

5-2020

The Underrepresentation of African American Doctoral Students in College of Education Disciplines at Hispanic Serving Institutions and Emerging Hispanic Serving Institutions in the Southwest United States (Texas, New Mexico, Arizona, California, Nevada and Colorado)

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THE UNDERREPRESENTATION OF AFRICAN AMERICAN DOCTORAL STUDENTS IN
COLLEGE OF EDUCATION DISCIPLINES AT HISPANIC SERVING INSTITUTIONS AND
EMERGING HISPANIC SERVING INSTITUTIONS IN THE SOUTHWEST UNITED
STATES (TEXAS, NEW MEXICO, ARIZONA, CALIFORNIA, NEVADA AND
COLORADO)

A Dissertation

by

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Submitted to the Graduate College of
The University of Texas Rio Grande Valley
In partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 2020

Major Subject: Curriculum and Instruction Higher Education Specialization

THE UNDERREPRESENTATION OF AFRICAN AMERICAN DOCTORAL STUDENTS IN
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May 2020

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ABSTRACT

Atterberry, Matthew Lloyd., The Underrepresentation of African American Doctoral Students in College of Education Disciplines at Hispanic Serving Institutions and Emerging Hispanic Institutions in the Southwest United States (Texas, New Mexico, Arizona, California, Nevada and Colorado. Doctor of Education (EdD.), May 2020, 211pp., 47 tables, 5 figures, references, 266 titles

African Americans are underrepresented in higher education, especially in the graduate and doctoral level. Furthermore, research has identified numerous factors influencing African Americans to pursue doctoral studies in College of Education disciplines at postsecondary institutions of higher learning. However, there is a gap in the literature pertaining to factors influencing African Americans to pursue graduate and/or doctoral studies in College of Education disciplines at Hispanic Serving Institutions and Emerging Hispanic Institutions of higher learning in the Southwest United States. The purpose of this study is to bridge the gap pertaining to demographic factors in relationship to motivation and self-efficacy (Confidence) influencing African Americans decision to pursue doctoral studies in College of Education disciplines at HSIs Serving and Emerging HSIs in the Southwest United States.

DEDICATION

The journey of my doctoral studies would not have been possible without the support and love of my family. First, I give credit to God Almighty (Jesus Christ) because He made it all possible. Secondly, I would like to thank my mother Rebecca Atterberry for her love and support throughout the doctoral journey. To my father Lloyd Atterberry, thank you for never giving up on me during my early struggles in life and I know you are smiling from Heaven right now as your son accomplished something nobody thought it could be done. To my sisters Tracy, Michelle and Melissa, thank you for your patience and understanding while your little brother pursued his goal far away from home. To my grandparents Jessie Gillians and Isabella Rose Gillians, thank you for your love, guidance plus your prayers during my early struggles of dealing with developmental delay. You never turned your back on me, and I truly appreciate that very much. Jessie and Isabella Rose Gillians, I know you are smiling from Heaven now and I love you very much and I miss your presence. To all my aunts, uncles, cousins thank you for your love and support.

ACKNOWLEDGEMENTS

I will always be indebted to Dr. Irma S. Jones, my dissertation chair, for her support and guidance in this process. This was her first time serving as chair of a dissertation committee and she was very supportive from day one through the ups and downs along with the change of topic. I would also to give thanks and acknowledgements to the three other members of the dissertation committee: Dr. Laura Jewett, Dr. Karin Lewis and Dr. Jerry Fischer. These members of the dissertation committee were dedicated and saw tremendous potential in me as an emerging scholar. Thank you Dr. Jewett, Dr. Lewis and Dr. Fischer for all your input in assisting me to produce a quality dissertation worth scholarly discussion. Also, I would like to thank all the participants in my research study. Without your participation, none of this dissertation research would be possible. Last, I would like to thank the UTRGV Library Staff for their assistance and support in my research.

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CHAPTER I

INTRODUCTION

Each year, students of all ages and cultural ethnicities make the difficult investment decision in pursuing doctoral degrees at various colleges and universities. According to the U.S. Department of Education, National Center Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2017), three million students were enrolled in graduate degree programs. Graduate degree programs are simply defined as an area of study pursued after completing a baccalaureate (undergraduate) degree. Areas of study which fall in the category of graduate degree programs include masters and doctoral programs, with inclusion of professional doctoral programs in the disciplines law, medicine and dentistry (U.S. Dept. of Education, NCES, IPEDS, 2017). Of the three million students enrolled in graduate programs for Fall 2016, 363,000 of these students were African Americans. The 363,000 African American students encountered questions and doubts before making the decision to pursue graduate studies at colleges and universities.

In the enrollment of doctorate programs pertaining to the College of Education disciplines, a major issue to contend with is the underrepresentation of minorities, especially African Americans. It is important to investigate and explore the factors that lead African Americans to decide to pursue doctoral studies in higher education. Additionally, there is a need to explore why historically marginalized population groups such as African Americans decide to pursue doctoral studies. Furthermore, the need for exploratory investigation of factors influencing African Americans decisions to pursue doctorate degrees in College of Education

disciplines are important. There has been some research which identified factors influencing African Americans to make the decision of pursuing doctoral studies. However, there is still a need to explore whether factors influencing African Americans to pursue doctoral studies at Hispanic Serving Institutions (HSIs) of Higher Learning are similar or different to the factors influencing African Americans to pursue doctoral studies at Predominately White Institutions (PWIs) of higher learning.

Statement of Problem

According to the National Science Foundation Report (NSF) (NSF, 2017), there has been an increasing trend of underrepresented minorities enrolling in doctoral education with a 31% increase in African Americans earning doctorate degrees during a 10-year timeframe. From 2005 to 2015, the percentage of African Americans earning doctoral degrees increased from 1,500 to slightly below 2,500 (NSF, 2017). Overall, according to the NSF, National Center for Science and Engineering Statistics, Survey of Earned Doctorates statistics (2016), 4303 individuals earned doctoral degrees in the discipline of education. Of the 4303 doctoral recipients, African Americans represented 14.9% of the doctoral degrees earned in the discipline of education. Additionally, African Americans comprised 6.6% of doctoral degrees earned in all disciplines (NSF, NCSES, Survey of Earned Doctorates, 2016).

Table 1

4303 Education Doctoral Degree Recipients by Ethnicity NSF National Center for Science and Engineering Statistics Survey of Earned Doctorates 2016

Ethnicity	Percentage
African American	14.9%
Hispanic/Latino	7.5%
American Indian or Alaska Native	0.7%
Asian	4.9%
More than one race	2.3%
Other race or race reported	0.8%
Ethnicity not reported	1.8%
White	67.1%
Total	100%

Table 2

31,759 Doctoral Degree Recipients by Ethnicity (All Fields) NSF, NCSES Survey of Earned Doctorates 2016

Ethnicity	Percentage
African American	6.6%
Hispanic or Latino	7.2%
American Indian or Alaska Native	0.4%
Asian	8.6%
More than one race	2.8%
Other race or race not reported	0.8%
Ethnicity not reported	2.1%
White	71.5%
Total	100%

African Americans are underrepresented at the doctoral level” (Dortch, 2016, p. 350).

According to the NSF, NCSES, Survey of Earned Doctorates (2016), African Americans comprised only 6.6% of doctoral degree recipients in all disciplines of study. Furthermore, 14.9% of African Americans who earned their doctoral degrees were in the discipline field of Education (NSF, NCSES, Survey of Earned Doctorates, 2016). In different disciplines of

Education, African Americans comprise 23.4% of earned doctorates in Education Administration, 13.8% in Education Research, 16.4% in Teacher Education, 10.0% in Teaching Fields and 15.3% in other areas of Education (NSF, NCSES, Survey of Earned Doctorates, 2016).

Statement of Purpose

The purpose of this research study is to (1) explore factors leading to underrepresentation of African Americans in doctoral programs in College of Education disciplines. Also, another purpose of this research study is (2) to identify factors leading African Americans to pursue doctoral studies in College of Education fields at Hispanic Serving Institutions and Emerging Hispanic Serving Institutions of higher learning in the southwest United States. Thirdly, the purpose of the research is to (3) explore how these factors impact African Americans enrolling in doctoral programs in College of Education fields at Hispanic Serving Institutions and Emerging HSIs in the Southwest United States.

Research Questions

- 1) What demographic factors predict the dependent variable confidence of African Americans pursuing doctoral studies in a College of Education discipline at HSIs or emerging HSIs in the Southwest United States?
- 2) What demographic factors predict the dependent variable motivation in General Self-Efficacy of African Americans in pursuing doctoral studies in College of Education disciplines at HSIs or emerging HSIs in the Southwest United States?

Overview of Methodology

This research study will be conducted utilizing quantitative methodology. Quantitative research is the method utilized for the purpose of testing a theory's objectivity by an examination of the variables through relationship (Creswell, 2014). The setting of this research occurred online at Hispanic Serving Institutions (HSIs) and emerging HSIs of higher learning that have doctorate programs (PhD or EdD in College of Education disciplines). The main method of collecting data was the General Self Efficacy Scale. It was created by Schwarzer and Jerusalem in 1995. It was also utilized in a study by Dortch (2016). In consultation with the methodologist, the researcher modified the General Self Efficacy Scale that is geared toward African Americans who are pursuing doctoral studies in a College of Education discipline at HSIs and emerging HSIs in the Southwest United States.

To explore factors of African Americans pursuing doctoral studies in College of Education disciplines at HSIs and Emerging HSIs, this study utilized self-efficacy. Self-Efficacy was developed by Albert Bandura and has four areas of concepts. These areas of concepts are (1) performance outcomes (accomplishments in performance), (2) being observant of others, (3) evaluative feedback and (4) physiological feedback (Bandura, 1997). These concepts can serve as an indicator on how much effort the individual is willing to commit to an activity, how they will move forward in difficult challenges and showing resilience when encountering uncharted territory (Bandura, 1986).

Rationale and Significance

The justification for conducting this research study is the need for more in-depth data that explores factors influencing African American students' decisions in pursuing doctoral degrees in a College of Education discipline at a Hispanic Serving Institution (HSI) of higher learning. Overall, there is very little literature that thoroughly examines the process of students making the decision to enroll in a College of Education discipline doctoral program (EdD). Furthermore, literature is very scarce when specifically geared toward African American students in their process of deciding to enroll in an EdD program or PhD program (McCallum, 2017).

Role of the Researcher

I, the researcher, investigated and categorized all Hispanic Serving Institutions (HSIs) and emerging HSIs of higher learning (PhD and/or EdD) in College of Education disciplines. An important approach the research embarked upon is identification of all HSIs and emerging HSIs of higher learning in the southwest United States of America with doctoral programs in College of Education disciplines. Next, I the researcher substantiated the accredited schools and websites and recorded all College of Education disciplines. It is important to note that each school has a different classification describing the categorization of College of Education disciplines. Once the list was generated, then I the researcher submitted an email to graduate coordinators in doctorate programs in College of Education fields at those postsecondary institutions to specifically solicit information on only African Americans who are enrolled in College of Education doctoral programs. The researcher selected the HSIs and emerging HSIs with

enrollment of African Americans in the doctoral program for College of Education disciplines. For clarification, the survey instrument will be the Graduate Student Self-Efficacy Scale. The researcher will be solely responsible for collecting, analyzing and coding of all data information in the General Self-Efficacy Scale on Graduate level.

Researchers Assumption

The main population focus of this study is simply African American doctoral students in College of Education at HSIs and emerging HSIs in the Southwest United States. Mainly, I the researcher realized the importance of making a difference in helping fellow African Americans excel and be equally represented in doctoral studies in the discipline field of education. Currently, I the researcher is in the All-But-Dissertation (ABD) Doctoral stage at The University of Texas Rio Grande Valley in Edinburg Brownsville TX, a Hispanic Serving Institution (HSI).

Definition of Key Terminology

For the purposes of this research study, the terms utilized will be identified and unambiguous as to the meaning of the terms. Here are the following terms utilized in the research study:

African American is an individual who is a descendant of enslaved Africans who endured the trans-Atlantic slave trade (Forson, 2018).

Emerging Hispanic Serving Institution is a minority institution serving greater than 10% plus between 15% and 24% full time equivalent undergraduate students of Latino/a descent (Excelencia in Education, 2017a).

Hispanic is one of Spanish speaking origin mostly Mexican descent.

Hispanic Serving Institution is a non-profit degree granting institution of higher learning with more than 25% of the full time equivalent undergraduate student population who are of Latino/a descent and a low-income student population (Calderon Galdeano & Santiago, 2014).

Latino is one of native Puerto Rican, South American, Cuban descent.

Persister is an individual who enrolls in college and continues to be enrolled until he/she completes the degree (Hagedorn, 2005).

Organization of the Dissertation

In this research study, chapter two of the dissertation addressed the literature review on the factors impacting African Americans in their decision to pursue doctoral studies in College of Education programs. These factors are (1) factors influencing African American students to pursue doctoral degrees in higher education, and (2) factors influencing historically marginalized populations decision to pursue doctoral studies. Chapter three addressed the quantitative research methodology to be used in this research study and will further explain why the researcher selected to use quantitative methods. Chapter four discussed the findings based on the surveys and/or interviews the researcher conducted. Chapter five addressed the conclusions along with the limitations and significance of the study. Finally, chapter five provides recommendations for future studies.

CHAPTER II

REVIEW OF LITERATURE

Pursuing a doctorate degree in higher education is one of the most challenging and demanding tasks an individual encounter. The effort of pursuing enrollment in a doctorate degree Program requires a lot of time, effort and sacrifice by the individual. When enrolling in doctorate programs, a major issue to contend with is the underrepresentation of minorities, especially African Americans. In the literature review, the central focus is the factors influencing African Americans to pursue doctoral degrees. The issues to be addressed are the factors influencing African American students to pursue doctoral degrees in higher education.

Factors Influencing African Americans to Pursue Doctoral Studies in Higher Education

The journey for African American doctoral students to finish their doctorate degree is full of obstacles along the way (Felder, 2010). Research has indicated the main reasons for the slow progression of doctorate degree completion among African Americans in the U.S. include a low completion rate in prior educational level, and insufficient representation of faculty who are not Caucasian (Gasman, Hirschfield, & Vultaggio, 2008; Thompson, 2006; Willie, Grady, & Hope, 1991). Faculty in higher education can play a significant role in the success of doctoral students by becoming heavily engaged and involved in doctoral student development by assisting doctoral students in becoming emerging scholars (Gasman et al., 2008; Walker, Golde, Jones, Bueschel, & Hutchings, 2008). African Americans striving to earn their doctoral degree have one major

hurdle to overcome; to seek and find connection with the right advisor that provides appropriate mentorship for development on a professional level along with shaping their discipline identities to maximize socialization experiences as graduate doctoral students (Davidson & Foster-Johnson, 2001; Gasman et al., 2008; Thompson, 2006).

Research has indicated the most prominent topic of communication pertaining to faculty-student relationship among the African American doctoral experience is mentorship (Davidson & Johnson, 2001; Gasman et al., 2004; Taylor & Antony, 2000; Willie et al., 1991). Researchers have defined faculty mentoring as “activities and interactions that maybe related to work, skill acquisition, and social or emotional aspects of the mentor or the protégée” (Davidson & Johnson, 2001, p. 551). Researchers also stated the biggest factor which determined doctoral completion among African American doctoral students is faculty mentorship (Willie et al., 1991).

Research has reported the fraction of doctoral students not finishing their doctorate degree is one half (Lovitts, 2005). The major reason indicated for one half of all doctoral students not finishing their doctorate degree is simply the rapport between advisor and advisee has not been compatible (Council of Graduate Schools, 2010; Golde, 2005; Jacks, Chubin, Porter, & Connolly, 1983; Maher, Ford, & Thompson, 2004; Smith, 1995). Another reason for rapport relationship between advisor and advisee (student) on the doctoral level not being compatible is possibly due to no connection when interacting and no trust established along with insufficient support of intellectual growth and development (Golde, 2005). Furthermore, there is lack of clarity pertaining to expectations of what is entailed in the relationship between advisor and advisee (student) (Foss & Foss, 2008).

Due to perceptions of risks doctorate students may encounter in making changes to their advisor, they decide to make an adjustment by selecting a different graduate program (Golde, 2005). The detriment of inconsistent advising toward students who remain in the original degree of program track results in time for doctoral students to complete their doctoral degree being extended (Wao, Dedrick, & Ferron, 2011). Section two of the literature review will focus on the factors influencing historically marginalized populations decision to pursue doctoral degree.

Factors Influencing Historically Marginalized Populations Decision to Pursue Doctoral Degrees

Pursing a doctoral degree is a worthwhile and noble effort. There is, however, insufficient literature on what factors motivate African American females to pursue and finish their doctoral degree (Simon, 2010). Although the literature does not discuss motivation of African American females to pursue and finish a doctoral degree, the literature review does highlight key factors which play a significant role in the persistence of African American graduate students in general. These factors are (1) rapport development between advisor and student, (2) mentoring, (3) support from family and (4) support from peers (Simon, 2010). According to the second layer in the conceptual model of student college choice, the availability of resources, types of resources and structural supports along with barriers are the determining factors impacting choice of attending postsecondary institution of higher learning (Perna, 2006). Mentoring is a key component needed for African American students to be successful in doctoral studies. There have been indications from research which suggest components of school context impacts

restriction on how students from low socioeconomic backgrounds and minorities of cultural ethnicity backgrounds decide to attend which institution of higher learning (Perna, 2006). The key question to ask is how much African Americans consider the role mentoring plays in deciding to pursue doctoral studies.

