The Effects of Race and Gender on the Satisfaction Levels of Entering and Advanced Level Doctoral Students

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The University of Southern Mississippi

THE EFFECTS OF RACE AND GENDER ON THE SATISFACTION LEVELS OF
ENTERING AND ADVANCED LEVEL DOCTORAL STUDENTS

by

Tiffany Nicole Labon

A Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirement
for the Degree of Doctor of Philosophy

May 2013
ABSTRACT

THE EFFECTS OF RACE AND GENDER ON THE SATISFACTION LEVELS OF ENTERING AND ADVANCED LEVEL DOCTORAL STUDENTS

by Tiffany Nicole Labon

May 2013

Doctoral education is an aspect of higher education that can be both rewarding and challenging for anyone who attempts the journey. Thelin (2004) stated many graduate students obtain the necessary skills that their individual fields of study require in their master’s and doctoral programs of study. Levine (2005), however, has found that the levels of satisfaction between what students expect and what they receive are at odds at many colleges and universities around the country. Thus, the need to assess graduate programs and services regarding satisfaction is warranted.

The purpose of this study was to compare the relationship of overall graduate program satisfaction between entering and advanced level doctoral students in relation to four dependent variables: race, gender, academic college, and attendance status (full-time or part-time). Using the modified survey developed by Nettles and Millett (2006), the researcher collected data at the selected university from 243 doctoral students. Upon analysis, the researcher found that none of the four dependent variables were statistically significant with the level of satisfaction at the selected university. However, the qualitative portion of the study revealed four categories of (dis)satisfaction: relationship with peers; relationship with faculty; program structure and organization; and support services. The researcher found multiple themes from the analysis: time-to-degree; departmental/administrative issues; satisfaction; alternative/course (delivery)
format/course satisfaction; university/climate/support services; social/socialization; and, student’s knowledge/research/experience. With this, the researcher provided a list of action research projects for the university to consider for future improvement for their students.
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Approved:

Thomas O’Brien
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Dean of the Graduate School

May 2013
DEDICATION

My dissertation is dedicated to the following people: Mr. and Mrs. John and Ophelia McGuire, Mr. and Mrs. Dennis and Lula Woodard, and Mr. and Mrs. Earnest and Martha Labon. I love you and want to thank you for instilling in me the value and the importance of an education.
ACKNOWLEDGMENTS

First, I want to thank God for all of His many blessings. You put me on this path and although it was long, hard, difficult, and I wanted to give up, You saw me through it until the end. I am beyond grateful. I love you, God. I’m ready for the next levels that You have in store me. Next, I want to thank my dissertation committee—Dr. Thomas O’Brien, Dr. Lilian Hill, Dr. J.T. Johnson, and Dr. Amy C. Miller—for all of their assistance and encouragement throughout this process.

I want to thank my biggest supporters, my parents, Earnest and Martha Labon. Without you, I’m not sure where I would be. The words “thank you” do not seem appropriate for all that you have done for me throughout my entire educational journey and my life. You have blessed with me with countless prayers, words of encouragement, and many laughs to get me where we are today. I love you both so much, Mama and Daddy. I have to thank my brothers, Earnest “Nikki” Labon and Eric Labon, my sisters, Yolanda Labon and April Peterson-Labon, and my nephew, Kordae Maples, for all of your love, support, and prayers throughout this entire process. Without you all, there is no me. I love you all.

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CHAPTER I
INTRODUCTION

One role of graduate education is to produce the next generations of college and university professors and scholars. However, higher education’s ability to develop professors and researchers who have had fulfilling graduate school experiences may be waning. Levine (2005) found that the levels of satisfaction between what students expected and what they received differed across the country. According to Judge (1982), students experience “symptoms of insecurity and self-doubt” particularly at the doctoral or postgraduate levels (p. 6). Golde and Dore (2001) found that doctoral students were not getting the skills, dispositions, and support needed to advance to graduation and beyond.

This study follows the work of these researchers and others (Wasburn-Moses, 2008) and aims to uncover factors related to the satisfaction levels of graduate students. Ultimately, it hopes to add to the knowledge base about how to change graduate education in ways that benefit both the student and the institution. This research looks at the satisfaction of doctoral students at a research university in the southeastern United States. The literature reveals that doctoral education is growing and changing with each passing generation of scholars. The literature states that there are differences with regard to race and gender, which can play a vital role in students’ perception of graduate study and their doctoral journey. Although many students are successful in completing doctoral study, the research finds that many students believe that they are not fully prepared for academic life.
Following the lead of Wasburn-Moses (2007) and others, this research also attends to race and gender. Wasburn-Moses stated that race and gender are factors into students’ experiences throughout their doctoral journey. She concludes that once the experiences of minority students are connected with the outcomes of the doctoral programs, institutions would be able to compare all minority groups and give “…explicit attention to socialization into the academic community and to the progress of all students [which] may lead to improvements in attrition rates, a great need for programs across fields” (p. 468). This research builds on this work by investigating doctoral students’ satisfaction in relation to race and gender.

When designing this study, the researcher separated the research population between entering-level and advanced-level doctoral students. The decision to separate and compare beginning and advanced students is influenced by the work of Baird (1995), Isaac, Pruitt-Logan, and Upcraft (1995), and Bowen and Rudenstine (1992). These researchers attempted to understand graduate students at various stages of completion. In this study, entering-level doctoral are defined as students who had 18 credit hours or less at the selected university. Advanced-level doctoral students are defined as students who had 36 credit hours or more at the selected university. The categories were created in order to compare graduate program satisfaction between entering and advanced level doctoral students. In relation to the qualitative portion of the study, the researcher examined the participants’ answers by coding them into themes before analyzing them in terms of satisfaction and dissatisfaction, which were Questions 5 and 6 of the survey (Appendix A).
Statement of the Problem

Golde and Dore (2001) demonstrate that, nationally, doctoral students believe they were not getting all of the tools needed to advance themselves up to and beyond graduation. In this study, it is hypothesized that doctoral students had experiences consistent with the doctoral students studied by Golde and Dore. The selected university for this study is categorized by the Carnegie Foundation as a research intensive institution. By addressing student satisfaction, this research hopes to shed additional light on students’ experiences in graduate education. At the conclusion of this study, it may even provide some direction for improving conditions that allow for increased student satisfaction and perhaps even increased rates of graduation.

Purpose of the Study

The purpose of this study was to compare overall graduate student program satisfaction, in relation to race and gender, between entering and advanced level doctoral students.

Research Questions

The research questions of this study were as follows:

1. Is there a significant difference in satisfaction between advanced level and entering level doctoral students?
2. Is there a significant difference in satisfaction between race, entering- and advanced-level doctoral students?
3. Is there a significant difference in satisfaction between gender, entering-level, and advanced-level doctoral students?
4. Is there a significant difference in satisfaction between full- or part-time doctoral students in terms of race and gender?

5. Is there a significant difference in satisfaction between doctoral students and their academic colleges in terms of race and gender?

6. Is there a significant difference in satisfaction between doctoral students, their academic colleges, classification status, gender, and race?

The researcher hypothesized that there would be a statistically significant difference between the following areas: the advanced doctoral students’ levels of satisfaction and the entering doctoral students’ level of satisfaction; the satisfaction levels between race, entering- and advanced-level doctoral students; the satisfaction levels of gender, entering- and advanced-level doctoral students; the satisfaction between full- or part-time doctoral students in terms of race and gender; the satisfaction between doctoral students and their academic colleges in terms of race and gender; and the satisfaction between doctoral students, their academic colleges, classification status, gender, and race.

Justification

This study hopes to contribute to the existing literature on student satisfaction by showcasing the satisfaction levels of doctoral students at a southern university. Thus an attempt will be made to compare the results of this study with those of other students.

Doctoral student satisfaction is a component of graduate education that is not only relevant, but also necessary for the success of the individual and the university alike. In this study, the levels of satisfaction with doctoral education at the selected university are assessed by the people it serves: its doctoral students. These students focused on the aspects of this institution in which they received their terminal degrees so that the
selected southern institution of higher education could continue to strive to be the university that it wanted to be now and in the future.

There are many factors that affect a graduate student’s success rate in completing their degree. Some of those reasons include federal grant monies for research, levels of expectations amongst Ph.D.s; and length of time to complete the Ph.D.; the length of the dissertation and committee members who believed that the level of achievement that they each reached with their own dissertations was the level in which their graduate student must meet and surpass in order to achieve their Ph.D. This study, however, focuses on satisfaction rather than success.

Golde and Dore (2001) found in a recent national survey of doctoral students that most students “[did] not clearly understand what doctoral study entail[ed], how the process work[ed] and how to navigate it effectively” and “the training doctoral students receive[d] [was] not what they want[ed], nor [did] it prepare them for the jobs they [took]” (p. 3). These findings help confirm that across the country doctoral students do not know what they are getting into, and were not getting out of graduate school with receiving the education they expected.

With this, the literature has made great strides in race and gender, but more is needed. Therefore, this research study aims to find out if race and gender play a vital role in the levels of satisfaction of doctoral students at the selected southern university.

Definition of Terms

The following were a list of definitions for the terms in this study:

Satisfaction — Giese and Cote (2000) explored the various definitions of the
word satisfaction. They found that there was no concrete definition for the word. Moreover, they found in the research that participants used their own personal definition of the word, and played a role in how they understood and responded to the questions researchers asked them. This hindered researchers’ “ability to interpret and compare empirical results. Giese and Cote (2000) concluded that “true satisfaction can be elusive” (p. 4). For this study, satisfaction is defined as contentment with doctoral student’s experiences during their graduate education process.

*Advanced-level doctoral students* — Students who had 36 or more credit hours toward their doctoral degree. Baird (1995) explained the multi-level process of the stages that doctoral students went through on the journey to completing their degree. Baird wrote that when doctoral students entered the phase that advanced-level students were in, they should be fully knowledgeable of the field in which they were studying and knew where their research interests, professionally, lie.

*Entering-level doctoral students* — Students who had less than 18 credit hours toward their doctoral degree. Baird (1995) also explained that doctoral students, similar to the entering-level doctoral students in this study, are becoming familiar with their field of study as they start their academic program. These students may be unsure of their abilities as well as become familiar with their peers, faculty, and the body of knowledge in their field of study.

*Full-time graduate student* — A student who was enrolled in three or more 3 credit hour classes per semester.

*Part-time graduate student* — A student who was enrolled in one or two 3 credit hour classes per semester.
Racial/Ethnic groups — The self-identified status of one of the following groups: People of color (i.e.: African American, Hispanic/Latino, Asian, Native American, or Other) and White. Race was chosen as a variable in this study because the researcher believed that there were differences in the experiences of people of color and whites at the doctoral level.

Gender — Male or female. Gender was chosen as a variable in this study because the researcher believed that there were differences in how men and women may view and feel about their experiences while on their doctoral journey.

Delimitations

There were several delimitations involved in this study. Delimitations include the selection of participants from only one university and the selection of those who were doctoral students only. Located in a mid-size southern city, the institution had a total of 2,873 doctoral students at the time of survey. The participants were from four of the five academic colleges at the selected university: Arts and Letters, Education and Psychology, Health, and Science and Technology. Due to this limited sampling, then, this study is not generalizable. Another delimitation is the parameters set by the researcher for entering and advanced-level doctoral students. The researcher set the boundaries of the entering-level doctoral student at 18 credit hours or less, due to the total amount of credit hours that a student would take their first year. For an advanced-level doctoral student, the researcher set the boundaries at 36 credit hours, due to the fact that it was past the midpoint of a doctoral student’s career.
Assumptions

The researcher assumed that all of the participants would answer the survey with complete honesty. The researcher also assumed that the participants would return the survey in a timely matter.

Summary

The overall purpose of this study is to examine the satisfaction levels between entering level and advancing level doctoral students, in relation to race and gender. The researcher also aimed to add to what is known about differences in levels of doctoral student satisfaction with regard to race and gender. Finally, the research aims to provide additional information to assist the selected university to maintain and improve their programs and services offered to doctoral students.
CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The review that follows focuses on the satisfaction of doctoral students. Specifically, this review synthesizes the literature on the satisfaction of doctoral students in relation to:

1) Alternative Delivery (Online, Satellite Programs) and Satisfaction;
2) Part-time/Full-time Students and Satisfaction;
3) Gender and Satisfaction;
4) International Students and Satisfaction;
5) Age, Life Cycle, and Satisfaction (Quarter-life crisis, Mid-life crisis, Marriage);
6) African Americans, Latino(s), Asians and Satisfaction;
7) Persistence, Completion, Retention and Satisfaction;
8) University Climate, Support Services and Satisfaction;
9) Advising, Mentoring and Satisfaction;
10) Learning Styles, Stress, and Satisfaction;
11) Beginning Doctoral Students, ABD Doctoral Students and Satisfaction;
12) School Type (Private, Public, Historically Black Colleges and Universities (HBCUs), Predominantly White Institutions (PWIs);
13) Social/Socialization and Satisfaction; and,
14) Assessment/Evaluation and Satisfaction.
The literature begins with an explanation of the theoretical framework employed in this study.

**Theoretical Framework on Satisfaction**

This study used two theories and one model that are routinely cited and used in studies of satisfaction. They are: (1) Herzberg’s Motivation-Hygiene Theory; (2) Maslow’s Hierarchy of Needs; and (3) Keaveney and Young’s Student Satisfaction and Retention Model. These theories, which proved the theoretical framework for this study, are examined below.

*Herzberg’s Motivation-Hygiene Theory*

In 1959, Frederick Hertzberg published, *The Motivation to Work*, which anchored his motivation-hygiene theory (Herzberg, Mausner, & Snyderman, 1959). Hertzberg sought to determine how the workplace environment impacted employee satisfaction and dissatisfaction (Internet Center for Management and Business Administration, Inc., 2010). Hertzberg found that various factors lead to satisfaction or dissatisfaction with job performance. These factors included “achievement, recognition, work itself, responsibility, advancement, and growth” (Internet Center for Management and Business Administration, Inc., 2010, p. 1). The factors that lead to dissatisfaction are “company policy, supervision, relationship with boss, work conditions, salary, and relationship with peers” (p. 1). Herzberg believed that satisfaction factors were qualitatively different from dissatisfaction factors and could not be “treated as opposites of one another” (p. 1).

Herzberg maintained that an employee has physiological needs, which could be “fulfilled by money” (Internet Center for Management and Business Administration, 2010, p. 2), and psychological needs, which could be “fulfilled by activities that cause
one to grow” (p. 2). In order for an employee’s physiological and psychological needs to be met, Herzberg argued that ‘job enrichment’ should be provided by challenging the employee to make use of all of the employee’s abilities, and increasing the level of responsibility as the level of ability increases. If these methods did not work, Hertzberg called for replacing an employee if he or she were still unable to perform their duties (p. 2).

Hertzberg’s (Internet Center for Management and Business Administration, Inc., 2010) theory was selected for this research because it provided clues about a fulfilling educational process. Although this theory deals with employment, it does parallel the researcher’s quest to find factors that may relate to doctoral students’ satisfaction. In this case, Hertzberg’s theory suggests that student achievement and recognition, the course of study, opportunities to take responsibility, and student growth were potential factors to consider in studying doctoral student satisfaction. Likewise, Hertzberg’s theory suggests that university policies and rules, relationships with professors, work and study conditions, graduate student compensation, and doctoral students’ relationship with peers were potential factors worth exploring.

Maslow’s Hierarchy of Needs

Abraham Maslow introduced the hierarchy of needs in 1943. The hierarchy contends that “people are motivated to fulfill basic needs before moving on to other needs” (Cherry, 2011, p. 1). The hierarchy is often presented in the shape of a pyramid with five levels: biological and physiological, safety/security, social, esteem and self-actualization needs (Chapman, 2010; Cherry, 2011). Each level encompasses what an individual would need in order to survive in society and grow as a person. Another way
that Maslow’s theory can be explained was through his identification of two types of human needs: basic needs and meta needs. Maslow (1968) defined self-actualization as:

Ongoing actualization of potentials, capacities, and talents, as fulfillment of mission (or call, fate, destiny, or vocation), as a fuller knowledge of, and acceptance of, the person’s own intrinsic nature, as an unceasing trend toward unity, integration or synergy within the person. (p. 25)

Maslow (1968) believed that people who had accomplished this need were individuals who had the following:

1. Superior perception of reality,
2. Increased acceptance of self, of others and of nature,
3. Increased spontaneity,
4. Increase in problem-centering,
5. Increased detachment and desire for privacy,
6. Increased autonomy, and resistance to enculturation,
7. Greater freshness of appreciation, and richness of emotional reaction,
8. Higher frequency of peak experiences,
9. Increased identification with the human species,
10. Changed (the clinician would say, improved) interpersonal relations,
11. More democratic character structure,
12. Greatly increased creativeness, and
13. Certain changes in the value system. (p. 26)

According to Maslow, moving from one level in the hierarchy of needs to the next requires individuals to grow to make their next move. However, if they are not able to
complete this task, Maslow held that metapathologies would develop. Metapathologies are the responses that come when meta needs are not met, which if “forced to live without these values, the self-actualizer develop[ed] depression, despair, disgust, alienation, and a degree of cynicism” (Boeree, 2006, p. 8).

Maslow’s hierarchy of needs may help explain a doctoral students’ progress toward completing their degree. If certain needs were not met, a student may remain stuck and be unable to move forward to the next, possibly derailing a doctoral student’s goal to complete their degree. Maslow’s theory, thus, provided additional clues crises, relationships (marital, mentor, peers, etc), persistence and completion, campus climate and support services, stress, and socialization.

**Keaveney and Young’s Student Satisfaction and Retention Model**

Keaveney and Young developed their Student Satisfaction and Retention Model (SSRM) in 1997. SSRM “incorporates a comprehensive set of independent variables and self-reported experiential assessments to predict experience, which in return is related to student satisfaction” (DeShields & Kara, 2005, p. 129). Keaveney and Young “assume[d] that student satisfaction [led] to intentions to stay which in turn [led] to student retention” (Kara & DeShields, 2004, p. 5). An early application of SSRM was made by DeShields and Kara who used the SSRM to study student satisfaction among business students. Their work explored how a student’s satisfaction level related to their decision to continue or stop their education at that particular institution.

In their first study, Kara and DeShields (2004) examined business students’ intention to stay in college. They began with the assumption that students need to be considered customers of the college, and that customers need to be satisfied. Kara and
DeShields argued that this would lead to “small increases in retention rates [that could] have a dramatic effect on the profits of a company [or the college or university] because…the cost of retaining an existing customer is much less than the cost of acquiring a new customer” (p. 3). The researchers used the SSRM to integrate a set of variables that were “hypothesized to predict student satisfaction and retention” (p. 5). The study also incorporated “a set of self-reported outcome assessment variables . . . [to] provide information about students’ evaluations of the programs offered . . . beyond satisfaction and retention” (p. 5). The researchers found that interactions with faculty members and students’ experiences in the classroom are important satisfaction factors that help determine whether or not students stay in school. They also found that student advisement plays a key role “enabling them to proceed through the college or university in an efficient manner” (Kara & DeShields, 2004, p. 13). This study provided some clues that might enable a college or university to implement various services that would help increase not only satisfaction, but also retention and graduation rates.

In a second study, DeShields and Kara (2005) continued to examine the factors that might determine a student’s satisfaction and retention. As they did in their first study, the researchers focused on retention. The researchers argued that universities needed to become more “customer” friendly delivering services. “Student retention may be linked to customer satisfaction” (p. 130), because without students, or ‘customers’, there would essentially be no need for colleges and universities or the services that are provided to them through these entities.

In this study, DeShields and Kara (2005) used a modified version of the SSRM. They focused on the correlations between faculty, advising staff, and classes, which they
felt were an important part of a student’s higher education experience. Their study found that quality of the experience enhances the relationship not just between the student and the college, but also with the general population. With this, students and higher education institutions assist each other in meeting their similar goals of completion and retention. “Students who have a positive college experience are more likely to be satisfied with the college or university than students who do not have a positive college experience” (p. 137), and this leads to higher rates of completion and retention.

The results of DeShields’ and Kara’s research show that the level and quality of services offered to students, relationships with faculty, experiences in the classroom and academic advising and its staff influences persistence. DeShields’ and Kara’s (2005) research coincides with this study because it provides three main clues about student satisfaction: faculty contact, advisement, and instruction. This study examines these factors, but considers other factors that may relate to satisfaction such as alternative delivery (online, satellite programs); part-time/full-time students; gender; race and ethnicity; nationality; age and life cycle; learning styles and stress; and school type. Though not directly linked to research by DeShields and Kara, and theory from Maslow or Hertzberg, these latter factors are included in this study because they have been examined by other researchers (Bowen & Rudenstine, 1992; Brown, 2007; Ellis, 2001) in college student satisfaction.

Alternative Delivery (Online, Satellite Programs) and Satisfaction

Doctoral graduate programs have seen numerous changes since their conception. One of these changes is the transition of some graduate programs from traditional on-
campus academic programs to course delivery through alternative methods such as online degree programs, online classes, and satellite campuses and programs.

Researchers have found that students who participate in online classes and programs have similar needs as on-campus students. Dooley, Kelsey, and Lindner (2003) and Fenby (2006) found that one of the biggest components that all shareholders must have was a basic knowledge of technology. Dooley, Kelsey, and Lindner (2003) examined specialized curricula and found that interactions through and with technology were of great importance for both faculty and students in the program. Dooley et al. (2003) also found that students could be “immersed in the academic culture, but not with campus-based activities” (p. 49). Fenby (2006) focused on the issues of “workload, quality of assignment prompts, feeling left out in class discussion, a general unresponsiveness from the faculty” (p. 5) and those faculty members’ inexperience and inability “to embrace the new environment, its pedagogy, and especially time management disciplines” (p. iv). All of the researchers felt that student satisfaction would increase as the problems diminished (Fenby, 2006) and that the students would continue to be successful students and urged “appropriate interactions between and among students and faculty through technology interfaces” (p. 50).

McFarland (1996) explored the differences between on-campus and off-campus students at Nova Southeastern University. He found that off-campus students believed their quality of education was higher than on-campus students. Yet, he concluded that the university should “initiate a series of activities to increase access to the University’s technology-based information resource infrastructure for off-campus students” (p. iii). Tipton (2002) studied how academic libraries at Texas A&M University served the needs
of their distance learners. Tipton’s research found that the library was supportive of its distance learners and that the library systems had not made any innovative changes to serve this particular student population.

