribution of this study to theories of doctoral student persistence. Suggestions comprise recommendations for practitioners, researchers, and policymakers. The conclusion summarizes the researcher's thoughts concerning the findings.

Statement of the Problem and Review of Study Design

The problem addressed by this study was the need for exploratory and interpretative studies examining influences on doctoral student persistence over time. Previous studies indicated that the likelihood for attrition increased among doctoral students as they progressed through their programs, rising as high as 50% for some programs (e.g., Golde, 1994, 1998; Tinto, 1993). This study

explored factors that doctoral students articulated as influencing their persistence to degree completion to understand better the phenomenon.

The study design used interpretive and exploratory methods to examine the phenomenon from the doctoral student point-of-view. The study relied on qualitative methods to examine contextualized doctoral students' experiences and describe, analyze, and interpret data gathered through survey and interview. The study compared and contrasted the experiences of degree completers to those of ABD participants.

Survey yielded demographic data from the participants allowing the researcher to explore Research Question One (RQ1). Interviews yielded data detailing participants' experiences allowing the researcher to explore Research Question One, Two, and Three (RQ1, RQ2, RQ3). The study design allowed the researcher to explore and interpret participants' personal experiences as doctoral students and compare and contrast participants' experiences over time.

Discussion of Results

The discussion of the findings examines influential factors on persistence related to the conceptual organizers demographics, academic integration, social integration, and external obligations and responds to the query posed by each research question.

RQ1: Do the Demographics of Doctoral Students Persisting to Degree Completion in Education Administration Differ from Those Not Completing Their Programs?

RQ1 attempted to determine if demographic differences were evident between degree completers and ABD participants. The similarities of the demographic data reported by the two groups indicated no differences existed

between them. The data indicated that both groups primarily portrayed students as those who were entering their middle adult years in age, practicing professionals in education, primarily white, and had families while pursuing their doctoral programs. Gender differences were approximately equal between groups as was educational attainment of parents.

Tinto (1993), Spady (1970), and Bean (1980) determined that student backgrounds inconsistent with institutional norms impacted institutional fit and often led to student departure. This study found that no demographic differences were evident between the two groups of students, but this finding was not considered incongruent with earlier studies for two reasons.

First, this finding was not considered incongruent with previous theoretical suppositions because all participants in this study were finished with their coursework and had achieved candidacy. Previous studies considered student demographics when students were entering programs. It was more likely that demographic differences leading to departure would present themselves at the beginning of doctoral programs rather than the mid-point or later in their programs.

Second, this finding was not considered inconsistent because all participants were doctoral students from a particular academic program and achieved similar levels of professional advancement. This increased the likelihood of similar demographics, with the exception of gender and ethnicity. The researcher found that demographics of degree completers and ABD participants in this study did not differ.

RQ2: Do Doctoral Students in Education Administration Programs Articulate Experiences of Academic Integration as Influencing Their Persistence?

The researcher found that degree completers articulated four dimensions related to the conceptual organizer academic integration during their interviews: (a) positive research experiences, (b) compatible academic advisors, (c) a clear research agenda, and (d) fellowship or assistantship. Dimensions of academic integration were influential on the persistence of degree completers.

Positive research experiences offered doctoral students the opportunity to develop their research skills and work with faculty in a collegial manner.

Compatible academic advisors portrayed relationships between degree completer and advisors that were professional and affable, encouraging coexistence and congeniality with each other over the course of the extended dissertation process. Entering their programs with a *clear research agenda* distinguished degree completers from their counterparts and provided motivation throughout their programs. Receiving a *fellowship or assistantship* provided recipients with opportunities for conducting research and teaching in the academic community on a daily basis.

Research question two sought to determine if doctoral students articulated experiences of academic integration as influencing their persistence. Degree completers articulated four dimensions of academic integration that influenced their persistence in sustaining ways. All degree completers described at least one dimension of academic integration that had a positive effect on their persistence. They described how the dimensions facilitated academic integration

by encouraging substantive, collegial participation in the academic community. *Compatible academic advisor* and *clear research agenda* enhanced students' academic integration for almost every degree completer. The researcher found that degree completers articulated experiences of academic integration as influencing their persistence in a positive way.