Evidence has been shown how faculty advisors who provide support in a positive manner make a significant difference in the persistence of African American graduate students especially at the doctoral level. Hamilton (1998) conducted a study of African American and Latino doctoral students pertaining to persistence and discovered, as a result, the most important factor of these historically marginalized populations persisting in doctoral degree programs is positive academic advising. Furthermore, Clewell (1997) conducted a study on the retention of historically marginalized populations like African Americans and Hispanic doctoral students and she concluded the characteristic which stood out in minority students obtaining their doctoral degree was having an advisor who is very supportive of their work. Another piece of evidence to illustrate the importance of rapport development between advisor and student is the profound influence of positive communication between faculty and student to ensure the graduate student's "sense of belonging, academic achievement, and in some cases, professional development" (Harrison, 1996, p.231).

Evidence from literature reviews indicate the importance of positive mentoring as a key attribute toward historically marginalized population groups persistence in doctoral degree completion. Hamilton (1998) along with Willie, Grady and Hope (1991) mentioned the importance of mentoring as an essential factor that played a tremendous role in the persistence of

African American doctoral students. Furthermore, researchers concluded from their study the importance of African American students having mentors of the same cultural ethnicity background as legitimate and often would seek mentorship support from outside of the academic department (Patterson-Stewart et al., 1997). Another piece of evidence pertaining to mentorship as a factor for persistence in doctoral degree completion among historically marginalized population groups is the importance of having effective mentorship for African American doctoral students to persistence toward degree completion at predominately white institutions (PWIs) of higher learning (King & Chepyator-Thomson, 1996).

Evidence from the literature indicates the importance of support from family as an instrumental factor identified for effective doctoral degree persistence of historically marginalized groups (Simon, 2010). A researcher conducted a study of 12 African American graduate students matriculating at a southern university and confirmed these students firmly believe in the importance of support from family to assist them with persistence in graduate school (Miller, 1993). To further expound on the evidence, the researcher stated, “family support, in some cases, filled voids which existed in other deficient relationships between students and faculty” (Miller, 1993, p.111). Moreover, to further validate the instrument of support from family as an important factor in persistence toward degree completion on the graduate level, another researcher stated, “family support is a primary source of encouragement outside of the academic environment” (Bickhman-Chavers, 2003, p.159).

Additional evidence from researchers concludes that motivation of African American students to complete their doctoral degree comes from their family members. Family members

push students by placing an essential emphasis of education as a major priority (Bingman, 2003; Harrison, 1996). Historically marginalized groups of African American and Latinos who currently matriculate in graduate school share a key characteristic for effective persistence. The characteristic is the encouragement given by their parents to be never afraid of pursuing advanced higher education (Clewell, 1987). Finally, a researcher concluded family members possibly play a significant role as “relief from the everyday pressures wrought by the demands of school” (Phillips-Evans, 1999, p.178).

The evidence presented in the literature review of positive contributions for effective persistence of African American students in graduate and doctoral degree programs is very beneficial; however, the issue of African American females who earned doctoral degrees in the STEM field of engineering is not documented (Simon, 2010). It is very essential to note racial issues during the process of doctoral studies play an important significant role pertaining to knowledge building and facilitation of support for success of doctoral students who are of African American descent (Felder, Stevenson, & Gasman, 2014). Numerous researchers have concluded racial experiences of African American graduate students do play a significant role in their academic achievement in preparation for teaching academic careers in higher education along with leadership roles (Antony & Taylor, 2000; Cleveland, 2004; Morehouse & Dawkins, 2006, Nettles, 1990).

During the timeframe between 1975 and 1999, doctoral recipients of color (African American descent) had the lowest percentage out of all ethnicities who earned doctoral degrees. Doctoral recipients’ percentage was at ten percent (National Science Foundation, 2012).

According to the National Science Foundation (2012), slightly fewer than 4,000 (3,697) doctoral degree recipients in 1991 were minorities while slightly fewer than 28000 (27,440) doctoral degree recipients were of Caucasian descent. In the timeframe 1991-2001, African Americans comprised only slightly fewer than six percent (5.4%) of overall doctoral degrees obtained across the board in all fields of discipline (National Science Foundation, 2012). Researchers have concluded African American doctoral recipients are long underrepresented and research must be explored to know how students of African American descent can be fully supported once they have made the decision to enroll in a doctoral program (Morehouse and Dawkins, 2006).

Researchers Taylor and Antony (2000) discovered motivation for doctoral students to conduct research was linked directly to their racial experience. They also reported African Americans felt the pressure of showing their Caucasian peers and faculty they could succeed in doctoral studies without the risk of answering narratives of not being intellectually competent as false (Taylor & Antony, 2000). Additionally, African Americans desire to enter doctoral degree programs as moral obligations to correct social injustices and create change in social justice is linked directly to the agenda of enhancing and improving historically marginalized underserved communities (Gasman et al., 2008; Hopp et al., 2003). Section three of the literature review will concentrate on addressing factors influencing African American students decision to pursue doctoral degrees.

Factors Influencing African American Students Decision to Pursue Doctoral Degrees

The number one issue of priority in addressing graduate education is the lack of diversity in the field of graduate education (Council of Graduate Schools, 2004; National Science Foundation, 2008). Students of diverse backgrounds bring key essential attributes of cultural knowledge to the classroom and work environments. The cultural knowledge diverse students contribute to the classroom significantly impacts three areas: (1) work in academia, (2) research and (3) global competition (McCallum, 2016). Knowing the rationale for African Americans not enrolling in doctoral programs is important; however, it is also vital to know what influences African Americans to enroll in doctoral programs (McCallum, 2016). There is inadequate information about factors that motivate African Americans to make the critical decision of enrolling in doctoral school (Weisbuch, 2015).

Researchers reported that family lineage experiences impact plans of African Americans both academia and career (Pearson & Bieschke, 2001). There are debates in literature relating to the pertinence of family roles to persistence in postsecondary institutions of higher learning (Ceja, 2006; Choy, 2002; Conklin & Dailey, 1981; Perna, 2000; Plank & Jordan, 2001) and how this assist with clarity of family roles influences in the phase of doctoral decision making. Furthermore, research in the literature reviews existing students are more likely to enroll in postsecondary institutions of higher learning when parents are actively involved and engaged in the college decision making process than students whose parents are not actively involved and engaged in the college decision making process (Conklin & Dailey, 1981; Hossler, Schmit & Vesper, 1999; Perna, 2000).

Research indicates scholarly literature has taken for granted not discussing enough on the African American family's mannerisms in the African American student's lives. The family's involvement has not been examined from the culturally distinct perspective (Coard et al., 2007; Hill, 1999, 2003; Smith, 2009) not in total association with "normative paradigms for parental involvement in education" (Smith, 2009, p.172) according to the standards of Caucasian families who come from middle- class backgrounds. McCallum (2016) reported the utilization of cultural distinctions are the mannerisms of support African American families incorporate to prepare their children for enrolling in higher learning institutions. Methods of African American family involvement in postsecondary institutions of higher learning are the following: (1) making difficult decisions pertaining to finances, (2) having conversations pertaining to which cocurricular and extracurricular activities to engage/join at the postsecondary institution of higher learning and (3) making sure their children are connected to loved ones and the African American community (Herndon & Moore, 2002; Maton et al., 1998; Smith, 2009).

Researchers noted research done on family involvement pertaining to postsecondary institutions of higher learning generally leans toward the role of parents; however, it was stated that those from underrepresented populations acknowledged the importance siblings and extended family members as being equally valuable as a traditional family (Carson, 2009; Cole & Omari, 2003; Herndon & Hirt, 2004; Moore, 2003; Nobles, 2006; Phinney, Dennis, & Osorio, 2006). Two studies, Ceja (2006) and Herndon and Hirt (2004) conducted provide evidence of family support as a critical resource to assist with college success. Ceja (2006) conducted a study which states Chicana students utilized siblings as a reliable source to obtain information on

postsecondary institutions of higher when the parents never earned a baccalaureate degree.

Herndon and Hirt (2004) conducted a study by interviewing African American students and their families and the African American students divulged they did receive support financially, emotionally, morally and socially from family members besides their parents before and during matriculation. It is very important to understand there are similarities pertaining to family involvement in the process of deciding attendance of doctoral school and strategies of support families utilized for their children while matriculating at postsecondary institutions of higher education. The decision to enroll in graduate school will likely be made during the college years by the students (Bersola et al., 2014).

Research on how African American students are influenced by family members to decide on pursuing doctoral degrees does not exist. This leads to a need for investigation of how family involvement plays a significant role in student's decision to pursue graduate studies (McCallum, 2016). McCallum (2016) identified five key aspects of African American families which can influence African American student's decision to pursue doctoral studies. These aspects are (1) having strong work ethic and education, (2) having family roles which are adaptable, (3) having networks of extended family kinship, (4) having strong flexible coping skills and (5) having strong orientation in religion. Strategies that are effective and not effective in recruiting and retaining the best and brightest students of color in PhD programs are not clearly identified (Weisbuch, 2005).

African Americans comprised slightly under 14% (13.6%) of the population in the U.S.; however, they comprised only slightly above seven percent of the PhDs awarded in 2010

(Langdon et al., 2011; National Center for Education Statistics, 2012). The majority of African Americans who earned PhDs in 2010 were in the field of education instead of the science related fields. This discrepancy resulted in the science related fields being left behind, leading to difficulty closing the gap in areas of prosperity, security, health, environment and quality of life (Orfield, 2014). Along with the enhancement of African American quality of life, everyone will benefit greatly when graduate education increases in diversity (McCallum, 2017). The Council of Graduate Schools (2008) reported there are three major ways in which everybody benefits with increased diversity in graduate education. They are (1) the more diverse persons with advanced degrees, the greater chances we have to solve complex issues occurring in ongoing changing world, (2) the more diverse individuals with advanced degrees, the better they can provide a significant presence in having opportunities to utilize their talents to boost economy, improve initiatives in health and utilize arts, humanities, and social sciences to enrich communities and (3) the more diverse persons with advanced degrees, the greater chance society has in upholding standards of higher living which include higher effectiveness of national security.

There has been no literature on factors influencing students decision to matriculate in a PhD program (Millett, 2003). Research on factors playing a significant role in the decision of African American students to enroll and matriculate in a PhD program is very scarce (McCallum, 2017). There are a few researchers who believed the decision of African American students to enroll in PhD programs comes when African American students feel a greater responsibility to become valuable assets and contributors in the African American community (Louque, 1999; Schwartz et al., 2003; Williams et al., 2005). In graduate education, one issue not

researched thoroughly enough is the drive or sincere interest in boosting or giving back to the community. This is a serious cultural phenomenon of the African American community (McCallum, 2017). Overall, there is not much literature which thoroughly examines the process of students making the decision to enroll in a PhD program; furthermore, literature is very scarce when specifically geared toward African American students in their process of deciding to enroll in a PhD program (McCallum, 2017).

Therefore, for students to have a realistic chance to enhance their work, students rely on the following factors to influence their decision to enroll in graduate programs: (1) positive experiences in preparatory graduate school programs and (2) positive communications and rapport with faculty on both the undergraduate and graduate degree level (Anderson & Swazey, 1998; Hathaway, Nagda, & Gregerman, 2002). Louque (1999) conducted a study of five African American women who earned their PhDs and shared the key factors of having passion and drive to better their family, along with being a service to the African American community as their key to success in the academic arena. Schwartz (2003) along with Williams and other researchers (2005) conducted studies in congruence with Louque (1999) which primarily focused on what factors led African American females to be inspired and encouraged to pursue and matriculate in PhD programs. As a result, both studies indicated the encouraging factors of African American females to pursue a PhD was (1) being a service to the African American community and (2) having the chance to repay gratitude by giving back to individuals who aided in terms of supporting and influencing them to go earn their degrees (Schwartz et al., 2003; Williams, 2005).

Louque (1999), Schwartz et al (2003) and Williams et al (2005) all concluded the main theme of their studies was the passion and hunger to give back was viewed as a responsibility as members of the African American culture instead of a choice. Researchers reported no real surprise of African Americans who matriculate in PhD programs having the intensity and drive to give back to the community. The reason for the drive and motivation of giving back is simply they earned their undergraduate degrees at Historically Black Colleges and Universities (HBCUs) (HBCUs; Brazziel, 1983; Perna, 2001; Solórzano, 1995).

Despite the increase of African Americans earning baccalaureate degrees (6.3%), there is no justification for the irregularities pertaining to percentages of African Americans earning doctorates in science and engineering in comparison to students of non-African American descent (Lewis, Ginsberg, & Davies, 2004; NSF, 2015). African American female doctoral students encountered a double edge sword challenge of being underrepresented according to both categories of racial ethnicity and gender (Ong, Wright, Espinosa, & Orfield, 2011). Researchers have argued African American female doctoral students must have enough mentoring and support networks for success (Bertrand Jones et al., 2015).

When African American females are only the individuals of color and female of color in their departments, they deal with marginalization, isolation, and alienation (Bertrand Jones et al., 2015; Ong et al., 2011). Research scholars emphatically place a greater emphasis on the African American female students' need for positive support systems in order to persist toward completion of their degree. This argument was designed to dispute persistence factors against African American female graduate student success (Bertrand Jones et al., 2015; Felder & Barker,

2013; Gay, 2007; Lewis, Ginsberg, & Davies, 2004; Nettles & Millett, 2006). Research scholars also argued African American graduate students need the following components in order to persist: (1) substantial support financially, (2) faculty who are accessible, available and approachable and (3) an environment that is supportive (Bertrand et al., 2015; Lewis et al., 2004; Nettles & Millett, 2006).

Limited research has been explored that solely concentrates on first- generation or African American students motivation to pursue doctoral studies; however, the majority of studies have been geared toward persistence, attrition and retention of first- generation and/or African American students in graduate doctoral degree programs (Morehouse & Dawson, 2006; Johnson-Bailey et al., 2008; Prospero & Vohra-Gupta, 2007; Ivankova & Stick, 2006).

Researchers grouped factors influencing desire to pursue graduate and doctoral school studies into three categories: institutional, environmental and motivational (King & Chepyator-Thomson, 2006). In the first category, programs and policies of post- baccalaureate postsecondary institutions concentrating on the availability of finances including assistantships for schooling and other support forms were considered institutional. Category two, feature the atmosphere of campus and availability of role models and mentors to provide services pertaining to support academically and socially, falls into the environmental factors category. Finally, category three entitled motivational factors “includes students’ attitudes, beliefs and values that were important in maintaining the level of intrinsic and extrinsic achievement impetus necessary for the rigors of doctoral study” (King & Chepyator-Thomson, 1996, p.171).

Research has been explored pertaining to what motivates students to pursue doctoral degrees (professional doctorate EdD) and the significant implications on their lives both professionally and personally (Wellington & Sikes, 2006). Based on the results, no real generalizations were able to be determined. Consequently, the results produced a profound statement: “we gained insight into the professional doctorate experiences of these particular individuals, and these insights are in themselves of value” (Wellington & Sikes, 2006, p.732). In conclusion, the researchers came to a consensus that there is no relationship between skills developed in professional doctorate and skills related to the profession (Wellington & Sikes, 2006). The fourth issue addressed in the literature review is the factors influencing African American students decision to pursue doctoral degrees in education.

Factors Influencing African American Students Decision to Pursue Doctoral Degrees in Education

Slightly fewer than four percent of doctoral degrees earned in the U.S. during the year 1976 were of African American descent (U.S. Department’s National Council of Statistics, 2007). Of 1,253 doctoral degrees in earned by African Americans in 1976, slightly over 60% (61%) or 766 were African American males (U.S. Department’s National Council of Statistics, 2007). With the enrollment rate of African American males becoming stagnant, there is an important call to pay attention to obtaining more relevant information pertaining to African American male experiences in postgraduate degree programs (Ingram, 2016).

For the 2002-2003 timeframe, 175 PhDs in biological and biomedical sciences were earned by African Americans, 116 PhDs in engineering, 63 PhDs in physical sciences and 20

PhDs in mathematics (NCES, 2007). On the other hand, the percentage of Caucasian students who earned doctorate degrees in the STEM field during the 2002-2003 timeframe was 75% (NCES, 2015). Therefore, the trend is leaning toward African Americans pursuing doctorates in the areas of social sciences and humanities while Caucasians would more likely pursue doctorates in social sciences and natural sciences (Ingram, 2016).

There is insufficient literature review of African American males who are persisting in higher education, especially on the doctorate level (Ingram, 2016). There is an important call for researchers to answer a very essential question: investigating the experiences African American males encounter in order to utilize their reasoning in making the decision of enrollment in graduate school (Ingram, 2016). African Americans who provide valuable information pertaining to their experiences in doctoral school can assist researchers in presenting valuable insight based on their experiences which lead to the decision of enrollment in doctorate programs (Ingram, 2016). Ingram (2016) conducted a study of African American males enrolled in doctoral school and concluded the factors influencing these African American males to pursue doctoral education were (1) faculty encouragement, (2) enhancing images of African American community and (3) motivation in achieving altruistic goals. The findings of Ingram's work were in total congruence with prior investigative research pertaining to giving back to underrepresented students as a priority (Bingman, 2003; Carlone & Johnson, 2007). The fifth and final issue addressed in the literature review is factors influencing African American students' decision to pursue doctoral degrees in higher education with a concentration (specialization) in student affairs.