Other researchers such as Ferguson and DeFelice (2010) and Scheer (2000) explored differences in how students perform in online classes. Ferguson and DeFelice (2010) explored the difference between summer session students and full-semester students’ satisfaction with an online course, perceived learning, and academic performance. They found that students in the summer course had a higher satisfaction with student-student communication than the full-semester students. They also found that full semester students had a higher satisfaction with student-professor communication; yet, there was no difference in satisfaction between the two sets of students when they took a future online course. Lastly, they found five factors that maximized student satisfaction, perceived learning, and academic performance: “effective communication between students and instructors; teaching strategies of the online instructor; [usage] of recorded podcasts and Frequently Asked Questions (FAQs); professor availability in response to respond[ing] promptly to online inquiries; and, mandatory attendance and participation in chats” (p. 81). Scheer (2000) explored how Master’s students took courses through two different learning methods—media-video and online—and wanted to know if there were any satisfaction and academic performance differences between the two groups of students. Scheer’s results were not similar to those of Ferguson and DeFelice in that there were no differences between classroom, video, and online students in regards to their final grade in the course or in instructor satisfaction ratings and that overall, there was little difference between on-campus and distance learners. Yet, the
final grade of video vs. online students did show a difference in satisfaction in the results of this study. Scheer believed that online students’ “overall satisfaction may not be significantly different from their peers, but the ingredients of that satisfaction may be weighed differently because their gratitude for causes them to overlook shortcomings in distance learning course design or lack of instructional contact” (p. 170).

Kelsey, Lindner, and Dooley (2002) and Ullyatt (2003) explored student satisfaction from the student and student/administrator perceptive, respectively. Kelsey, Lindner, and Dooley (2002) found that students were satisfied with the instructional design, faculty and cohort group of the joint doctoral program between Texas Tech University and Texas A&M University. However, students were not satisfied with the feelings of isolation, course materials, inaccessible resources, and the time allocated for the completion of assignments and wanted more technology training and improvements to the technology that they were using for their program of study. This finding was similar to the results and findings of Fenby (2006). Ullyatt (2003) asked administrators and students how they felt about the effectiveness of the service system for online students. It was found that students were satisfied with enrollment services, but were less satisfied with billing and Financial Aid. Administrators rated Enrollment Services as mediocre and expressed concern about reliability and receiving accurate information from students. Administrators also wanted change to take place in regards to implementation of the automated processes that occurred on campus. Although they studied two different groups on university campuses, they found that students and administrators have different viewpoints as to what would increase the levels of satisfaction for both students and administrators.
Lastly, Walsh (2009) and Wolford (2001) explored how individual-level student factors affected student satisfaction and perceptions of students who took online courses, respectively. Walsh (2009) found that there was no relationship between student satisfaction and learning style, he argued that student’s knowledge of distance education did affect their satisfaction, and that learning styles were not a major factor in student satisfaction in regards to distance learning. However, Wolford (2001) found that student satisfaction was not determined by the instructor. He found that students with a wide knowledge base about technology were equally successful as online students, although, the age of the student did affect their success in the online course, but not the student’s personality or their satisfaction with the course instruction.

Doctoral student satisfaction and alternative delivery methods can be viewed as an area where research has steadily progressed and will continue to do so. However, there is a gap in the research of technological infrastructure and the resources these students need in order to be successful with their academic programs. This current study attempts to begin to bridge the gap.

Part-time/Full-time Students and Satisfaction

Doctoral students embark on their journey by either being a full-time or part-time student. This distinction is often a factor in the student’s time-to-degree and finishing their degree. Regardless of which path a student decides to take, it is imperative that services and programs are provided for them to be successful.

Evans (2002) and Neumann and Rodwell (2009) explored factors influencing whether part-time students finished their degrees in a timely manner. Evans (2002) found that although the part-time student population had risen at international universities,
students had studied too narrowly within their specific fields of study, which hindered their communication skills, workplace skills, and employment opportunities. Evans also found that several levels of satisfaction were affected with part-time students: completion duration, scholarship/income, infrastructure provision and demands, research, and part-time doctoral students’ withdrawals. It was also noted that scholarships, income, proper infrastructure provision and demand were affected if time to degree was not in place. Yet, Neumann and Rodwell (2009) found that part-time doctoral students had a faster time-to-degree than full-time students. Part-time doctoral students, however, were less satisfied with the support that they were given and had a lesser perception of the research climate within their department than full-time doctoral students.

Moro-Egido and Panades (2010) assessed the level of satisfaction between full-time and part-time graduate students to determine how a student’s employment status affected their level of satisfaction with their degree programs. They found that students who were employed part-time were less satisfied with their experience than those who were not employed. They also found that dissatisfaction amongst students came from the inability to use all of the services, amenities, and facilities that were available to them at the university, which hindered their academic progress in earning their degree.

Lastly, Liu and Jung (1980) examined part-time (commuter students) to determine their satisfaction levels. The factors that they examined included the age, student level, grade point average (GPA), perception of education, and student satisfaction. The researchers found that only student level, or years in college, had a negative effect on satisfaction. They also found that age, perception of education, and grades did affect
student satisfaction and academic performance. Yet, they found that “older students [were] best suited to a commuter college environment” (p. 225).

Gender and Satisfaction

Bailey-Chen (2007), Nettles (1990), and Junn and Fuller (1996) explored how sex, race, gender, ethnicity, and class standing affected levels of satisfaction for graduate students. Bailey-Chen (2007) studied students at a private institution and wanted to identify the areas in which students were most and least satisfied with their institution. She found that students had high expectations and that most of the students were satisfied with the services that were offered. Although students were least satisfied with financial services, she found that regardless of the demographic variables of ethnicity, race, and gender that registration services had high satisfaction from the students.

Nettles (1990) used the demographic characteristics of age, race, gender, and socioeconomic status of Caucasians, African Americans, and Hispanic students to identify how their experiences affected their pursuit of their education. He found that African Americans were more satisfied with their doctoral programs than Caucasians and Hispanics, but Hispanics were more satisfied than Caucasians. Overall, students who judged their institutions to be the least discriminatory, reported lots of “support and encouragement from a mentor,” reported lots of “interaction with faculty,” and “took more time off between undergraduate school and graduate school” (p. 12) were the most satisfied with their doctoral programs. He also found that race and socioeconomic status (SES) were not factors in the amount of financial aid received or borrowed by students. He had several recommendations for administrators to improve programs and services that were offered to students: develop policies and strategies for minority students; find
ways to reduce “the amount of time that lower SES and female students take off between undergraduate and graduate school and toward improving the social environment and the amount of interaction with faculty that lower SES students have, even when their undergraduate preparation is equal to that of their relatively high SES counterparts” (p. 14). Nettles’ (1990) research also found that African Americans and Hispanic felt more racial discrimination than their Caucasian counterparts. He also found that African American graduate students, especially those from a lower socioeconomic status, did not receive as much financial assistance as their counterparts in helping to lower the costs of their educational pursuits.

Junn and Fuller (1996) explored the usage of student services and its satisfaction levels in relation to the demographic variables of class standing, gender, and ethnicity and how these services could be improved for the students. They found that these variables correlated with the satisfaction of the services being offered. Women and Caucasians were more satisfied than their counterparts in relation to the services. Caucasians rated the services better than minorities. The researchers concluded that their results would lead to a more effective student services that would assist in improving the students’ observation of inclusion, retention rates, climate on campus, and diversity.

In relation to studying students from different fields of study and satisfaction, Baker (1998) and Wimms (2008) looked for differences in how students from various fields of study would perceive their levels of satisfaction. Controlling for student ability, Baker (1998) found that female and minority Ph.D. students in science and engineering had reduced completion rates compared males and Caucasians. The findings confirmed the argument that high female and minority attrition was a result of racism and sexism.
Wimms’ (2008) found that the African American, Latino, and Asian American students in this study were all similar as to why they chose their field of psychology, what conditions led them down the path to a doctorate, and how support can be found by future generations in pursuing this degree. Yet, both groups had differences such as the various challenges that they faced, how racial background may play a role in gaining employment in the future, and ways the academic environment can influence the perceptions of cultural diversity.

Researchers studied African and African American women, who had completed or wanted to complete their graduate degree, and those who had studied scientific fields during the 1960s through the 1990s at western universities. Consistent with the findings of Baker (1998), Beoku-Betts (2004) found racism, gender bias, and third world location affected African women because they had to go beyond “the patriarchal structure of science education” (p. 117). They also found that the women believe that their graduate experiences gave them a different outlook in relation to their personal relationships, mentoring, meeting the high demands of graduate school, and peer-to-peer interaction.

Yet, in a ten-year study of African American women, Schwartz, Bower, Rice, and Washington (2003) found that women primarily discussed their motivation to complete their degree and found encouragement and discouragement throughout the graduate degree process. They also found that women fostered personal relationships with faculty members and how all of their experiences affected their self-esteem.

Bowen and Rudenstine (1992) did one of the first in-depth studies on doctoral studies and concluded with recommendations for improvements. One recommendation was the fact that the external setting influences whether or not graduate education will be
supported as well as the fact that “the state of the academic labor market influences decisions by public and private benefactors to invest more or less heavily in graduate education” (p. 268). In addition, the source of funding was another recommendation in that students have to rely on multiple streams of funding in order to pay for graduate school and that if students have to personally pay for the cost of their education, it may hinder who is able to pursue a graduate degree. Foundation support was another recommendation in that they provide funding sources but also have the ability to enhance specific areas of research through their initiatives. Next, the graduate program’s size, content, norms, and structure also influenced graduate programs because if any of these are not correct in number or function, it can hinder the expectations of the graduate students. Lastly, faculty advising needs to assist the students who are not going to be successful sooner rather than later in the doctoral process as well as be assessed in their role as advisers. Another in-depth study was conducted by researchers, Nettles and Millett. Nettles and Millett (2006) started their research with the question: “How do doctoral students find the financial resources to support their academic interests and see themselves through timely completion of their Ph.D. programs?” (p. xv) They found that students’ had a variety of personal aspirations, origins, and interactions. They also wanted broader insight from the faculty and the curriculum from which they were taught.

Reporting personal experience has allowed for researchers to express how they felt about their graduate experiences. Brown (2007), an African American woman, explained her personal experiences in graduate school. Brown believed her experiences shaped and affected aspects of her life long after graduation. She believed that as she attempted to complete her degree, all of her actions were met with the message that she
was the wrong race, sex, and age. Nolan (1979) gave a personal narrative on the journey to obtaining a graduate degree. For him, it was not an easy transition in regards to balancing his personal and professional life.

Gilbert, Gallessich, and Evans (1983) explored how the gender of a faculty member affected the professional development of the students. They found that female students identified more with female professors in terms of confidence. However, male and female students did not show any difference with their self-descriptions of confidence, career-orientation, and instrumentation with their same-sex faculty role models. Female students with female faculty role models were found to have higher satisfaction rates than male and female students with a male role model. Lastly, female graduate who students were mentored by female professors were more satisfied than their male counterparts.

Student matriculation is an area that could affect the area of doctoral study with age and the life-cycle. Daniels (1979) explored African American students’ matriculation into Harvard University’s Medical and Law Schools during the 1960s and the 1970s. By examining the admittance process, it was found that minority professors felt that there was a “lack of commitment to actively look for viable black candidates” (p. 41) for admission into Harvard. However, as time passed, it was noted that tension between African Americans and Caucasians eased at Harvard.

Leisure (2007) examined the online learning experience for female psychology doctoral students. The findings included eight (8) themes: accessibility of distance learning; having the support of a mentor; responsibilities of distance education and time management; strong support system of family and friends; satisfaction with all aspects of
distance education; having and sustaining a positive self-image; understanding how the experiences of the student factor were intertwined into gender-based discrimination; and self-identified limitations with the online degree program. These themes found to be the most rewarding and challenging areas as they pursued their doctoral degree, and they also highlight areas of online education that administrators or faculty members may not be familiar with. Leisure concluded that these themes could be applied to both traditional and online degree students.

Lastly, Lenz (1997) and Quinn (2002) explored how nontraditional women and married women who were completing their doctorates were affected by the decision to return to school. Lenz (1997) wanted to determine what assisted or hindered the completion of their degree. Lenz found that an established relationship between the advisor and the advisee was critical to the dissertation process. It was also found that family and peer support as well as having emotional involvement and support, time, and financial support were critical to finishing their doctorate. Quinn’s (2002) results were similar to Lenz’s. Quinn interviewed five married and divorced women about their decision to return to school. Although five overall themes were found—spousal support/emotional unavailability; communication; adaptability to change in the martial relationship; sense of autonomy/personal satisfaction; and, the need to be involved, the women discussed these three common themes: money, time away from their husbands, and work in this study. However, participants explained that as they were questioning their life’s decision, it led them to continue their education as well as gain a sense of satisfaction and future economic security by returning to the classroom to pursue their degree.
International Students and Satisfaction

International doctoral students come from a variety of countries such as China, Japan, and England to study in the United States. With this transition from their home countries to the U.S., they experience a range of experiences that may or may not hinder their journey to obtaining their degree. Much of the research has found that international students were satisfied with their studies, but felt that there were missing components in the overall educational curriculum.

As with any recent educational pursuit, the usage of the internet is a factor. Abdulla (2003) found that international students use the web for five reasons: information seeking, entertainment, surveillance, personal utility, and social interaction. With each of these reasons, a gender difference exists, with males using the internet for more social interaction than their female counterparts with females using it more for gathering information. However, freshmen students used the internet more than seniors and graduate students.

Other research by Goff (2004) discussed “ecological” (pp. 12-13) factors that affected the martial relationships of Chinese students. In this study, students discussed how language, relationship expectations, Western influence, gender, and Communism were seen as influential in the “macrosystem” (p. 12). Other results found that the social cultural environment was the most influential for the participants and that family, friends, and the presence of children were the most influential in the “mesosystem” (pp. 14-15), which is another ecological level. Lastly, time spent with others due to graduate school and the relationships with professors and advisors were the most influential for the “exosystem” (p. 14).
Otsu (2008) and Trice and Yoo (2007) found that the academic experiences of international students were similar. Otsu found that undergraduate students were more involved than graduate students in their academic experience and on-campus involvement. It was found that graduate students were less satisfied with their experiences on campus. However, Trice and Yoo found that most students judged their experiences to be positive and were satisfied academically, yet noticed that there was not an international component in the curriculum. Otsu found that students were satisfied with campus services and their relationships with others. Students were also comfortable with the fact that English was not their first language and that they had not attended another U.S. institution before the institution that they were currently attending for this degree. English proficiency did not make a significant difference in the research results nor did satisfaction with campus services or relationships with others. Lastly, Trice and Yoo found that over three-fourths of the students believed that they were prepared to return to their home country, yet less than 35% were leaving immediately after graduation. It was found that plans after graduation ranged considerably such as returning to the home country, continuing on within their field of study, and starting careers both at home and in the United States.

Age, the Life Cycle, and Satisfaction

The age of a doctoral student may have an effect on the satisfaction levels that person has had upon the start of the doctoral journey. Research studies have shown that age and life cycle play a critical role in the completion of the doctoral degree. One area of age, life-cycle, and satisfaction research came in the form of a study of martial satisfaction. Karadatzke (2009) explored the factors that affected martial satisfaction for
students who were studying in a counseling program. She was found that marital satisfaction factors included, but were not limited to, attachment anxiety, attachment voidance, and dyadic coping. Yet, master’s and doctoral students showed no significant difference with the variables and dyadic coping did not have a related role in the relationship with perceived stress and marital satisfaction.

Legako and Sorenson (2000) studied marital satisfaction from the viewpoint of the nonstudent spouse. They found that nonstudent spouses believed that the graduate program was detrimental to their marriage. It was also found that there was no support from the nonstudent spouse if the graduate student became isolated and withdrawn, which added more stress and additional strain to the marriage. Lastly, they found that for religious couple’s nonstudent spouses believed that the graduate student’s commitment to God wavered as they moved through the graduate process.

Martiny (2004) examined the factors that caused the dissolution of student marriages and explored how to find effective coping strategies so the student could remain in classes. Unlike Legako and Sorenson, Martiny found that graduate school was seen as beneficial by most married graduate couples. However, no significant differences were found between men and women’s perceptions and the impact on their education. It was found that stress was directly related to financial and time constraints and this affected marital relationships. Religious views did not help the impact of the stress on the marital relationship.

Based on previous research, Hostetler (2004) wanted to explore older male and female graduate students’ satisfaction levels. Hostetler found that a helping attitude from friends was the strongest predictor for satisfaction and that the support of friends was
another area for satisfaction. However, if the participants had a dependent at home and held a job in the past it had a negative effect on being an older graduate student. Also, Hostetler found gender differences because there were more women than men in this study, Hostetler found that “when a bivariate correlation analysis was performed separating the genders, no independent variables were significantly related to role satisfaction or strain for males. This indicated a gender difference in the data (p. 120).”

Time constraints, learning styles, and how students obtained knowledge were also factors that contributed to an older student’s satisfaction levels.

Lenz (1997) examined nontraditional-aged women who were working on their dissertation and determining the factors that assisted and/or hindered in their progress of completion. It was found that the advisor and advisee relationship was crucial in the dissertation process. It was also found that family and peer support were the biggest factors in degree completion. Other factors that affected the completion of the dissertation were high levels of stress, the emotional involvement and support, time, and financial funding throughout the entire process of completing the dissertation were needed for the women in this study. Levine and Weitz (1968) both discussed graduate students and their satisfaction levels. Levine and Weitz (1968) explored job satisfaction of graduate students at two different universities. They found that students felt high dissatisfaction because of the lack of student input in the departmental policy and/or changes that were going to affect them.

African Americans, Latinos, Asians and Satisfaction

“Students of color [refers] to people classified as African-American/African descended, Latino/Hispanic, American Indian/Native American, and Asian American”
(Cheatham & Phelps, 1995, p. 91). These same students are also called “minorities” or “underserved students.” Most graduate students were white (Nerad, 2008), but the fastest growing group was African American women. Older students, also known as non-traditional students, have also increased their numbers at the graduate level. Many non-traditional students were the first in their families to attend college because it was financially impossible or insignificant to their family in the past (Hawley, 2003).

Cheatman and Phelps (1995) argued that higher education is lacking in developing the social and intellectual needs of minority students at colleges and universities. They indicated that institutions of higher education had typically focused on undergraduate students and assumed that the needs of graduate students of color were similar to those in their undergraduate counterparts. They suggested that there were several areas that can be addressed by campus administrators to assist in the development of graduate students of color: recruitment and retention; various support programs; professional development opportunities; pulling support from the surrounding community; faculty diversification; faculty-student interaction and mentoring; classroom interaction; teaching; and, curriculum. Each of these entities played an intricate and critical role in the lives of all graduate students.

Other researchers such as Nettles (1990), Nettles and Millett (2006), and Neumann (2002) looked at aspects of diverse populations to determine how a variety of factors can affect their education, including race and the availability of financial resources especially in regards to doctoral students’ completion rates. Nettles found that African American and Hispanic students felt more racial discrimination than their Caucasian counterparts. He also found that African American graduate students,
especially those from a lower socioeconomic status, did not receive as much financial assistance as their counterparts. Neumann detailed the importance of diversity in research and doctoral education by exploring the cost of education, concentration, relevance, and how each of these poses both positive and negative influences. The results showed that a person’s gender, age, social background, and life experiences help to bring diversity into both the short- and long-term picture of graduate education. Neumann also found the rising cost of doctoral education continues to influence the process in and around doctoral education. The other two entities explored were concentration and relevance.

Concentration was tied to the fields of study that offered higher lucrative funding sourcing, as well as the admissions process as to who was being selected into various programs, which could affect the cost and quality of the program. Relevance was related to “both the . . . research [of] society and to the relevance and purpose of a doctorate to employment outside the university realm” (p. 173). The authors believe that relevance, concentration, and cost were equally important to doctoral education.

Research has also explored factors related to time to degree. Kim and Otts (2010) examined how financial cost affected time to degree for doctoral students in terms of race, field of study, and institutional characteristics. Additionally, Kim and Otts believed that the doctoral degree prepared students for careers in and outside of academia. They found that the type of financial assistance the student received did influence their time-to-degree and having an assistantship or fellowship did affect a student’s completion rate. Non-traditional students had a longer time-to-degree if they had recently completed their undergraduate degree and gender was not a definitive variable in time-to-degree. In addition, a student’s age, time between undergraduate and graduate school, and the
selectivity of the undergraduate institution were all factors related to a student’s time-to-degree in every field of graduate study. In this study, race was the most significant factor in the humanities and social science fields in determining time-to-degree and being engaged difficult fields of study did affect their completion rate.

Hardiman and Jackson (1992) explored the racial identity development of African Americans and Caucasians and how to help educators and administrators make more informative decisions for their campuses. They were concerned about the social interactions between these two groups and how they affected the campus community. The authors found five stages to racial identity in life: naïve, acceptance, resistance, redefinition, and internationalization. As the student goes through each stage, educators and administrators should know that each race would progress through each stage differently. The researchers believed that administrators and educators should respond to the stages by trying to facilitate development in students, not stifle it or hide it. The authors believed that educators should try to look at these stages in the light of their own life experiences and should not be surprised by the ways in which the students interact. They also argued that educators should understand broad differences in social identity perspective.

Similar to Hardiman and Jackson (1992), Quaye and Magolda (2007) explored students’ developmental levels from a dialogued discussion using a learning partnership model. “Racial self-understanding evolves through complex development along three dimensions: (1) cognitive, that [was], our beliefs and perspectives on knowledge, (2) intrapersonal, that [was], our sense of self, and, (3) interpersonal, that [was], our sense of
self in relation to others” (p. 2). They found that all students develop at different rates, which influenced their racial understanding of others.

Harper and Hurtado (2007) examined the challenges that colleges and universities across the country experience when it comes to race relations. They found that racial differences in perception of race issues on college campuses were evident. Minority students sometimes reported prejudicial treatment and racist campus environments, resulting in isolation when these students were the minority on campus. Yet, there were benefits to racial incidents on campus that brought forth discussions about cross-racial engagement. Exposure to other races could change individual perceptions that were seen in everyday society. It allowed these students to be given the opportunity for more interactions with diverse populations; their racial anxiety levels could be lower upon graduation. In contrast, Reason and Evans (2007) stated that a few Caucasian students had an understanding about themselves racially. But, this process was because the students were in active pursuit of the reformation of the self due to being Caucasian in America. A diverse student body on a college campus would not make Caucasian students engage in racial dialogues and activities nor would it initiate the racial exploration process for them.