The researcher found that ABD participants articulated three dimensions related to the conceptual organizer academic integration during interviews. The three dimensions were: (a) negative departmental experiences, (b) incompatible academic advisors, (c) and lacked a clear research agenda. Dimensions of academic integration were influential on the persistence of ABD participants.

Negative departmental experiences encompassed a broad spectrum of interactions for ABD participants. Participants perceived that faculty attitudes, poor guidance, committee composition, departmental politics, and inequities were representative of such negative encounters. *Incompatible academic advisors* differed from the first category because students described scenarios that caused them to distance themselves from their advisors. The sources of incompatibility often included departmental dynamics but ultimately centered on the inability of ABD students to develop an effective working relationship with their advisors. Students who *lacked a clear research agenda* early in their doctoral programs struggled to settle on a particular research topic of interest for extended examination.

Research question two sought to determine if doctoral students articulated experiences of academic integration as influencing their persistence. Negative

departmental encounters or incompatibility with academic advisors influenced approximately half of the participants in ways that deterred their progress. The majority of ABD participants *lacked a clear research agenda* and never identified a particular research topic to explore. ABD participants articulated that experiences related to the organizer academic integration influenced their persistence in negative ways.

The researcher found that the contrasts articulated between the academic integration experiences of degree completers and ABD participants constituted substantial influences on doctoral student persistence. Positive academic integration experiences encouraged degree completers to persist by affirming their sense of membership in the academic community while negative experiences had the converse influence on ABD participants.

RQ3: Do Doctoral Students in Education Administration Programs Articulate Experiences of Social Integration as Influencing Their Persistence?

The researcher found that degree completers articulated two dimensions related to the conceptual organizer social integration during interviews: (a) interaction with peers and (b) peer support. Social integration was influential on the persistence of degree completers.

Interaction with peers included both structured and unstructured social gatherings. Though social in nature, interactions with peers included exploration of both academic and personal interests. *Peer support* represented interpersonal relationships between students that extended beyond basic interactions to actively engaging in their personal lives. Peer support often began as collegial,

professional relationships and then intensified to the level of surrogate family. Both dimensions facilitated social integration of degree completers by encouraging the development of collegial relationships among their peers.

Research question three sought to determine if doctoral students articulated experiences of social integration as influencing their persistence. Degree completers articulated two dimensions of social integration that had positive influences on their persistence. Eleven participants described interactions with peers as important for their degree completion. Dimensions related to the organizer social integration emerged from descriptions of peer relationships that ultimately enhanced experiences of academic integration for several participants. The dimensions described by degree completers influenced their persistence in positive ways.

The researcher found that ABD participants articulated one dimension related to the conceptual organizer social integration that influenced their persistence. The dimension *isolation from peers* portrayed experiences of isolation and distance as characteristic of students' approaches to interactions with peers during the coursework phases of their programs. As ABD participants progressed to the dissertation phase, the lack of peer support had a negative effect on their progress. Isolation from their peers limited ABD participants' opportunities to converse with colleagues about academic and programmatic concerns, explore options for possible dissertations, or develop strong personal bonds with peers considered supportive.

Research question three sought to determine if doctoral students articulated experiences of social integration as influencing their persistence. Six ABD participants articulated that their choice to conduct themselves in isolation from peers influenced their persistence in a negative way.

The researcher found that the dimensions of social integration articulated by degree completers and ABD participants were influential on their persistence. Experiences of social integration often served a complimentary function for academic integration among degree completers. Degree completers described dimensions of social integration that encouraged their persistence. ABD participants who choose to navigate their programs with an isolated approach missed opportunities to develop relationships that offered community and academic support.

RQ4: Do Doctoral Students in Education Administration Programs Attribute Commitments to External Obligations as Influencing Their Persistence?