Factors Influencing African American Students Decision to Pursue Doctoral Degrees in Higher Education with Concentration in Student Affairs

There has not been enough investigative research pertaining to the complex decision of enrolling in a doctoral degree program (McCallum, 2015). Researchers have explored the following issues pertaining to doctoral school: (1) processes of socialization (Antony, 2002; Austin, 2002; Ellis, 2001), (2) rates of both attrition and completion (Bowen & Rudenstine, 1992; Golde, 2005; Lovitts, 2001) and (3) dissertation issues/concerns (Boote & Beile, 2005; Nettles & Millett, 2006). Amazingly, the factor that inspires the decision of students to pursue doctoral studies is not discussed on a regular basis (McCallum, 2015). McCallum (2015) explored the importance of postsecondary institutions of higher learning to increase knowing what factors inspire African American students to pursue graduate degree programs along with facilitation of enrollment in order to recruit and retain the brightest diverse students in a graduate program successfully.

In comparison between African Americans and other cultural ethnic groups over the last two decades, researchers have noted major discrepancies in both doctoral degree enrollment and doctoral degree attainment (Council of Graduate Schools, 2004; Lehner, 1980; Poock, 2007). Out of all the conferred PhD degrees, slightly fewer than five percent were comprised of African Americans (Lehner, 1980). In 2007, African Americans consisted of 12% of the U.S. population; however, accounted for slightly fewer than six percent of doctorate degrees conferred in the U.S. (Council of Graduate Schools, 2008). A significant statement was made according to the

Woodrow Wilson National Fellowship Foundation that said, “it is simply unclear what works best, or does not work, in recruiting and retaining doctoral students of color” (Cross, 2005, p. 3).

McCallum (2015) proposed a strategic suggestion of investigating solely what factors play a significant role in motivating African Americans to pursue enrollment in doctoral degree programs instead of discussing obstacles and barriers which discourage African Americans from pursuing doctoral studies. Researchers have identified the following factors as the main influences in African Americans pursuing doctoral degrees: (1) financial packages which are accessible and available (Nevill & Chen, 2007; Millett, 2003), (2) commitment and mission to passionately give back to the African American community (Louque, 1999; Schwartz, Bower, Rice, & Washington, 2003; Williams, Brewley, Reed, White, & Davis-Haley, 2005) and (3) opportunities pertaining to career advancement (Anderson & Swazey, 1998; Stoecker, 1991).

Evidence in literature does discuss the significance that positive meaningful dialogue students’ have with faculty and peers influences their decision to pursue and enroll in doctorate studies (Ethington & Smart, 1986; Harper et al., 2005; Wagner & Nettles, 1998; Wallace, 1965); consequently, there is not much literature review on how student interactions in a meaningful manner with student affairs personnel on campus at postsecondary institutions of higher learning influence student decisions to pursue enrollment in doctorate studies (McCallum, 2015).

The reason for insufficient literature pertaining of student interaction/dialogue with student affairs personnel influencing the decision to pursue enrollment matriculation in a doctorate program is simply that researchers discussed the assumption of student affairs personnel being engaged and involved with interacting with students pertaining to various

opportunities in undergraduate research programs and/or programs of student support (Kinzie & Kuh, 2004). One problem still exists is the fact literature reviews vaguely discuss the relationship rapport established and developed between student and student affairs personnel at postsecondary institutions of higher learning (McCallum, 2015). The next section focused on the barriers of African Americans in graduate programs within the College of Education.

Limited studies have been investigated in the United States on a larger scale pertaining to demographic characteristics of doctoral programs at postsecondary institutions of higher learning (Boyce & Rikard, 2011). Researchers Golde and Dore (2001) explored demographic characteristics of doctoral programs students in the area of Arts and Sciences centered on five characteristics of doctoral students which are (1) Direction of career path after earning their doctoral degree, (2) Cultural ethnicity of doctoral students, (3) Gender of doctoral students who graduated, (4) Rate of employment for doctoral students, and (5) Method of how doctoral students support themselves financially. Golde and Dore (2001) reported (1) Slightly more than three fifths (63%) of students who earned their doctoral degree indicated they would like to be gainfully employed in higher education, (2) Not enough diversity among doctoral students with slightly over four fifths (82%) of the students in the doctoral program identified their cultural ethnicity as Caucasian, (3) The percentage of doctoral students who identified their gender as females was under 50% (40.6%),(4) The fraction of individuals who earned their doctorate degrees and obtained teaching positions only on part-time basis at postsecondary institutions of higher learning, and (5) The majority of students in doctoral programs utilized support financially from universities to fund cost of graduate school. The study conducted by Golde and

Dore (2001) did not take into consideration two areas (1) characteristics of faculty and (2) the faculty makeup of doctoral granting institutions (Boyce & Rikard, 2011). The next graduate program within College of Education with barriers for African Americans is the field of Counselor Education.

Barriers for African American Doctoral Students in Counselor Education

Although preparation of future leaders in the counselor education profession is the focal point of a counselor education degree (Goodrich et al., 2011), the issue of the lack of clarity pertaining to professional standards in obtaining a certain amount or type of counseling experience needed is necessary for admission into doctoral programs (Boes, Ullery, Millner, & Cobia, 1999; Schweiger, Henderson, Mc Caskill, & Collins, 2012; Warnke, Bethany, & Hedstrom, 1999). Advising graduate students who have a desire and genuine interest in pursuing and obtaining a doctoral degree is the most important responsibility of counselor educators (Sackett et al., 2015).

Ambiguity of the guidelines leads to confusion about how graduate students can navigate successful gainful employment in academia (Schweiger et al., 2012; Warnke, Bethany, & Hedstrom, 1999). Students who apply for admission into the doctoral program of counselor education and supervision are competent as entry-level clinicians and who have passed all requirements of The Council for Accreditation of Counseling and Related Education Programs accredited master's program (Goodrich et al., 2011). Nelson, Canada, and Lancaster (2003) noted the conclusion of one study that noted necessary component for doctoral admission into a counselor education supervision program was work experience.

There is insufficient data pertaining to master's students receiving advice from counselor educators on how much post- masters experience should be obtained before entering a doctoral program (Sackett et al., 2015). Consequently, doctoral applicants have been provided with inadequate guidelines of the types or post master's experience requirements are needed or preferred to become hired as a faculty member at postsecondary institutions of higher learning where they are uniquely qualified as graduates of counselor education and supervision (Sackett et al., 2015).

To fully understand the experiences and perspectives of African American graduate students in counseling, it is very important to analyze how legislation and other trends in education have a significant impact on education experiences of African Americans in the United States (Haskins et al., 2013). Consequently, there is not much information addressing the experiences of African Americans who are matriculating in graduate counseling programs at Predominately White Institutions of higher learning (Henfield, Owens, & Witherspoon, 2011). According to The National Center for Educational Statistics (2010), there was a five percent increase of African Americans matriculating at PWIs from nine percent in 1976 to 14% in 2008. One main reason for this increase is the legislation passed in the 1960s which include the Civil Rights Act of 1964 and Higher Education Act of 1965. These essential pieces of legislation were designed and implemented for the purpose of not denying African Americans an opportunity to enroll at PWIs of higher learning (Haskins et al., 2013). However, researchers report African Americans at PWIs of higher learning still encounter stressors emotionally, academically, socially, and personally (Edman & Brazil, 2009; Thomas et al., 2007). The next graduate

program area within College of Education for discussion of barriers encountered by African Americans is School Psychology.

Barriers for African American Doctoral Students in School Psychology

In the school psychology profession, the main issue researchers have noted is the lack of diverse faculty members (Zhou, Bray, Kehle, Theodore, Clark, & Jenson, 2004). From the beginning, representation of ethnic minorities in school psychology has been scarce (Fagan & Wise, 2007). There has been low representation of persons of non-Caucasian descent in academia (Turner, Gonzalez, & Wood, 2008). In the field of school psychology, the main issue is the lack of diversity teaching school psychology in higher education (Graves & Wright, 2009). Slightly less than one percent of faculty members teaching school psychology at postsecondary institutions of higher learning are of African American descent (Curtis, Lopez, Batsche, Minch, & Abshier, 2007). Slightly under two percent responding to the 2007 American Psychological Association membership survey were identified as African American (American Psychological Association, 2007). Based on the Survey for Earned Doctorates (SED) conducted by the National Science Foundation (NSF), the National Institutes of Health and the U.S. Department of Education, it was reported there were 238 doctoral- level school psychologists produced in 2006 by both departments of Education and Psychology (Hoffer, Hess, Welch, & Williams, 2007). Also, it was reported slightly under seven percent of African Americans earned doctorate degrees in school psychology in 2006 (Graves & Wright, 2009).

In 2005, six percent of students earning their doctoral degrees in school psychology were of African American descent. In 2004, two percent of students earning their doctoral degrees in

school psychology were of African American descent (Graves & Wright, 2009). In addition to not enough diversity in the field of school psychology, the shortage of faculty members in the field of school psychology at postsecondary institutions of higher learning is nationwide. It is warranted for serious efforts to be made in order to diversify the field of school psychology (Graves & Wright, 2009). Although the discussion pertaining to shortage of school psychologists is not a new subject, the main issue is the shortage of school psychologists impacting practitioners in public schools and higher education faculty (Curtis, 2002).

The lack of African Americans in the field of school psychology has not received much attention for discussion (Graves & Wright, 2009). The critical point is that the field of school psychology takes valuing diversity very seriously (National Association of School Psychologists, 2003). Researchers have reported the statistical data of ethnic minorities in the field of school psychology that (1) African American school psychologists composed less than two percent (1.5%) of the school psychology profession in 1980-1981 and (2) In 1989-1990 and 2004, African Americans comprised of 1.9% of the approximate 20,000 members of the National Association of School Psychologists (Curtis, Grier, & Hunley, 2004). The next section of the literature review addressed the barriers of African Americans in doctoral programs of higher education with a concentration (specialization) in student affairs.

Barriers of African American Doctoral Students in Higher Education with Specialization in Student Affairs

The most important purpose of graduate programs in the field of higher education and student affairs is simply to prepare students for employment in engaging with students pertaining

to activities inside and outside the classroom at postsecondary institutions of higher learning (Linder, Harris, Allen, & Hubain, 2015). The goal of higher education student affairs graduate program is to make a concerted effort in striving to recruit students of non-Caucasian descent in order to meet the growing diverse backgrounds of students pursuing baccalaureate degrees at postsecondary institutions of higher learning (Taub & McEwen, 2006). As the diversity of students in HESA graduate program continues to grow, faculty in HESA graduate programs must consider that (1) graduate students have unique learning styles, (2) experiences in education prior to graduate school are not one size fits all and (3) have unique social identities in their classrooms (Danowitz & Tuitt, 2011).

The characteristics of inclusion, diversity and social justice are heavily emphasized in higher education and the student affairs fields (American College Personnel and National Association of Student Personnel Administrators [APCA &NASPA], 2010). Non-Caucasian graduate students have dealt with microaggressions coming from fellow peers and teaching faculty on these levels: individual, institutional and structural (Gildersleeve, Croom, & Vasquez, 2011; Nadal, Pituc, Johnston, & Esparrago, 2010). Graduate students of non-Caucasian descent have dealt with the following racial microaggressions aimed at their direction: (1) Criminality assumptions and lack of intelligence (Sue, Lin, Torino, Capodilupo, & Rivera, 2009; Torres, Driscoll, & Burrow, 2010), (2) Oversensitivity, misunderstandings and denial of racism as a serious issue by Caucasian students, (3) Tion (s) of being isolated, marginalized and tokenized (Gildersleeve, Croom, & Vasquez, 2011; Torres, Driscoll, & Burrow, 2010), (4) Issue of credibility being questioned/challenged (Gomez, Khurshid, Freitag, & Lachuk, 2011), (5) Fear of

Caucasian faculty providing feedback which can be challenged and/or disputed (Constantine & Sue, 2007) and (6) Paternalistic adoration expressions (Clark, Spanierman, Reed, Soble, & Cabana, 2011).

The way students of Caucasian descent respond to race/racism discussions lead to continued microaggressions racially which results as a driving force for discussions on racial matters (Linder, Harris, Allen, & Hubain, 2015). Researchers have noted students of non-Caucasian descent said their Caucasian peers are very hesitant and reluctant to discuss issues involving race (Constantine & Sue, 2007; Harris, Linder, Hubain, & Allen, 2013; Sue, Lin, Torino, Capodilupo, & Rivera, 2009), there is no expectation of receiving credit for being able to engage in reflecting on their race (Bondi, 2013) and utilized crying as a method of deflecting attention pertaining to the racialized behaviors (Sue, Lin, Torino, Capodilupo, & Rivera, 2009). These behaviors negate opportunities to have meaningful dialogue on issues pertaining to race and negate opportunities for students of Caucasian descent and students of non-Caucasian descent to grow and develop as people (Linder, Harris, Allen, & Hubain, 2015). The next section of the literature review is geared toward the issue of persistence of minorities, especially African Americans and females, in completing their graduate doctoral degree.

Issue of Persistence Among Minorities in Graduate/Doctoral Completion

One major factor which may possibly contribute to minorities not completing their graduate master's program and/or doctoral program is the complexity of life issues pertaining to graduate students. Bell (2011) reported the population of graduate students matriculating at institutions of higher learning in the U.S. is slightly under 2 million (1.7 million) and the number of graduate

degrees confirmed each year was 465,000. Graduate students of traditional age encounter challenging obstacles such as the development of their identity (Erickson, 1959) and the delay decisions of career establishment and marriage. In addition, graduate students are expected to be effective managers of multiple roles. Issues/challenges reported by researchers of students being effective managers of multiple roles include feelings of both insecurity and decreased self-esteem along with additional increased workload (Hyun, Quinn, Madon, & Lusting, 2007).

On the issue of persistence, there is not much research relating persistence rate among graduate students; however, research has been conducted pertaining to rate of persistence among undergraduate students (Ott & Markewich, 1985; Stolzenberg, 1994; Cooke, Sims, Peyrefitte, 1995; Most, 2008). The most likely demographic of a graduate student in the 21st century include (1) adults who are employed on a full time basis, (2) family oriented with major responsibilities, (3) not enrolled full time in graduate school, (4) the gap from obtaining their baccalaureate degree to matriculating in graduate school is very large, (5) relying on commuting to class and from class, (6) taking courses in graduate school are accessible online or via distance education, and (7) having difficulty making friends that are relatable to them (Jeffreys, 1998; Polson, 2003; Hyun, Quinn, Madon, & Lustig, 2006).

Moreover, researchers reported graduate students faced issues/challenges of increased stress and anxiety (Gerdes & Mallinckrodt, 1994; Mazumdar et al., 2012). Kasworm (2003) stressed the importance for institutions of higher learning to implement student services to support adult learners in graduate school. Furthermore, adult students were identified as individuals with a “palette of life experiences as being colored with older age, full time

employment, and roles of spouse and parent” (Fairchild, 2003, p.11). In the life of a graduate student, the most defining characteristic is the challenges graduate students encounter in managing multiple roles along with fulfilling obligations of roles and responsibilities outside the classroom (Benshoff, Cashwell, & Rowell, 2015). The next group impacted by complexity of life issues among graduate students is females.

Researchers and scholars have explored the role strain among females in graduate studies (Benshoff, Cashwell, & Rowell, 2015). The definition of role strain is when an individual begins to experience stress or strain from behavior becoming incompatible with expectations and obligations which lead to a connection with a non-plural social role (Role, Strain, n.d.). The three main components of role strain identified among females are (1) role conflict due to demands being incompatible simultaneously, (2) role overload which means time to fulfill all demands are limited, and (3) role contagion is being involved with one role while simultaneously being stressed about another role (Home, 1998). Female graduates are more likely to be at risk for role strain than male graduate students because (1) females tend to deal with more negative life experience events, (2) communication and togetherness within their family is lowered, (3) inadequate resources of finances and (4) limited amount of time for quality leisure (Lynch, 2008; Mallinckrodt & Leong, 1992). Role strain does impact older female graduate students as they are likely candidates for mental and physical difficulties stress related when they add the role of student to other roles already established (Anderson & Mieziotis, 1999; Lynch, 2008). Furthermore, other factors which influences how much time an older female graduate student spends in multiple roles are cultural variables (Leyva, 2011).

Due to the complexity of lives of graduate students, it is very important for college counselors and staff members in student affairs areas at postsecondary institutions of higher learning to start paying attention to the needs of graduate students (Benshoff, Cashwell, & Rowell, 2015). In order to address the needs of graduate students, one major aspect of importance is the ability to comprehend challenges graduate students confront daily (Benshoff, Cashwell, & Rowell, 2015). Due to the assumption of maturity level, graduate students did not always seek the assistance of special services (Polson, 2003).

Researchers have reported one reason for the increased number of graduate students visiting counseling centers is due to the rising cases of mental health problems at institutions of higher learning impacting the population of student enrollment of all age levels (Gallagher, 2011; Kitzrow, 2009). There are going to be some students of traditional age with mental health issues of significance who eventually will encounter and deal with those same issues as graduate students (Benshoff, Cashwell, & Rowell, 2015). The more graduate students realize that accepting counseling services to deal with issues of mental health and/or seeking counseling service to deal with issues of life, the more they would be an inspiration to all students to feel no shame or embarrassment in seeking out counseling services on campus (Benshoff, Cashwell, & Rowell, 2015).

To truly understand the complexities of life among graduate students, it is important to note the different perspectives of graduate students pertaining to development. First, some of the graduate students matriculate in graduate school for the purpose of career advancement. Most of these graduate students who pursue graduate studies for career advancement are in their 20s or

30s (Benshoff, Cashwell, & Roswell, 2015). Consequently, individuals who have multiple work experiences over their lifetime are matriculating in graduate school for the purpose of commencing a new career. These individuals are in their 30s, 40s, and 50s (Benshoff, Cashwell, & Rowell, 2015). Therefore, most graduate students are in the middle stages of life in contrast to traditional- aged college students who are transitioning from early adolescent to adulthood. The age differences and differences in development are key components for counselors in postsecondary institutions of higher learning to consider when dealing with the complexity of life issues of graduate students (Benshoff, Cashwell, & Roswell, 2015).