Wasburn-Moses (2007) explored the perceptions that minority doctoral students have about their special education graduate programs and considered whether there was a shortage of minority students in this field. She found that “some students of color may not share the same graduate school socialization process as their peers, despite the efforts that the field of special education [had] made to bring more students of color into doctoral study” (p. 463). Students of color believed that financial support was the most
important reason determining which university they selected to obtain their degree, felt that they were not as prepared as their peers, and saw themselves as poorly prepared to submit an article for publication. Students felt that having or not having a mentor could affect their perception of their experiences on the doctoral journey and this varied depending on their race. Wasburn-Moses (2007) also found that Asian American students had very different experiences than their peers with regard to their preparedness levels, feelings of satisfaction, and financial support. Asian American students also felt that it was difficult for them to express any form of assertiveness, express their dissatisfaction, or ask for assistance when it was needed for them.

Schoenecker, Martell, and Michlitsch (1997) explored the cultural and racial diversity of students in a computer stimulation project. They found that diversity in undergraduate student groups had a negative effect on satisfaction. Due to this lack of satisfaction, the researchers stated that more research should be conducted to further examine how group diversity is affected over time as well as how diversity within a group affects satisfaction and performance.

Lastly, Johnson-Bailey, Valentine, Cervero, and Bowles (2009) examined the experiences of African American graduate alumni and found five factors that were common amongst all of the participants in the study: Caucasian professor discrimination, enforced social isolation, underestimation of academic ability, Caucasian student discrimination, and forced representation for the race. They also found that Caucasian professor discrimination and underestimation of academic ability decreased over time, but that Caucasian student discrimination increased over time. According to their
research, it was also found that Caucasian students’ experiences have stayed the same in relation to enforced social isolation and forced representation of the race.

Persistence, Completion, Retention and Satisfaction

Doctoral students face a variety of challenges while they are pursuing their degree. Research studies examine how persistence, completion, and retention can affect satisfaction levels of doctoral students through areas of student satisfaction, performance, time to degree, and faculty advisors.

Persistence

Bean and Bradley (1986) examined how academic performance (GPA) and satisfaction of students affected other variables—academic integrity, utility, academic difficulty, social life, memberships in campus organizations, class level, and institutional fit. They found women, but not men, had a statistically significant relationship between their GPAs and satisfaction. They also found greater effects of satisfaction on GPA than GPA on satisfaction. Additionally, there were different factors of satisfaction between men and women.

Gregg (1971) performed one of the first studies on doctoral education, which examined doctoral student satisfaction. He found that collegiality between faculty and students were a strong indicator of both academic and non-academic satisfaction, regardless of gender, size of the academic department, or degree emphasis. He also found that competitiveness between students and expectation-reality were both negative predictors of academic and non-academic satisfaction.

Researchers such as Pike (1991) explored how a student’s grades and their satisfaction were influenced by factors such as gender, high school grade point average,
and scores on college entrance examinations. It was found that satisfaction does influence grades and that faculty-student and peer interactions were also related to satisfaction. However, if students attended cultural events on campus, it was negatively related to satisfaction. This research also showed that background characteristics do influence academic performance; however, “high school grades and entering ability significantly influence subsequent academic performance” (p. 26). A student’s entering ability was found to be the best indicator of college achievement.

Baird’s (1997) research also examined the stages that the students went through during the doctoral process. Baird stated that the first stage was students learning about “the expectations and demands of the discipline” (p. 100) and becoming integrated into the department and institution. Upon their integration, the students completed their coursework and prepared for their comprehensive exams and completing their dissertation. Upon the completion of their dissertation, Baird identified several elements involved in a dissertation: an idea, a method, a committee, advice and guidance, finances, familiarity with the process and its forms, a peer group, and finally encouragement. These elements of the doctoral process showcased the components that graduate students must go through in order to complete their degree.

Gardner (2009) explored how faculty members across seven disciplines determined the success of their students. Gardner believed that success had been determined by “retention, academic achievement, completion or graduation, and professional socialization” (p. 384). She found that the departments of oceanography, communication, and psychology had the highest completion rates; the lowest rates of degree completion were from mathematics, engineering, and computer science. The
author found that the professors’ comments on what success meant were determined by the field of study and the institutional standards. Gardner stated that a full picture of doctoral education success had not been captured because most of the research had been conducted at top-tier institutions.

Law (2001) wanted to identify personal and professional characteristics and perceptions of graduate students to compare with the results of a previous study at The University of Georgia. Law found that there were more men who graduated than women. Regardless of the group of graduates, most doctoral students were employed while they were completing their degree and did not receive any type of financial assistance. The graduates believed that their self-satisfaction was the primary reason behind wanting to acquire this degree. Yet, there was an increase in the time-to-degree with the first group from 1940 to 1986 averaging 36 months to complete their degree while the group from 1986 to 2000 averaging 50 months to complete their studies.

The expectations and experiences of doctoral students can be fluid, and studies have found that students’ expectations may not always meet what they actually experience during the course of their journey to obtain their degrees. Researchers like Leonard, Becker, and Cate (2005) wanted to know what students expected to learn, gain, and what circumstances surrounded their studies in the United Kingdom. They found that students earned their degrees for a variety of reasons such as professional development, learning a new skill set, the joy of studying, to obtain a doctorate, to study abroad, and because of a particular interest in a field. They also found out that students gained “confidence, writing skills, friendships, professional contacts and the development of an international outlook” (p. 140). Students did inform the researchers that their educational
costs were funded by themselves or through their employer. The students had to fit their academic pursuits around caring for their family and their children, although some students felt that their studies did not affect their family life. However, several students were not sure if obtaining their degree was worth all that they had experienced while pursuing their doctorate: a lower socioeconomic status, inadequate family housing on campus, the cost of living in London, personal costs, and having to deal with tension in one’s personal life as they progressed through this journey.

Levine (2005) examined the mismatches between students, their experiences, and their institutions of higher education. He explored the areas of “money, convenience, teaching and learning, free time, and priorities” (p. 155). He found that the price of education has risen and that financial funding has not been able to keep with the increase of educational costs. With the ‘convenience mismatch’, fewer traditional-aged students attended college and lived on campus. He also found that teaching and learning mismatch appeared between students, teachers, and how learning styles of the material that was being taught. Levine believed that students would better benefit from learning their major classes and finishing with the general education requirements instead of the opposite way, which is how most, if not all, institutions are set up. Although Levine’s research dealt with undergraduate students, the mismatch between students and institutions of higher education can be felt at the graduate level by some of these same experiences.

Completion

The experiences of students were critical to their journey to completing their degree. Gregg (1972) examined the quality of student experiences while they were pursuing their doctoral degrees. He believed that “the degree of satisfaction experienced
by the graduate student may be important not only for his level of performance but also for his remaining in graduate school and attaining his degree objective rather than dropping out before completion” (p. 483-484). He also looked at the relationship between the faculty-student and student-student. He found that satisfaction was not only important for doctoral student performance levels but was also helpful in the retention and matriculation of those same students. Gregg’s study of graduate student satisfaction found that faculty-student relationships (collegiality), student-student relationships (competitiveness), and expectation-reality discrepancy (ERD) were all factors in how students’ experiences were intertwined with their levels of satisfaction.

Researchers like Elliott and Healy (2001) defined student satisfaction as “a short-term attitude resulting from an evaluation of a student’s educational experience. Student satisfaction results from when actual performance meets or exceeds the student’s expectations…Student life is a web of interconnected experiences which overlap and influence student satisfaction” (p. 2). They were examining “the impact that various dimensions of an educational experience has on student overall satisfaction” (p. 2). Their research found that the dimensions of the academic experience led to high levels of satisfaction, as well as dissatisfaction. Their results also showed that the dimensions that students felt were important to their overall educational experience did not necessarily impact their levels of satisfaction. The authors argue that their findings have serious implications. Specifically, student satisfaction was identified by the students’ view of what was important to their educational experience and identifying the gap between areas of high importance and low importance to their satisfaction. Another implication was that universities can emphasize the different aspects of educational experiences based on the
perceived importance to students in the overall recruitment of students in order to aid in retention which focused more on how to keep current students satisfied.

Baird (1993) examined how graduates’ decisions before entering their graduate program affected their time-to-degree process. He outlined four different models—integrated, sociological, process, and psychological—that expressed ways in which students can progress through their graduate programs. He discussed various sources of data that institutions could use to study graduate student progress: survey questionnaires from current students; trends from the National Research Council tapes on doctoral students, high and low calculated averages of time-to-degree between academic departments’ interviews with faculty and students, and a longitudinal study of graduate students. He believed that these methods would provide insight into how and why students were progressing toward their degree at the rate that they were as well as give institutions data on what can be done to assist students in completing their degree.

Research in relation to time-to-degree and degree completion by Booth and Satchel (1995) found that funding had a positive, but insignificant, effect on whether or not a student completed their degree. However, the science field had a higher completion rate for males and females than the social sciences, which had a higher rate than the arts and languages. In relation to this study and gender, they found that male students’ ability had an insignificant effect on withdrawing from pursuing their education, yet higher ability caused women’s completion rates to increase. For male students, being part-time or full-time students with a job, also had a significant negative effect on their completion rates for their degree.
Faghihi and Ethington (1996) examined individual doctoral students’ characteristics and involvement, both academically and socially, and how this may have influenced their time-to-degree. They found that the relationship between intellect and individual satisfaction was related to gender, age, and marital status. They also found that older students felt that they had more intellectual involvement than their younger peers, and women had higher intellectual involvement than men. The authors also argued that if institutions implemented policies and programs to increase financial funding, social and faculty support it would assist in removing obstacles that may change how students view their persistence to finishing their degree leading to growth and development as a graduate student.

Gardner (2010) found that there were differences between departments whose students have a high completion rate versus those departments that do not complete their degree as quickly. Using the socialization theory, she identified four themes in the socialization process: transition, ambiguity, self-direction, and support. These themes offset any negative feelings or experiences that a doctoral student may have as he or she were starting the process. Gardner also noted that one cannot assume that the experiences of one doctoral student should set the model for all students. She made note of other factors that may affect matriculation and completion rates. She proposed that orientation programs for students at the start of their doctoral programs and graduate school policies should be evaluated to ensure that the information given to graduate students assists them in having a holistic view of their graduate program.

Kluever (1997) compared students who had completed-all-but-dissertation and students who had completed their degree. The author found that more men than women
in both categories had full-time employment as their primary financial means, although both groups did experience financial hardship with current students experiencing it more than students who had graduated. Neither group of individuals had a lot of experience with publishing their research, but did have some skills with data analysis. Both groups also revealed that their academic advisor and family aided them in having emotional support through the doctoral process. However, it was found that their committees provided little support for them.

Wright (1964) studied why graduate students fail or succeed in completing their degree. One reason that Wright found for failure was the length of time needed to conduct research. Another reason that showed success or failure was that the student showed a lack of ability to do the work required at the doctoral level. Another reason included motivation of graduate school.

Malfroy and Yates (2003) explored the strategies in managing doctoral education and what new format there was in to complete the degree. Students believed that they were gaining knowledge and a degree, but they also were put into a position to affect policy changes or developments as well as changes to the models in what had been done previously. The students also identified a shift in their mindset in both “professional thinking and new directions in education” (p. 128).

Golde, Walker, and Associates (2006) wrote, Envisioning the Future of Doctoral Education, in which they discussed the essence of doctoral education and its possible future path. They saw “the doctorate as a degree that exists at the junction of the intellectual and moral. The Ph.D. is expected to serve as a steward of her discipline or profession, dedicated to the integrity of its work in the generation, critique,
transformation, transmission, and use of its knowledge” (p. 3). Golde’s inclusion of some of the changes that have occurred in graduate education showcases the need to explore those changes and how they have impacted the institutions of higher education: “Time-to-career continues to increase”; “Every discipline is evolving, with its boundaries expanding and changing”; “Financial support for doctoral students is a complex and dynamic ecosystem, dependent on changing federal and state priorities”; and, “Although research is largely an international enterprise, federal policies affect flows of students into and out of the United States” (p. 4). With each of these changes, many doctoral students feel that they are ill-prepared to effectively work in future work settings.

Retention

Researchers have looked at student satisfaction, performance, and retention and how satisfaction has been affected through persistence, completion, and retention. In examining if students’ decisions to stay or remain at The University of Massachusetts, Aitken (1982) presented theoretical and structural models to determine student satisfaction, performance, and retention. Aitken found that a student’s GPA and predicted GPA for graduation foretold if a student stayed or left the institution. Family or personal issues were significant in the decision to remain at the institution; however, financial support and academic advisors were not.

Franco-Zamudio (2009) examined the impact of perceptions of fit on academic retention to see if lack of fit could be found in students’ social identities. Most of the participants in the study were satisfied with their graduate studies, wanted to finish their studies, and had a high level of self-efficacy. However, students of color and women
commented on their gender and race in the academic environment and were possibly involved in student organizations that were associated with their social identities.

Gilliam and Kritsonis (2006) found that if doctoral students left their academic programs, it was the university that felt the aftershock of their departure because it was losing income and research. In their research on the hidden problems of attrition and retention of doctoral students, they found that for all of the students who stayed and completed their degree, a number of other students who were not successful in their pursuit of their degree. Nerad and Miller (1996) examined the attrition levels of doctoral students at The University of California at Berkeley and found that the majority, but not all, of the participants did complete their degree programs. Non-completion was associated with initially having no desire to obtain the Ph.D., changing their institution, student professionals, who were those who worked and went to school to advance their career, mismatch between the student and the academic program; and, having unmet frustrations. They found that students who did leave the program at a later date were leaving for reasons just as complex as those students who left early: adviser-student relationship, lack of financial support, departmental climate, and/or the undecided student. They found that the longer time-to-degree, the lower the completion rates. Lastly, women and men had similar patterns of time-to-degree in the humanities, but not in biological, physical, and social sciences. Men, however, had higher graduation rates than women, overall.

Wasburn-Moses (2008) completed a nationwide satisfaction of students from 78 doctoral programs. She recognized that student attrition impacted a variety of institutions across many different degrees. She concluded that “simply increasing existing numbers
of doctoral students may not be sufficient to ameliorate shortages” (p. 259). Wasburn-Moses found that there were differences in “age, race, student (part-time versus full-time), career aspirations, and financial support” (p. 262). In addition, participants were satisfied with mentoring and support, as well as overall satisfaction with advisor and other faculty, but “this relative strength may be masking problems with program structure, workload, and a lack of research-related activities” (p. 265). She determined that “a flexible yet clear program structure, greater emphasis on research, and a focus on doctoral student outcomes” (p. 265) led students to be least satisfied with their doctoral programs. Therefore, Wasburn-Moses explained that “a direct link [exists] between specific experiences in doctoral program and doctoral student attrition, as well as between those experiences and career attainment” (p. 267).

University Climate, Support Services, and Satisfaction

Doctoral education and students’ levels of satisfaction needed to be researched in order to determine if the university climate and support services were affected. It needed to be determined if the goal that was or was not to be attained.

University Climate

Freedman (2000) studied how university climate affects graduate student satisfaction and what elements of university climate were important to students. Freedman also investigated whether any differences existed in the levels of satisfaction by gender, residency, age, bachelor’s degree of the same or different institutions, and how long a student had been enrolled. The study found that students were satisfied with the leadership at the institution, facilities, and their education. Graduate students decided to attend their institution based on major availability, tuition costs, no standardized test
requirement, and employment opportunities after graduation. Yet, students lacked satisfaction because their educational expectations had not been met with regard to the attributes of the faculty members and the availability of high quality career placement programs. Lastly, students believed that the campus buildings, especially the graduate school, did not look professional, student resources were poorly placed, the library was inadequate, participation in the development of the institution was insufficient, and the quality of services was poor.

Lipschutz (1993) explored many aspects of graduate education and how they may affect the matriculation of graduate students through their academic programs. Lipschutz presented a framework on how to reduce student frustration at the graduate level and suggested the change for graduate education would first be addressed through the admissions process. The selection of students was of vast importance because the individuals that are admitted allow into the academic programs will be products of those academic programs. If these students were not up to par, it would be difficult not only for them but also for the institution in terms of their retention/attrition rates. Another way in which to think about changing graduate education was through the graduate curriculum. The curriculum was an avenue into examining the program and if it did not prepare an institution’s students to be the best and the brightest upon graduation, it would show when it came down to those same students researching and interviewing for jobs.

The third way Lipschutz (1993) suggested change for graduate education was through advising and mentoring of graduate students. Students must know that they can come and speak with those individuals in their departments, whether they were having problems academically or personally. Next, tracking graduate students’ progress was
crucial to know that the students admitted to graduate programs were progressing through the program at a pace that was acceptable for the requirements of the graduate school. Third, the financial support was extremely important for all graduate students because paying for school was not easy. The climate in graduate education affected students because if they did not feel that the climate of the department or anyone, or anything for that matter, was inclusive, students felt as though they were not wanted nor did they matter. Last of all, the climate in graduate education also affected the monitoring of the business practices and procedures that encompassed graduate student life. If a student was treated indifferently or badly, it caused that person to be apprehensive about future situations or issues. Room for improvement exists in every aspect of the entire graduate education process, and changes should not be taken lightly, as changes an institution makes could take a fair or good program and made it a great program of study for everyone involved at the university.

Braskamp, Wise, and Hengstler (1979) explored how satisfaction affected “instruction, departmental operations, curricula offerings, and faculty-students relationships” (p. 494) through numerous factors, including: challenges by program; integration of courses; quality of instruction; sound theoretical framework; quality of texts; classroom evaluation procedures; availability of enrichment activities; variety of course offerings; attention to providing credentials; contact with faculty; academic advising; vocational guidance; faculty-student communication; worth of program; and, satisfaction with program. They found that ‘General Satisfaction with Major’ and ‘Satisfaction with Mentorship’ were the two factors that were consistent over a two-year period in which the research was conducted. With the first factor, ‘General Satisfaction
with Major,’ they found that it “reflected students’ satisfaction with their curriculum and
course offerings, quality of instruction, and the extent to which they were challenged and
considered their program to be worthwhile” (p. 497). With the second factor,
‘Satisfaction with Mentorship,’ the students’ assessment of a faculty member’s role in
being supportive and social was important. Because the two factors were correlated, the
authors believed that students were also satisfied with ‘formal departmental offerings.’

Giese and Cote (2000) explored the various definitions of the word “satisfaction”
and found that no concrete definition exists; leaving research participant’s to use their
own personal definition. As a result, “the ability to interpret and compare empirical
results” is difficult and “true satisfaction can be elusive” (p. 4). They argue that the focus
should be on the timing of the response, what the response was, and what dissatisfaction
means to the research that was being conducted.

Lessoh, McNeil, Kooburat, and Thummarpon (2007) compared master’s students’
satisfaction levels with their studies and the satisfaction with the study program and its
components. They found that satisfaction crossed multiple dimensions such as friendly
classmates and teacher, well-known institute, facilities, expert teacher, technology,
management, curriculum, practical program, and good teaching. It was also found that
good facilities and satisfaction were tied together, but only when associated with the area
of study. Lastly, only three elements were connected with area of study and satisfaction:
expert teacher, well known institute, and friendly teacher.

Umbach and Porter (2002) studied how academic departments impacted their
students and their levels of satisfaction. The authors believed that “individual and
environmental characteristics” as well as “college subenvironments, academic
departments and disciplines” (p. 211) influenced how students viewed their experiences on a university campus. By examining satisfaction with the major, personal skill development, intellectual skill development, and general skill development, the authors found that the grade point average did affect the student’s level of satisfaction with their major program of study, yet grade point averages did not have a relationship with skill development. Women had lower satisfaction rates than men in relation to their development. African American students had higher levels of “impact of college” (p. 229) than their Caucasian counterparts. Transfer students do not live on campus, so they are not fully integrated into campus life and activities like first year students were which did have an impact on their results. Lastly, the authors did find that faculty support showed higher levels of satisfaction from its students in those departments.

**Support Services**

Lang (1987) studied various characteristics—social class, sex, race, undergraduate achievements, and the rank of undergraduate institution—to determine if it influenced the rank of the graduate institution. He found that students who attended a higher ranked undergraduate institution also attended a higher ranking graduate institution. However, women and men attended institutions that were similarly ranked, but the schools that women attended were ranked higher than the ones men attended in the tier of schools. Similar to the results for women and men, students of different races attend similarly ranked, but different schools.

The United States doctoral education system has received major criticisms that relate to student’s training. Nerad (2008) found that the challenges of doctoral education include “managing the intricate link between doctoral education and the institutional
research missions of the university; undergraduate education; the labor market; funding; accountability and governance; and most recently, pressures from the global economic market” (p. 278). Nerad’s research stated that doctoral students were educated and trained too narrowly: as a result, they lacked key professional skills, such as collaborating effectively and working in teams, as well as organizational and managerial skills. In addition, students were ill-prepared to teach, took too long to complete their doctoral studies and in some fields many were not completing their degrees at all. After graduation, students were ill-informed about employment outside academia and had too-long a transition period from PhD completion to stable employment.

Nyquist and Woodford (2000) suggested numerous changes needed for doctoral education, including provision of explicit expectations for students, adequate mentoring, exposing students to a variety of career options, and preparing them to teach in a wide range of settings. The authors stated a need for recruiting women and people of color to enhance the world of academia and producing scholar-citizens that are connected to both society and the global economy. They argued for the balance of the disciplinary doctorate with the challenges of interdisciplinary work, as well as partnerships with all entities of doctoral education. All of these elements were needed because “it takes a community of scholars to build, retain, and graduate a community of scholars” (p. 6).

Extant research focuses on attrition rates in regards to graduate education; however, the best practices approach had been limited. These practices allow for institutions to gather information from other institutions that have been identified as having a best practice, which can possibly assist in the retention of their students. Di Pierro (2007) described the Graduate Center for Research, Writing, and Proposal
Development at Western Michigan University and demonstrated how an institution found a best practices approach to assist their graduate students in their educational experience. The Center offered a combination of programs and services that assisted students with all aspects of the dissertation process. The Center also assisted faculty members with being advisers. Formal training and support was essential for both doctoral students and faculty advisors if the road to attaining a doctorate was to be successful. In order for graduate education to improve, the needs of both faculty and doctoral students needed to be addressed for significant change to be made in the higher education system (Di Pierro, 2007).

Isaac et al. (1995) explored the services and entities that could impact graduate students at universities across the country. They found that the student demographic at the graduate level had changed drastically to include more female and students of color in degree programs as both full- and part-time students. However, women were alienated more than men, had an increase in their levels of anxiety, experienced more depression and negative life events, and were supported less from faculty members, the curricula, and their peers, which gave them a more challenging graduate experience than their male counterparts. An increase in enrollment and shifting expectations from faculty members in turn changed the expectations of graduate students. Faculty members also had to increase their research agendas and campus culture shifted because staff professionals were hired to advise students and govern various committees on campus. Other relevant factors included: student’s time-to-degree, completion rates, degree requirements, varying requirements on student affairs and higher education as a whole, and whether or not students should continue their graduate education.
Lack of financial resources to afford graduate school can possibly hinder a student’s ability to continue their education. McWade (1995) stated that admission to graduate education was primarily based on academic merit. These forms of financial assistance consisted of fellowships, grants, support from academic departments, and assistantships. One of the first things that all graduate students must do when considering attending graduate school was to examine their budget and learn about debt management. Finances could also add stress to the demanding course load because students could be worried about the amount of debt that they were accruing while in graduate school along with the debt that they already had before returning to school.