The researcher found that degree completers articulated three dimensions related to the conceptual organizer external obligations: (a) family support, (b) employer support, and (c) family expectations. External obligations constituted responsibilities and duties commanding students' attention and time outside their doctoral programs and were influential on the persistence of degree completers. *Family support* described duties, roles, and responsibilities of degree completers that family members assumed allowing degree completers to focus their immediate attention and energy on their doctoral programs. These responsibilities included generation of income, provision of child care, and

managing household needs. Although family support provided students with the freedom to focus on their programs, many still expressed feelings of guilt associated with accepting family support because they felt they were neglecting traditional roles and duties.

Employer support described instances where employers encouraged degree completers to return to graduate school for professional development. Participants discussed how their employer encouraged them to pursue a doctoral program and modified their responsibilities at work to allow them the freedom to focus on program requirements.

Family expectations attested to sentiments of degree completers of being obliged to their families to complete their doctoral programs. Seven of the degree completers described family expectations as an external obligation influencing their persistence. Degree completers described that family expectations were expectations they had little choice but to fulfill. Family expectations created an intense external obligation for seven degree completers.

Two dimensions of external obligations, family support and employer support, were excused or reduced during degree completers doctoral programs through negotiated agreements with family members and employers. Changes in family and employer responsibilities did not negate degree completers' feelings of obligation but did allow them to temporarily shift their focus to their doctoral studies for a time. Family expectations remained a personal obligation degree completers fulfilled. All three dimensions represented external obligations degree

completers met during their programs. Two obligations were met through negotiation with family members or employers. One obligation was met directly.

Research question four sought to determine if doctoral students articulated experiences of external obligations as influencing their persistence. For two dimensions, degree completers indicated that experiences related to external obligations influenced their degree completion in positive ways because others assumed their obligations for a period of time and demonstrated support for their efforts. A third external obligation influenced their persistence positively by creating an external motivation for them to persist to degree completion.

The researcher found that ABD participants articulated three dimensions related to the conceptual organizer external obligations during interviews. The three dimensions were: (a) financial concerns, (b) family responsibilities, and (c) employer expectations.

Financial concerns posed a threat to some ABD participants as the need for additional income to support their personal and family needs became greater than they could manage while in the program. *Family responsibilities* were a predominate issue influencing persistence for two ABD participants and a contributing factor for nine others. *Employer expectations*, identified by only one participant, described how employer expectations created an obstacle for her while attempting to meet program requirements.

Research question four sought to determine if doctoral students articulated experiences with external obligations as influencing their persistence.

ABD participants indicated that external obligations were influential in negative ways on their persistence.

The researcher found that experiences with external obligations articulated by degree completers and ABD participants were influential on persistence. Experiences of external obligations had a positive influence on degree completers when they were able to reduce normal responsibilities through negotiations with others and when obligations provided additional, external motivation for persistence. Financial concerns and an inability to reduce responsibilities for family or work had a negative influence on the persistence of ABD participants.

Findings Related to the Conceptual Organizers

Findings for the conceptual organizers emerged from data collected during interviews. Dimensions articulated by degree completers and ABD participants related to the organizers academic integration, social integration, and external obligations and findings for varied between degree completers and ABD participants.

Degree completers. Findings from interviews of degree completers were ordered in relation to the three conceptual organizers: (a) academic integration, (b) social integration, and (c) external obligations. All degree completers articulated experiences producing dimensions related to the organizers. Variation existed concerning specific dimensions degree completers described for each organizer. Table 9 below presents a summary of the dimensions articulated by

Table 9

Findings Comprising Conceptual Organizers for Degree Completers

RQ2: Academic Integration

The data showed that degree completers encountered four forms of academic integration that sustained them during their programs. Academic integration is the success students have infusing themselves into academic norms of their particular institutions, departments, and fields of study.

Positive Research Experiences

Degree completers described opportunities for meaningful participation with faculty advisors on research projects during the coursework phase of their programs as vital to creating and developing a sense of acceptance in the academic community.

Compatible Academic Advisor

Degree completers defined compatibility as coexistence and congeniality with their advisors over the extended dissertation process.