The next perspective to take into the account of complexities of graduate student life issues is that graduate students do not possess the same point of view as undergraduate students (Kasworm, 2003). The reason graduate students do not possess same point of view as undergraduate students is simply that graduate students are challenged to think more critically. Despite applying several theories of development to graduate student adults, it is important to not underestimate the work by researchers Erickson, Chickering, and Perry in establishing the initial foundations utilized for the purpose of effectively counseling graduate students (Benshoff, Cashwell, & Rowell, 2015). According to the viewpoint of Erikson (1959), undergraduate students deal with identity issues more than graduate students. Counselors in postsecondary institutions of higher learning must understand and realize graduate students are dealing with the struggle of Erikson's stage intimacy and generativity.

The major difference between intimacy and generativity is simply intimacy addressed how individuals go about the method and manner of developing and establishing relationships

with family, friends, and significant others while generativity focused on the issue of contributing to society, less attention on recognition and achievement from an individual standpoint and more focus on family, mentoring and parenting. The struggle between intimacy and generativity occurs in graduate students who are in the age range from 30s to 50s (Benshoff, Cashwell, & Rowell, 2015). To further discuss the complexities of life issues, the following section of the literature review addressed women both matriculating in graduate school and obtaining tenure in higher education teaching.

Females in Graduate/Doctoral School and Teaching in Higher Education

The percentage of women obtaining their doctoral degree increased dramatically by 34% during a 30- year timeframe from 1970-2000 (Kuperberg, 2009). Slightly over one half (53%) of persons who obtained their doctoral degrees were females (Aud et al., 2012). Females might become more tempted to pursue motherhood while simultaneously pursuing graduate and/or doctoral degrees (Holm, Prosek, & Godwin Weisberger, 2015). However, there is a trepidation pertaining to females in higher education and motherhood. That trepidation is when females take time to pursue higher education, their chances of commencing motherhood is delayed by three fourths of a year (Rindfuss, Morgan, & Offutt, 1996). Additionally, the fraction of females without children who commence in their academia career of teaching at postsecondary institutions of higher learning will eventually attempt to pursue motherhood within the first 12 years of their academic teaching career (Mason & Goulden, 2004).

The major caveat of delaying motherhood for females in academic teaching at higher institutions of higher learning is the issue of infertility. In other words, the further delay of

motherhood, the more risk of infertility occurs (Holm, Prosek, & Godwin Weisberger, 2015). According to the U.S. Department of Health and Human Services (2012), one third of couples by age 35 will experience fertility issues and the rate of fertility among females starts to decline by age 30. In conclusion, it is important for postsecondary institutions of higher learning to become very sensitive toward females who are both pursuing doctoral degrees and teaching careers in academia along with their desire to pursue motherhood.

Despite the statistic that one half of the doctoral degrees recipients in the U.S. are women (Aud et al., 2012), more males accept tenure track positions of Assistant Professor at institutions of higher learning than females (Wolfinger, Mason, & Goulden, 2009). Researchers have reported for females to achieve the goal of motherhood and successful careers in academia, they must be prepared to make numerous sacrifices along with dealing with many challenges and obstacles (Gilbert, 2008; Trepal & Stinchfield, 2012). It has been mentioned by researchers that females in graduate school can possibly have successful tenure if they pursue and become mothers during graduate school (Spalter Roth & Kennelly, 2004); however, research on females encountering pressures of pursuing motherhood during their doctoral studies has not been discussed (Holm, Prosek, & Godwin Weisberger, 2015). The next section will discuss mentoring identified as the number one factor graduate students experience in completing their doctoral degree.

Mentoring

African Americans striving to earn their doctoral degree have one hurdle to overcome. The hurdle is to seek and find a connection with an advisor/faculty member who provides appropriate mentorship for development on a professional level along with shaping of discipline identities to maximize socialization experiences as graduate doctoral students (Davidson & Foster-Johnson, 2001; Gasman et al., 2008; Thompson, 2006). Research ranks mentorship as the most prominent topic of communication pertaining to faculty-student relationships among the African American doctoral experience (Davidson & Foster-Johnson, 2001; Gasman et al., 2004; Taylor & Antony, 2000; Willie et al., 1991). Researchers have defined faculty mentoring as “activities and interactions that may be related to work, skill acquisition, and social or emotional aspects of the mentor or the protégée” (Davidson & Foster-Johnson, 2001, p. 551).

Evidence from literature reviews indicate the importance of positive mentoring as a key attribute toward historically marginalized population groups persistence in doctoral degree completion. Hamilton (1998) along with Willie, Grady and Hope (1991) mentioned the importance of mentoring as an essential factor that played a tremendous role in the persistence of African American doctoral students. Furthermore, Patterson-Stewart et al (1997) concluded from their study the importance of African American students having mentors of the same cultural ethnicity as appropriate and often would seek mentorship support from outside of the academic department in order to achieve that goal. The importance of having effective mentoring for African American doctoral students at Predominately White Institutions (PWIs) of higher learning was another piece of evidence pertaining to mentorship as a factor identified for African

Americans to complete their doctoral degree (King & Chepyator-Thomson, 1996). Oden (2003) summarized positive advisor-student relationships and mentoring relationships were the means that allowed four African American females enrolled in the STEM doctoral field of engineering to effectively persist toward degree completion at a PWI doctoral engineering program.

An essential component in the role of developing effective graduate student development is mentoring (Taylor & Neimeyer, 2009). Research indicated students exhibit more self confidence in both their ability to communicate effectively and establishing a professional identity when they received mentoring (Elman, Illfelder-Kaye, & Robiner, 2005). Research also indicated students who have been mentored exhibit satisfaction with their doctoral programs and are able to effectively connect within networked communities (Clark, Harden, & Johnson, 2000). For mentees (protégés) to integrate their identities on a professional level, it is essential that mentors play an integral part in assisting mentees to forge their own path of professional identity (Vespia, 2006).

Another aspect of mentoring relationships is the advisor-advisee connection. The advisor-advisee relationship can develop into mentor-mentee over a period when the advisor passes on his/her structural knowledge and simultaneously provides supervision of the mentee's development relating to having specific intellectual skills for success (Monsour & Corman, 1991). Most graduate programs indicate the most essential aspect for success in graduate school is mentoring (Taylor & Niemeyer, 2009). Russell and Adams (1997) agreed mentoring is vital for success in graduate school because they stated the key essential element crucial for growing and maturity in both graduate school and life is graduate school mentorship. Numerous

researchers have been seeking to answer a very important question: what factors contribute to mentoring success and/or what are the characteristics of an ideal mentor (Taylor & Neimeyer, 2009).

For any mentoring relationship to be effective in doctoral school, it is important for the doctoral students to establish rapport with his/her advisor, faculty or chairperson (Barnes & Austin, 2009; Holley & Caldwell, 2012; Ku, Lahman, Yeh, & Cheng, 2008). In addition, there must be mutual respect between the mentor and student along with having common goals and areas of research interests (Mullen, 2007). Moreover, Mullen (2007) profoundly stated not all advisors, faculty or chairpersons who are skilled in teaching academia are good mentors. The major reason for persistence lacking among doctoral students is the non-presence of effective mentoring from faculty at postsecondary institutions of higher learning (The 7th International Conference, 2012). It was reported when faculty has no experience or training on how to effectively mentor doctoral students, they go back to their comfort zone of supervisory role instead of being involved in the learning of the doctoral on a personal level (Linden et al., 2013). The next section discussed academic advising as second factor identified by graduate students experience in completing their doctoral degree.

Academic Advising

Evidence has shown how faculty advisors who provide positive support make a significant difference in the persistence of African American graduate students, especially at the doctoral level. Hamilton (1998) conducted a study of African American and Latino doctoral students pertaining to persistence and discovered, as a result, the most important factor of these

historically marginalized populations persisting in doctoral degree programs is positive academic advising. Furthermore, Clewell (1987) conducted a study on the retention of historically marginalized populations like African Americans and Hispanic doctoral students and concluded the characteristic which stood out in minority students obtaining their doctoral degree was having an advisor who was very supportive of their work. Another piece of evidence to illustrate the importance of rapport development between advisor and student is the profound influence of positive communication between faculty and student to ensure the graduate student's "sense of belonging, academic achievement, and in some cases, professional development" (Harrison, 1996, p.231). Advising graduate students who have a desire and genuine interest in pursuing and obtaining a doctoral degree is one of the most important responsibilities of faculty counselor educators (Sackett et al., 2015). The next section will discuss family support as the third factor identified by graduate students experience in completing their doctoral degree.

Family Support

Evidence from the literature indicates the importance of support from family as an instrumental factor identified for effective doctoral degree persistence of historically marginalized groups (Simon, 2010). Miller (1993) conducted a study of 12 African American graduate students matriculating at a southern university and confirmed these students firmly believed in the importance of family support to assist them with their persistence in graduate school. To further expound on the evidence, the researcher stated, "family support, in some cases, filled voids which existed in other deficient relationships between students and faculty" (Miller, 1993, p.111). Moreover, to further validate the instrument of support from family as an

important factor in persistence toward degree completion at the graduate level, another researcher stated, “family support is a primary source of encouragement outside of the academic environment”(Bickhman-Chavers, 2003, p.159).

Additional evidence from researchers concludes that motivation of African American students to complete their doctoral degree comes from their family members. Family members push students by placing an essential emphasis on education as a major priority (Bingman, 2003; Harrison, 1996). Among historically marginalized groups, African American and Latinos who currently matriculate in graduate school, share family support as a key characteristic for effective persistence. That characteristic is the encouragement given by their parents to never be afraid of pursuing advanced higher education (Clewel, 1987). It was concluded that family members possibly play a significant role for “relief from the everyday pressures wrought by the demands of school” (Phillips-Evans, 1999, p.178). The next section discussed peer support as the fourth factor identified by graduate students in completing their doctoral degree.

Peer Support

Evidence from the literature indicates a historically marginalized population of African Americans enrolling and matriculating in doctoral school utilized a peer support system as a mechanism to effectively persist in doctoral programs. These peer support systems are situated both within and outside of their academic department (Simon, 2010). Consequently, researchers have reported that African American doctoral students at PWIs have a strong inclination to seek support from outside their academic department or outside the institution they attend (Ellis, 1997; Miller, 1993; Oden, 2003). Ellis (1997) views these outside support systems that African

American graduate students explore as a mechanism for assistance in succeeding academically; however, the main detriment of this relationship is that this rapport development does not allow African American doctoral students to become more integrated into the academic departments they represent at a social level.

Another evidence of peer support system as an instrument for effective persistence among African American doctoral students is the provision of peer relationships as “informal opportunities for learning in a safe place in which students can share ideas and experiences as well as develop strategies for navigating the academic terrain and departmental politics (Harrison, 1994, p. 231). Moreover, communication between African American graduate students at PWIs leads to an opportunity to have candid conversations with other African American graduate students at PWIs on issues and concerns pertaining to navigating successful matriculation along with the ability of having social needs fulfilled (Harrison, 1994). Finally, researchers have concluded the necessity for psychological stability of African American graduate students who are enrolling and matriculating at PWIs of higher learning is simply African American peer relationships (Patterson-Stewart, Ritchie, & Sanders, 1997).

Summary

Chapter two addressed the factors mentoring, academic advising, family support and peer support playing roles graduate students experience in completing their doctoral degrees. The review of literature mentioned the importance of mentoring in assisting African American students be successful in completing their doctoral degree. Furthermore, the review of literature discussed the importance of academic advising for graduate students to complete their doctoral

degree. In addition, support from family and peers were highlighted in the review of literature as factors graduate students encounter in order to complete their doctoral. Finally, the complexities of graduate student life were discussed in the review of literature. Along with the complexities of graduate student life, role strain/role identity and intimacy and generativity phase of graduate student life were identified as factors graduate student experience pertaining to persistence in completing a doctoral degree. Chapter three discussed the methodology for this research study.

CHAPTER III

METHODOLOGY

In Chapter III, the methods utilized for exploring factors influencing African Americans to pursue doctoral degrees in a College of Education discipline are explained. The College of Education unit encompasses those programs of study which offer education PhD or EdD degrees at postsecondary institutions. For this study, Hispanic Serving Institutions (HSIs) and Emerging HSIs of higher learning in the southwest United States was the central focus. Chapter III highlighted the research rationale, participants in the research study, research setting, research sample and data sources, data collection methods, data analysis methods, issues of trustworthiness, and limitations.

Research Rationale

For the purpose of exploring factors influencing African Americans to pursue doctoral studies in a College of Education discipline at HSIs and Emerging HSIs of higher learning, a quantitative method was utilized. Quantitative research is a specific method of research with the purpose of testing a theory's objectivity by examination of relationship among variables (Creswell, 2014). A major purpose of this research was to highlight the exploration of current African American doctoral students in the College of Education disciplines at Hispanic Serving Institutions (HSIs) and Emerging HSIs of higher learning in the southwest United States. This study identified the factors that influence African Americans to pursue doctoral studies in program disciplines within College of Education. Again, for clarity purposes, the College of Education Field encompasses programs that offer doctoral degrees (PhD or EdD) in areas within

the College of Education. These areas include Educational Administration, Curriculum and Instruction, Educational Leadership, Teaching, Learning, and Culture (TLC), Higher Education, Special Education, Counseling Psychology, School Psychology, Educational Psychology, Counselor Education and others depending on the unit setup.

Research Setting/Context

The setting for this research study will be situated online correspondences with HSIs and Emerging HSIs in the southwest United States. Creswell (2014) noted the importance of quantitative researchers to identify the purpose of survey research and identify the population of the sample. Adams (2011) conducted a study of first generation African American students' motivation to pursue doctoral degree studies and concluded research needed expansion of diverse backgrounds and specified differences between full time and part time doctoral students. The next section discusses the participants in this study.

Research Sample and Data Sources

Participants for this research study consisted of African American students who are currently enrolled in a doctoral program in College of Education disciplines at HSIs and Emerging HSIs in the southwest United States. For this study, the Hispanic Serving Institutions focused on the Southwest portion of the United States. The area will consist of states Texas, Arizona, New Mexico, California, Nevada and Colorado. Purposive sampling will be utilized in this research study. In purposive sampling, the responsibility of the researcher utilizing this method is simply to identify specific characteristics of population and locate those individuals meeting the criteria of the population (Johnson & Christensen, 2008). This study utilized

convenient sampling instead of purposive sampling. For this quantitative research study, the specific characteristics the researcher identified are African American doctoral students enrolled in doctoral programs specifically in the College of Education discipline at HSIs and Emerging HSIs of higher learning in the southwest United States.

The goal for this research study is to have at least 84 African American doctoral students in doctoral degree programs in College of Education disciplines at HSIs and Emerging HSIs of higher learning in Texas, New Mexico, Arizona, California, Nevada and Colorado. These students must be of African American descent, or who identified themselves as being bi-racial, must be traditional or non-traditional, must be full time or part time students in their doctoral studies. In addition, they can be in any stage of their doctoral study (first year, second year, comp exam, All But Dissertation, and Dissertation defense). This number was determined by the researcher's methodologist. A main reason to have 84 African American students pursuing doctoral studies in College of Education fields for this study is because the researcher utilized multiple regression analysis to have a strong power analysis. Multiple Regression is a specific type of regression that features one dependent variable and two or more independent variables (Johnson & Christensen, 2008). Originally, the researcher's methodologist wanted the effect size to be at 0.80 with desired statistical power at 0.8 featuring four predictors at the 0.05 probability level. When calculating the number of participants needed, the result was 21. So, my methodologist suggested adjusting the effect size to 0.15 with a desired statistical power at 0.8 with four predictors at the 0.05 probability level. That is how the number 84 was derived for the number of participants in this research study.

If the number of participants does not turn out as the researcher would have liked, then the researcher needs to be prepared in adjust accordingly. All participants in the research study consisted of only African American full time or part time doctoral students in College of Education fields at HSIs and Emerging HSIs of higher learning in Texas, New Mexico, Arizona, California, Nevada and Colorado. For each HSIs and Emerging HSIs of higher learning in the Southwest United States, the researcher accounted for developing an IRB Form and submit email correspondence to coordinators of doctoral programs in College of Education disciplines requesting information about participant requirements and what the research entailed. Additionally, the researcher ensured all participants that confidentiality will be kept, and they can withdraw from the study without penalty.

Earlier, it was mentioned the researcher was accountable for securing permission from College of Education or Graduate Office coordinators to assist with the distribution of material to only African American doctoral students enrolled in that College of Education doctoral program. This is important simply because approval from these Coordinators in Colleges of Education or Graduate Office is one main prerequisite requirement before the research study can be conducted. In this case, the College of Education doctoral program field coordinators at HSIs and Emerging HSIs of higher learning and Graduate Offices are the gatekeepers. Creswell (2014) emphasized the importance of researchers needing approval from gatekeepers to obtain access for the research to be conducted in an ethical manner.

Data Collection Methods

The instrument utilized for this research is the General Self-Efficacy Scale. The General Self-Efficacy Scale was developed by Schwarzer and Jerusalem (1995). In utilizing the General Self-Efficacy, the researcher had the capacity to explore how African American doctoral students enrolled on College of Education disciplines would perform in their program. Dortch (2016) utilized the General Self-Efficacy in her research which discussed a phenomenological narrative of two African American female doctoral students.