Need-based support aided in reducing the cost for graduate students (McWade, 1995). Merit-based support included fellowships, assistantships, and scholarships, as well as institutional funding through academic departments. Dissertation research support is another element of doctoral study that was crucial in the completion of the degree because without this money, many students may not be able to finish what they have started. Different funding sources allowed graduate students to have multiple options for financing their graduate education.

The retention of doctoral students can affect not only the students who choose to leave the institution before completing their studies, but also the institution as well. Skouras (2001) explored the differences between full-time graduate students’ perceptions on their needs, the accommodations, and levels of services that they were receiving. It was found that not all of the services provided to the students were being used and that there were wide-varying levels of satisfaction with those services as well. There was also a less than positive view in how their institution supported their needs and Skouras cited
two institutional barriers—non-reimbursable financial support and teaching styles—that affected their satisfaction levels.

Information on satisfaction of doctoral students can be also found in research on student perception, student experiences, and race relations. Satisfaction was the premise of the research study by Ansari and Oskrochi (2006). They examined four demographics—gender, disability, ethnicity, and age bracket—and seven other variables—mode of study, academic term, academic level, pre-/post-registration status, entry qualification, qualification aim, and class size—and how it affected the satisfaction of students in public health courses. The authors found that part-time students desired more time with their professors than full-time counterparts. Part-time students also would benefit from smaller class sizes, which would allow for more time with their professors. However, the authors also noted that library resources needed to be increased and materials for all of their classes needed to be concise, clear, and given to them at the beginning of the class or semester, so that all of the students could be successful. It was shown that students who were satisfied had better grades as well.

Student perception on their experiences relates to satisfaction. Golde and Dore’s (2001) research provide insight into what doctoral students felt was and was not working as they pursued their degree. They asked students from around the country in 11 disciplines and at 27 universities to answer questions about their educational experiences, and they found a “three-way mismatch between student goals, training and actual careers” (p. 5). The students felt that what they received was not what they wanted nor did it prepare them for the jobs that there available to them upon graduation. The students
also did not display a clear understanding of what doctoral study entailed, how the actual process worked and how to navigate it effectively.

Ho (2005) examined the perceptions of students and faculty of the services offered at the University of Idaho through three groups: student and faculty; undergraduate and graduate students; and, American-born and international students. Ho found that students, and the other groups, were most satisfied with teaching effectiveness. The other categories of satisfaction included the campus atmosphere, academic advising and success, living learning environment, administrative operations, health and safety and security, and, recruitment and financial aid.

Oldfield (2007) explored how first-generation college students became acclimated to the university campus and its culture. Oldfield was himself a first-generation college student who knew very little “about the higher-social-class sensibilities of university life when [he] started college” (p. 2). He expressed that “first-generation college students from poor and working class backgrounds must understand that their new surroundings [would] require much more from them than just getting good marks” (p. 3). The author concluded that first-generation college students do have feelings of isolation and loneliness and needed to use the services offered to them. He stated that he wish he had known the real purpose of college before he started and that “higher education considers debate and argument integral to sound learning” (p. 7) as well as other lessons. He explained how institutions of higher education can assist first generation college students with acclimating to campus: 1) increase support systems on campus; 2) address classism; 3) have a diverse body of faculty and administration; and, 4) have a diverse student body
in relation to social-class. Each of these elements can play a role in their transition to the university setting.

Advising, Mentoring, and Satisfaction

Advising and mentoring doctoral students are two key avenues that are critical to the success of the graduate student. Without these two entities, students may face more difficulties than their peers.

Advising

Advising is more than assisting students their next set of classes to take. Advisors help students negotiate the milestones that encompass the graduate school life and beyond. Baird (1969) explored how graduate students interacted with their peers, faculty members, and their academic departments. Baird found that numerous factors affected student interactions. One factor was peer interaction in support of academic values, which was the support system that peers created amongst themselves while they were pursuing their degrees. Another factor was tension, which was in terms of the peers’ stress and satisfaction levels. The third factor was academic difficulty that defined the rigorous academic standards that students go through while in the graduate process. The fourth factor was conflict and lack of clarity. This factor was in relation to the differences between the inconsistency and uncertainty in faculty members expectations of their students. The last factor was warm faculty-students relations established by the regular interactions of faculty members and the distance that faculty members showed to graduate students.

Bargar and Mayo-Chamberlain (1983) explored how the advisor and advisee relationship was reflected in the graduate school process by examining each individual’s
role. The growth of the students that advisors saw came from multiple sources. These sources included positive, nonverbal cues and overt expressions of interest in a student’s work and welfare, open discussions of the developmental issues confronting students and advisors, and through programmatic activities designed to create a developmental setting. Once a student entered into the academic program, multiple elements were essential to the relationship of the advisor and the advisee including the growth of the program, general examinations, and the dissertation. The authors claimed that the relationship between the student and their advisor, especially the communication between the two, was imperative to the success of Bargar and Mayo-Chamberlain’s study. They also maintained that students’ peers, committee, and community played an important role in the process by having a specific attitude, particular structures, and behaviors that would aid in the success of the student.

Goldberg (2003) explored faculty and students in relation to the advising process and how students responded, then later in a different study he examined student perception of advisors’ behavior and how that behavior affected student success. In both studies, Goldberg found that female students with a female advisor had a higher level of satisfaction than other students. Yet, in the first study, Goldberg found that both female and male students preferred female advisors over male advisors. In the second study, advisor-advisee pairings had the greatest level of satisfaction. It was also found in the second study that female students had a longer completion rate than male students at both the master’s and doctoral levels.

Other research by Lauren (1992) looked at how personality type characteristics of advisors and advisees and how advisee satisfaction affected their environment
academically. The advisors and advisees completed the Myers-Briggs Type Indicator and the Vocational Preference Inventory as well as completing the Student Satisfaction Questionnaire by only the advisees. Lauren found that the Myers-Briggs results had a significant relationship between the advisees and the advisors. It was also found that there was no relationship between the advisees’ satisfaction levels and academic standards. Lauren additionally found that the Vocational Preference Inventory and advisee satisfaction had no relationship and advisees’ and advisors’ personality types and their satisfaction levels did not having a relationship.

Lastly, Tenebaum, Crosby, and Gliner (2001) stated that “the benefits of mentoring often, but not always, include increased satisfaction and commitment as well as elevated promotions and pay” (p. 327). They wanted to know the levels of satisfaction of graduate students, their mentoring relationships with their advisors, and academic success at The University of California. They found that students’ levels of productivity increased when they received practical help. It was also found that when students received more psychosocial help, their levels of satisfaction increased again. At the start of their graduate career, students’ levels of satisfaction and working with their advisor were similar in terms of results; however, the longer they were in their graduate program, the more their levels of satisfaction decreased. Men and women had similar results in this study, though that was not the focus. Yet, men and women had a different number of publications with men and their advisors having more publications together than their female counterparts. They also found that the gender of the advisor did not factor into their satisfaction levels.
Mentoring

Researchers have found that mentoring was an element that doctoral students believed helped them to become successful while they went through the graduate school process, but also after graduation as well. Creighton, Parks, and Creighton (2007) studied if mentoring for doctoral students would help them as they progressed through their graduate program. The authors thought that students should have two professors—one for advising and one for mentoring. They argued that students would receive the guidance they needed to prepare for future semesters while learning the profession, which would also prepare them for life after graduation. With this model, the authors contended that it was “to better understand the components of effective mentoring and its difference from advising” (p. 5), which included planning, evaluating, and practicing. The authors also believed that this mode could help the doctoral students with their “collegiality, professional relationship, and communicating program structure and faculty expectations” (p. 7).

Davis (2007) wanted to know how former graduate and current undergraduate African American students used their mentoring experiences in relation to their paths to their career and professional socialization. Davis found four themes in her research results. The first theme was that mentoring relationships did help the former graduate and current undergraduate African American students engage with professional networks. Secondly, these relationships encouraged students to do research. The third theme was through their participation in this program, the former graduate and current undergraduate African American students were able to develop relationships with individuals across
multiple fields. Finally, students felt that they were able to explore other career options
that they did not know about.

Grant and Simmons (2008) examined both an African American female doctoral
student and an African American female professor as they matriculated through a
predominantly White institution (PWI) through the avenue of mentoring. They found
both women believed that the mentoring process helped them to move to the next level of
their academic pursuits. The doctoral student believed that her experience allowed her to
gain “spiritual support, role-modeling, academic advisement, [and] networking
opportunities” (p. 507). However, the professor believed that the department’s culture
and her tenure track position hindered her mentoring experience. The professor believed
that mentoring should encompass the following entities: “professional support, modeling,
listening and advising, encouragement and nurturing, task-oriented support with
timeliness, sponsorships, professional networking, and personal and social support of
other women of color (sistering)” (p. 509).

Ortiz-Walters and Gilson (2005) examined mentor relationships with doctoral
students and found that students of color received instrumental support and psychosocial
support from their mentors and were more satisfied with mentors of color. When Taylor
and Neimeyer (2009) examined clinical, counseling, and psychology programs in terms
of their mentoring experiences, they found that the counseling program students had
higher socio-emotional support with their mentoring relationships and higher levels of
satisfaction than their clinical and psychology counterparts. However, clinical and
experimental program students had higher levels of instrumental, networking, and
socioemotional support than their counterparts.
Finally, Webb, Wangmo, Ewen, Teaster, and Hatch (2009) state that mentoring aided in the intellectual growth and provided a support system for students. Mentoring was “a vital part of higher education” (p. 1090). They examined levels of satisfaction of faculty members and peer mentors at The University of Kentucky and found that students were satisfied with their peer mentors. Participants were satisfied with their faculty mentors, but only in certain areas such as faculty being aware of the welfare of their students, but not for the job search. However, both students and faculty felt that there were a number of issues in regards to the program such as how mentors were chosen by students. The participants, in regards to peer mentoring, believed that they were being assisted in how to navigate through their graduate program, given support, and mentoring provided “invaluable social support, encouraging other students, offering reassurance, and ‘being there’ for them when necessary” (p. 1100). Yet, for faculty mentoring, the participants stated that their faculty mentors gave direction and skill building. As with every graduate program, the needs of the students’ change as they matriculate through their graduate programs and the mentoring program should change as well.

Learning Styles, Stress, and Satisfaction

The learning styles and stress levels of doctoral students play a significant role in their progression toward their degree. Research has shown that each of these elements can affect the way in which doctoral students understand the curriculum as well as the rate of their matriculation through their academic programs.

Learning Styles

Beeler (1991) discussed a four-stage framework that first-year graduate students could potentially go through while on their quest to complete their doctorate. The four
stages were unconscious incompetence; conscious incompetence; unconscious competence; and conscious competence. Unconscious incompetence was based on the concept that first-year graduate students had a limited perception on what occurred inside and outside of the classroom. Typically, students at this stage were passive learners. Conscious incompetence was the belief that a student may not have had the academic ability to produce the caliber of work that was required at this level of academia, which usually happened around mid-terms when course evaluations were being returned. Unconscious competence transpired for students who had the academic expertise, but were unaware of it. The shift of their awareness came through their interactions with their professors. Lastly, conscious competence happened when graduate students started to show their academic confidence more openly, which allowed them to produce higher quality work for the end of their first year and as they moved toward the future.

Stress

Doctoral students have a number of factors that influence their stress levels. Researchers like Black (2010) explored the factors that could have contributed to a “quarter-life crisis” experienced by some graduate students. Black found that factors such as employment, finances, academic stressors, change of relationships, and identity development negatively impacted students’ stress levels. Negative and positive emotions also played a role in how they viewed their current life and their future as well. Students in this study believed that there were several services and programs needed to enhance their graduate school experiences such as preparation for writing, research, and experiential learning, life skills education, and having positive relationships with faculty
members. Additionally, community building, socialization, mentoring, and institutional support were also found to be important factors.

**Beginning Doctoral Students, ABD Doctoral Students and Satisfaction**

The decision to start a doctoral degree is one that is not made lightly. People who decide to start on this path know that it will be challenging as well as rewarding upon receiving their degree at graduation. However, for beginning doctoral students and those who start, but do not complete their degree, the perceptions they have and decisions that they make while on this journey provide a glimpse of what they face and how they move ahead, regardless of the outcome.

*Beginning Doctoral Students*

Doctoral education has a multi-step process that every student goes through to achieve their goal of earning their doctorate. Baird (1995) explained that students had a general understanding of the field and its structure, which came from their undergraduate experiences. However, there were still many components of the graduate experience to which the new graduate student must become accustomed. These components consisted of getting familiarized with the language that was used throughout the entire field of study as well as becoming acquainted with the people within the department. Another task that must be conquered during the first years of the graduate program of study was getting to know your cohort of peers and those who are further along in the program. It was with these individuals that you would weather the storm of graduate education. Doctoral students also found a faculty sponsor or advisor who shared their same or similar research interests and obtained financial assistance for the student. It was
important for graduate students to also know the requirements and expectations of their program.

During the middle phase of graduate education, students by this time had mastered the language of the field. Doctoral students have also begun or have already identified their professional interests which aided them in choosing a dissertation topic. Besides choosing a dissertation topic, graduate students also selected a committee that would guide them through the process of writing and conducting their dissertation research. During the middle stage, doctoral students began to prepare and take their comprehensive exams (Baird, 1995).

The dissertation stage was the final stage of the doctoral process. In the eyes of the graduate adviser, the concept of the dissertation began at the idea stage: What was the student is really interested in? Once the student found their idea, a method of procedures of how this research would be conducted was examined. Then, the student would seek advice, guidance, and encouragement while going through the dissertation process (Baird, 1995).

Isaac et al. (1995) found an increase in the time to degree completion, regardless of the degree program. According to Bowen and Rudenstine (1992), (as cited in Isaac et al., 1995), about 50% of doctoral students earned their degree. This percentage merited discussion by administrators since the factors of when and why a student dropped out of the program impacts the institution of higher education. Another factor was the requirements that were needed for the degree. Isaac et al. stated that there were several factors as to how degree requirements were delivered and completed by doctoral students: accountability demands and their significance to the program, training
expectations from students, developments from technology advances, and “societal needs from trained professionals” (p. 16). Due to their satisfaction, the graduate students were able to strengthen their abilities while they moved through the doctoral process. Therefore, upon graduation, they had the necessary skill sets needed to compete in the job market.

*ABD Doctoral Students*

Doctoral students who are considered all-but-dissertation (ABD) are a unique dynamic within doctoral education. These students are individuals who have completed all of their coursework and comprehensive exams; yet, they have not finished their dissertation. Research has been conducted to determine the reasoning as to why students do not finish their dissertation and graduate with their doctoral degree.

Golde (1998) contended that “too many students choose to leave their doctoral program by transferring, withdrawing, or completing only a master’s degree” (p. 55). Golde argued that the first year of the doctoral program was critical in terms of faculty and administrators seeing where students may go wrong. Using socialization theory, Golde found four levels—“intellectual mastery,” “learning about the realities of life as a graduate student,” “learning about the profession for which one is preparing,” and “integrating oneself into the department” (p. 56). With these characteristics, Golde concluded that many disciplinary norms and program structures had an impact on the decision to leave a program and that earlier attrition was superior to later.

Golde (2000) explored the process students go through to determine if they will complete their doctoral degrees or not by using the organizational socialization theory and the integration theory of attrition. She found students’ concern with academic
advisors and departmental relationships, and some expressed second thoughts about acquiring a doctorate and life on campus. Lastly, students explored what it meant to grow into the field of academia and the student’s relationships with faculty members.

Hawley (2003) found many reasons why students decided to leave their degree program. Some of those reasons included loss of data, birth of a child, loss of time, loss of financial funding, or the committee chair leaving the institution. Hawley went on to state:

The problem [was] rarely lack of commitment. Most [students entered] Ph.D. programs with strong feelings of dedication and great eagerness to realize a cherished dream. Promising scholars at the start, they [became] discouraged before acquiring the sophistication to cope with their new environment. (p. 9)

Hawley believed that for some individuals not completing the degree may have been a good decision in comparison to those who did. For those who did complete their degree, Hawley found that the gender gap was closing, in part because of the increase in women who were attending college to obtain their degrees for both the master’s and doctoral degrees.

Lee (2003) explored the non-completion rates of doctoral students at Tennessee State University’s Educational Administration and Curriculum graduate program. Lee found that the national attrition average was higher than the students in the program. He also found that students who had completed their degree had different levels of satisfaction than those who were ABD. ABD students also had different levels of satisfaction with their dissertation chair and their level of satisfaction in regards to their
research. Lastly, Lee found that there were fewer students who had not completed their degree than those who had completed their degree.

Lovitts (2001) addressed the various concerns of “the causes and consequences of departure from doctoral structure” (p. x). Lovitts found numerous reasons why students leave their doctoral program before finishing. He placed those who departed into four categories: “dissatisfaction with the academic environment”; “a single item [that was] focusing on lack or loss of interest in the discipline”; “unsatisfactory academic performance or academic failure”; and, “the loss of one’s advisor” (p. 168). Lovitts, again, named four more categories that he determined were personal: “the inappropriateness of the program/graduate school for some students”; “the ordeal of graduate school and its toll on students”; “family factors”; and, “illness or health problems” (p. 173-174). Lovitts found that finances also influenced the decision to leave a program, whether they had progressed further into their program or if they were still early in their program. Other reasons were career-related because early leavers gave three (3) different reasons as to why they left: “the need for a career with more financial security . . . a change in career plans, and frustration with the job market” (p. 175).

In relation to academic reasons, Lovitts (2001) found that “most students left their programs for integration-related reasons than for any other reason” (p. 176). Primary reasons included the program was too competitive or the students were lacking enough support. Another reason was the feeling of isolation, or the “lack of cohesion’ in their department, ‘too little contact’ with faculty and graduate students, ‘too little contact’ with people outside the departmental community (anomie), and being unable to cope with the ‘social deprivation’” (p. 177). Lovitts also found that “the students who cited academic
failure were not making satisfactory progress in their programs or with their dissertations, or were denied admission to the Ph.D. program” (p. 178). With this, Lovitts believed that the reasons for any student who leaves before completion did not fall under just one category. Because non-completion can be multiple categories, research needs to examine why students leave before acquiring their degree.

Nettles and Millett (2006) found that students stopped their degree for a variety of reasons. One of the reasons was household income; however, sex, race-ethnicity, and age did not play a role in who would leave a doctoral program. Marital status and the age of children, particularly children under 18, did have an effect on whether or not a student stopped out. Nettles and Millett also found that socialization did affect the stopping out process; but those students with research assistantships had a higher level of satisfaction with their doctoral program, and those at their first or only choice for their doctoral program persisted throughout their program. In regards to doctoral student completion, the authors found that having a mentor was “a small but significant contribution toward degree completion” (p. 173). The authors also found that funding played a role in students’ degree completion as well. Yet, it was found that “gender did not influence degree completion in any field” (p. 174).

Rudd (1985) examined why certain students completed their postgraduate work while others failed to succeed in this endeavor. He found that those who complete do so because they mastered how to conduct research, learned how to use research to foster growth in multiple fields of study, applied what they had learned in various areas that strengthened their cognitive development and writing capabilities, discovered their
strengths and challenge areas, developed their skills for a specific or broad career path, and enjoyed the challenges of graduate study and research.

Rudd (1985) further stated that students enter postgraduate education because of an attraction to the field of subject, attraction to research, and aspirations for a future career. Some doctoral students’ decision to attend graduate school was not as precise as their counterparts. For these doctoral students, their decision-making process was led by various factors, such as being indecisive about moving forward with their careers because the collegiate life is all that they knew. Another factor was the recruitment from staff members who saw potential in undergraduate students, which caused some to consider graduate study. Rudd also found that other factors contributed to the success or failure of graduate students: the qualities of the student, personal and individual problems and accidents not directly arising from the student’s studies, problems inherent in the research, personal academic problems other than teaching and supervision, and teaching and supervision (p. 39).

School Type (Public, Private, HBCUs, and PWIs)

The United States has various types of institutions of higher education such as private, public, historically black colleges and universities (HBCUs), and predominately White institutions (PWIs). With each institutional type, variations of these institutions exist, including with student satisfaction. Thomas’ (2004) research explored the differences of African Americans and Caucasians at HBCUs and PWIs. Thomas found no significant differences in student satisfaction between institutional types, but did identify differences in the areas of financial support, administrative support, African American students’ performance, and the observation of African Americans within the department.
Additional research has also been conducted on the differences between PWIs and HBCUs. Lewis, Ginsberg, Davies, and Smith (2004) examined the experiences of African American doctoral students at PWIs and how these students matriculated through their programs. They found that feelings of isolation, standing out, relationships with peers, and knowledge of how to negotiate the system were all critical to their development and the pursuit of their doctoral degree.

Lastly, Denmon (1987) explored the level of involvement and satisfaction of graduate students at multiple HBCUs and PWIs. Denmon found that students at both types of institutions were successful. Yet, students at HBCUs were less involved with faculty and organizations than their counterparts. African American and Hispanic students at PWIs were more involved in professional organizations and with faculty members than at HBCUs. Additionally, graduate students at HBCUs were more satisfied with recognition they received than students at PWIs. Lastly, policies, procedures, and recognition had a higher satisfaction level for white graduate students than African Americans and Hispanics at HBCUs.

Social/Socialization and Satisfaction

Research on the social aspects and socialization theory of students throughout the doctoral process has provided insight regarding how doctoral students proceed through their academic journey. Students enter doctoral programs from all walks of life. Many move to different regions and cities in order to study and are often far away from what they have known. Social connections with their peers, advisors, and community have been found to be important to the overall satisfaction levels of doctoral students (Bargar & Mayo-Chamberlain, 1983). For many, doctoral study is a different experience from
undergraduate work and studies have found that orienting students early on in the process is important to retention and satisfaction. While each person’s journey through the degree seeking process is different, research has found that they do share some commonalities.