Clear Research Agenda

Having clear research agendas from the outset of their programs provided degree completers with a focused research goal.

Fellowship or Assistantship

Degree completers described the duties of teaching and research required for their stipends as providing opportunities for integration in their academic departments.

RQ3: Social Integration

The data showed that degree completers encountered two forms of social integration that sustained them during their programs. Social integration is the success students have becoming members of a social network of peers in their particular institutions and departments.

Interaction with Peers

The nature and context of interactions with peers for degree completers included both structured and unstructured encounters.

Peer Support

Degree completers defined peer support as encounters with other students that developed into substantial interpersonal relationships.

RQ4: External Obligations

The data showed that degree completers encountered three external obligations of which they effectively negotiated the demands in ways that sustained them during their programs. External obligations are roles doctoral students are responsible for executing related to family, work, or other obligations during their programs of study that are not directly associated with the pursuit of their degree.

Family Support

Degree completers negotiated their customary family roles with others to allow them to focus their attention on their programs.

Employer Support

Degree completers negotiated their customary work roles with others to allow them to focus their attention on their programs.

Family Expectations

Degree completers described family expectations relative to the completion of their degrees as placing high external demands on them for program completion.

degree completers for the three conceptual organizers explored during interviews. Table 10 below tabulates dimensions each degree completers articulated during their interviews related to each conceptual organizer.

Table 10

Findings Articulated by Degree Completers

	RQ2: Academic Integration				RQ3: Social Integration		RQ4: External Obligations		
	PRE	CAA	CRA	FA	NP	PS	FSP	ESP	EFE
Rebecca	+	+	+		+	+	+		+
Scott	+	+	+	+	+	+	+		+
Jane		+	+				+	+	
Hazel	+	+	+	+	+		+	+	
Lincoln	+	+	+	+	+				
Janet	+	+	+		+		+	+	+
Jodi		+	+				+	+	
Jewell		+			+		+		
John	+	+		+	+		+		+
Sue	+	+	+		+	+	+		+
Jim		+			+	+	+		+
Lynn		+	+				+		
Elianne		+	+	+			+		
Robert		+		+	+				
Lola	+	+	+		+	+	+		+

ABD participants. Findings for ABD participants were ordered in relation to the three conceptual organizers: (a) academic integration, (b) social integration, and (c) external obligations. All ABD participants articulated experiences producing dimensions related to the organizers. Variation existed concerning

Table 11

Findings Comprising Conceptual Organizers for ABD Participants

RQ2: Academic Integration

Data showed that ABD participants encountered three negative experiences related to academic integration that restrained them during their programs. Academic integration is the success students have infusing themselves into academic norms of their particular institutions, departments, and fields of study.

Negative Departmental Experiences

ABD participants described negative encounters with members of their departments that deterred their progress toward degree completion.

Incompatible Academic Advisor

ABD participants described negative experiences with their advisors that prevented establishing a collegial relationship.

Lacked Clear Research Agenda

Lacking a clear research agenda from the outset of their programs deterred ABD participants from establishing a focused research goal.

RQ3: Social Integration

The data showed that ABD participants avoided opportunities for social integration with peers and that restrained their progress toward degree completion. Social integration is the success students have becoming members of a social network of peers in their particular institutions and departments.

Isolation from Peers

Isolation from peers by ABD participants described their choice to avoid extended interactions with other students during their programs.

RQ4: External Obligations

The data showed that ABD participants encountered three external obligations which ultimately caused them to determine that they could not manage the obligations of both personal and academic life. External obligations are roles doctoral students are responsible for executing related to family, work, or other obligations during their programs of study that are not directly associated with the pursuit of their degree.

Financial Concerns

ABD participants indicated that financial concerns were a restraint on their ability to meet their academic program obligations.

Family Responsibilities

ABD participants identified a cadre of responsibilities related to their family roles that superseded their program obligations.

Employer Expectations

ABD participant identified expectations related to their employment duties that superseded their program obligations.

specific categories degree completers described for each organizer. Table 11 above presents a summary of the dimensions articulated by ABD participants for the three conceptual organizers explored during interviews. Table 12 below tabulates dimensions ABD participants articulated during their interviews related to each conceptual organizer.