In addition, the researcher secured permission from Dortch (2016) in utilizing the modified version of the General Self-Efficacy for this study. For this research, the questions in the General Self-Efficacy were modified. An example would be the researcher proposed this question to African American doctoral students: Assuming you were motivated to do your best, please indicate how much confidence you have that you could do at your college on a scale from no confidence to complete confidence in (1) Completing all statistical coursework requirements with at least a “B” or better. Another question asked is to tell me your confidence level in completing doctoral education coursework requirements with at least a “B” or better. The General Self-Efficacy Scale has been utilized in other studies and the reliability, stability and construct validity is high (Leganger, Kraft, & Roysamb, 2000; Schwarzer, Mueller, & Greenglass, 1999). The next section addressed the methods of data analysis.

Data Analysis Methods

The main tool utilized in the data analysis is SPSS 25. SPSS 25 is computer software utilized for calculating quantitative research (IBM SPSS 25, 1017). For this research study, gender is one of the independent variables to utilize in multiple regression. Therefore, the researcher will be required to transform gender from a nominal variable to an interval variable. The interval variable is also known as a dummy variable. The dummy variable, gender, can be coded as 0 or 1 and must be entered multiple regression as an interval variable (Gay, Mills, & Airasian, 2009). Scores in multiple linear regression consists of criterion variable (Y) that is predicted utilizing multiple predictor variable (x_1, x_2, \dots, x_k) (Hinkle, Wiersma, & Jurs, 2003). The demographic independent variables of year in doctoral school, last semester GPA, final masters GPA, expected timeframe of graduation, education level of mother and father, socioeconomic income status, marital status, employment status, child rearing responsibilities and percentage of child rearing responsibilities were categorical. Therefore, dummy coding was utilized. Davis (2010) stated it is possible for the creation of complex dummy coding when variables have multiple categories. In this research, the demographic variables had multiple categories. Dummy coding utilizes only 0 and 1 (Fox, 1997).

In this research, the predictors will be gender, education level of mother and father, final masters GPA, percentage of child rearing responsibilities, expected graduation year date, last semester GPA, employment status, student status, marital status, socioeconomic status and year in school. These factors will predict how much motivation and confidence African Americans have in deciding to pursue doctoral studies in College of Education disciplines at HSIs and

Emerging HSIs of higher learning in Texas, New Mexico, Arizona, California, Nevada and Colorado. Issues of trustworthiness will be the next area of focus to be addressed.

Issues of Trustworthiness

To ensure trustworthiness in this research study, the researcher must incorporate validity in quantitative research and reliability. Validity in quantitative research is defined as can the researcher draw inferences that are meaningful and useful from scores obtained on the instruments (Creswell, 2014). Creswell (2014) mentioned the three specific types of validity to seek in quantitative research. They are (1) content validity (does the items measure content that was designed to measure?), (2) predictive or concurrent validity (did the scores predict criterion measure and did the results of scores correlate with other score results?) and (3) construct validity (are the items measuring hypothetical constructs or concepts as it is intended to do so?). It is important to establish reliability in quantitative research pertaining to the utilization of instruments. The definition of reliability is determining whether scores on a specific instrument are consistent internally, results demonstrate stability over a period time and whether the method in which the examination is administered and scored are consistent (Creswell, 2014).

As mentioned earlier, the instrument (General Self Efficacy Scale Higher Education) which the researcher is going to utilize in this research study will be modified. Creswell (2014) makes a clear emphasis of importance for a quantitative researcher to reestablish validity and reliability during data analysis modifying an instrument or combining instruments in a study. The reason is simply because the validity and reliability of original instrument may not be similar for new instrument (Creswell, 2014).

Creswell (2014) mentioned four steps to assist quantitative researcher in maintaining reliability and validity which are (1) inclusion of sample items from the instrument so the reader can get clarification in being able to see items utilized, (2) major content sections of instrument must be indicated, (3) make sure to indicate plans for pilot testing or field testing and be prepared to provide a justification for these plans and (4) if utilizing mail survey, make sure steps for administering survey are identified and follow up to ensure that the response rate will be high.

Furthermore, Creswell (2014) discussed six steps in data analysis and interpretation for quantitative research. Step one is reporting information regarding participants in the sample who did the survey and did not attempt the survey. This is important for the researcher because the researcher must account for all African American doctoral students in College of Education disciplines at HSIs who participated and did not participate in the research study. Step two is discussing research bias that may encounter. Fowler (2009) defines research bias simply as how nonresponses on survey estimates influence the study. Step three is providing a descriptive analysis of data for both independent and dependent variables in the study. Step four entails identification of statistical procedure the researcher will utilize in the study. Step five is to make sure the statistics and statistical computer program utilize for examining inferential research questions or hypotheses in proposed study must be identified. Lastly, step six entails the presentation method. In the presentation method, the results must be displayed in tables or figures and the importantly interpret results from statistical exams utilized.

Limitations and Delimitations

For this research study, one limitation is that the focus of the study is geared toward only African American doctoral students in College of Education programs at HSIs and Emerging HSIs of higher learning in the Southwest United States. HSIs are situated in 20 U.S. states Puerto Rico; however, the only states covered for this research are Texas, New Mexico, Arizona, California and Nevada. Another potential limitation is not focusing on all doctoral programs at HSIs and Emerging HSIs of higher learning, just on College of Education programs. Furthermore, the number of participants maybe a limitation. In other words, participants maybe hesitant to share their experience and the researcher may not have enough resources in reaching the population sample. The researcher did set a high number of participants and may have to adjust accordingly. One more limitation for this study is gender. The researcher will utilize all full time and part time African American doctoral students in College of Education programs regardless of gender and age.

Summary

Chapter three provided detail of the methodology utilized for the research study. It mentioned the utilization of the phenomenological method of qualitative research and the strategies to ensure positive qualitative validity and qualitative reliability. In addition, the limitations for the research study were addressed along with the instrumentation tools that was utilized in this phenomenological research study. Furthermore, a detailed data collection and data analysis description was discussed along with who was going to be involved in the research study and the procedures of how the research is conducted.

CHAPTER IV
DATA RESULTS

The program software utilized in analyzing the data was IBM SPSS 25 (2017). Chapter four regarding data results/analysis is organized in the following manner: First, the demographics identified the participant cultural group (African American) and the number of males and females self-identifying themselves as African American who participated in this research study (See Tables 3 and 4). Secondly, the demographic factor year in school was identified and the highest frequency recorded was first year of doctoral study at 38.6% (N=34) and the lowest was fourth year or more of doctoral study at 18.2% (N=16) (See Table 5). Third, the demographic factor socioeconomic status was identified and the highest was income greater than \$75,000 at 63.6% (N=56) and the lowest was \$25,000 to \$49,999 at 4.5% (N=4) (See Table 6). Finally, the demographic factors regarding marital status, student status, employment status, child rearing responsibilities, percentage of child rearing responsibilities, last semester GPA, final masters GPA and education levels of both mother and father were addressed. Tables 7-16 provided detail frequency results for these demographic factors.

Table 3

Participant Cultural Group

African American	<u>Number</u>
	88

In this research study, there 88 doctoral students in College of Education disciplines who self-identified themselves as African American who participated voluntarily. These students who self-identified themselves as African American represented HSIs and Emerging HSIs in the southwest United States (Texas, New Mexico, Arizona, California, Nevada and Colorado). In addition, the participants represented diverse College of Education majors in pursuing doctoral degrees.

Table 4

Gender

	<u>Number</u>	<u>Percentage</u>
Males	20	22.7%
Females	68	77.3%
Total	88	100%

Out of the 88 African American participants in my research study, 77.3% of the participants identified their gender as female (N=70) and 22.7% of the participants identified their gender as male (N=20).

Table 5

Year in School

	<u>Number</u>	<u>Percentage</u>
1 st Year	34	38.6%
3 rd Year	21	23.9%
2 nd Year	17	19.3%
4 th Year or More	16	18.2%
Total	88	100%

Out of the 88 participants, the highest frequency recorded for the demographic factor year in school was 1st year at 38.6% (N=34). The second highest frequency recorded among the demographic factor year in school was 3rd year at 23.9% (N=21). 2nd year was the third highest frequency recorded for the demographic factor year in school. Finally, 4th year or more was the least frequency recorded regarding demographic factor year in school. According to SPSS 25 (2017), my research indicated eight African American males were in their first year of doctoral studies in College of Education disciplines at HSIs and Emerging HSIs in the southwest United States, two were in their second year of doctoral studies, five were in their third year of doctoral studies and three were in their fourth year or more of doctoral studies in College of Education disciplines at HSIs and Emerging HSIs in the southwest United States. Among the 70 African American female participants in my research study, 26 were in their first year of doctoral studies, 15 were in their second year of doctoral studies, 16 were in their third year of doctoral studies and 13 were in their fourth year or more of doctoral studies in College of Education disciplines at HSIs and Emerging HSIs in the southwest United States.

Table 6

Income Status

	<u>Number</u>	<u>Percentage</u>
Greater than \$75000	56	63.6%
\$50000-\$74999	20	22.7%
Less than \$25000	08	9.1%
\$25000-\$49999	04	4.5%
Total	88	100%

For the demographic factor income status (socioeconomic status), 63.6% of the 88 participants reported their income status (socioeconomic status) was greater than \$75000 (N=56). Next, the second highest frequency recorded regarding income status was 22.7% of African American participants in this study who reported their income status (socioeconomic status) ranging between \$50000 and \$74999 (N=20). The third highest frequency recorded regarding income status (socioeconomic status) was nine-point one percent of the African American participants in my study reported their income status was less than \$25000 (N=8). Finally, the least frequency recorded for income status (socioeconomic status) was four-point five percent of the African American participants reported income status ranging from \$25000 to \$49999 (N=4). The breakdown of socioeconomic status (income status) for the African American participants in my research were as followed: (1) two African American males and six African American female participants reported income less than \$25000, (2) zero African American males and four African American females reported income between \$25000 and \$49999, (3) one African American male and 19 African American female participants reported income between \$50000 and \$74999 and (4) 15 African American male and 41 African American female participants reported income greater than \$75000.

Table 7

Marital Status

	<u>Number</u>	<u>Percentage</u>
Married	43	48.9%
Single	33	37.5%
Divorced	09	10.2%
Widowed	03	3.4%
Total	88	100%

For marital status, 48.9% of the participants in my study indicated their marital status as married (N=43). That is the highest recorded frequency and the breakdown of the participants who indicated marital status as married was seven African American male participants and 36 African American female participants. The second highest frequency recorded regarding marital status was single at 37.5% (N=33). Out of the 33 African American participants in the research study, seven were males and 26 were females. Divorced was the third highest frequency recorded for marital status at 10.2% (N=9). Of the nine African American participants in my study who indicated their marital status as divorced, four were males and five were females. Finally, widowed was the least frequency recorded regarding marital status at three-point four percent (N=3). All three African American participants in my study who indicated marital status as widowed were females.

Table 8

Student Status

	<u>Number</u>	<u>Percentage</u>
Full Time	63	71.6%
Part Time	25	28.4%
Total	88	100%

For student status, 71.6% (N=63) of the African American participants who were in doctoral studies in College of Education disciplines at HSIs and Emerging HSIs in the southwest United States indicated their student status as full time. Of the 63 full time African American student participants in my study, 47 were females and 16 were males. 28.4% (N=25) of the African American participants in my study indicated their student status was part time. Of the 25

part time African American student participants in the study, 21 were females and four were males.

Table 9

Employment Status

	<u>Number</u>	<u>Percentage</u>
Full Time	76	86.4%
Part Time	06	6.8%
On Scholarship	06	6.8%
Total	88	100%

For employment status, the highest frequency recorded was full time at 86.4% (N=76). Of the 76 African American participants in my study who indicated full time employment, 14 were males and 62 were females. Both employment statuses of part time and on scholarship were recorded at six-point eight percent (N=6). Of the six African American participants who indicated their employment status as part time, one was male and five were females. Lastly, three African American male participants in the study indicated they were on scholarship and three African American female participants in my study indicated they were on scholarship.

Table 10

Child Rearing Responsibilities

	<u>Number</u>	<u>Percentage</u>
Yes	45	51.1%
No	43	48.9%
Total	88	100%

For child rearing responsibilities, 10 African American male participants indicated having child rearing responsibilities and 35 African American female participants indicated having child rearing responsibilities. Therefore, 51.1% (N=45) of the participants in my study

who self-identified themselves as African American indicated having responsibilities in child rearing. Furthermore, eight African American male participants in my study stated having no child rearing responsibilities and 35 African American female participants in the study stated having no child rearing responsibilities. In conclusion, 48.9%(N=43) of the African American participants in my study reported having no responsibilities in child rearing.

Table 11

Percentage of Child Rearing Responsibilities

	<u>Number</u>	<u>Percentage</u>
0%	43	48.9%
90%-100%	26	29.5%
50%-60%	15	17.0%
70%-80%	03	3.4%
10%-20%	01	1.1%
Total	88	100%

Regarding percentage of child rearing responsibilities, the highest frequency recorded was zero percent at 48.9% (N=43). Of the 43 African American participants in my study who indicated zero percent of child rearing responsibilities, eight were males and 35 were females. The second highest frequency recorded regarding percentage of child rearing responsibilities was 90%-100% at 29.5% (N=26). Seven African American male participants and 19 African American female participants in my study reported having child rearing responsibilities ranging from 90% to 100%. Next, those indicating 50%-60% child rearing responsibilities was the third highest frequency recorded at 17.0% (N=15). Three African American male participants and 12 African American female participants for my study reported having 50%-60% of child rearing responsibilities. Fourth, those indicating 70%-80% child rearing responsibilities was recorded as

number four in the frequency order at three-point four percent (N=3). All three African American participants my study who indicated 70%-80% of child rearing responsibilities were female. Lastly, the least frequency recorded regarding child rearing responsibilities was 10%-20% at one-point one percent (N=1). Only one African American female participant for my study indicated having 10%-20% child rearing responsibilities.

Table 12

Last Semester GPA

	<u>Number</u>	<u>Percentage</u>
3.8-4.0	65	73.9%
3.4-3.7	13	14.8%
3.0-3.3	10	11.4%
Total	88	100%

For the demographic factor last semester GPA, the highest frequency recorded was last semester GPA 3.8-4.0 at 73.9% (N=65). Of the 65 African American participants in my study who indicated last semester GPA 3.8-4.0, 15 were males and 50 were females. Secondly, those indicating last semester GPA 3.4-3.7 was next the highest frequency recorded according to last semester GPA at 14.8% (N=13). Of the 13 African American participants in my study who indicated 3.4-3.7 as last semester GPA, one was male and 12 were females. Finally, the least recorded frequency regarding last semester GPA was 3.0-3.3 at 11.4% (N=10). Of the 10 African American participants in my study who indicated 3.0-3.3 as their last semester GPA, two were males and eight were females.

Table 13

Final Masters GPA

	<u>Number</u>	<u>Percentage</u>
3.8-4.0	45	51.1%
3.4-3.7	33	37.5%
3.0-3.3	10	11.4%
Total	88	100%

For the demographic factor final masters GPA, the highest frequency recorded was final masters GPA 3.8-4.0 at 51.1% (N=45). Of the 45 African American participants in my study who reported 3.8-4.0 as their final masters GPA, nine were males and 36 were females. Secondly, the frequency recorded according to final masters GPA was 3.4-3.7 at 37.5% (N=33). Of the 33 African American participants in my research study who indicated 3.4-3.7 as their final masters GPA, seven were males and 26 were females. Finally, the least recorded frequency was the final masters GPA 3.0-3.3 at 11.4% (N=10). Two African American males and eight African American females in my research study reported 3.0-3.3 as their final masters GPA.

Table 14

Expected Graduation Date (Year)

	<u>Number</u>	<u>Percentage</u>
2020	28	31.8%
2021	20	22.7%
2022	14	15.9%
2019	12	13.6%
2023	11	12.5%
2024 or Beyond	03	3.4%
Total	88	100%

For expected graduation date (Year), the highest frequency recorded was 2020 at 31.8% (N=28). In my research study, 21 African American female participants and seven African American participants indicated their expected graduation date (Year) from HSI or Emerging HSI with their doctoral degree in a College of Education discipline was 2020. 2021 was the second highest frequency recorded regarding the expected date (Year) of graduation. In conducting my research, two African American male and 18 African American female participants indicated 2021 as the expected graduation (Year) date. Third, 2022 was frequency number three recorded among expected graduation date (Year) at 15.9% (N=14). 12 African American female and two African American male participants in my research study indicated 2022 as their expected graduation date (Year). Next, 2019 was number four in the frequency lineup recorded according to expected graduation date (Year) at 13.6% (N=12). 10 African American female and two African American male participants in my research reported 2019 as their expected graduation date (Year). 2023 was the next frequency in order recorded base on the expected graduation date (Year) at 12.5% (N=11). Four African American males and seven African American female participants in my research study indicated 2023 as their expected graduation date (Year). Finally, 2024 or Beyond was the least recorded frequency base according to expected graduation date (Year) at three-point four percent (N=3). Only one African American male and two African American female participants in my research study indicated 2024 or Beyond as the expected graduation date (Year).

Table 15

Education Level of Mother

	<u>Number</u>	<u>Percentage</u>
Some College	27	30.7%
High School Diploma	17	19.3%
Masters Degree	14	15.9%
Bachelors Degree	13	14.8%
Some High School	07	8.0%
GED	07	8.0%
Doctoral Degree	02	2.3%
Some Graduate	01	1.1%
Total	88	100%

Regarding education level of the mother, Some College was the highest recorded frequency at 30.7% (N=27). Six African American male and 21 African American female participants in my study conducted did report having Some College as the highest education achieved by their mother. Secondly, High School Diploma was the number two frequency recorded according to the education level of mother at 19.3% (N=17). Two African American male and 15 African American participants in my conduction of the research indicated High School Diploma was the highest education level achieved by their mother. Third, Masters Degree was the number three frequency recorded according to education level of the mother at 15.9% (N=14). Five African American male and nine African American female participants in my study reported Masters Degree as the highest education level obtained by their mother. Next, Bachelors Degree was the number four frequency recorded regarding education level of the

mother at 14.8% (N=13). Two African male and 11 African American females according to my research indicated the highest education level achieved by their mother was Masters Degree.