_Social_

Corneau (2008) explored how social support correlated with a student’s happiness in regards to personal life and other areas of social support. Corneau found no significant difference in the relationship of social support and the satisfaction of academic life. It was also found that personal life satisfaction had a greater significance for married students than those who were single. Corneau also found students who lived with roommates had a higher happiness than those who lived alone. Additionally, part-time students showed a greater happiness in personal life satisfaction than full-time students. The students who had more person-to-person interaction with people of importance were more satisfied than those who did not have this interaction and students who had multiple forms of communication—(email, in-person, and phone)—were more satisfied than their counterparts.

Lastly, Goplerud (1980) examined first-year graduate students’ levels of social interaction and how it may have affected the stressful events of their lives as well as how this may have affected their health and emotional well-being. Goplerud found that if preexisting social networks of support were already in place for students, they were better off than their peers who did not have such a network. Other findings included those students who were single, new to the area, and not socially active reported about twice as much cumulative stress and 60% more intense life, emotional, or health disturbances than those who were socially connected to others. Students also believe that their relationship
with faculty members was of high significance because faculty members assisted with their transition into graduate life and aiding in the reduction of the “likelihood of experiencing health or emotional problems during this high-risk period” (p. 288).

Socialization

Socialization theories have been applied by various scholars to the field of higher education. Ellis (2001), for example, examined the impact of race and gender on graduate school socialization, satisfaction with doctoral study, and the commitment to degree completion. In her study, “the objective was to determine if any discernible differences influenced graduate school socialization, satisfaction with graduate study, and commitment to completing the doctoral degree” (p. 30-31). To address this, she considered the social factors of “social contact with other students in their programs, social contact with faculty, and networking with peers” (p. 32). She found that the nature of contact that students had with their advisors influenced the experiences students had with their departments as a whole. In addition, the race of the student was found to influence the health of those relationships. In terms of race, “black women, [especially,] both currently enrolled students and degree recipients, appeared to be the most isolated group of doctoral students in the study” (p. 40). Lastly, it was found that “the doctoral students did not appear to be learning much about the importance of collegiality among peers and faculty members” (p. 40).

Research by Gardner (2008) examined “the socialization processes that doctoral students experience in their degree programs which facilitate or impede success and degree completion” (p. 128). By studying one land-grant institution and one large, public institution, Gardner found students of color had issues of “integration and a general lack
of satisfaction” (p. 132) and did not fit the mold of graduate education. Doctoral students who had children found their “socialization, academic structures, conventions, and tradition [were] typically not designed to allow students with children, whose schedules and responsibilities [were] often demanding, much flexibility” (p. 133-134). However, part-time students had more interaction with faculty members than their full-time counterparts, though they “regretted not having more time with their peers and missing a part of the graduate school experience” (p. 134).

Another study by Gardner and Barnes (2007) examined the retention and satisfaction of doctoral students in five different U.S. institutions. They found that there was a difference between the involvement levels of undergraduate and graduate students. They also found involvement varied between graduate and undergraduate studies. Socialization was vital to graduate students because of its importance “to their professional goals and success in their future careers” (p. 382). Lastly, they believed that students should be introduced early on in the doctoral process to existing local and national organizations and to encourage their involvement in their studies.

Glasgow (2004) explored the socialization differences between African Americans and Caucasi ans in three doctoral programs. Glasgow wanted to know how those differences in socialization affected African American graduate student satisfaction. Glasgow found that peer and faculty connections, size of the cohort, funding, and ethnic diversity impacted socialization levels. The students believed that their small cohorts, strong faculty and peer mentor connections, and funding opportunities were factors in their integration socially and academically. However, if it was a large cohort, African American students felt that they were more isolated from their counterparts, which, in
turn, had a negative effect on their graduate experiences. Lastly, the students explained that the motivators of time and financial funding did affect their time-to-degree.

Weidman and Stein (2003) explored doctoral students’ socialization to the academic norms of research and scholarship. They found that the socialization to the role of the scholar was shaped by student perception of faculty members’ encouragement for students to explore areas of interest and that having an environment where students and faculty were seen as colleagues was beneficial. Other results were that departments in this environment found that socialization: 1) “[ultimately] fosters collegial relationships and encourage[d] participations by doctoral students in scholarly work” (p. 653), and 2) [makes a] “specific and concerted efforts could be made to emphasize the faculty’s responsibility for the socialization of doctoral students to the scholar role” (p. 654). Lastly, the authors believed that assessments of departmental structures can be conducted instead of relying on student perceptions to: “refine the measure of student participation in scholarly activities”; “establish more clearly the relationship between the scholar and student roles”; and, more research may identify other elements of the departmental climate that affect socialization (p. 654).

Lastly, in regards to socialization, Gardner, Hayes, and Neider (2007) explored the skills and knowledge that a person who was pursuing their Ph.D. in education would need to know. They found that students and faculty members spoke of two distinct themes in their interviews: habits of mind and skills and abilities. The authors stated that with habits of mind, participants spoke of three particular entities: having a “quest for knowledge,” which was defined as having “the desire for knowledge, the willingness to learn, and the possession of a curious mind” (p. 292). They also spoke about
“independence,” which was being self-motivated and having the ability to direct one’s self without the direction of someone else. Lastly, they spoke about “humility,” which was defined as being able to accept constructive criticism and reflect on what had been spoken to you. In regards to “skills and abilities,” participants spoke about the fact that students should have the ability to conduct research, as well as know how to effectively communicate the research findings.

Assessment/Evaluation and Satisfaction

The assessment and evaluation of doctoral education is imperative to the growth of the field of higher education. O’Meara (2006) stated that “assessment and evaluation [were] critical aspects of supporting a broader definition of scholarship” (p. 292). Without assessment and evaluation, administrators and faculty members would not be aware of what the challenges were that students faced as well as what services and programs needed improvement within their graduate programs. It was through assessment and evaluation that doctoral students were able to share their concerns and provide insight into the journey that they are on.

Assessment

The assessment of doctoral education has allowed for institutions of higher education to determine what changes and improvements need to occur. Huber, Hutchings, and Shulman (2005) argued that the scholarship of teaching and learning today is imperative to the growth of doctoral education. The assessment movement allowed for student learning to be brought to the forefront of the graduate education research agenda and provide insight into the area of teaching and learning so that faculty members could make changes in order to impact the curriculum.
Girves and Wemmerus (1988) described “a model that links department and student characteristics, financial support, and student perceptions of the faculty with students grades, involvement in the program, satisfaction with the department, and alienation in order to predict progress toward the master’s and doctoral degrees” (p. 163). They found that there were two apparent differences between the degrees. When students were earning their master’s degree, they were either degree-seeking students who only took classes, but did not finish their requirements or they finished all of their degree requirements and completed their degree. The master’s student progress model had several components such as the direct and indirect way in which grades of these students affected the department and student characteristics of the model. Another component was that a poor academic performance may cause a student to leave the program. Students who were full-time had higher grades and achieved more degrees than their part-time peers. However, with the doctoral degree, courses were taken past the master’s degree, comprehensive exams were taken and then the degree was awarded. The doctoral degree “progress disappear[ed] at the doctoral level” (p. 184). Components for the doctoral degree that may affect students’ matriculation were comprehensive exams and the ability to undertake research as well as the admissions’ process and the student’s level of involvement. Other components that may also affect doctoral students’ progression also included the advisor-advisee relationship, financial funding, and departmental characteristics.

Haworth (1996) demonstrated five concepts that would push assessment processes to a higher level. First, there was the observation of what had happened in graduate and professional education due to assessment. Haworth could determine that the
field of assessment had been strictly focused on the undergraduate students and their needs with very little research conducted on graduate student assessment. However, the time had come to change the agenda of assessing graduate and professional programs and its students.

In order to change the agenda of assessing graduate and professional programs and its students, graduate and professional education authorities needed to change their mindset on how institutions were assessing their graduate and professional students at this higher educational level. Third, Haworth (1996) determined if institutions looked at the quality of their advanced-degree programs to determine what changes needed to be made, if any, in order for their students to be prepared upon graduation. Fourth, student persistence must be on their radar because it would allow them to be aware of what was going on with their students and if there were problems on how they could be fixed. In conclusion, student outcomes must be considered in graduate and professional education, and not just program and institutional outcomes (Haworth, 1996).

Learning-centered programs allowed the student to be directly engaged and involved in his or her own learning. Haworth and Conrad (1996) contended that a learning-centered view would enable a program to enhance the student’s experiences. The authors also argued that it would enable the students to gain insight into what they had learned and would experience upon graduation.

Haworth and Conrad (1996) concluded that the engagement theory of quality enhanced the learning experiences of students so that they are able to grow and learn. The theory had been organized around the idea of students, faculty, and administrators’ participation in both the learning and the teaching. Another aspect was that the theory
engaged the faculty, students, and administration in experiences that would directly affect the students’ growth by having diverse and engaged participants, participatory program cultures, connected program requirements, and adequate resources. With all of these components, graduate programs would increase or sustain themselves as being of high quality.

Faculty members who had doctorates from highly recognized institutions and were engaged in research activities, as well as being known throughout their fields were just one component of a high quality program. Another part of a high quality programs were students who came from rigorous academic backgrounds and who had superior test scores. Next, programs that had a large amount of resources were available for its students, faculty, and staff members to be used for conducting research. Fourth, curriculum requirements also showcased the caliber of a graduate program as well as giving its students set coursework that would give them the necessary tools at all stages of their graduate career to proceed to the next level. Additionally, a high-quality program would be accessed through the strength of its students, faculty, research, and curriculum (Haworth & Conrad, 1996).

Evaluation

The evaluation of doctoral programs allows for insights and potentially sets the stage for changes to be made. Craven (1999) examined graduate students’ satisfaction and goal attainment levels to see if they were connected to a student’s goals, educational process, learning outcomes, and background. Craven found that master’s and doctoral students’ differences were because the students in each groups’ goals had changed and that they were in fact satisfied with their educational process. No significant difference
between doctoral and Master’s students in relation to their goals, learning outcomes, and background characteristics. Both groups were concerned about the following: quality of teaching, program flexibility, faculty interest in students, faculty interaction, preparation with Master’s finals, qualifying and comprehensive exams, research opportunities, and more support and guidance with the dissertation process. Lastly, both groups anticipated to be challenged academically, to have high quality faculty, to be exposed to innovative teaching methods, and to be involved in advanced research.

Davidson-Shivers (2004) examined the instructional design program’s effectiveness for master’s and doctoral degree program. Davidson-Shivers found that both current students and alumni of the program were satisfied overall with the program because of the program’s ability to assist in securing a job and the preparation for the job market. It was also found that the students believed that the strengths of their program included the knowledge of the faculty members and the actions of supportive faculty members. However, the challenge areas were the inability to obtain classes when needed due to a time conflict and changes to the class schedule that affected time-to-degree.

Other research by McFarland (2000) explored institutional effectiveness by surveying both master’s and doctoral students’ satisfaction on the programs and services. He found that both sets of students had high levels of satisfaction for the “competency of the faculty” (p. 3). Master’s students were less satisfied in relation to “access to full-time faculty, either through direct contact or other means” (p. 3) than doctoral students. Doctoral students were less satisfied than master’s students in relation to the “process for assigning students to advisors” (p. 3). In regards to “Administration” (p. 3), doctoral students were more satisfied than master’s students. Doctoral students were more
satisfied with “Computing Resources and Information Technology” (p. 3) than master’s students. However, the biggest differences in satisfaction were with ‘Financial aid services’ between master’s students and doctoral students with Master’s students being more satisfied than doctoral students.

Snyder and Draheim’s (2002) study developed “a comprehensive research agenda for current and prospective doctoral students; focus[ing] faculty on a unified approach toward current research interest priorities and reflective practice; and, to increase collaborative research” (p. 33). They found that a culture shift happened when there was more collaboration on projects, research presentations, and articles between faculty members and students. They also found that once faculty members created a handbook, it became “a useful resource for new undergraduate and graduate students, for parents of new graduates, and for new faculty” (p. 41). However, challenge areas for this project included the length of time it took for it to be completed, which was two years, and the fact that the faculty had a negative perception about the project. Nevertheless, faculty members finally came aboard with the idea, which changed the culture of the department.

Thomas and Glalmbos (2004) explored the characteristics and experiences of students and how they affected their satisfaction. There were four questions that considered satisfaction: “1) Indicate your level of satisfaction with this college in general; 2) If you could start college over would you choose to attend this college?; 3) What is your overall impression of the quality of education at this college?; and, 4) It is likely that I will transfer to another college before next fall” (p. 253). They found that “students’ general satisfaction, satisfaction with the quality of education, and likelihood of returning to the same college, measure satisfaction with different aspects of the college experience”
(p. 255). Other results were that different “perceptions of campus facilities and services have relatively little affect on the varying un-satisfaction of students on a single campus” and “academic diversity [was] a more important explanation of satisfaction differences than demographic diversity” (p. 256).

**Summary**

Funk and Klomparens (2006) state that “graduate education, especially doctoral education, is a system” (p. 145) that had multiple levels for both faculty members and graduate students such as institutional cultures, departmental policies, and the process to degree attainment. Due to these pressures, some students struggled with their satisfaction on this journey.

Graduate students’ gender and race may be a critical factor in doctoral student satisfaction. Prior research suggests that differences in satisfaction related to race and gender are real. Researchers found that female students and students of color felt the stings of isolation, having to represent their genders and race, and the inadequacies of their academic abilities among others (Johnson-Bailey et al., 2009). With these, researchers have found that the socialization of students does impact their matriculation. Additionally, a student’s perception of their progress and what they are learning allows them to give helpful insight into various elements of doctoral education: the university climate; support services; advising; mentoring; and the age and life cycle.

Furthermore, research surrounding doctoral education has moved to the forefront of higher education. Through the assessment of doctoral education, researchers found that doctoral students believed that they had not been given the necessary tools to fully compete in academia upon graduation. As a result, a variety of changes have occurred in
doctoral education, in terms of technology, market trends such as distance education, and an increase in international student population.

Research has shown that many doctoral students decided to leave before earning their degree. With that decision, institutions are left to ponder the reasons why graduate students exited. In graduate education, doctoral students have an overwhelming amount of things to juggle. Because of these challenges, some students struggled with their satisfaction on this journey. This research study will examine race and gender in relation to entering-level doctoral students and advanced-level doctoral students at a southern university. With various avenues that are factored into the field of doctoral education, the researcher aimed to find whether race and gender played a significant role in entering-level and advanced-level doctoral students’ level of satisfaction. Explaining how these factors relate to other aspects of graduate education is the researcher’s goal.
CHAPTER III
METHODOLOGY

Introduction

The primary focus of this study was to address the graduate program satisfaction levels of entering-level and advanced-level doctoral students in relation to enrollment, race, ethnicity, and gender. The current practice at the Office of Graduate Studies at the selected university is to have students complete an exit survey. Though this survey provides relevant information, it is administered too late for students to benefit from any changes that may be made during the doctoral journey. If student feedback could be gathered and analyzed throughout the doctoral journey, improvements to the program might be possible before graduation. Therefore, this study collected student feedback at two difference points of students’ journey with regard to their levels of satisfaction with the hope of improving information that might be used to improve the doctoral education experience. The method of collection and analyzes for both the quantitative and qualitative parts of the study are described below.

Research Design

The researcher employed a mixed methods design survey for this study. The study used an instrument developed by Nettles and Millett (2006) to collect quantitative data concerning student satisfaction. The qualitative data collection method concerning student satisfaction was designed by the researcher of this study. The variables used included: advanced doctoral students; entering doctoral students; full-time status; part-time status; racial/ethnic groups—White or People of Color (ie: Asian, Black,
Hispanic/Latino or Other); and, gender. Race and gender were used because of previous findings in the literature.

The research questions concerning the quantitative part of this study are as follows:

1. Is there a significant difference in satisfaction between advanced level and entering level doctoral students?
2. Is there a significant difference in satisfaction between race, gender, and entering- and advanced-level doctoral students?
3. Is there a significant difference in satisfaction between gender, entering-level, and advanced-level doctoral students?
4. Is there a significant difference in satisfaction between full- or part-time doctoral students in terms of race and gender?
5. Is there a significant difference in satisfaction between doctoral students and their academic colleges in terms of race and gender?
6. Is there a significant difference in satisfaction between doctoral students, their academic colleges, classification status, gender, and race?

The research questions concerning the qualitative part of this study are as follows:

1. What have been the most satisfying aspects of being a doctoral student at your university/in your major program?
2. What have been the most dissatisfying aspects of being a doctoral student at your university/in your major program?

The variables were as follows:

- Satisfaction;
• Advanced-level doctoral students;
• Entering-level doctoral students;
• Racial/Ethnic groups—White and People of Color (i.e.: Black, Hispanic/Latino, Asian, Native American, and/or Other);
• Gender;
• Part-time doctoral student; and,
• Full-time doctoral student.

Participants

The selected university is located in a mid-size city in the southern region of the United States. The university is public and is the largest and best known of a handful of other institutions of higher education in the city and surrounding areas. These other institutions include one private, church-affiliated university, one for-profit technical college, and two community colleges that also housed technical schools. In the spring of 2009 and at the time of the study, the selected university’s total student population was: 10,868 undergraduates and 2,673 at the graduate level (master’s, specialist’s, and doctoral).

The participants of this survey were identified through The Office of Graduate Studies and spanned across all four colleges that offer doctoral degrees. This included the College of Arts and Letters; College of Education and Psychology; College of Health; and College of Science and Technology. The researcher expected a 20% response rate to the survey from across the various disciplines at the selected university.

The researcher divided the those surveyed into two groups: entering and advanced-level doctoral students. Advanced-level doctoral students were defined as
students who had 36 or more credit hours toward their doctoral degree, due to the fact that 36 hours was in nearly all programs beyond the mid-point of a doctoral student’s career. Put another way, an advanced graduate student was defined as one who had successfully completed the equivalent of 12 graduate courses. Entry-level doctoral students were defined as students who had less than or equal to 18 credit hours toward their doctoral degree. Thus, an entry-level graduate student was one who had successfully completed the equivalent of six or fewer graduate courses. The selected university deems a graduate student to be full-time when a doctoral student registers for nine credit hours or more. Any student enrolled in less than 9 hours was categorized as a part-time student.

Instrumentation

The quantitative instrument used for this study came from portions of the Survey on Doctoral Student Finances, Experiences, and Achievements (SDSFEA) developed by Nettles and Millett (2006). The researcher was granted permission by Nettles and Millett to use parts of the SDSFEA for this study (see Appendix A). The qualitative instrumentation was developed by the researcher of this study.

The researcher used two sections of the SDSFEA: (1) the demographic questions and (2) the section that assessed students’ experiences in their doctoral programs (see Appendix A). These SDSFEA items were selected because they addressed student interactions with faculty members and peers, overall satisfaction with one’s doctoral program and instruction and overall satisfaction with the institution.

The revised SDSFEA survey contained a total of 32 questions. This included eight demographic questions (gender, race, full- or part-time status, entering- or advanced-level status, and participants’ home college) and 24 items that sought to measure satisfaction
levels. Two additional items were included to identify participant grade point averages (GPAs) and the self ranking of academic performance. The satisfaction items made use of a Likert scale that ranged from ‘strongly disagree’ to ‘strongly agree’, along with an option of ‘not applicable’. The researcher used SPSS to calculate levels of doctoral student satisfaction.

Qualitative Data

The survey also contained two open-ended questions that comprised the qualitative portion of this study. Question 5 stated, “What have been the most satisfying aspects of being a doctoral student at your university/in your major program?” Question 6 stated, “What have been the most dissatisfying aspects of being a doctoral student at your university/in your major program?”

The variables in this study were defined as follows:

- Satisfaction;
- Advanced-level doctoral students;
- Entering-level doctoral students;
- Racial/Ethnic groups—Caucasian and People of Color (i.e.: African American, Hispanic/Latino, Asian, Native American, and/or Other);
- Gender;
- Part-time doctoral student; and,
- Full-time doctoral student.

Pilot Study to Establish Reliability

Before conducting the main study, the researcher conducted a statistical test for reliability of the SDSFEA with a pilot group with 19 doctoral students within two of the
colleges (Education and Psychology and Science and Technology) in the fall 2009.

Within the pilot group, the demographics were as follows:

- 9 males and 14 females;
- 5 students of color and 14 Caucasians;
- 18 students were enrolled in the College of Education and 1 student was enrolled in the College of Science and Technology;
- 5 doctoral students were enrolled full-time while 14 doctoral students were enrolled part-time;
- 1 doctoral student was a Geography major and the other 18 doctoral students were majoring in Higher Education; and, also,
- 17 participants classified themselves as entering doctoral students and 2 participants classified themselves as advanced doctoral students.

The SDSFEA was administered in a face-to-face setting. The researcher wanted to test the reliability of the survey instrument through the pilot study. The Cronbach’s alpha attained after the statistical analysis was .905, which indicates that a survey was found to be reliable and could be duplicated from the original study of Nettles and Millett (2006).

Procedures for the Main Study

For the main study, the researcher obtained permission from the Institutional Review Board at the selected university (see Appendix B). In the summer of 2010, over 900 surveys were distributed to the participants through a postal mail out, which included the participant letter, the survey, and a return stamped envelope (Appendices A and C). The researcher obtained the participants addresses from the selected university’s Office of the Registrar. The researcher did not send out follow-up mailings and stopped
collecting surveys by September 2010; however, some participants mailed their surveys after this date. Those surveys were included in the study. The researcher then conducted a statistical analysis of the data that had been collected with SPSS. The researcher recorded the participants’ answers to Qualitative Questions #5 and #6 (see Appendix A) into a word document. Next, the researcher put these responses into an Excel spreadsheet and coded the entries by race and gender. The information was then compiled into themes to be analyzed.

The researcher ensured confidentiality and accuracy by coding each mailed survey with a number (i.e.: 001, 002, 003, etc.). The survey did not ask for any personal identifying information. The participants were not contacted at any time during this study.

To encourage participation, participants who returned their survey by mail were entered into a drawing for one of 24 book scholarships redeemable at Barnes and Noble Bookstore. The returned envelope that was sent back to the researcher had a number (i.e.: 001, 002, 003, etc.) printed in the upper left-hand corner. The number printed on the envelope corresponded with the Excel spreadsheet that had the participants’ address. From the returned questionnaires, a number was listed on individual slips of paper and drawn for the book scholarships. The participants were notified via postal mail that they had won the book scholarship from their participation in the researcher’s study.

Data Analysis

The researcher analyzed the collected data using the two-way ANOVA. The researcher selected the two-way ANOVA because it enabled the researcher to group various variables together. The researcher also selected this statistical test because it
allows the comparison of the variables once grouped. For example, the researcher was able to compare entering-level and advanced-level doctoral students by either full-time or part-time status as well as by their academic college.