Table 12

Findings Articulated by ABD Participants

	RQ2: Academic Integration			RQ3: Social Integration IP	RQ4: External Obligations		
	NDE	IAA	LCR		FIN	FAM	EMP
Larry			+		+	+	
Perry		+			+	+	
Kimberly	+	+		+			
Donny	+	+	+	+		+	
Teresa	+		+			+	
Ruth		+		+	+	+	
Nikki	+	+		+		+	
Lea			+		+		+
Eddie			+		+		
Dave		+	+			+	
Rita	+		+			+	
William			+	+	+	+	
Ashley	+			+		+	
Tyler		+	+		+		
June	+		+			+	

It was found that degree completers and ABD participants articulated dimensions of academic integration, social integration, and external obligations when describing influential factors that affected their persistence. Findings indicated that dimensions varied between the degree completers and ABD participants when they described experiences related to the conceptual organizers. All participants in the study described one or more dimensions related to the conceptual organizers that were influential on their doctoral student persistence.

Contributions to Theory

Previous studies examining graduate student persistence explored institutional norms and individual student experiences to determine influential factors effecting degree completion. Studies examining institutional norms evaluated the usefulness of university programs aimed at enhancing student integration in the university culture and results indicated they were valuable for introducing students to university structures and institutional norms (Barker, Felstehausen, Couch, & Henry, 1998; Cusworth, 2001; Poock, 2004). Studies focusing on individual student experiences identified student expectations, student characteristics, and student-faculty interactions that had a positive influence on persistence (Golde, 1994, 1998; Girves & Wemmerus, 1998; Stallone, 2003). This study continued the exploration of student experiences to identify elements of the student experience that could enhance existing theories of persistence.

Tinto (1993) suggested a need for developing a longitudinal model of doctoral persistence that identified influential factors affecting persistence and determined when factors were most influential. He indicated that reliable data to develop a longitudinal model were sparse and data needed to develop such a model could be collected and analyzed though a series of research projects focusing on various phases of doctoral student programs. Tinto (1993) also expressed the need for examining the factors affecting doctoral student persistence among a broad range of academic disciplines to enhance the development of such a theory. The need to study a broad range of academic

disciplines was indicated by the variations in attrition rates between disciplines (Golde & Dore, 2001) and the high percentage (15-25%) of students Lovitts (2001) reported who become candidates but never completed the doctorate.

Miles and Huberman (1994) contended that qualitative studies make contributions when they contribute to existing theories or facilitate the development of new theories. This study contributed to existing theory by indicating whether demographics, academic integration, social integration, and external obligations were influential on the persistence of doctoral students.

Theoretical models of student persistence focused on various perspectives during recent history. Early persistence models (Bean, 1980; Eaton and Bean, 1993) gave attention to the influences of psychological attributes on attitudinal and coping behaviors and self-efficacy and attribution theories. Astin (1984, 1993) examined the influence of student involvement with academics, faculty, and peers. Pascarella and Terenzini (1991) considered student background and precollege traits to determine their influence on involvement and commitment. Tinto (1975) expanded the work of Spady (1970) to examine the influence of formal and informal experiences of academic and social integration on students' commitment to educational goals.

Tinto (1993) called for multiple studies of doctoral student persistence to inform and enhance the development of a longitudinal theory of doctoral student persistence. In addition to considering the concepts of academic and social integration, Tinto (1993) expanded his model to include consideration of the additional factors of student attributes and background as well as external

commitments (e.g., isolation, finances, external obligations) and their influence on persistence. This study explored factors consistent with this theoretical framework as articulated by doctoral students to determine if doctoral students viewed them as influencing their persistence. The findings of this study were compared with Tinto's (1993) to offer a contribution to theory.

Demographics

Findings demonstrated no demographic differences between degree completers and ABD participants. Tinto (1993), Spady (1970), and Bean's (1980) determined that student backgrounds impacted institutional fit and often led to student departure if students found institutional norms incongruent with their own.