Some High School and GED were tied at eight-point zero percent (N=7) regarding order of frequency for education level of mother. Seven African American participants and zero African American male participants stated GED was the highest education level obtained by their mother; furthermore, one African American male and six African American female participants stated Some High School was the highest education level obtained by the mother. Then, Doctoral Degree was number seven in the frequency order regarding highest level of education obtained by the mother at two-point three percent (N=2). Two African American male participants stated in my study the highest level of education obtained by their mother was the Doctoral Degree. Finally, Some Graduate was the least frequent recording of highest education level obtained by the mother at one-point one tenth percent (N=1). Only one African American female participant in my research reported Some Graduate as the highest education level obtained by the mother.

Table 16

Education Level of Father

	<u>Number</u>	<u>Percentage</u>
High School Diploma	29	33.0%
Some College	21	23.9%
Some High School	12	13.6%
Bachelor's Degree	11	12.5%
Masters Degree	08	9.1%
Doctoral Degree	05	5.7%
GED	01	1.1%
Some Graduate	01	1.1%
Total	88	100%

Regarding education level of the father, High School Diploma was the highest recorded frequency at 33.0% (N=29). Two African American male and 27 African American female participants in my research indicated the highest education level obtained by their father was High School Diploma. Some College was the second highest frequency recorded regarding education level of the father at 23.9% (N=21). In my research conducted, seven African American male and 14 African American female participants confirmed Some College as the highest education level achieved by their father. Some High School was the third highest recorded frequency according to education level achieved by the father at 13.6% (N=12). My research stated two African American male and 10 African American female participants verified that Some High School was the highest level of education obtained by their father. The fourth highest frequency recorded according to education level of the father is Bachelors Degree at 12.5% (N=11). Nine African American female and two African American male participants confirmed the highest education level achieved by their father was Bachelors Degree.

Masters Degree was the fifth highest frequency recorded according to education level of the father at nine-point one percent (N=8). For confirmation in my research, five African American female and three African American male participants verified the highest education obtained by their father was Masters Degree. Next, Doctoral Degree was the sixth highest recorded frequency according to education level of the father at five-point seven percent (N=5). To validate this data in my study, two African American male and three African American female participants verified the highest education level achieved by their father was Doctoral Degree. Finally, GED and Some Graduate were tied for the least recording frequency based according to education level of the father at one-point one percent (N=1). For confirmation in my investigative study, one African American female confirmed the highest education level obtained by their was both GED and Some Graduate.

In addition, chapter four identified how the participants responded to the dependent variables of self-efficacy (confidence) and motivation (See Tables 17-26 for Self-Efficacy (confidence) frequency results). The items covered include level of confidence completing statistical coursework, confidence level completing doctoral education coursework requirements, completing writing coursework requirements on the doctoral level with at least a “B”, pass all qualifying exams, defend the dissertation with success, complete the dissertation and defend the dissertation with success. The scales on the confidence level ranged from No Confidence (N=1), Very Little Confidence (N=2), Some Confidence (N=3), Much Confidence (N=4) to Complete Confidence (N=5). For the motivation level of the participants in this research, tables one through six displayed the frequencies with the scales starting with Strongly Disagree (N=1),

Disagree (N=2), Neither Agree or Disagree (N=3), Agree (N=4) and Strongly Agree (N=5) (See Tables 27-32 for Motivation frequency results). In addition, a table is shown to indicate a correlation between self-efficacy (confidence) and motivation (See Table 34 correlation below).

Confidence Level (Self-Efficacy) Results

Table 17

Level of Confidence Completing Doctoral Writing Course Requirements with at Least a “B” or Better

	<u>Number</u>	<u>Percentage</u>
Complete Confidence	53	60.2%
Much Confidence	23	26.1%
Some Confidence	12	13.6%
Total	88	100%

For confidence level (Self-Efficacy) regarding completion of doctoral writing course requirements with at least a “B” or better, Complete Confidence was the highest recorded frequency at 60.2% (N=53). 41 African American female and 12 African American male participants confirmed in my study complete confidence in completing doctoral writing course requirements with at least a “B” or better. Much Confidence was the next highest frequency recorded regarding confidence in completing doctoral writing course requirements with at least a “B” or better at 26.1% (N=23). For validation of the data in my research investigation, 21 African American female and two African American male participants stated having Much Confidence in completing doctoral writing course requirements with at least a “B” or better. Some Confidence the least recorded frequency regarding confidence in completing doctoral writing course requirements with at least a “B” or better at 13.6% (N=12). Six African American

male and six African American females confirmed having Some Confidence in completing doctoral writing course requirements with at least a “B” or better.

Table 18

Level of Confidence Completing Doctoral Education Course Requirements with at Least a “B” or better

	<u>Number</u>	<u>Percentage</u>
Complete Confidence	53	60.2%
Much Confidence	27	30.7%
Some Confidence	08	9.1%
Total	88	100%

For level of confidence completing doctoral education course requirements with at least a “B” or better, Complete Confidence was the highest recorded frequency at 60.2% (N=53). 42 African American female and 11 African American male participants in my study reported having Complete Confidence in completing doctoral education course requirements with at least a “B” or better. Much Confidence was the second highest recorded frequency regarding level of confidence in completing doctoral education course requirements with at least a “B” or better at 30.7% (N=27). 21 African American female and six African American male participants verified my investigation of having Much Confidence in completing doctoral education course requirements with at least a “B” or better. Some Confidence was the least recorded frequency regarding confidence level of completing doctoral education coursework requirements with at least a “B” or better at nine-point one percent (N=8). Five African American female and three African American male participants stated in my research study they have Some Confidence in completing doctoral education coursework requirements with at least a “B” or better.

Table 19

Level of Confidence Completing Doctoral Statistical Requirements with at Least a “B” or Better

	<u>Number</u>	<u>Percentage</u>
Much Confidence	29	33.0%
Some Confidence	26	29.5%
Complete Confidence	24	27.3%
Very Little Confidence	09	10.2%
Total	88	100%

For confidence level of completing doctoral statistical requirements with at least a “B” or better, Much Confidence was the highest recorded frequency at 33.0% (N=29). 24 African American female and five African American male participants in my study investigation verified having Much Confidence in completing doctoral statistical requirements with at least a “B” or better. The second highest recorded frequency regarding level of confidence in completing doctoral statistical requirements with at least a “B” or better is Some Confidence at 29.5% (N=26). 19 African American female and seven African American male participants in my study confirmed having Some Confidence in completing doctoral statistical requirements with at least a “B” or better. Thirdly, Complete Confidence was the next highest recorded frequency regarding level of confidence in completing doctoral statistical requirements with at least a “B” or better at 27.3% (N=24). 17 African American female and seven African American male participants confirmed having Complete Confidence in completing doctoral statistical requirements with at least a “B” or better. Finally, Very Little Confidence was the least recorded frequency regarding level of confidence in completing doctoral statistical requirements with at least a “B” or better at 10.2% (N=9). Seven female and two male participants of African

American descent in my investigation study reported having Very Little Confidence in completing doctoral statistical requirements with at least a “B” or better.

Table 20

Earn a Cumulative Grade Point Average of at Least 3.0 on a 4.0 Scale After at Least Three Years of Study

	<u>Number</u>	<u>Percentage</u>
Complete Confidence	58	65.9%
Much Confidence	23	26.1%
Some Confidence	07	8.0%
Total	88	100%

In terms of earning a cumulative Grade Point Average of at least 3.0 on a 4.0 scale after three years of study, Complete Confidence was the highest recorded frequency at 65.9% (N=58). 46 female and 12 male participants of African American descent in my research verified having Complete Confidence in earning a cumulative Grade Point Average of at least 3.0 on a 4.0 scale after at least three years of study. Much Confidence was the second highest recorded frequency in terms of earning a cumulative GPA of at least 3.0 on a 4.0 scale after at least three years of study at 26.3% (N=23). To validate the data, 17 female and six male participants of African American descent in my research confirmed having Much Confidence in earning a cumulative Grade Point Average of at least a 3.0 on a 4.0 scale after at least three years of study. Finally, Some Confidence was the least recorded frequency in terms of earning a cumulative Grade Point Average of at least 3.0 on a 4.0 scale after at least three years of study at eight-point zero percent (N=7). Five female and two male participants who self-identified themselves as African American indicated having Some Confidence in earning a cumulative Grade Point Average of at least 3.0 on a 4.0 scale after at least three years of study.

Table 21

Complete Coursework Requirements for a Doctorate in Education with a Grade Point Average of at Least 3.0 on a 4.0 Scale

	<u>Number</u>	<u>Percentage</u>
Complete Confidence	60	68.2%
Much Confidence	21	23.9%
Some Confidence	07	8.0%
Total	88	100%

Regarding complete coursework requirements for a doctorate in Education with a grade Point Average of at least 3.0 on a 4.0 scale, Complete Confidence was the highest recorded frequency at 68.2% (N=60). 47 female and 13 male participants of African American descent in my study verified having Complete Confidence in terms of completing coursework requirements for a doctorate in education with a Grade Point Average of at least 3.0 on a 4.0 scale. Secondly, Much Confidence was the next highest frequency recorded at 23.9% (N=21). 16 African American female and five African American male participants in my investigation study confirmed having Much Confidence in completing coursework requirements for a doctorate in Education with a Grade Point Average of at least 3.0 on a 4.0 scale. Some Confidence was the least recorded frequency in terms of completing coursework requirements for a doctorate in Education with a Grade Point Average of at least 3.0 on a 4.0 scale at eight-point zero percent (N=7). Five female and two male participants of African American descent in my research validated having Some Confidence in terms of completing coursework requirements for a doctorate in Education with a Grade Point Average of at least 3.0 on a 4.0 scale.

Table 22

Excel Over the Next Two Quarters/Terms/Semesters

	<u>Number</u>	<u>Percentage</u>
Complete Confidence	44	50.0%
Much Confidence	28	31.8%
Some Confidence	15	17.0%
Very Little Confidence	01	1.1%
Total	88	100%

Regarding the ability to excel over the next two quarters/terms/semesters, Complete Confidence was the highest recorded frequency at 50.0% (N=44). 38 African American female and six African American male participants confirmed having Complete Confidence regarding the ability to excel over the next two quarters/terms/semesters. Much Confidence was the second highest recorded frequency at 31.8% (N=28) regarding the ability to excel over the next two quarters/terms/semesters. 19 female and nine male participants of African American descent reported having Much Confidence regarding their capability to excel over the next two quarters/terms/semesters.

Some Confidence was the third highest recorded frequency at 17.0% (N=15). Twice as many female participants who self-identified themselves as African American compared to African American male participants validated having Some Confidence regarding their ability to excel over the next two quarters/terms/semesters (10 African American female participants and five African American participants). Finally, Very Little Confidence was the least recorded frequency at one-point one percent (N=1) regarding the ability to excel over the next two quarters/terms/semesters. Only one African American female participant in my research study

verified having Very Little Confidence in regards of capability to excel over the next two quarters/terms/semesters. No African American male participant reported Very Little Confidence in the capability of excelling over the next two quarters/terms/semesters.

Table 23

Pass All Qualifying Exams

	<u>Number</u>	<u>Percentage</u>
Much Confidence	32	36.4%
Complete Confidence	30	34.1%
Some Confidence	24	27.3%
Very Little Confidence	02	2.3%
Total	88	100%

In terms of passing all qualifying exams, Much Confidence was the highest recorded at 36.4% (N=32). To verify the data, 25 female and seven male participants of African American descent in my study replied having Much Confidence in passing all qualifying exams. Complete Confidence was the second highest frequency regarding level of confidence in passing all qualifying exams at 34.1% (N=30). Five times as many African American female participants as African American male participants (25 African American females and five African American males) in my study stated having Complete Confidence in passing all qualifying exams. Some Confidence was the third highest recorded frequency in terms of passing all qualifying exams at 27.3% (N=24). 17 African American female and seven African American male participants in my investigation research verified having Some Confidence in passing all qualifying exams. Finally, Very Little Confidence was the least recorded frequency regarding level of confidence in passing all qualifying exams at two-point three percent (N=2). One African American female and

one African American male participant in my study confirmed having Very Little Confidence in passing all qualifying exams.

Table 24

Defend the Dissertation Proposal with Success

	<u>Number</u>	<u>Percentage</u>
Much Confidence	34	38.6%
Complete Confidence	31	35.2%
Some Confidence	21	23.9%
Very Little Confidence	02	2.3%
Total	88	100%

In terms of defending the dissertation proposal with success, the highest recorded frequency was Much Confidence at 38.6% (N=34). For my research study, 25 African American female and nine African American male participants indicated Much Confidence in defending the dissertation proposal with success. Complete Confidence was the second highest recorded frequency in terms of defending the dissertation proposal with success at 35.2% (N=31). 25 African American female and six African American male participants confirmed Complete Confidence in defending the dissertation proposal with success in my research exploration. Some Confidence was the third highest recorded frequency in defending the dissertation proposal with success at 23.9% (N=21). In my research study, 16 African American female and five African American male participants declared Some Confidence in defending the dissertation proposal with success. Finally, Very Little Confidence was the least recorded frequency at two-point three percent (N=2). One African American female and one African American male participant in my research stated Very Little Confidence in defending the dissertation proposal with success.

Table 25

Complete the Dissertation

	<u>Number</u>	<u>Percentage</u>
Complete Confidence	37	42.0%
Much Confidence	29	33.0%
Some Confidence	20	22.7%
Very Little Confidence	01	1.1%
No Confidence	01	1.1%
Total	88	100%

Regarding the question complete the dissertation, Complete Confidence was the highest recorded frequency for level of confidence in completing the dissertation at 42.0% (N=37). 30 African American female and seven African American male participants reported having Complete Confidence in completing the dissertation in my research investigation. Much Confidence was the next highest recorded frequency in reference to level of confidence in completing the dissertation at 33.0% (N=29). 21 African American female and eight African American male participants confirmed having Much Confidence in completing the dissertation for my research study.

The third highest recorded frequency in reference to level of confidence in completing the dissertation was Some Confidence at 22.7% (N=20). Female participants of African American descent reported three times as to having Some Confidence in reference to completing the dissertation as male participants of African American descent in my research investigation (15 African American female participants and five African American male participants). Finally, Very Little Confidence and No Confidence were statistically tied for the least recorded frequency in reference to level of confidence in completing the dissertation at one-point one

percent (N=1). One African American female participant verified having Very Little Confidence in completing the dissertation according to my research study. Furthermore, my research study verified one African American female participant stated having No Confidence in completing the dissertation.

Table 26

Publish at Least One Journal Article, Book Chapter Prior to Degree Completion

	<u>Number</u>	<u>Percentage</u>
Some Confidence	34	38.6%
Complete Confidence	19	21.6%
Very Little Confidence	18	20.5%
No Confidence	11	12.5%
Much Confidence	06	6.8%
Total	88	100%

In reference to publish at least one journal article, book chapter prior to degree completion, Some Confidence was the highest recorded frequency at 38.6% (N=34). In my research investigation, 24 female participants of African American descent and 10 male participants of African American descent reported having Some Confidence in reference to publish at least one journal article, book chapter prior to degree completion. Complete Confidence was the second highest recorded frequency in reference to confidence level of publishing at least one journal article, book chapter prior to degree completion at 21.6% (N=19). 15 African American female participants and four African American male participants stated having Complete Confidence in completing at least one journal article, book chapter prior to degree completion based on my investigative research.

Very Little Confidence was the next highest recorded frequency regarding level of confidence in having publication of at least one journal article, book chapter prior to degree completion at 20.5% (N=18). In my research study, 14 African American female participants and four African American male participants confirmed having Very Little Confidence in publishing at least one journal article, book chapter prior to degree completion. No Confidence was the next highest recorded frequency at 12.5% (N=11) regarding level of confidence in publication of at least one journal article, book chapter prior to degree completion. In my research exploration, 10 African American female participants and one African American male participant reported No Confidence in having publication of at least one journal article, book chapter prior to degree completion. Finally, Much Confidence was the least recorded frequency at six-point eight percent (N=6) regarding level of confidence in publication of at least one journal article, book chapter prior to degree completion. In my research report, five female participants and one male participant of African American descent indicated having Much Confidence in having to publish at one journal article, book chapter prior to degree completion.

Motivation Level Table Results

Table 27

If I have something unpleasant to do, I stick to it until I finish it

	<u>Number</u>	<u>Percentage</u>
Agree	45	51.1%
Strongly Agree	26	29.5%
Neither Agree or Disagree	08	9.1%
Disagree	08	9.1%
Strongly Disagree	01	1.1%
Total	88	100%

Regarding motivation level of sticking to a project until finish when it is unpleasant to do, Agree was the highest recorded frequency at 51.1% (N=45). In my research exploration, female participants of African American descent reported four times as much of male participants of African American descent to Agree in having something unpleasant to do they will stick to it until it is finished (36 African American female participants and nine African American male participants). Strongly Agree was the next highest recorded frequency at 29.5% (N=26) regarding to sticking with an unpleasant thing to do until its finished. 20 African American female participants and six African American male participants indicated they Strongly Agree if they have something unpleasant to do, they stick to it until its finished.