Summary

This research addresses the satisfaction levels of entering and advanced-level doctoral students by gender, race, and full- or part-time status at a southern public university. Demographic and satisfaction data were collected using parts of Nettles and Millett’s (2006) *Survey on Doctoral Student Finances, Experiences, and Achievements* and with an open-ended questionnaire. The survey was distributed to potential participants through postal mail and in person during the pilot study. The data was analyzed using a two-way ANOVA. The findings and results are discussed in Chapter IV and V.
CHAPTER IV
RESEARCH FINDINGS

Introduction

The purpose of this study was to compare the difference in overall graduate student program satisfaction between entering and advanced level doctoral students at the selected four-year institution. To gather data for the comparison, a modified survey by Nettles and Millett (2006) was delivered to 919 doctoral students. There was a response rate of 29.2% or 268 returned surveys. The researcher gathered, coded, and analyzed the qualitative data from this research study. This chapter details the findings from this research study.

Quantitative Data

The researcher began this study by mailing 919 surveys out to the doctoral students at the selected university. The variables in this study were defined as follows: satisfaction – contentment with doctoral student’s experiences during their graduate education process; advanced-level doctoral students — students who had 36 or more credit hours toward their doctoral degree; entering-level doctoral students — students who had less than 18 credit hours toward their doctoral degree; full-time graduate student — a student who was enrolled in three or more classes per semester; part-time graduate student — a student who was enrolled in one to two classes per semester; racial/ethnic groups — the self-identified status of students with one of the following groups: people of color (i.e.: African American, Hispanic/Latino, Asian, Native American, or Other) and Caucasian; and, gender — male or female. Doctoral students who returned completed surveys were comprised of 88 males or 32.8%, 179 females or 66.8%, and one missing
The racial background of the participants was 62 people of color or 23.1%, 204 whites or 76.1%, and two missing data sets (see Table 1). In terms of enrollment status, the researcher had 141 full-time doctoral students (52.6%), 122 part-time doctoral students (45.5%), two doctoral students who had graduated, and two who did not respond (see Table 1). There were 50 entering-level doctoral students (18.7%), 195 advanced level (72.8%) doctoral students, 12 doctoral students who were between 18 and 36 credit hours (4.5%), eight who graduated in May 2010 (3.0%), one missing data set, and one who graduated in August 2010 (see Table 1). Lastly, the researcher had 55 students from The College of Arts and Letters (20.5%), 137 students from The College of Education and Psychology (51.1%), 13 from The College of Health (4.9%), 62 from The College of Science and Technology (23.1%), and one missing data set (see Table 1).

Table 1

*Doctoral Student Satisfaction Survey Demographic Information*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>88</td>
<td>32.8</td>
</tr>
<tr>
<td>Female</td>
<td>179</td>
<td>66.8</td>
</tr>
<tr>
<td><strong>Ethnic Origin</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person of Color</td>
<td>62</td>
<td>23.1</td>
</tr>
<tr>
<td>White</td>
<td>204</td>
<td>76.1</td>
</tr>
<tr>
<td>Full/Part-time Status</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>Full-time doctoral student</td>
<td>141</td>
<td>52.6</td>
</tr>
<tr>
<td>Part-time doctoral student</td>
<td>122</td>
<td>45.5</td>
</tr>
<tr>
<td>Doctoral students who have graduated</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entering level doctoral student (less than 18 hours)</td>
<td>50</td>
<td>18.7</td>
</tr>
<tr>
<td>Advanced level doctoral student (more than 36 hours)</td>
<td>195</td>
<td>72.8</td>
</tr>
<tr>
<td>Doctoral students who have between 18 &amp; 36 hours</td>
<td>12</td>
<td>4.5</td>
</tr>
<tr>
<td>Graduate in May 2010</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>.4</td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral students who completed their degree in August 2010</td>
<td>1</td>
</tr>
<tr>
<td>Academic Colleges</td>
<td></td>
</tr>
<tr>
<td>College of Arts &amp; Letters</td>
<td>55</td>
</tr>
<tr>
<td>College of Education &amp; Psychology</td>
<td>137</td>
</tr>
<tr>
<td>College of Health</td>
<td>13</td>
</tr>
<tr>
<td>College of Science &amp; Technology</td>
<td>62</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
</tr>
<tr>
<td>Missing System</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>268</td>
</tr>
</tbody>
</table>

In reference to Research Question #1, “Is there a significant difference in satisfaction between advanced-level and entering-level doctoral students?”, the returned surveys revealed a total of 50 entering-level doctoral students and 195 advanced-level doctoral students who returned their surveys (see Table 2). The mean for entering-level
doctrinal students was slightly higher than the mean for advanced-level doctoral students 
(see Table 2).

Table 2

*Satisfaction of Entering and Advanced-Level Doctoral Students*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>entering</td>
<td>3.06</td>
<td>.53</td>
<td>50</td>
<td>1.37</td>
<td>3.89</td>
</tr>
<tr>
<td>advanced</td>
<td>2.92</td>
<td>.80</td>
<td>195</td>
<td>.30</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>2.94</td>
<td>.75</td>
<td>245</td>
<td>.30</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Note: In the research study survey, the likert scale was 0 (strongly dissatisfied) to 4 (strongly satisfied) and 5 was not included in the scale.

The researcher found that between entering-level and advanced-level doctoral students there was no statistically significant difference $F (1,243) = 1.243, p=.266$. Therefore, the researcher also found that the participants were pretty satisfied due to mean values of this study.

In reference to Research Question #2, “Is there a significant difference in satisfaction between race, entering-level, and advanced-level doctoral students?” the research analysis listed below (see Table 3) stated that there were 13 people of color who were at entering-level, 37 whites who were at entering-level, 46 people of color who were at advanced-level, and 148 whites who were at advanced-level that returned surveys. The mean for entering-level doctoral students who were white was slightly higher than entering-level doctoral students who were persons of color. For advanced-level doctoral students, the researcher, again, found that whites had a slightly higher mean than people of color. Overall, whites had a slightly higher overall mean than people of color.
### Table 3

**Satisfaction of Racial Groups**

<table>
<thead>
<tr>
<th>Race of Student</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>entering</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person of Color</td>
<td>3.05</td>
<td>.50</td>
<td>13</td>
</tr>
<tr>
<td>White</td>
<td>3.06</td>
<td>.55</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>3.06</td>
<td>.53</td>
<td>50</td>
</tr>
<tr>
<td><strong>advanced</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person of Color</td>
<td>2.88</td>
<td>.79</td>
<td>46</td>
</tr>
<tr>
<td>White</td>
<td>2.94</td>
<td>.80</td>
<td>148</td>
</tr>
<tr>
<td>Total</td>
<td>2.93</td>
<td>.79</td>
<td>194</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person of Color</td>
<td>2.92</td>
<td>.73</td>
<td>59</td>
</tr>
<tr>
<td>White</td>
<td>2.96</td>
<td>.76</td>
<td>185</td>
</tr>
<tr>
<td>Total</td>
<td>2.95</td>
<td>.75</td>
<td>244</td>
</tr>
</tbody>
</table>

Note: In the research study survey, the likert scale was 0 (strongly dissatisfied) to 4 (strongly satisfied) and 5 was not included in the scale.

The researcher found that between race and the classification of entering-level and advanced-level doctoral students $F(1, 240) = .069, p = .793$. The researcher concluded that there was no between-race effect because $p > .05$, while the independent variable accounted for .006% of variance in the level of satisfaction. Therefore, the researcher also found that the participants were pretty satisfied due to mean values of this study.

In reference to Research Question #3, “Is there a significant difference in satisfaction between gender, entering-level, and advanced-level doctoral students?”, the research analysis listed below (see Table 4) stated that there were 10 entering-level doctoral students who were male, 40 entering-level doctoral students who were female, 68 advanced-level doctoral students who were male, and 127 advanced-level doctoral students who were female.
students who were female. The mean was slightly higher for entering-level males than entering-level females. For the advanced-level, males also had a higher mean than females. Overall, males had a higher mean than their female counterparts.

Table 4

Satisfaction of Gender Groups

<table>
<thead>
<tr>
<th>Gender of Student</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>entering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.11</td>
<td>.43</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
<td>3.04</td>
<td>.56</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>3.06</td>
<td>.53</td>
<td>50</td>
</tr>
<tr>
<td>advanced</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.05</td>
<td>.63</td>
<td>68</td>
</tr>
<tr>
<td>Female</td>
<td>2.85</td>
<td>.86</td>
<td>127</td>
</tr>
<tr>
<td>Total</td>
<td>2.92</td>
<td>.80</td>
<td>195</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.06</td>
<td>.60</td>
<td>78</td>
</tr>
<tr>
<td>Female</td>
<td>2.89</td>
<td>.81</td>
<td>167</td>
</tr>
<tr>
<td>Total</td>
<td>2.95</td>
<td>.75</td>
<td>245</td>
</tr>
</tbody>
</table>

Note: In the research study survey, the likert scale was 0 (strongly dissatisfied) to 4 (strongly satisfied) and 5 was not included in the scale.

The researcher found that between gender $F (1, 241) = .872, p = .351$. The researcher concluded that there was no between-gender effect because $p > .05$, while the independent variable accounted for .018% of variance in the level of satisfaction.

In reference to Research Question #4, “Is there a significant difference in satisfaction between full- or part-time doctoral students in terms of race and gender?”, the researcher stated that there were 27 full-time entering-level doctoral students and 21 part-time entering-level doctoral students that returned their surveys. Ninety-seven full-time
advanced-level doctoral students and 80 part-time advanced-level doctoral students returned their surveys (see Table 5).

The researcher found that entering full-time doctoral students had a slightly higher mean than entering part-time doctoral students. However, part-time advanced-level doctoral students had a slightly higher (but not significant) mean than full-time advanced-level doctoral students. Overall, part-time doctoral students had a higher mean than full-time doctoral students.

Table 5

*Satisfaction of Full- and Part-time Doctoral Students*

<table>
<thead>
<tr>
<th></th>
<th>entering</th>
<th>parttime</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>entering</td>
<td>full-time</td>
<td>3.12</td>
<td>.60</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>part-time</td>
<td>3.01</td>
<td>.43</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.08</td>
<td>.53</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>advanced</td>
<td>full-time</td>
<td>2.81</td>
<td>.87</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>part-time</td>
<td>3.06</td>
<td>.70</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.92</td>
<td>.81</td>
<td>177</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>full-time</td>
<td>2.88</td>
<td>.83</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>part-time</td>
<td>3.05</td>
<td>.65</td>
<td>101</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.95</td>
<td>.76</td>
<td>225</td>
<td></td>
</tr>
</tbody>
</table>

Note: In the research study survey, the likert scale was 0 (strongly dissatisfied) to 4 (strongly satisfied) and 5 was not included in the scale.

The researcher found that between full- and part-time doctoral students $F (1, 221) = 2.083, p = .150$. Therefore, the researcher concluded there was no statistically significant difference with regard to full-time versus part-time status because $p > .05$, while the independent variable accounted for 0.029% of variance in the level of satisfaction.
In reference to Research Question #5, “Is there a significant difference in satisfaction between doctoral students and their academic colleges in terms of race and gender?” the analysis is summarized in Table 6 below. The researcher had collected data from seven entering-level doctoral students from the College of Arts and Letters, 28 entering-level doctoral students from the College of Education and Psychology, three entering-level doctoral students from the College of Health, and 12 entering-level doctoral students from the College of Science and Technology. The researcher also had data from 45 advanced-level doctoral students from the College of Arts and Letters, 96 advanced-level doctoral students from the College of Education and Psychology, 10 advanced-level doctoral students from the College of Health, and 44 advanced-level doctoral students from the College of Science and Technology (see Table 6).

The researcher found that for entering-level doctoral students, the College of Health had the highest mean at 3.20 followed by the College of Education and Psychology at 3.10, the College of Science and Technology at 3.03, and the College of Arts and Letters at 2.84. For advanced-level doctoral students, the researcher found that the College of Arts and Letters had the highest mean at 3.02 followed by the College of Science and Technology at 3.00, the College of Education and Psychology at 2.85, and the College of Health at 2.82 (see Table 6).

Table 6

<table>
<thead>
<tr>
<th>Name of College</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts &amp; Letters</td>
<td>2.84</td>
<td>.30</td>
<td>7</td>
</tr>
<tr>
<td>College of Education &amp; Psychology</td>
<td>3.10</td>
<td>.54</td>
<td>28</td>
</tr>
</tbody>
</table>
Table 6 (continued).

<table>
<thead>
<tr>
<th>Name of College</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Science &amp; Technology</td>
<td>3.03</td>
<td>.60</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>3.06</td>
<td>.53</td>
<td>50</td>
</tr>
<tr>
<td>College of Arts &amp; Letters</td>
<td>3.02</td>
<td>.62</td>
<td>45</td>
</tr>
<tr>
<td>College of Education &amp; Psychology</td>
<td>2.85</td>
<td>.82</td>
<td>96</td>
</tr>
<tr>
<td>College of Health</td>
<td>2.82</td>
<td>1.05</td>
<td>10</td>
</tr>
<tr>
<td>College of Science &amp; Technology</td>
<td>3.00</td>
<td>.84</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>2.92</td>
<td>.80</td>
<td>195</td>
</tr>
<tr>
<td>College of Arts &amp; Letters</td>
<td>3.00</td>
<td>.58</td>
<td>52</td>
</tr>
<tr>
<td>College of Education &amp; Psychology</td>
<td>2.91</td>
<td>.77</td>
<td>124</td>
</tr>
<tr>
<td>College of Health</td>
<td>2.90</td>
<td>.98</td>
<td>13</td>
</tr>
<tr>
<td>College of Science &amp; Technology</td>
<td>3.01</td>
<td>.79</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>2.95</td>
<td>.75</td>
<td>245</td>
</tr>
</tbody>
</table>

Note: In the research study survey, the likert scale was 0 (strongly dissatisfied) to 4 (strongly satisfied) and 5 was not included in the scale.

The researcher found that between doctoral student and their academic college that $F(3, 237) = .067, p = .978$. Therefore, the researcher concluded there was no statistically significant difference because $p > .05$, while the independent variable accounted for .018% of variance in the level of satisfaction.
In reference to Research Question #6, “Is there a significant difference in satisfaction between doctoral students, their academic colleges, and classification status?”, the research analysis was taken from the table listed below (see Table 7). The researcher had five entering-level, full-time doctoral students and two entering-level, part-time doctoral students from the College of Arts and Letters. Within the College of Education and Psychology, the researcher had 11 entering-level, full-time and 16 part-time status. For the College of Health, there were three entering-level full-time doctoral students. In the College of Science and Technology, there were eight entering-level full-time students and three entering-level, part-time doctoral students (see Table 7).

In terms of advanced-level doctoral students, the College of Arts and Letters had 28 who were of full-time status and 13 who were of part-time status. The College of Education and Psychology had 45 advanced-level full-time doctoral students and 44 advanced-level part-time doctoral students. The College of Health had four advanced-level, full-time doctoral students and four advanced-level part-time doctoral students. Lastly, the College of Science and Technology had 20 advanced-level full-time doctoral students and 19 advanced-level part-time doctoral students (see Table 7).

The researcher found that for the College of Arts and Letters, entering-level part-time doctoral students had a slightly higher mean at 2.98 than entering-level full-time doctoral students at 2.79. For the College of Education and Psychology, entering-level part-time doctoral students had a higher mean at 3.16 than entering-level part-time doctoral students at 2.97. With the College of Health, there were only three entering full-time doctoral students whose mean was 3.20. For the College of Science and Technology,
the entering-level full-time doctoral students had a higher mean at 3.08 than part-time advanced-level doctoral students whose mean was 2.98 (see Table 7).

The researcher found that the College of Arts and Letters, advanced-level part-time doctoral students had a higher mean at 3.16 than full-time advanced-level doctoral students at a mean of 2.97. With the College of Education and Psychology, advanced-level part-time doctoral students had a higher mean at 3.02 than advanced-level full-time doctoral students with a mean of 2.66. The College of Health’s advanced-level part-time doctoral students had a higher mean at 3.17 than its advanced-level part-time doctoral students at a mean of 2.84. Lastly, the College of Science and Technology’s advanced-level part-time doctoral students had a higher mean at 3.04 than its advanced-level full-time doctoral students that had a mean of 2.92 (see Table 7). Overall, the entering-level full-time doctoral students had a slightly higher mean at 3.13 than the entering-level part-time doctoral students whose mean was 3.01. For advanced-level doctoral students, part-time students had a higher mean at 3.06 whereas full-time students had a mean of 2.81.

Table 7

*Satisfaction of Entering and Advanced-Level Doctoral Students by Academic College*

<table>
<thead>
<tr>
<th>Name of College</th>
<th>parttime</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>entering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College of Arts &amp; Letters</td>
<td>full time</td>
<td>2.79</td>
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<tr>
<td></td>
<td>parttime</td>
<td>2.98</td>
<td>.04</td>
<td>2</td>
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<tr>
<td></td>
<td>Total</td>
<td>2.84</td>
<td>.30</td>
<td>7</td>
</tr>
<tr>
<td>College of Education &amp; Psychology</td>
<td>full time</td>
<td>3.29</td>
<td>.56</td>
<td>11</td>
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<tr>
<td></td>
<td>parttime</td>
<td>3.03</td>
<td>.48</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.13</td>
<td>.52</td>
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<tr>
<td>College of Health</td>
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<td>3</td>
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<td>Total</td>
<td>3.20</td>
<td>.78</td>
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</table>
Table 7 (continued).

<table>
<thead>
<tr>
<th>Name of College</th>
<th>parttime</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Science &amp; Technology</td>
<td>full time</td>
<td>3.08</td>
<td>.73</td>
<td>8</td>
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<tr>
<td></td>
<td>parttime</td>
<td>2.98</td>
<td>.32</td>
<td>3</td>
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<tr>
<td></td>
<td>Total</td>
<td>3.05</td>
<td>.63</td>
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<tr>
<td>Total</td>
<td>full time</td>
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<td>27</td>
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<tr>
<td></td>
<td>parttime</td>
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<tr>
<td></td>
<td>Total</td>
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<tr>
<td>advanced</td>
<td>College of Arts &amp; Letters</td>
<td>full time</td>
<td>2.97</td>
<td>.66</td>
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<td></td>
<td>parttime</td>
<td>3.16</td>
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<td>13</td>
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<td></td>
<td>Total</td>
<td>3.03</td>
<td>.62</td>
<td>41</td>
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<tr>
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<td></td>
<td>parttime</td>
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<td></td>
<td>Total</td>
<td>2.84</td>
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</tr>
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<td></td>
<td>parttime</td>
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<td></td>
<td>Total</td>
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<td>1.02</td>
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<td>full time</td>
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<td>.90</td>
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<td></td>
<td>parttime</td>
<td>3.04</td>
<td>.79</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.98</td>
<td>.84</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>full time</td>
<td>2.81</td>
<td>.87</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>parttime</td>
<td>3.06</td>
<td>.70</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.92</td>
<td>.81</td>
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<tr>
<td>Total</td>
<td>College of Arts &amp; Letters</td>
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<tr>
<td></td>
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<td>15</td>
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<td></td>
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<td>.59</td>
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<tr>
<td>College of Education &amp; Psychology</td>
<td>full time</td>
<td>2.79</td>
<td>.90</td>
<td>56</td>
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<tr>
<td></td>
<td>parttime</td>
<td>3.02</td>
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<tr>
<td></td>
<td>Total</td>
<td>2.91</td>
<td>.79</td>
<td>116</td>
</tr>
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</table>
Table 7 (continued).

<table>
<thead>
<tr>
<th>Name of College</th>
<th>parttime</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Health</td>
<td>full time</td>
<td>2.99</td>
<td>1.10</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>parttime</td>
<td>3.14</td>
<td>.65</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.04</td>
<td>.93</td>
<td>11</td>
</tr>
<tr>
<td>College of Science &amp; Technology</td>
<td>full time</td>
<td>2.96</td>
<td>.84</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>parttime</td>
<td>3.03</td>
<td>.74</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.99</td>
<td>.79</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>full time</td>
<td>2.88</td>
<td>.83</td>
<td>124</td>
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<tr>
<td></td>
<td>parttime</td>
<td>3.05</td>
<td>.65</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.95</td>
<td>.76</td>
<td>225</td>
</tr>
</tbody>
</table>

Note: In the research study survey, the likert scale was 0 (strongly dissatisfied) to 4 (strongly satisfied) and 5 was not included in the scale.

The researcher found that between the variables of academic colleges, classification, race, and doctoral students that $F (3, 210) = .038, p = .990$. Therefore, the researcher concluded there was no statistically significant difference because $p > .05$, while the independent variable accounted for 0.053% of variance in the level of satisfaction.

Qualitative Data

The researcher asked two questions at the end of the survey questionnaire: “What have been the most satisfying aspects of being a doctoral student at your university /in your program?”, “What have been the most dissatisfying aspects of being a doctoral student at your university /in your major program?” With these questions, the researcher
sought to allow the participants to elaborate on the aspects of their academic journeys with regard to satisfaction. The researcher analyzed the data and the following themes emerged from the data: program structure and organization, relationships with faculty; relationships with peers; and, support services. These themes allowed the researcher to code and analyze the responses to find the areas of concern for the students.

Of the 268 participant responses, there were four subgroups: white men, white women, men of color, and women of color. The researcher examined the subgroups in this matter in order to determine if there were any differences between race and gender. Each subgroup had a total of the following: by race, there were 204 white participants and 62 people of color; and, by gender, there were 79 white men, nine men of color, 126 white women and 53 women of color. The researcher completed a word count to determine the response patterns of each subgroup (see Table 8). From this information, the researcher found that white women and men of color had the same average number of satisfaction words, followed by white men and then women of color (see Table 8). The researcher also found that, in relation to dissatisfaction words, white men had the same average number, followed by white women, women of color, and men of color (see Table 8). Although white women wrote the most words for both satisfaction and dissatisfaction, the researcher found that the total number of participants in the other subgroups changed the outcome of the average per person under each subgroup.
Table 8

Number of Words Per Person by Subgroup

<table>
<thead>
<tr>
<th></th>
<th>Words of Satisfaction</th>
<th>Average # of Satisfaction Words Per Person</th>
<th>Words of Dissatisfaction</th>
<th>Average # of Dissatisfaction Words Per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Whites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1361</td>
<td>17</td>
<td>2331</td>
<td>30</td>
</tr>
<tr>
<td>Women</td>
<td>2401</td>
<td>19</td>
<td>2879</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>3762</td>
<td>36</td>
<td>5210</td>
<td>53</td>
</tr>
<tr>
<td><strong>People of Color</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>179</td>
<td>19</td>
<td>160</td>
<td>17</td>
</tr>
<tr>
<td>Women</td>
<td>888</td>
<td>16</td>
<td>1184</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>1067</td>
<td>35</td>
<td>1344</td>
<td>39</td>
</tr>
</tbody>
</table>

Dimensions of Satisfaction and Dissatisfaction Among Doctoral Students

The level of satisfaction that a doctoral student has in reference to their progress is of high importance. If students experience a low level of satisfaction, it may affect other areas of their studies, which could hinder their progression toward degree. If a participant’s level of satisfaction remained at a low level, it could hinder them in moving ahead with their academic program. A white, female doctoral student stated that “I have been successful and I have had wonderful instructors and advisement. My [own] self
satisfaction is very important.” Another student, a white female, stated that “My satisfaction has come from the huge amount of knowledge I have gained. I love that everything I read in the textbooks has come to the lab bench. The work I do in the lab makes the text come to life.”