This study contributed to existing theory by demonstrating that the influence of demographics on doctoral student persistence was less dramatic for students who achieved candidacy status than for students beginning programs.

Academic Integration

Findings from this study demonstrated that experiences of academic integration influenced doctoral student persistence in both positive and negative ways. Tinto (1993) indicated that academic integration experiences include university, departmental, and advisor interactions. The researcher found that academic integration influenced doctoral students positively when students' experiences encouraged participation in the academic community with their faculty and negatively when experiences discouraged interactions.

These findings were congruent with Tinto's (1993) theory which suggested that at the candidacy stage "affiliations with faculty within the department" (p.

241) are vital for developing research opportunities and collegial relationships. Tinto (1993) indicated that financial support also encourages affinity for the department and program and this held true for degree completers in this study. This study found that students articulating positive experiences relative to academic integration with their faculty and academic departments were substantially more likely to be degree completers. Those whom did not were likely to remain ABD.

This study contributed to existing theory by demonstrating that students reporting positive experiences of academic integration were more likely to persist to completion of their doctoral programs.

Social Integration

Findings from this study demonstrated that experiences of social integration influenced doctoral student persistence in both positive and negative ways. Tinto's (1993) theory indicated social systems included peer relationships and faculty relationships. The researcher found that social integration influenced doctoral students positively when experiences encouraged active engagement with peers. This study did not reveal encounters with faculty that participants identified as social in nature.

Degree completers in this study articulated that their experiences of social integration with peers often evolved from activities that were academic in nature (e.g., after class discussions, exploration of research interests, providing feedback during the writing process). Degree completers described experiences that provided an informal setting to discuss their ideas and personal academic

interests. In contrast, ABD participants described an approach where they preferred to operate in isolation from their peers. They chose this tack for multiple reasons (e.g., personal preference, perceived lack of available time) but in so doing distanced themselves from their peers and the opportunities to explore academic issues in ways that benefited degree completers.

These findings were congruent with Tinto's (1993) theory which suggested that "social integration at the graduate level is more closely tied to that of academic integration. . . . Social membership within one's program becomes part and parcel of academic membership" (p. 232). Tinto (1993) also suggested that doctoral students might develop similar social affiliations with faculty during their programs. A few participants in this study described affable relationships with advisors but not in ways that were construed as social. Degree completers articulated experiences of social integration with their peers that built camaraderie and support for their academic efforts while ABD participants described scenarios of isolation from their peers.

This study contributed to existing theory by demonstrating that students articulating positive experiences of social integration with their peers were substantially more likely to complete their doctoral programs than those who did not.

External Obligations

This study found that external obligations influenced doctoral student persistence in both positive and negative ways. Tinto's (1993) theory indicated external obligations primarily included commitments to the external communities

of family and work. The researcher found that external obligations influenced doctoral students positively when students' obligations were relieved temporarily by others through negotiated agreements. For others, the inability to negotiate their obligations gave "rise to conflicting demands upon student time and energy" (Tinto, 1993, p. 233) and precluded them from being able to focus on degree requirements. Tinto's (1993) suggested "not all students can easily negotiate such 'role conflicts.' Membership in one community may require giving up membership in another" (p. 233). Findings from this study supported this contention.

Degree completers in this study articulated external obligations that were evident during their programs and described how family members and employers agreed to negotiate and modify roles, most often temporarily, to provide students with the freedom to devote time and energy to their programs. This stood in contrast to ABD participants whose progress was diminished because they were not able to negotiate their roles in similar ways.

Findings were congruent with Tinto's (1993) theory which suggested that "students also belong to other external communities, such as those of family and work. Though these may intersect institutional departments and communities, their functioning is largely independent of the institution" (p. 233). Tinto (1993) suggested that doctoral students must find reasonable ways to negotiate their external obligations with others to provide them with the freedom to focus on their programs. Degree completers indicated an ability to do so as compared to the ABD participants who articulated less success with accomplishing that task.