Neither Agree or Disagree and Disagree were statistically tied for the next highest recorded frequency at nine-point one percent (N=8). According to my research investigation, four African American female participants and four African American male participants reported Neither Agree nor Disagree when having something unpleasant to do, they stick to it until its finished. Seven African American female participants and one African American male

participant reported Disagree in reference to sticking to a project when it is unpleasant to do until the project is finished. Finally, Strongly Disagree was the least recorded frequency at one-point one percent (N=1). Only one African American female participant in my research study indicated Disagree in reference to sticking to a project until finished when it is unpleasant to do.

Table 28

Failure makes me try harder

	<u>Number</u>	<u>Percentage</u>
Agree	46	52.3%
Strongly Agree	22	25.0%
Neither Agree or Disagree	12	13.6%
Disagree	08	9.1%
Total	88	100%

Regarding failure makes me try harder, the highest recorded frequency was Agree at 52.3% (N=46). 39 African American female participants and seven African American male participants verified Agree in reference to failure makes me try harder. Strongly Agree was the second highest recorded frequency regarding failure makes me try harder at 25.0% (N=22). 15 African American female participants and seven African American male participants in my research confirmed they Strong Agree failure makes me try harder. The next highest recorded frequency regarding failure makes me try harder was Neither Agree nor Disagree at 13.6% (N=12). Seven female participants and five male participants of African American descent reported Neither Agree nor Disagree regarding failure makes me try harder. Finally, Disagree was the least recorded frequency regarding failure makes me try harder at nine-point one percent

(N=8). Seven African American female participant and one African American male participant verified Disagree regarding failure makes me try harder.

Table 29

I know the subjects where I am academically weak and I try to improve them

	<u>Number</u>	<u>Percentage</u>
Agree	40	45.5%
Strongly Agree	26	29.5%
Neither Agree or Disagree	14	15.9%
Disagree		
Disagree	07	8.0%
Strongly Disagree	01	1.1%
Total	88	100%

Regarding I know the subjects where I am academically weak and I try to improve them, the frequency recorded from highest to lowest were as followed: (1) Agree at 45.5% (N=40), (2) Strongly Agree at 29.5% (N=26), (3) Neither Agree or Disagree at a 15.9% (N=14), (4) Disagree at eight-point zero percent (N=7) and (5) Strongly Disagree at one-point one percent (N=1). For the response Agree, 33 female participants and seven male participants of African American descent confirmed Agree regarding I know the subjects where I am academically weak, and I try to improve them in my research. For the response Strongly Agree, 20 African American female participants and six male participants validated Strongly Agree regarding I know the subjects where I am academically weak, and I try to improve them in my investigative study.

For the response Neither Agree or Disagree, 10 female participants and four male participants of African American descent indicated Neither Agree or Disagree regarding I know the subjects where I am academically weak and I try to improve them. For the response Disagree,

four female participants of African American descent and three male participants of African American descent verified in my research exploration Neither Agree or Disagree regarding I know the subjects where I am academically weak, and I try to improve them. Finally, only one African American female participant in my research study stated Strongly Disagree regarding I know the subjects where I am academically weak, and I try to improve them.

Table 30

If something looks too complicated, I will not even bother to try it

	<u>Number</u>	<u>Percentage</u>
Disagree	48	54.5%
Strongly Disagree	27	30.7%
Agree	07	8.0%
Neither Agree or Disagree	05	5.7%
Strongly Agree	01	1.1%
Total	88	100%

Regarding if something looks too complicated, I will not even bother to try it, the order of frequency recorded from highest to lowest were as followed: (1) Disagree at 54.5% (N=48), (2) Strongly Disagree at 30.7% (N=27), (3) Agree at eight-point zero percent (N=7), (4) Neither Agree or Disagree at five-point seven percent (N=5) and Strongly Agree at one-point one percent (N=1). African American female participants in my research investigation reported three times as much as African American male participants (36 African American females and 12 African American males) Disagree regarding if something looks too complicated, I will not even bother to try it. In my research study, 21 African American female participants and six African American male participants stated Strongly Disagree regarding if something looks too complicated, I will not even bother to try it.

Seven African American female participants in my research investigation verified Agree regarding if something looks too complicated, I will not even bother to try it. Three female participants and two male participants of African American descent in my research study confirmed Neither Agree or Disagree regarding if something looks too complicated, I will not even bother to try it. Lastly, only one African American female participant in my research study stated Strongly Agree regarding if something looks too complicated, I will not even bother to try it.

Table 31

When trying to learn something new, I soon give up if I am not initially successful

	<u>Number</u>	<u>Percentage</u>
Disagree	44	50.0%
Strongly Disagree	33	37.5%
Neither Agree or Disagree	07	8.0%
Disagree		
Agree	02	2.3%
Strongly Agree	02	2.3%
Total	88	100%

Regarding when trying to learn something new, I soon give up if I am not initially successful, the frequency recorded from highest to lowest were as followed: (1) Disagree at 50.0% (N=44), (2) Strongly Disagree at 37.5% (N=33), (3) Neither Agree or Disagree at eight-point zero percent (N=7) and (4) Agree and Strongly Agree were statistically tied for the least recorded frequency at two-point three percent (N=2). In my research exploration, 34 African American female participants and 10 African American male participants stated Disagree in terms of when trying something new, I soon give up if I am not initially successful. 26 female

participants of African American descent and seven male participants of African American descent in my research study reported Strongly Disagree regarding when trying to learn something new, I soon give up if I am not initially successful. In my investigation study, five African American female participants and two African American male participants verified Neither Agree or Disagree in terms of when trying something new, I soon give up if I am not initially successful. Only two African American female participants in my research study indicated Agree regarding when trying to learn something new, I soon give up if I am not initially successful. Finally, one African American female participant and one African American male participant reported Strongly Agree in my research regarding when trying to learn something new, I soon give up if I am not initially successful.

Table 32

I avoid trying to learn new things when they look too difficult for me

	<u>Number</u>	<u>Percentage</u>
Disagree	40	45.5%
Strongly Disagree	39	44.3%
Neither Agree or Disagree	05	5.7%
Agree	02	2.3%
Strongly Agree	02	2.3%
Agree	88	100%

Regarding I avoid trying to learn new things when they look too difficult for me, the frequency recorded from highest to lowest were as followed: (1) Disagree at 45.5% (N=40), (2) Strongly Disagree at 44.3% (N=39), (3) Neither Agree or Disagree at five-point seven percent (N=5) and (4) Agree was tied with Strongly Agree statistically for least recorded frequency at two-point three percent (N=2). 33 African American female participants and seven African

two-point three percent (N=2). 33 African American female participants and seven African American male participants in my research stated Disagree in terms of I avoid trying to learn new things when they look too difficult for me. 28 female participants and 11 male participants of African American descent reported Strongly Disagree in terms of I avoid trying to learn new things when they look too difficult for me in my research study. Four African American female participants and one African American male participant indicated Neither Agree nor Disagree regarding I avoid trying to learn new things when they look too difficult for me. Two African American female participants in my research stated Agree regarding I avoid trying to learn new things when look too difficult for me. Finally, one African American female participant in my research stated Strong Agree in terms of I avoid trying to learn new things when they look too difficult for me.

Table 33

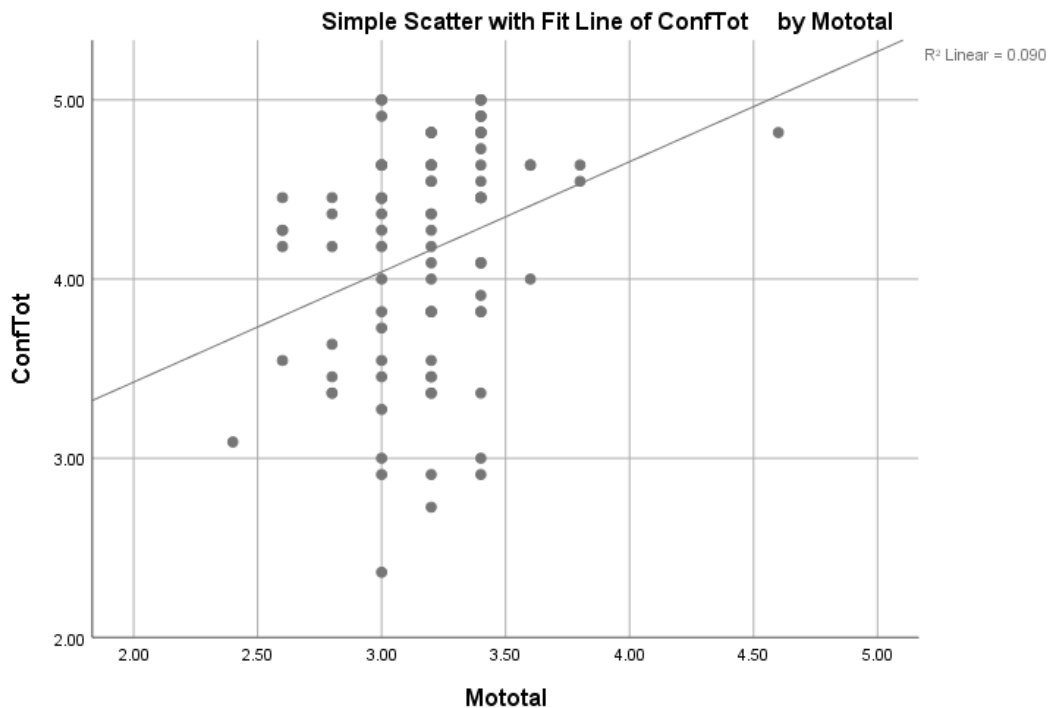
Correlation between self-efficacy and motivation

		Conf Tot	Mototal
Conf Tot	Pearson Correlation	1	.30**
	Sig. (2 tailed)		.004
	N	88	88
Mototal	Pearson Correlation	.30**	1
	Sig. (2 tailed)	.004	
	N	88	88

The correlation between self-efficacy and motivation was similar at the .30** based accordingly to the Pearson Correlation. Also, both self-efficacy and motivation were significant (2 tailed) at the .004 level. These correlations were based on the number of participants (88) in my research study.

Figure 1

Correlation between self-efficacy and motivation



For multiple regression data analysis, there were three questions regarding motivation stated in a negative connotation. As a result, those questions were transformed to indicate those responses of strongly disagree and disagree to be recorded in a positive connotation. The three statement questions which were transformed to have results recorded in a positive connotation

were as follows: (1) If something looks too complicated, I will not even bother to try it, (2) When trying to learn something new, I soon give up if I am not initially successful and (3) I avoid trying to learn new things when they look too difficult for me. Originally, the scale measurements were Strongly Agree=1, Agree=2, Neither Agree or Disagree=3, Disagree=4 and Strongly Disagree=5. For the three questions stated in a negative connotation, if the respondents indicated Strongly Disagree, then the scale will be 1 instead of 5. Respondents who replied Disagree will be recorded as a 2 instead of 4. Those who indicated Agree will be recorded as a 4 instead of a 2 and those replied Strongly Agree will be recorded as a 5 instead of a 1. This transformation was designed for only three questions which were stated in a negative connotation.

Additionally, the demographic independent variables of year in doctoral school, last semester GPA, final masters GPA, expected timeframe of graduation, education level of mother and father, socioeconomic income status, marital status, employment status, child rearing responsibilities and percentage of child rearing responsibilities were categorical. Therefore, dummy coding was utilized. Davis (2010) stated it is possible for the creation of complex dummy coding when variables have multiple categories. In this research, the demographic variables had multiple categories. Dummy coding utilizes only 0 and 1 (Fox, 1997).

Next, the research required multiple regression data to meet assumptions pertaining to collinearity and multicollinearity. Collinearity simply means the condition when there is very strong correlation between two predictors existing (Meyers, Gamst, & Guarino, 2017). Whenever more than two predictors have very strong correlations, the result of this existing

condition is called multicollinearity (Meyers, Gamst, & Guarino, 2017). Another factor that must be accounted for in the data analysis meeting assumptions of data pertaining to collinearity is the variance inflation factor (VIF). This statistic is simply dividing one by the tolerance (Meyers, Gamst, & Guarino, 2017). Allison (1999) cautioned anytime the VIF value is greater than 2.50 and having a tolerance of .40, then it is a serious issue. Researchers also warned if the VIF value is greater than 10 with a tolerance of .1, then it is a very serious problem issue (Cohen et al., 2003; Myers, 1990; Pituch & Stevens, 2016). Tolerance is simply considering the amount of predictor's variance in which the other predictors were not considered for (Meyers, Gamst, & Guarino, 2017).

The multiple regression analysis did meet the assumptions of data pertaining to collinearity for the dependent variable self-efficacy (confidence). There were no issues of collinearity, multicollinearity, tolerance and VIF for the dependent variable self-efficacy (confidence) (See Tables 34 and 35 for Collinearity Results on self-efficacy (confidence)).

Table 34

<i>Collinearity Diagnostics for Dependent Variable Self-Efficacy (Confidence)</i>							MOM=
Model	Dimension	Eigenvalue	Condition Index	Constant	GFINAL=3.4-3.7	Q35=4.0	Some College
1	1	1.612	1.000	.19	.19		
	2	.388	2.040	.81	.81		
2	1	1.716	1.000	.16	.16	.07	
	2	.896	1.384	.05	.04	.93	
	3	.387	2.105	.79	.80	.00	
3	1	2.105	1.000	.09	.09	.03	.09
	2	.935	1.500	.01	.00	.92	.06
	3	.624	1.837	.01	.42	.05	.59
	4	.336	2.504	.89	.49	.00	.27

Table 35

Collinearity Coefficients Statistics for Dependent Variable Self-Efficacy (Confidence)

Model	Unstand B	Coeff Std Err	Stand Coeff B	t	Sig.	Zero order	Corr Partial	Part	Tolerance	VIF
1 (Constant)	4.286	.083		51.630	.000					
GFINAL= 3.4-3.7	-.372	.136	-.283	-2.741	.007	-.283	-.283	-.283	1.000	1.000
2 (Constant)	4.272	.081		52.437	.000					
GFINAL= 3.4-3.7	-.405	.133	-.309	-3.033	.003	-.283	-.313	-.307	.987	1.013
CHILDPER= 4.0	.786	.356	.225	2.207	.030	.190	.233	.223	.987	1.013
3 (Constant)	4.183	.089		47.052	.000					
GFINAL= 3.4-3.7	-.418	.131	-.319	-3.199	.002	-.283	-.330	-.316	.985	1.015
CHILDPER= 4.0	.781	.348	.223	2.246	.027	.190	.238	.222	.987	1.013
MOM=Some College	.305	.136	.221	2.238	.028	.210	.237	.221	.998	1.002

In multiple regression, research question one asked what demographic factors predict the dependent variable confidence of African Americans pursuing doctoral studies in a College of Education discipline at HSIs or emerging HSIs in the Southwest United States. The results showed a relationship between the dependent variable self-efficacy (confidence) and independent variable demographic factors final masters GPA 3.4-3.7, education level of mother (Some College) and percentage of child rearing responsibility ranging from 70% to 80%. See Tables 37-39 regarding Multiple Regression Model for the dependent variable confidence below.

Table 36

Summary of Stepwise Regression Analysis for Demographic Factors Predicting Confidence

Variables	Model 1			Model 2			Model 3		
	<i>B</i>	<i>B SE</i>	β	<i>B</i>	<i>B SE</i>	β	<i>B</i>	<i>B SE</i>	β
GFINAL (3.4-3.7)	-.37	.14	-.28	-.41	.13	-.31	-.42	.13	-.32
CHILDPER 4.0(70%-80%)				.79	.36	.23	.78	.35	.22
MOM (Some College)							.31	.14	.22
R ²	.07			.11			.15		
F change in R ²	7.51***			4.87*			5.01*		

*p<.05, **P<.01, ***p<.001

Table 37

Model Summary Stepwise Regression Analysis for Demographic Factors Predicting Confidence

Model	R	R Square	Adjusted R ²	Std. Error of Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.283 ^a	.080	.070	.61566	.080	7.510	1	86	.007
2	.361 ^b	.130	.110	.60225	.050	4.872	1	85	.030
3	.423 ^c	.179	.150	.58854	.049	5.007	1	84	.028

a. Predictors: (Constant), GFINAL=3.4-3.7

b. Predictors: (Constant), GFINAL=3.4-3.7, CHILDPER=4.0 (70%-80%)

c. Predictors: (Constant), GFINAL=3.4-3.7, CHILDPER=4.0(70%-80%), MOM=Some College

Table 38

ANOVA Summary Regression Analysis for Demographic Factors Predicting Confidence

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.847	1	2.847	7.510	.007 ^b
	Residual	32.597	86	.379		
	Total	35.444	87			
2	Regression	4.614	2	2.307	6.360	.003 ^c
	Residual	30.830	85	.363		
	Total	35.444	87			
3	Regression	6.348	3	2.116	6.109	.001 ^d
	Residual	29.096	84	.346		
	Total	35.444	87			

- a. Dependent Variable: ConfTot
- b. Predictors: (Constant), GFINAL=3.4-3.7
- c. Predictors: (Constant), GFINAL=3.4-3.7, CHILDPER=4.0 (70%-80%)
- d. Predictors: (Constant), GFINAL=3.4-3.7, CHILDPER=4.0 (70%-80%), MOM=Some College

Furthermore, a crosstab was conducted during the multiple regression analysis, the result indicated a significance of respondents who reported 70%-80% of child rearing responsibilities. Although the frequency did indicate respondents who reported 90%-100% responsibility for child rearing was the highest, the 90%-100% range was not significant. The reason for 90%-100% child rearing responsibilities not significant is because 90%-100% had a lower confidence level indicated at the beginning. The confidence level for 90%-100% of the child rearing responsibilities commenced at the 2.36 confidence level. However, the confidence for 70%-80% child rearing responsibilities started at the 4.45 confidence level. See Table 39 for crosstabulation results and See Figure 2 indicating 70%-80% child rearing responsibilities as significant below.