However, for other students, they believed that they were not receiving certain elements that they felt were important to their professional growth. One white female doctoral student felt that there were missing parts to her education. She stated that she was “very satisfied with [her] program, but [she thought] it could be improved by providing more learning experiences for students who want to pursue a faculty career. For example, I would like to have learned more about academic publishing.” Some participants gained knowledge that allowed them to gain more insight into their field of study and others did not receive what they believed was pertinent information for the future. These experiences influenced satisfaction in four main areas: program structure and organization; relationships with faculty; relationships with peers; and support services.

Program structure and organization. The participants of this study shared how the program structure and organization affected their educational process. Between departmental issues, the format of courses, students’ research experiences, and time-to-degree, some of the participants of this study reported that these entities were critical to their success in their doctoral program.

Departmental/administrative issues. Departmental or administrative issues can affect students in both positive and challenging ways. Participants of this study reported that issues that came from within the department could impact both current and future
students in how they learned what was needed to be successful in their field. One such student was a female of color who expressed that there were “great opportunities to learn…[that had] timely assignments…[with] fairness in rigor…[along with] the access of classes. The dept works w/me to meet all of my requirements. Those in charge seem to know what they are doing in 2009/2010 & 2010/2011.” However, another female of color felt that “the program is very good [at] preparing me for work in my field; however recent changes to [the] program have me wondering about students who will follow me. Due to changes I do not believe they will be as prepared.”

*Alternative/course [delivery] format/course satisfaction.* The format of courses during the doctoral experience may relate to how and if students achieve their goals. The students in this study reported that in some cases the flexible course delivery format helped them be successful, whether they were full-time or part-time students. One student who was a white female explained that the “non-traditional format—the [program name] program is an executive format so it allows full-time working people [the ability] to pursue a doctorate. I would not be able to do this without this format.”

Curriculum methods and styles varied among the four academic colleges. For some students, their needs were met. Others, however, reported that courses could have been offered in either a hybrid or online format, at various class times. Others reported that due to the limited number faculty members who taught in the program, the time it took to move through their program was extended. A white female stated that “the most dissatisfying aspect is [the] difficulty in getting the courses I need. The limited faculty has made it a difficult task for professors to offer the elective courses I need beyond the
core classes I have already taken.” Another student, a white female, spoke to a wide-range of dissatisfying aspects within her academic program:

1) later afternoon classes were either eliminated from the schedule or [were] repeats of things already taken, which eliminated the option of taking more than one course per day (an inconvenience for commuter students); 2) classes, staff developments (or professional developments for department’s PhD students), and activities seems to be catered to full-time, teaching assistant students rather than non-TA students.

Lastly, a white female believed that the least dissatisfying aspects of her experience in doctoral program were the “1) Lack of hybrid/online courses; 2) Dr. [XX’s] departure; 3) Lack of elective options.” Yet, another white, part-time, advanced-level, female doctoral student from the College of Education and Psychology was dissatisfied with the “turnover of full-time faculty; program requirements/timeline & fit with part-time students who are employed full-time.” Another white female would have loved to have been a full-time student at [selected southern university], but life dictated that I have to keep my teaching job at an Arkansas university. I am jealous of those who have had a more traditional doctoral experience than I have, although I am eternally grateful to [selected southern university] and the [department name] department for working with me. I would [have] never been able to do this otherwise.

Student’s knowledge/research experiences. Some participants of this study were satisfied with the research experience and knowledge gained while progressing through their doctoral studies. One student, a white female doctoral student believed that it was
“the ability to grow as an individual/intellectually as a result of attendance/participation in the program. Research that is relevant to the [rest] of the world, not just academia.”

Another student, a white female, stated that

some of the coursework has inspired me to research and develop skills but this has been somewhat independent of faculty themselves. I have also had the opportunity to teach college-level courses and that experience has contributed more than anything to my professional development.

However, multiple participants reported being dissatisfied with their knowledge and research experiences because of the low quality of interaction with faculty members and peers, and a lack of interest that faculty had in their research areas. One white male stated that

although [he had] been told many positive things about [his] research outside of this university, there is one professor in [his] department who has publically [sic], to other students & faculty, criticized [him] personally. This professor never expressed his concerns to [him], but rather slandered [him] throughout [his] department. Therefore, [he is] disappointed on how this faculty has behaved, and [he] hope[s] it hasn’t caused any disadvantages to [his] ability to graduate.

Another student, a white male, stated it was the “lack of interest, as a whole, on research in [his] areas of interest. It is not discourage[ment], and faulty & students alike support me, but no one is interested in it to any appreciable degree.”

The relationship that doctoral students have with their faculty members may be a key and essential element of the entire doctoral experience. For some of the participants in this study, they had a relationship with their faculty member(s) that allowed them to
grow as students, personally, and as researchers, professionally. However, there were a number of students, both whites and students of color, who did not report having the type of relationship or experience that allowed them to grow to the extent that they wanted and/or needed in academia nor did they have the support system that they needed to be as successful as they wanted to be. These same students also expressed concern about the fact that the faculty turn-over was noticeable from one year to the next year, which could have several effects on the academic department such as course availability and diversity.

*Persistence/time-to-degree/completion.* The components of time-to-degree, completion, and persistence are essential for the doctoral students. Many students were able to fulfill everything that they needed to complete their degree in a timely fashion. In the open-ended questions, students spoke about how they were making progress, had assistance from their professors/advisers, and found available classes to meet their needs. A white male believed that the program was “user friendly . . . [and that the] professors accommodate[d] personal situations and work with the students. The profs seems to genuinely want you to succeed.”

However, other students felt that a lack of role models combined with a late discussion of the dissertation delayed their degree completion. One student, a female of color, felt that her biggest disadvantage was [her] ignorance. My own. I have often felt left out simply b/c it was assumed that I would know something. I do not know anyone (outside of my academic circle) who has a doctorate. My parents have vocational certificates. No one else in my family even has that much higher education. How am I supposed to know how getting a doctorate works? Qualifying exams, comprehensive exams, proposals,
etc—These are things I had to learn as I went. Other students already knew.

Granted they are not black but I don’t know if that has anything to do w/it. If I was white w/the same background I would be just as confused.

Another student, a white female, “would have liked for the pgm [program] to be more like those at Ole Miss where the dissertation class comes earlier in the pgm [program].”

One student, a white female, said:

I sold my home and up-rooted my family only to encounter unprofessional, unethical, repugnant behavior of faculty and staff in my dept. There was no standardized rubric. They played favorites. They were heavy handed, unavailable via email, phone, or in person. It was not an environment conducive to a healthy and productive academic experience. The graduate school dean, school dean, and provost did nothing in light of this even though they had [heard] numerous complaints.

Another student, a white female on a regional campus, reported the following with regard to advising and mentoring: “1) Did not have comparable programs as main campus; 2) Advising & counseling & guidance were inadequate or altogether absent; 3) [Regional] Department secretary needs to be replaced w/true liaison for main campus services.”

Some students of color, in particular, shared that they missed seeing faculty members of color in their departments, which they reported affected a variety of elements in the doctoral journey such as mentoring, research opportunities, and advising. Due to the lack of diversity amongst the faculty, the participants, both whites and students of color, did not have the opportunity to learn and grow as students and researchers under
the mentorship of faculty members who are minorities themselves. One student, a female of color, stated:

The apparent division of faculty members has taken disappointing. [sic] During the 30+ hours I’ve taken [courses with] only two profs [who] have given written feedback on research proposals. The advising has lacked on a variety of levels. The financial assistance is extremely low when compared to other programs. Overall, I simply wish I had more than one prof who takes an interest in helping me grow as a researcher. This goes back to the lack of advising. If it were not for the one professor I would be lost. (I hope this survey is anonymous!)

Another female of color stated that she was dissatisfied with a number of areas: “1) The program is too long!; 2) The program sort of leaves students out there to figure it out on their own; 3) Many of my classmates never knew what courses to take and when to take them.”

Overall, the students who returned surveys, both whites and students of color, felt that the program structure and organization were only some of the tools that they needed to be successful. The researcher found that more women, both white and minority, compared to men both white and minority, across all academic colleges, reported their dissatisfaction in relation to lack of classes, class formats, class meeting times, turnover of faculty, and the lack of guidance.

*Relationships with faculty.* The faculty-student relationship is essential to the development of the doctoral student as a future scholar in their academic field (Cheathman & Phelps, 1995; Gregg, 1971; Gregg, 1972; Kara & DeShields, 2004; Nettles, 1990; Pike, 1991). With this, the participants of this study reported that their
relationships with faculty either assisted them or hindered them, in some way, in their pursuit to complete their degree requirements.

Advising/mentoring. The participants in this study believed the support given and knowledge shared by faculty and peers were essential to their growth, both professionally and personally. The role of an advisor is of critical importance in the doctoral process (Bowen & Rudenstine, 1992; Gardner, 2009; Gilbert et al., 1983). In addition to course advising, students in this study also expressed the importance of having a mentor throughout their doctoral experience. One student, a male of color, stated that “the fact that my major advisor and second advisor supported me throughout my Ph.D. experience” was one of the most satisfying dimensions of his graduate career. He went on to explain: “They allowed me to customize my project pretty much the way I want[ed] and gave me good advice to finish successfully.” Another student, a white female, stated the following: “I have been very pleased with the way my advisor/professors have been able to work with my colleagues and me while [I] continue working while pursuing another degree.” One student, who was female of color, stated that she was satisfied with the “…feedback & honest advise [sic] from the professors; the atmosphere of the classroom; it’s a comfortable and open environment to learn in.”

Other participants also experienced a great satisfaction with their interaction with faculty members. A white female stated that she had the opportunity to work with a professor who is still an active professional in public education. I have also been able to work through the program without too many interruptions in my planned timeline for my completion of the program.
The majority of the people in my department actively help to make the process a success. I have enjoyed my experience!

Another participant, a white female, stated

Faculty in my program [do] a great job of staying in touch with students (outside of the classroom). In addition, my faculty have stayed on top of me regarding my professional development. For example, they’ve encouraged me to join relevant IT organizations and have assisted me in the preparation and development of conference proposals and manuscripts. In addition, we have a student organization [XXXX] that provides peer-to-peer collaboration and a student support network for students in the program.

Although some participants in this study felt that they had received adequate mentoring and advising throughout their doctoral journey, there were some students who were dissatisfied with the process. The study’s participants expressed concern about the lack of diversity amongst the doctoral faculty, lack of communication, the lack of advising, and that there was not enough mentoring to help them become researchers. They also reported feeling lost without sufficient direction. One female of color stated that there were

no African American tenured professors on staff. No African American females on staff or in Education on campus full-time, just adjunct or visiting instructors.

Lack of consistency with advising and assistance with program/dissertation progress if the topic is ‘hard’ which to me translates ‘we don’t want to work with this topic!’
The responses for advising and mentoring were overall positive, but there were some participants, particularly students of color, who reported that the lack of faculty diversity and lack of consistency with multiple aspects of their doctoral program such as mentoring, advising, and the dissertation process affected their experience. Because this perspective was shared by students of color, it gave the researcher insight into the areas in which the participants felt hindered their academic pursuits, which is similar to the research that has been conducted by Wasburn-Moses (2007), who stated that the lack of mentoring for minority doctoral students during their doctoral journey affected their experiences.

*Faculty interaction/knowledge/support.* The support of faculty members and peers can be vital to the professional and personal growth of a doctoral student at any stage in their program. However, for some participants, the lack of support that they reportedly experienced—such as faculty members not being knowledgeable about university policy and protocol and lack of communication between faculty and students—did not enhance their doctoral experiences. One student, a white male, stated that there was a lack of communication from teachers to students especially about upcoming requirements. Also the lack of true job placement preparation. This includes lack of quality facilities and in some cases no facilities at all to create the proper materials needed to have a fighting chance on the job market.

Another student, a white female, stated that the most dissatisfying aspect of her program was “the relationship between faculty & students.” She believed that the “faculty [members were] condescending & manipulative [by] using students for their own research.”
The study’s participants reported that their interactions with both faculty members and their peers were, at times, negative and disheartening. Also disheartening was students’ awareness that cheating occurred among their peers. A white male stated the following:

The stereotypical relationship of professors being dominant over PhD students [is true]. The constant “hazing”, separation, and master/slave mentality is ever-present. This creates a negative relationship and prohibits the collaborative environment. There are no mentoring relationships. In fact, most of us will graduate hoping that we never see (some not all) our professors ever again, much less because colleagues or publish with them. The dept’s PhD program ranks 34 out of 35 in the nation, and to foster this environment prohibits any progress with that ranking. Approximately 90% of the PhD students would not recommend this program to prospective PhD students. In fact, this coming academic year, we will have NO new PhD students and no prospects. There is a low, low graduation rate as several students go in active & ABD. There has also been evidence that grading of comprehensive exams are [sic] arbitrary & capricious. Some professors have indicated to others that every student should fail the section they grade the first time—“because this is what I had to go through”. This mentality of implying to PhD student [sic] that they should take as long as possible to complete comps exams and complete their PhD portrays a negative atmosphere, kills morale, and is counter-productive. Bottom-line: I was accepted to other programs, and now I regret coming here, but investments in student loans, moving, and time w/classes compelled me to stay. I regret coming here, especially after two recent Asst.
Professors quit and told me after they left that there’s no recognition for our program nationally, and that I should’ve gone somewhere else.

A female of color described the administrative and departmental issues as the following:

1) Low [sic] student/teacher ratio (not enough faculty); 2) Not enough minority faculty; 3) Institutional racism/Discrimination (clear-cut!); 4) Faculty disputes in which students receive punishment; 5) Unethical faculty members stealing research by student; 6) No [0 with a line through it] minority support in the program → Few on campus; 7) Consistent changing of faculty from year to year.

A female of color stated that she did not have complaints about the university. However, [her] doctoral program lacks a diverse faculty. Moreover, the program faculty are concern [sic] primarily about tenure and promotion, and maintaining the status quo. There is little to no concern for mentoring students. To be totally honest, I found my program faculty to be quite hostile toward some students.

Lastly, a white female felt that by “being a part-time student, I feel that I don’t get enough interaction with my advisor.”

*Relationships with peers.* The relationship that doctoral students have with their peers is indispensable because their peers represent both their social and support networks throughout the doctoral process. Many participants commented on the social and socialization aspects of the doctoral journey. The participants believed that without the support from peers, the doctoral process would have been more difficult. As stated by
one white female, it was the “the friendships [she’d] made with classmates” that aided in part of her development. Another student, a white male, stated that he was satisfied with:

1) Building relationships with other doctoral students and seeing each other/interacting at the in-person sessions; 2) In-person sessions are [the highlight of the program—[I] suggest [an] increase in frequency of occurrence; 3) [Regional campus] is an excellent facility for the in-person sessions; very nice library environment as well.

Other aspects of the relationships with peers included positive interactions, such as:

[meeting students who shared my interests and ambition toward being focused and finishing the program despite the odds stacked against us; i.e. no African American faculty on staff full-time at [selected southern university], no adjunct, visiting professors or instructors. No one looks like me on staff! So how can you understand my dissertation premise?

Yet, some participants felt that the actions of their peers were disrespectful to them and the educational process. One student, a white female, stated that the rampant cheating, [in which] students [would give] projects, tests, papers, data sets, etc. to students taking the course in a later semester and students using the same project, paper, etc. in more than one course; [and] the pettiness and passive-aggressive behavior of professors.

There was one student, a male of color, who reported that that his “classmates from MS treated me like a pariah; they often made little comments about me being Black AND smart—like it was a strange phenomenon.” The researcher theorizes that this participant’s
response alluded to how a person’s race and academic abilities can affect how others perceive and accept them as a doctoral student. Similar to the personal narrative from Brown (2007), the opinions and comments made by others, peers often shape and affect how the doctoral experience progresses and one’s feeling about the experience after degree completion. Junn and Fuller (1996) explain that inclusion is also a factor in a student’s level of satisfaction. With this student, if his own peers saw him as a strange phenomenon, it could affect how he felt he was being perceived by other peers in relationships throughout his doctoral journey.

The relationship that the participants in this study had with their peers was generally positive. For some students, relationships with their peers allowed for growth as researchers and a support system throughout this process. It also allowed for them to have a social outlet. Yet, as noted above, there were students who experienced incidents that were not supportive at all, but hurtful in both a personal and professional nature. Those experiences may have changed how the students judged the satisfaction of their experience.

Support Services. Many of the participants of this study reported that the university climate and support services offered to them were aligned with their expectations. The services, such as financial aid, the graduate school, the health clinic, and the libraries offered to them enhanced learning experiences as doctoral students. From their professors’ ability to listen and give suggestions to problems, students reported that they were growing, both professionally and personally. One student, a white female, stated:
Teachers are good about responding to questions. They seem to monitor progress of students and try to make a point to keep individual students informed of information/changes in programs/classes. [I] Do not feel like another number—[I] believe they want to retain students.

Another student, a female of color, stated the following:

The most satisfying aspects of being a doctoral student [are] the advance[d] learning experience[s] that I’m having. The professors care about all student[s] and gives opportunities for growth. I am very satisfied with how this university allows students to enroll in classes on each of the [selected southern university] campuses. With that being said, I’ve been able to complete several classes that I would not have been able to if this wasn’t an option, also the Saturday classes.

Yet, for some students, the university climate and the support services were seen as negatives. Some participants reported that the services and climate were not conducive to an environment that supported their pursuit of a doctoral degree. A white female felt that the following were dissatisfying aspects of her doctoral experience:

1) Lack of orientation for students who work during the day; 2) Lack of awareness and communication with other students; 3) Difficulty in scheduling appointments with staff members; 4) Lack of quiet study opportunities in the library; 5) No enforcement of regulation on student behavior in the library and other common areas—loud music, phone use, boisterous behavior; 6) Uninformed about comments [selected southern university’s president’s name] has made to the media (i.e., program cuts, etc.).
Another participant, a white male, believed that the differences between the two campuses were the most dissatisfying aspect for his doctoral experience:

[Regional campus] students do not have access to the same resources that [southern city that the selected university is located in] have (i.e.: health clinic, access to financial aid office, no gym). We pay the same tuition but don’t get to access any of the benefits as the main campus students.

Still, for some students, they did not receive what they needed from the various departments on campus, which, in turn, affected their ability to be successful as they matriculated through doctoral work. For example, one student, a white female, stated that she was dissatisfied with “the set-up and interaction of the committee and the lack of interest in helping you understand the process.” She also reported a “lack of response from the graduate school in answering requests and appeals. It took a year [sic] on re-admission and I have not to date—gotten a response on an appeal I sent in at the end of the spring 10 semester. Grad school—F.”

Another student, a female of color, stated that she was dissatisfied for several reasons such as the “lack of aid; lack of org. focused on minority students.”

In several instances, the support services were not evaluated positively. The students believed that communication with the offices and departments, outside of their academic college, could be drastically improved. They also expressed a need for more campus organizations, particularly for minority students as well as in-depth orientations for incoming and returning students to discuss the changes in the curriculum and university-wide policies and procedures. Lastly, students who were based not on the main campus articulated a need to improve the services and offerings. These students reported
that a lack of services resulted in their needs not being met, which, in turn, negatively impacted their view of the university.

Summary

The researcher conducted the statistical analysis of the data collected in this research study. For the quantitative data, no statistically significant differences were found any of the six major research questions, which lead the researcher to find that the participants, both entering-level and advanced-level doctoral students, were satisfied with the selected southern university. For the qualitative data, the participants of the study described what they believed to be the most satisfying and dissatisfying aspects of their major program or university, revealing more nuanced levels of “satisfaction” than the quantitative data allowed. The qualitative results enhanced the project by providing deeper insights into the experiences of the participants. The qualitative data helped the researcher uncover other areas of satisfaction/dissatisfaction undetectable in the survey results. These areas included lack of diversity amongst faculty members, campus climate, support services, and the relationships that the participants had with their peers and faculty members.

There were four primary categories of (dis)satisfaction that emerged from the qualitative data: program structure and organization; relationships with faculty; relationships with peers; and, support services. There were numerous secondary themes that were found in the responses to the open-ended questions. Those themes were time-to-degree; departmental/administrative issues; satisfaction; alternative/course (delivery) format/course satisfaction; university/climate/support services; social/socialization; and, student’s knowledge/research/experience.
From those themes, there were certain areas in which the participants were satisfied and felt that they were receiving what they needed to be successful in the future. The qualitative data indicated varying levels of both satisfaction and dissatisfaction. The qualitative data that spoke to the areas, in particular, in which most of the participants were satisfied included, but were not limited to, the research experiences and opportunities for the participants, the overall relationship with their peers, and the support that they received from various entities on campus. In contrast, the other areas that were most associated with respondent dissatisfaction included, but were not limited to, the faculty relationship, course delivery and format, time-to-degree, and a lack of diversity amongst faculty members. Other areas of dissatisfaction were the lack of communication, lack of minority organizations, lack of assistance for minority and international students, and lack of quality experiences and services that they felt they needed to fully grasp the curriculum and be successful.

The findings between the quantitative and qualitative portions of this study were completely different from each other. The quantitative portion yielded no statistically significant differences. The qualitative, open-ended responses, in contrast, allowed the participants to share their experiences in an unstructured way, gave them room to comment on their satisfaction. The qualitative portion allowed for participants to report a multiplicity of views about the university and their experiences.

The researcher found that two areas of highest contrast were between gender and race. Low contrast was found with regard to full-time or part-time status and respective academic college. In relation to gender, the women, overall, were more responsive to than the men, but those experiences were still different between women of color and
white women. White men were more responsive in their answers than men of color. White women did experience levels of dissatisfaction that in turn spoke of lack of advising or not being given assistance from faculty or administrators. For white men, they spoke of communication issues and how the lack of faculty support made for a negative relationship between faculty members and the doctoral students. However, for both men and women of color, their reported experiences were leveled with racial discrimination, lack of diversity amongst faculty, and not being mentored, which, through their perception, changed and challenged them on how they believed they were perceived as scholars while pursuing their doctorate.