This study contributed to existing theory by demonstrating that external obligations can have a positive influence on persistence to degree completion when successful negotiation was achieved for traditional roles and commitments.

This study revealed that aspects of academic integration, social integration, and external obligations influence doctoral student persistence in positive and negative ways. The findings provided an impetus for suggestions and recommendations to practitioners, researchers, and policymakers that could lead to improved doctoral student persistence.

Suggestions for Practitioners, Researchers, and Policymakers

Findings from this study led the researcher to develop seven suggestions for practice, policy, and research. The seven suggestions include:

First, the findings indicated a need for policymakers at individual institutions to develop an understanding of doctoral student persistence at their institution. Tinto (1993) believed that differences existed in persistence between academic programs. It is reasonable to infer that differences exist between academic institutions. Di Pierro, (2007) indicated that differences between institutions require administrators of graduate student programs to develop a clear understanding of the persistence of doctoral students at their university and the factors influencing their students' outcomes. Policymakers need to develop a comprehensive understanding of their doctoral students and academic programs and identify the factors influencing success or failure. A suggestion for policymakers at individual institutions is to develop a thorough understanding of doctoral student persistence as it pertains to their doctoral programs through

research and assessment that focuses on individual departments and programs as well as global perspectives.

Second, the findings indicated that institutions should develop sets of criteria, or “best practices,” for departments and faculty to follow when working with doctoral students. This study revealed that students articulated certain types of experiences with academic and social integration that were more likely to influence persistence to degree completion. Some institutions have developed sets of best practices to follow when working with students in doctoral programs (e.g., Western Michigan University). “Best practices” include student support centers, assistance with proposal development, opportunities for publication, communication strategies for students and advisors, dissertation topic exploration, defense preparation, and strategies for dissertation writing (Di Pierro, 2007).

Developing a set of “best practices” focused on assisting faculty who are guiding students through the dissertation process is equally important. Providing faculty with assistance and guidance on how to mentor students during the dissertation process could improve their skills and reduce the need to rely solely on personal experience for managing their students. The use of such “best practices” could facilitate social and academic integration and reduce overall attrition rates of students experiencing difficulty with the transition from coursework to the dissertation phase (Lovitts, 2008). A suggestion for policymakers is to develop a set of “best practices” for implementation at their

institutions that provide students and graduate faculty support and assistance throughout doctoral programs.

Third, the findings indicated that additional research is needed to explore the experiences of doctoral students at various points throughout doctoral programs. Research indicates that overall 50% of doctoral students leave prior to degree completion, but departure rates vary at differing points in programs (Di Pierro, 2007; Dorn & Papalewis, 1997; Lovitts, 1996, 2008; Tinto, 1993). The findings of this study focused on students who had achieved candidacy in their programs before terminating their programs or completing their degrees. Estimates are that as high as 25% of students who leave their programs have achieved candidacy status (Bowen & Rudenstine, 1992). Tinto (1993) called for additional research examining the doctoral student experience over time to identify the underlying character of graduate studies at differing stages and understand how experiences at one point impact experiences at another.

The results of this study indicated that normally no single factor caused ABD participants to leave their programs, rather leaving resulted from the interplay of a combination of many factors. A suggestion for further research is to explore the experiences of doctoral students at varying points in doctoral programs to develop a broader understanding of the interplay of factors influencing doctoral student persistence.

Fourth, the findings indicated that degree completers articulated that having a compatible academic advisor had a significant positive influence on their degree completion. This positive relationship provided degree completers

with an academic colleague who mentored them through their programs. The choice of an academic advisor is intentional in many cases but can also be the result of convenience in others (e.g., sometimes a matter of which advisor is able to accommodate a new student in a department at a given time). The use of a variety of standardized instruments measuring personal preferences and interest inventories could aid practitioners in the process of pairing students and advisors. Such an approach could facilitate other important academic interactions that enhance persistence at earlier points in the students' doctoral programs. A suggestion for practitioners is to take a more direct, intentional approach within departments when pairing doctoral students with advisors at the outset of their programs.