In relation to race, people of color and whites had both satisfying and dissatisfying responses for this research study. For whites, some felt that the organizational structure of their academic programs such as functions of departmental offices, their interactions with faculty, and becoming aware that their doctoral program was not recognized nationally affected how they would be perceived upon graduation from the selected university. Yet, for people of color, their responses had a general racial undertone that spoke to the fact that their race played a role in most, if not all, aspects of obtaining their Ph.D.

The experiences of all of the participants were intertwined with their gender and race. The researcher learned from the participants’ responses that their experiences were similar and different, even within the same academic college. For example, some students felt that their faculty advisor was available, while others felt that they did not communicate enough with their advisor. From this, the researcher learned that the participants’ responses are a reflection of their direct experiences from the selected
university. Additional research on these findings seems appropriate. If additional research, carefully designed to shed more light on areas, confirms these patterns, steps should be taken to correct the problems.
CHAPTER V
RESEARCH ANALYSIS DISCUSSION

Introduction

In this chapter, the researcher reviews the quantitative and qualitative findings of this study, and compares them findings to the existing literature on graduate student satisfaction reviewed in Chapter II. Since none of the quantitative findings yielded any significant relationships among selected variables, the analysis focuses on hints that emerged from the qualitative findings. After this analysis, the researcher will explain the limitations of this study. The researcher will then provide specific recommendations for further research on what to study with regard to the satisfaction of students on their doctoral journey. The chapter concludes with specific recommendations for action research projects that the selected university might conduct to foster improvement.

Upon analyzing the data, the researcher hypothesized that there would be a statistically significant difference among all of the variables of advanced-level doctoral students, entering-level doctoral students, gender, academic colleges, and race which were all tested against the satisfaction variable. In reference to Research Question #1, “Would there be a significant difference in satisfaction between advanced-level and entering-level doctoral students?” the researcher found that there was no statistical significant difference between the advanced-level and entering-level doctoral students. In reference to Research Question #2, “Would there be a significant difference in satisfaction between race, gender, and doctoral students?” the researcher found that there was no statistical significance between race, gender, and doctoral students.
In reference to Research Question #3, “Would there be a significant difference in satisfaction between full- and part-time doctoral students?” the researcher found that there was no statistical significance between satisfaction, the entering-level and advanced-level full-time and part-time students. In reference to Research Question #4, “Would there be a significant difference in satisfaction between doctoral students and their academic college?” the researcher found that there was no statistical significance between satisfaction, doctoral students and their academic colleges. In reference to Research Question #5, “Would there be a statistically significant difference in satisfaction between doctoral students, their academic colleges, and classification status?” the researcher found that there was no statistical significance between satisfaction, doctoral students, their academic colleges, and their classification status.

Discussion

Each of the variables was not statistically significant when compared with satisfaction. The qualitative findings, however, provide insights into how the participants felt about their doctoral experiences at the selected southern university. Later in the chapter, the researcher will identify opportunities for further research on this topic. Although the researcher’s study yielded no statistical significance at this selected university, the researcher believed that the research that had been completed on doctoral students assisted in indentifying specific areas and questions for further research on graduate students’ satisfaction. First, with regard to race, there are strong hints that students of color appear to have lower satisfaction than their white counterparts. Although Nettles (1990) research spoke of minority students being satisfied, as some were in this study, these hints were more consistent with studies by Brown (2007) and
Wimms (2008). These researchers discussed how minority students, both collectively and individually, felt more racial discrimination than their white counterparts. Brown and Wimms’ research also discussed how regardless of their academic abilities, students of color still faced backlash on how they were treated throughout their graduate experience. Since racial and ethnic diversity are a part of any vibrant university campus today, the lower minority doctoral student population seemed to parallel the racial incidents that students may encounter on university campuses (Harper & Hurtado, 2007).

Another hint from the qualitative portion of this study came from students’ response regarding the relationship with the faculty. Research by Gregg (1971), Gregg (1972), and Bargar and Mayo-Chamberlain (1983) showed faculty-student relationships are essential elements of the graduate journey. All students in this study, regardless of race, gender and tenure in the program, stated that they had both satisfying and dissatisfying experiences with faculty members in the areas of advising, mentoring, and overall guidance throughout their academic program. In relation to advising, similar to Bargar and Mayo-Chamberlain’s research, some participants of this study stated that they had received adequate advising while others perceived the amount of advising to be low, which made them feel as lost and unsure as to what their next steps should be. Gregg’s 1971 and 1972 research showcased that the relationship between the faculty member and the student gave insight into both personal and professional satisfaction. The participants of this study stated that the faculty relationship was important because if they were connected to faculty, it gave them opportunities to be mentored and strengthened their research skills. Another researcher, Baird (1969), also found that there were inconsistencies in the expectations the faculty members held for their students. The
students of this study mirrored those results. Students in this study reported that they could not get clear communication about what requirements were expected of them.

Qualitative findings about the relationship with peers also connect with findings from other studies. Similar to the evidence produced by Baird (1969), the researcher found that participants had some positive experiences with their peers, which allowed them to grow and have a support system while they were completing their degree. Yet significantly, for students of color, their experiences were, at times, aligned with the research of Johnson-Bailey et al. (2009). These researchers examined the experiences of black graduate alumni and found that white peers underestimated the academic abilities of students of color. This finding was detected in this study.

Hints regarding gender also emerged from the qualitative portion of this study. Research by Law (2001), Baker (1998) and Junn and Fuller (1996) showcased how gender and satisfaction plays a role in students’ levels of satisfaction. Law’s research found that there were more men than women who graduated; however, with this research study, there were more women who responded than men, with white women being the most responsive and men of color being the least. Baker found that the completion rates for women and minority doctoral students were less than males and whites. Although this study did not examine graduation rates, Law’s results did find that self-satisfaction was a key component for students obtaining their doctorate, which the researcher detected to be consistent with participants’ qualitative comments in this study. Overall, this study found that women and men had both similar and different experiences. However, the qualitative findings of this study found that students of color, regardless of gender, experienced various degrees of racism and discrimination. Race affected the ways in which they saw
their peers and how they believed they were seen by others around them. These findings are consistent with other studies and suggest that race continues to be a factor in the educational lives of students of color.

Previous research has shown that the positive social and socialization experiences the doctoral journey are key aspects for successful students obtaining the doctoral degree. However, Glasgow (2004) found no difference between a student’s social support and the satisfaction of academic life. The qualitative portion of this study found different results, mainly, in part, because students responded about their interactions with their peers and how they did receive assist and encouragement from them.

The researcher found similar results to Ellis’ (2001) study. The researcher found that advisors did impact graduate students’ outlook, satisfaction and graduate school socialization. Ellis’s work and hints from this study then suggest that the amount of time that a student spends with their advisor, faculty member, and/or peers influences their journey through the academic program. Other researchers such as Weidman and Stein (2003) found that the encouragement of faculty members aided doctoral students in their development as scholars and researchers. For this study, the findings were inconclusive: some participants responded that they were given assistance from their mentor or faculty member; whereas, others stated that they received little to no help from the faculty of their department. Further study is warranted that examines assistance and mentorship for the doctoral students, specifically studies that focus on how mentoring relates to personal and professional growth.

Gardner (2008) and Corneau (2008) both wrote about how socialization affected the lives of doctoral students in some way. Gardner (2008) explored students of color and
their levels of socialization and found that they had an overall lack of satisfaction. This result is parallel to students of color in the qualitative portion of this study. Students of color in this study reported that there were key elements missing from their experiences: advising, mentorship, and lack of diversity among faculty. For Corneau (2008), it was found that there was no relationship between academic life and social support, which did not mirror the outcome of the research study because the participants felt that without the support of their peers, it would have made the doctoral journey harder to progress through.

The structure and organization of the program can also affect students and their accomplishments on the road to degree completion. Davidson-Shivers (2004) examined both current students and alumni of the program and their satisfaction in relation to job placement and the strength of their faculty members. It was found that the students were satisfied overall with the program and faculty members. However, these results are at odds with the findings in this study, where students reported they needed more assistance and guidance with job placement and were dissatisfied with the interactions that they had with their faculty members. Craven (1999) found that master’s and doctoral student expected to be challenged academically and had similar concerns about faculty interaction and interest in students, preparation and guidance for comprehensive exams and the dissertation process. Students in this study were also concerned about their preparation and guidance with comprehensive exams and the dissertation, wanting more faculty interaction, and faculty interest in students. Therefore, the researcher believes that the recommendations listed below would assist in aligning student-faculty expectations and bringing these expectations into fruition.
Lastly, the researcher found that there are developmental stages that students pass through in graduate school. At each of these stages, advising, mentoring, and time-to-degree can affect achievement and satisfaction. When students do not fully comprehend what is needed at each stage (Baird, 1995; Baird, 1997), disappointment and failure are possible. As Baird has found, new student orientations at the beginning of every semester where policies and procedures are discussed can be very helpful for students at step 1. More research is needed to see what might help these students at step 2 and 3.

Another facet of assisting doctoral students through their academic programs was the need for financial assistance. Nerad and Miller (1996) found that if financial assistance is provided, retention efforts and career placement would improve. Without financial assistance, retention efforts, and career placement support, doctoral students may possibly continue to struggle throughout their academic journey. The qualitative portion of this study did have some statements on participants wanting an increase in funding for all aspects of doctoral education.

Another hint that emerged for the qualitative portion of this study that connects to the literature relates to the area of mentoring and advising. Nyquist and Woodford (2000) found that multiple changes were needed in doctoral education. These included mentoring, providing students more career options, having clear expectations of students, and helping students prepare for a variety of teaching situations and settings (such as for teaching in community colleges, research intensive institutions, and liberal arts colleges). Nyquist and Woodford also stated that there was a need for the recruitment of women and people of color to enhance the study of the academic field. The qualitative findings of this study echoed Nyquist and Woodford findings across all of the academic colleges and
for both men and women, especially women of color. The researcher posits that the lack of diversity reported by participants could be rectified if there was an increase in the recruitment of more faculty of color and women.

Time-to-degree was another “hint” that the researcher found in the qualitative portion of this study regarding time-to-degree. Both Isaac et al. (1995) and Wright (1964) spoke about how time-to-degree can be affected by a number of factors such as accountability and expectations from the students as well as failure to complete in a timely manner. Some of the participants of this study reported that they did not know the expectations of their academic department despite their desire to know. They also felt that they could not complete their course work in a timely manner because the courses were not offered on a regular basis. By not knowing what was expected of them or how to plan for coursework, participants reported their dissatisfaction with their doctoral experiences at the selected university.

Lastly, the overall importance of race and gender was essential to this research study. The researcher notes that the participants responses, especially in terms of racism and discrimination found in the qualitative data are salient. Due to the survey instrument not asking explicit questions about various forms of diversity, these particular findings may have been muted in the overall results. Therefore, the researcher hypothesizes that race may very well be a factor in the educational lives of the doctoral students at the selected university. This inference suggests more research on race using a more exact instrument is warranted.
Limitations

The researcher stated several delimitations at the beginning of this study. These included the study of only one university to conduct the research and the cut-offs and boundaries which the researcher set for entering and advanced-level doctoral students. At the completion of this study, the researcher found that limiting participants to one institution limited the research because it did not allow for a comparison to be done between doctoral students at two or more different institutions. If two or more different institutions had been used in the study, the researcher could have moved beyond an isolated case-study. A much larger randomly selected sample at multiple institutions would have increased the chances for some of the findings to be generalizable to doctoral students, regardless of the institution where they studied. The researcher also found that by setting boundaries for both entering and advanced-level doctoral students that the students who were in the middle between 19 and 35 credit hours were excluded from this survey, due to the initial boundaries in this study that were set by the researcher. Another limitation was missing data from the surveys. Additionally, the variable of race could be not appropriately tested in the quantitative portion of the study due to low numbers of returned surveys. Race, however, was analyzed in the qualitative portion of the study.

Another limitation that was not anticipated was the lower than expected return rate of surveys. Although the researcher received more than 25% of the surveys back from the participants, the researcher initially expected a higher percentage of return. Due to the amount of returned surveys, there are potential problems with proposing changes on a sample of this size. First, the sample does not give a complete picture of the satisfaction levels of all doctoral students at the selected university. Second, it also does
not factor into the notion that the results are only one-sided. Third, the survey instrument was also a limitation because issues of diversity were given for the qualitative data and no questions about any form of diversity was asked in the survey instrument. Therefore, realistically speaking, it would be premature to draw any firm conclusions to make any suggestions for improvement based on this research design or sample of surveys. At best, this study provides hints for further investigation. These areas for further inquiry are identified later in this chapter.

Recommendations for Future Research Based on this Study’s Limitations

Upon completing this study, the researcher has several recommendations in regards to future research projects based upon the research findings. One recommendation that the researcher would make is to compare multiple institutions to see if the findings from this study are generalizable. Another recommendation would be to change the methodology from mailed-out surveys to focus groups and one-on-one interviews with a smaller sample size population or to a completely online survey; therefore, the researcher believed that with either choice, there could possibly be an increase in participation from the research study group.

The third recommendation would also be to develop and pilot a survey written to detect differences in satisfaction levels of white vs. African American doctoral students. Another recommendation for future research would be to solely concentrate the population on minority students and do a comparison between Asian Americans, African Americans, Hispanic/Latino Americans, Native Americans, and multi-racial individuals. The fourth recommendation would be to develop and pilot a study that compared doctoral student satisfaction levels by discipline and/or by academic college. The last
recommendation for future research is to study the retention rates of doctoral students at multiple institutions to determine their graduation rates as well as why students who have departed from the program initially left and whether they satisfied with the services they were given while they were still in the doctoral program.

**Recommendation for Action Research**

Based on this study’s findings, there are some specific recommendations for future action research on doctoral students’ satisfaction. Action research was developed by Kurt Lewin in the 1930s. Action research is “for practitioners to investigate and improve their practices” (Hendricks, 2006, p. 3). It has also been defined as “taking action . . . doing research . . . and, telling the story and sharing your findings” (McNiff & Whitehead, 2009). Hendricks (2006) stated the following:

Data from [a] variety of sources, including qualitative and quantitative measures, are collected and analyzed for the purpose of informing practice. Thus, all results feed back into the action research cycle so that the study is continuous, flexible, and constantly evolving (p. 3).

Hendricks (2006), Kemmis and Wilkinson (1997), and Cole and Knowles (2000) stated that action research allows the following processes: reflect, act, evaluate, reflect, act, and evaluate (p. 9). The cycle continues and repeats as the solutions along the way are shared, tested, and revised as the circumstances change. Future research that focuses on administrators at the department level, academic college dean, and the graduate dean of a selected university could go a long way in assisting doctoral students on their graduate journey. Action research attending to and the diversification of faculty and its
relationship to how students report their growth intellectually, in their field of study, for example would be worthwhile.

Next, additional action that connects doctoral students more tightly to their programs of study and/or their institution, and to the various forms of financial support might prove useful. With the rising cost of higher education and without definite knowledge of financial assistance, many students are unable to complete their degree. Action research that studies the effects of assistantships, fellowships, and graduate teaching positions on satisfaction are also in order. These projects could link not only satisfaction with these appointments; they could also connect the satisfaction with financial assistance and professional development. Studies of fluid communication from the beginning of the doctoral program to the end—about rules and protocol procedures of the department, academic college, and university, and orientations and information sessions could be launched. Semester-by-semester guidelines with milestones for doctoral students (when to file a plan of study, schedule comprehensive exams, and for the dissertation committee, etc.) might be tested with action as well. Continuous dialogue projects where both the student and the faculty advisor meet every semester could be tested to see if such meetings build and strengthen teaching and research relationships could be addressed with action research.

Another recommendation would be to conduct action research on the provision of professional development opportunities to graduate students through the department, academic college, and university. In particular, action research about the provision of teaching opportunities and professional growth seems warranted. Perhaps graduate students could teach courses at the undergraduate level and co-teach at the graduate level,
guest teach in nearby community colleges, or participate in teacher exchanges with nearby liberal arts colleges, university extension center or even high schools. If a doctoral student chooses to pursue the professoriate, it is vital for that student to know how to succeed and maintain a classroom.

Lastly, experimenting with a broad range of class times—morning, afternoon, and early evening—could be tested to see how scheduling might improve rates of time-to-degree and degree completion. Action research that gave the students a choice in the variety of methods in which these classes are taught such as the traditional face-to-face, hybrid, and completely online classes might also prove fruitful. The ability to choose the type of method in which they receive their education by having a variety of options could have the added benefit of increasing the graduate student population and thus bringing in more tuition dollars.
APPENDIX A

DOCTORAL STUDENT SATISFACTION SURVEY

Doctoral Student Satisfaction Survey

_Personal Information_

1. What is your gender?
   a. Male
   b. Female

2. What is your ethnic/racial background?
   a. Person of Color (i.e.: Asian, Black/African-American, Hispanic/Latino, Native American, and/or Other)
   b. White

3. During the academic year, I have primarily enrolled as a (select one):
   a. Full-time doctoral student
   b. Part-time doctoral student

4. Which of the following are you (excluding this semester’s credit hours):
   a. Entering doctoral student (Less than 18 credit hours)
   b. Advanced doctoral student (More than 36 credit hours)

5. Under which college does your major fall:
   a. College of Arts and Letters
   b. College of Education and Psychology
   c. College of Health
   d. College of Science and Technology
Satisfaction Survey: This section of the survey is about your experiences in your current doctoral program. Please answer each question to the best of your ability.

1. Which of the following letter grades or grade point equivalents best describe your cumulative grade point average during your doctoral study? (Check one response.)

   _____ A or A+ (4.0)        _____ C+ (2.75 to 2.99)
   _____ A- (3.75)            _____ C (2.50 to 2.74)
   _____ B+ (3.50 to 3.74)    _____ C- (2.25 to 2.49)
   _____ B (3.25 to 3.49)     _____ D+ or less (less than 2.25)
   _____ B- (3.00 to 3.24)    _____ Did not receive grades

2. Compared with other students in your program, how would you rate your academic performance? (Check one response.)

   _____ 1. I am in the top 10 percent.
   _____ 2. I am in the top 25 percent.
   _____ 3. I am in the middle (around 50 percent).
   _____ 4. I am in the bottom 25 percent.
3. Check the one response on each line below that best reflects your agreement or disagreement with each of the following statements. (Check one response on each line).

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Not Applicable (N/A)</th>
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</thead>
<tbody>
<tr>
<td>At least one faculty member in my program has had a strong impact on my intellectual development.</td>
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<td>It has been easy for me to meet and make friends with other students in my program.</td>
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<td>I am confident that I made the right decision in choosing this doctoral program.</td>
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<td>It is easy to develop personal relationships with faculty members in this program.</td>
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<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td>Not Applicable (N/A)</td>
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<td>There is a great deal of contact between professors and students in my program outside the classroom.</td>
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<td>I am satisfied with the level and types of organizations and committees in my program.</td>
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<td>There is a strong sense of community, a feeling of shared interest and purpose in this program.</td>
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<td>Overall, I am satisfied with the doctoral program in which I am currently enrolled.</td>
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</tbody>
</table>
4. Indicate your level of satisfaction with each of the following by checking the appropriate response on each line. (Check one response on each line).

<table>
<thead>
<tr>
<th></th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither Satisfied nor Dissatisfied</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
<th>Not Applicable (N/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of faculty instruction</td>
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<td>Fairness of my program in providing financial support</td>
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<td>Fairness by professors in my program in grading</td>
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<td>Collegial atmosphere between the faculty and students</td>
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<tr>
<td>Communication between faculty and students</td>
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<td>Availability of the faculty to meet with students</td>
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<td></td>
<td>Very Dissatisfied</td>
<td>Dissatisfied</td>
<td>Neither Satisfied nor Dissatisfied</td>
<td>Satisfied</td>
<td>Very Satisfied</td>
<td>Not Applicable (N/A)</td>
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<td>Quality of overall faculty-student relations</td>
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<td>Quality of academic advising provided by faculty</td>
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<td>Quality of feedback on scholarly projects or academic progress</td>
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<td>Quality of professional advising and job placement</td>
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<td>Class scheduling</td>
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<td>Faculty interest in my research</td>
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</table>
5. What have been the most satisfying aspects of being a doctoral student at your university/in your major program?

6. What have been the most dissatisfying aspects of being a doctoral student at your university/in your major program?
APPENDIX B

INSTITUTIONAL REVIEW BOARD ACCEPTANCE LETTER

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board
118 College Drive #5147
Hattiesburg, MS  39406-0001
Tc:  601.266.6820
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 21, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 10072002
PROJECT TITLE: Entering and Advanced Doctoral Student Overall Program Satisfaction
PROPOSED PROJECT DATES: 04/01/2010 to 04/01/2011
PROJECT TYPE: Dissertation
PRINCIPAL INVESTIGATORS: Tiffany Labon-Sims
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Studies & Research
FUNDING AGENCY: N/A
HSPRC COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 07/20/2010 to 07/19/2011

[Signature]
Lawrence A. Hosman, Ph.D.
HSPRC Chair

[Signature]
7-22-2010
Date
APPENDIX C

SURVEY PARTICIPANT LETTER

Summer 2010

Dear Doctoral Student:

My name is Tiffany Labon-Sims. I am a doctoral student at The University of Southern Mississippi. I am currently working on my dissertation, a comparison of satisfaction levels between entering and advanced doctoral students at the selected university.

The mailed participant letter and questionnaire utilized for this study will cover topics connected to various components of graduate education. Completion of the questionnaire should last no longer than 15 minutes. All data that will be collected will be confidential, participation is voluntary, and will not be traceable to any participant. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow fellow regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6920.

Your participation in this research is strictly voluntary and with your written permission, you can withdraw your data at any time. If you agree to participate, please fill out the enclosed questionnaire and return it in the provided pre-paid envelope. Upon receiving the returned questionnaire, each participant will be entered into a drawing for one of 24 book scholarships that can be redeemed at the Barnes and Noble Bookstore. If you do not agree to participate in this survey, I do thank you for taking the time out to consider participating.

Best Regards,

Tiffany N. Labon-Sims
Doctoral Candidate
Department of Educational Studies and Research
313 N. 37th Ave., Apt. 94
Hattiesburg, MS 39401
901.233.8143

Dr. R. Styron, Faculty Sponsor
Director and Associate Professor
GCSSC 134-C
Gulf Coast Instructional Leadership Center
The University of Southern Mississippi
730 East Beach Blvd. #5128
Long Beach, MS 39560
228.214.3224 (o), 228.214.3279 (f)
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