Fifth, the findings indicated that doctoral students primarily functioned within the confines of their academic departments during their programs and had little interaction with graduate program offices. This approach left struggling candidates few options for problem resolution if necessary because often the totality of their academic involvement was limited to interactions with their advisors. Institutions typically allow academic departments to manage their doctoral students apart from direct university involvement. A suggestion for policymakers is to explore establishing benchmarks that measure doctoral student progress and accomplishment of particular outcomes over time that practitioners could use while working with students.

Sixth, the findings indicated that external obligations created obstacles for some students requiring them to turn their attention and focus to personal issues.

Students encountering external obligations sometimes leave their programs because their time to degree completion is protracted and extends beyond the limits set by their programs. A suggestion for practitioners and policymakers is to establish checkpoints for doctoral students throughout their programs when graduate program and departmental representatives evaluate their progress and determine if reasonable progress is being achieved by the students.

Seventh, the findings of the study indicated contrasts between the experiences of degree completers and ABD participants as the researcher sought to identify differences between the two groups. The need for additional research using probing questions to ascertain similarities of experiences between the two groups related to each conceptual organizer was indicated and could provide a more extensive understanding of the phenomenon.

These suggestions for practitioners, researchers, and policymakers illustrate both the importance of this study and the need for further study of doctoral student persistence.

Conclusion

This study focused on factors influencing doctoral student persistence. The study explored and interpreted the influences of demographics, academic integration, social integration, and external obligations on persistence as articulated by doctoral degree completers and ABD participants. The researcher used a conceptual organizers developed by Tinto (1993) to contribute findings from this study to theories of doctoral student persistence.

Focusing on experiences articulated by doctoral students, the major findings of this study were: (a) no differences in demographics were distinguishable between degree completers and ABD participants, (b) experiences of academic integration were influential on the persistence of doctoral students, (c) experiences of social integration were influential on the persistence of doctoral students, and (d) experiences of external obligations were influential on doctoral student persistence.

As the literature suggested and the findings of this study supported, doctoral student persistence was influenced by multiple dimensions and was highly contextualized. This study explored the experiences of 30 doctoral students, 15 degree completers and 15 ABD, from two research universities in the southeast. Three conceptual organizers were used to identify dimensions of each that were influential on persistence for doctoral students who had achieved candidacy status. The researcher was unable to find evidence of demographic differences between degree completers and ABD participants.

This study's inductively-derived effects as articulated by participants identified the complexity of the doctoral student experience. The study found that the more profound the academic and social integration and the more successful at negotiating roles and commitments relative to external obligations, the greater the likelihood was that doctoral students persisted to degree completion. Ultimately, experiences related to the conceptual organizer academic integration seemed to be described by participants as having the strongest influences on their persistence. Participants describing positive experiences leading to active

participation in their academic community evidenced the highest likelihood of persistence to degree completion.

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APPENDICES

APPENDIX A

Semi-Structured Interview Guide

1. How would you describe your experiences with your faculty advisor during your program of study (Academic Integration, RQ2)?
 - a. Did you work with a faculty advisor during the coursework phase of your studies?
 - b. How did you select an advisor?
 - c. Did you work on any research projects for publication or presentation with a faculty advisor during your program before you began working on your dissertation?
 - d. What was your role in those projects if they occurred?
 - e. How would you describe the process of choosing a dissertation topic?
 - f. How did you or are you working through the process of completing the project?
2. How would you describe your experiences with your student peers during your program of study (Social Integration, RQ3)?
 - a. How much interaction do you have with them, and what is the nature of those interactions?
 - b. Did you associate with your peers outside the normal course of your classes?
 - c. Did these relationships influence your decisions about persisting in the program?
3. What types of external obligations do you have beyond the arena of your doctoral program (External Obligations, RQ4)?
 - a. If you were to determine the percentage of time you commit to your doctoral studies versus other obligations, what would the division of the time resemble?
 - b. Are there barriers to your doctoral program that external obligations create?
 - c. Describe sources of external obligations that supported your pursuit of doctoral studies?

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