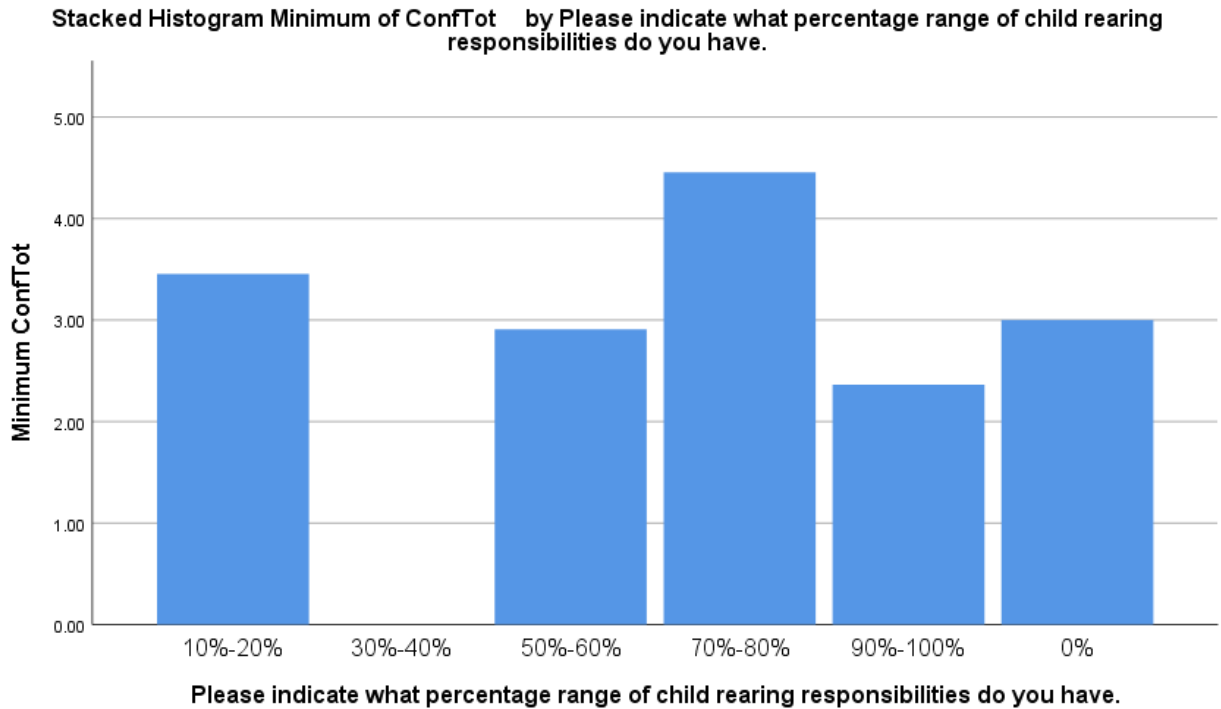
Table 39

Crosstabulation Results on Indication of Percentage Regarding Child Rearing Responsibilities

ConfTot	10%-20%	50%-60%	70%-80%	90%-100%	0%	Total
2.36	0	0	0	1	0	1
2.73	0	0	0	1	0	1
2.91	0	1	0	2	0	3
3.00	0	0	0	1	1	2
3.09	0	0	0	0	1	1
3.27	0	1	0	0	0	1
3.36	0	0	0	2	3	5
3.45	1	1	0	1	1	4
3.55	0	0	0	0	3	3
3.64	0	0	0	1	0	1
3.73	0	0	0	0	1	1
3.82	0	2	0	1	3	6
3.91	0	0	0	0	1	1
4.00	0	0	0	2	1	3
4.09	0	0	0	2	1	3
4.18	0	0	0	0	4	4
4.27	0	3	0	0	1	4
4.36	0	0	0	1	3	4
4.45	0	0	0	0	1	1
4.45	0	1	1	2	3	7
4.55	0	0	0	1	3	4
4.64	0	2	0	3	5	10
4.73	0	1	0	0	0	1
4.82	0	3	0	2	3	8
4.91	0	0	1	2	1	4
5.00	0	0	1	1	3	5
Total	1	15	3	26	43	88

Figure 2

Crosstabulation of Percentage Regarding Childrearing Responsibilities and Confidence



The multiple regression did meet the assumptions of data pertaining to collinearity for the dependent variable motivation. There were no issues of collinearity, multicollinearity, tolerance and VIF for the dependent variable motivation. See Tables 40 and 41 for Collinearity diagnostic results for the dependent variable motivation below.

Table 40

Collinearity Diagnostics for Dependent Variable Motivation

Model	Dimension	Eigenvalue	Cond Index	(Constant)	MOM	EXP	GFINAL	PAPA
					Some Grad	2.0	3.0-3.3	5.0
1	1	1.107	1.000	.45	.45			
	2	.893	1.113	.55	.55			
2	1	1.633	1.000	.18	.06	.19		
	2	.937	1.320	.07	.91	.01		
	3	.430	1.950	.75	.03	.80		
3	1	1.971	1.000	.10	.05	.11	.10	
	2	.982	1.417	.13	.58	.06	.06	
	3	.618	1.786	.03	.34	.08	.83	
	4	.429	2.143	.74	.03	.75	.00	
4	1	2.262	1.000	.07	.04	.07	.07	.07
	2	.999	1.505	.14	.46	.09	.03	.04
	3	.725	1.766	.01	.01	.03	.36	.67
	4	.600	1.942	.01	.40	.19	.54	.14
	5	.413	2.339	.78	.08	.62	.00	.09

Table 41

Collinearity Diagnostics for Dependent Variable Motivation

Model	Unstand B	Coeff Std. Err	Stand Coeff B	t	Sig.	Tolerance	VIF
1(Constant)	3.165	.029		108.095	.000		
MOM=							
Some	1.435	.275	.491	5.223	.000	1.000	1.000
Graduate							
2 (Constant)	3.213	.034		93.867	.000		
MOM=	1.541	.270	.527	5.706	.000	.975	1.025
Some							
Graduate							
EXP=2.0	-.154	.061	-.231	-2.502	.014	.975	1.025
(2020)							
3 (Constant)	3.197	.034		94.860	.000		
MOM=							
Some	1.347	.272	.461	4.955	.000	.901	1.109
Graduate							
EXP=2.0	-.182	.060	-.273	-3.007	.003	.944	1.060
(2020)							
GFINAL=	.237	.092	.243	2.581	.012	.881	1.135
3.0-3.3							
4 (Constant)	3.214	.034		94.527	.000		
MOM=	1.482	.275	.507	5.398	.000	.851	1.175
Some							
Graduate							
EXP=2.0	-.176	.059	-.264	-2.957	.004	.941	1.062
(2020)							
GFINAL=	.257	.091	.263	2.832	.006	.871	1.148
3.0-3.3							
PAPA=5.0	-.177	.085	-.188	-2.070	.042	.905	1.105
Bachelors							
Degree							

In multiple regression, research question two asked what demographic factors predict the dependent variable motivation of African Americans pursuing doctoral studies in a College of Education discipline at HSIs or emerging HSIs in the Southwest United States. The results indicated a relationship independent variable demographic factors education level of the mother is Some Graduate (MOMSCHOOL_6), expected timeframe graduation date of 2020 (EXP=2.0), final masters GPA of 3.0-3.3 (GFINAL=3.0-3.3), and education level of the father is Bachelors Degree. See Tables 42-44 regarding Multiple Regression Model for the dependent variable motivation below.

Table 42

Summary of Stepwise Regression Analysis Demographic Factors Predicting Motivation

	Model 1			Model 2			Model 3			Model 4		
Variables	<i>B</i>	<i>B SE</i>	β	<i>B</i>	<i>B SE</i>	β	<i>B</i>	<i>B SE</i>	β	<i>B</i>	<i>B SE</i>	β
MOM=	1.44	.28	.49	1.54	.27	.53	1.35	.27	.46	1.48	.28	.51
Some Graduate												
EXP GRAD				-.15	.06	-.23	-.18	.06	-.27	-.18	.06	-.26
DATE (2020)												
GPA FINAL							.24	.09	.24	.26	.09	.26
(3.0-3.3)												
PAPA										-.18	.09	-.19
(Bachelors Degree)												
R ²	.23			.28			.32			.35		
F change in R ²	27.28***			6.26**			6.63**			4.29*		

*p<.05, **p<.01, ***p<.001

Table 43

Summary of Stepwise Regression Analysis Demographic Factors Predicting Motivation

Model	R	R ²	Adjusted R ²	Std. Err of Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.491 ^a	.241	.232	.27313	.241	27.279	1	86	.000
2	.541 ^b	.293	.276	.26514	.052	6.261	1	85	.014
3	.587 ^c	.345	.321	.25673	.052	6.663	1	84	.012
4	.614 ^d	.377	.347	.25185	.032	4.285	1	83	.042

- a. Predictors: (Constant), MOM=Some Graduate
 b. Predictors: (Constant), MOM=Some Graduate, EXP=2.0 (2020)
 c. Predictors: (Constant), MOM=Some Graduate, EXP=2.0 (2020), GFINAL=3.0-3.3
 d. Predictors: (Constant), MOM=Some Graduate, EXP=2.0 (2020), GFINAL=3.0-3.3, PAPA=5.0 (Bachelors Degree)

Table 44

ANOVA Summary Regression Analysis for Demographic Factors Predicting Motivation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.035	1	2.035	27.279	.000 ^b
	Residual	6.416	86	.075		
	Total	8.451	87			
2	Regression	2.475	2	1.238	17.604	.000 ^c
	Residual	5.975	85	.070		
	Total	8.451	87			
3	Regression	2.914	3	.971	14.739	.000 ^d
	Residual	5.536	84	.066		
	Total	8.451	87			
4	Regression	3.186	4	.797	12.558	.000 ^e
	Residual	5.264	83	.063		
	Total	8.451	87			

- a. Dependent Variable: Mototal
 b. Predictors: (Constant), MOM=Some Graduate
 c. Predictors: (Constant), MOM=Some Graduate, EXP=2.0 (2020)
 d. Predictors: (Constant), MOM=Some Graduate, EXP=2.0 (2020), GFINAL=3.0-3.3
 e. Predictors: (Constant), MOM=Some Graduate, EXP=2.0 (2020), GFINAL=3.0-3.3, PAPA=5.0 (Bachelors Degree)

In addition, a crosstabulation was conducted for this multiple regression analysis regarding education level of the mother (Some Graduate), education level of the father (Bachelors Degree), and final masters GPA of 3.0-3.3. These demographic factors were significant in predicting motivation. The reason for the crosstabulation is simply because the frequency results indicated the education level of the mother (Some Graduate), education level of the father (Bachelors Degree) and final masters GPA OF 3.0-3.3 was the not the highest. However, another demographic factor of expected timeframe graduation date of 2020 (EXP=2.0) predicted dependent variable motivation did not need a crosstabulation because the expected timeframe graduation date of 2020 (EXP=2.0) was the highest frequency result indicated in relation to anticipated graduation date (completion of doctoral degree). The education level of the mother with Some College (MOM=Some College) was the highest frequency indicated by the respondents; however, the major factor was Some College commenced at the 2.60 level predicting motivation. Consequently, Some Graduate commenced at the 4.60 level predicting motivation. Therefore, the education level of mother some graduate (MOM=Some Graduate) was very significant predicting motivation.

The education level of the father (Bachelors Degree) was not the highest frequency indicated by the respondents in this research. High School diploma (PAPA=2.0) was the highest frequency recorded regarding education of the father. The education of the father with High School Diploma (PAPA=2.0) commenced at the 2.60 level predicting motivation; however, education level of the father with a Bachelors Degree (PAPA=5.0) commenced at the 2.40 level predicting motivation. The difference is the education level of the father with a Bachelors Degree

(PAPA=5.0) was significant at the 4.60 level predicting motivation. For final masters GPA (GFINAL), the highest frequency indicated by the respondents in this research was final masters GPA 3.8-4.0 (GFINAL=3.8-4.0).

However, the final masters GPA 3.8-4.0 (GFINAL=3.8-4.0) commenced at the 2.60 level predicting motivation. Meanwhile, the final masters GPA 3.0-3.3 (GFINAL=3.0-3.3) commenced at the 2.80 level predicting motivation and very significant at the 4.60 level predicting motivation. Therefore, the final masters GPA 3.0-3.3 (GFINAL=3.0-3.3) was significant predicting motivation for this research of African Americans pursuing and completing doctoral studies in College of Education disciplines at HSIs and/or emerging HSIs in the Southwest United States (Texas, New Mexico, Arizona, California, Nevada and Colorado). See crosstabulations for education level of mother (MOM=Some Graduate), education level of the father (bachelor's degree) (PAPA=5.0), and final masters GPA 3.0-3.3 (GFINAL=3.0-3.3) and figures predicting motivation below (Tables 45-47 and Figures 3-5) .

Table 45

Crosstabulation Results on Education Level of Mother Predicting Motivation

Mototal	Some High School	High School Diploma	GED	Some College	Bachelors Degree	Some Graduate	Masters Degree	Doctoral Degree	Total
2.40	0	0	0	0	0	0	1	0	1
2.60	0	1	0	3	0	0	0	1	5
2.80	0	1	0	2	1	0	3	0	7
3.00	2	6	1	4	4	0	2	1	20
3.20	3	3	4	6	4	0	4	0	24
3.40	2	5	2	9	3	0	4	0	25
3.60	0	1	0	1	1	0	0	0	3
3.80	0	0	0	2	0	0	0	0	2
4.60	0	0	0	0	0	1	0	0	1
Total	7	17	7	27	13	1	14	2	88

Figure 3

Crosstabulation on Education Level of Mother Predicting Motivation

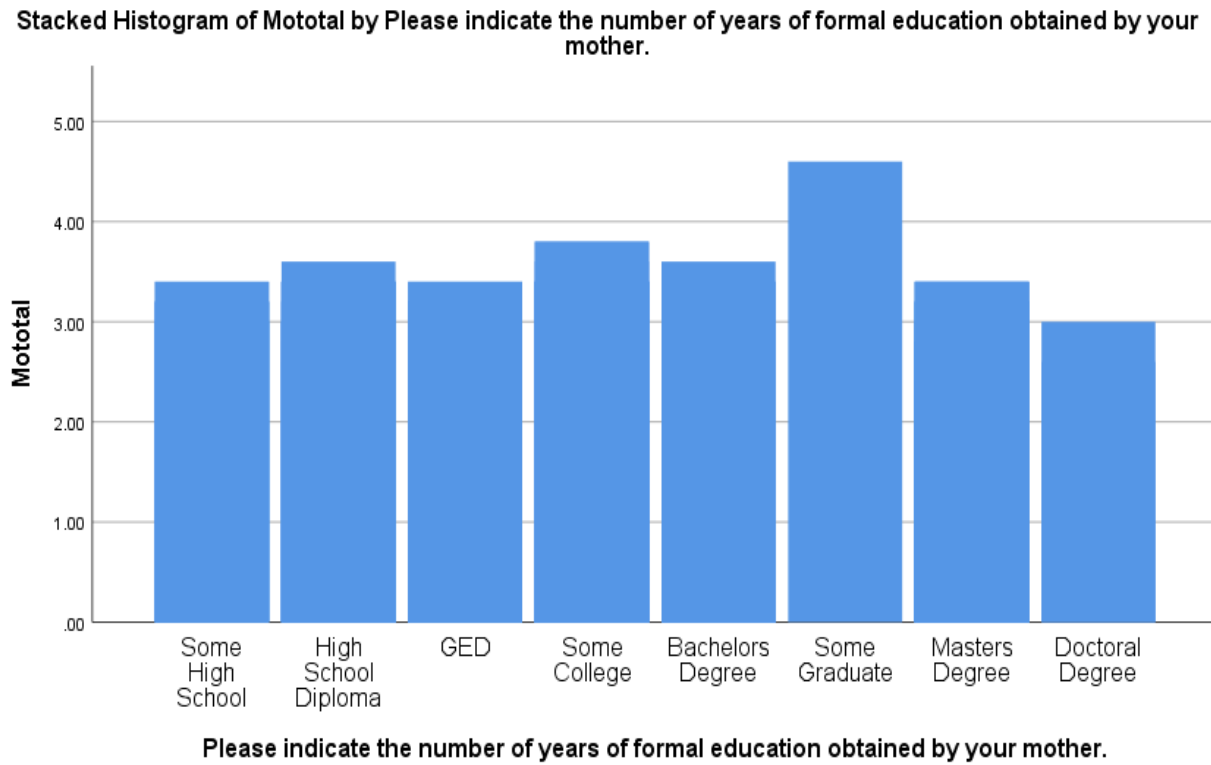


Table 46

Crosstabulation on Education Level of Father Predicting Motivation

Mototal	Some High School	High School Diploma	GED	Some College	Bachelors Degree	Some Graduate	Masters Degree	Doctoral Degree	Total
2.40	0	0	0	0	1	0	0	0	1
2.60	0	2	0	1	1	0	1	0	5
2.80	1	1	0	2	1	0	2	0	7
3.00	6	4	0	3	3	1	3	0	20
3.20	3	10	1	5	2	0	1	2	24
3.40	2	12	0	6	2	0	0	3	25
3.60	0	0	0	2	0	0	1	0	3
3.80	0	0	0	2	0	0	0	0	2
4.60	0	0	0	0	1	0	0	0	1
Total	12	29	1	21	11	1	8	5	88

Figure 4

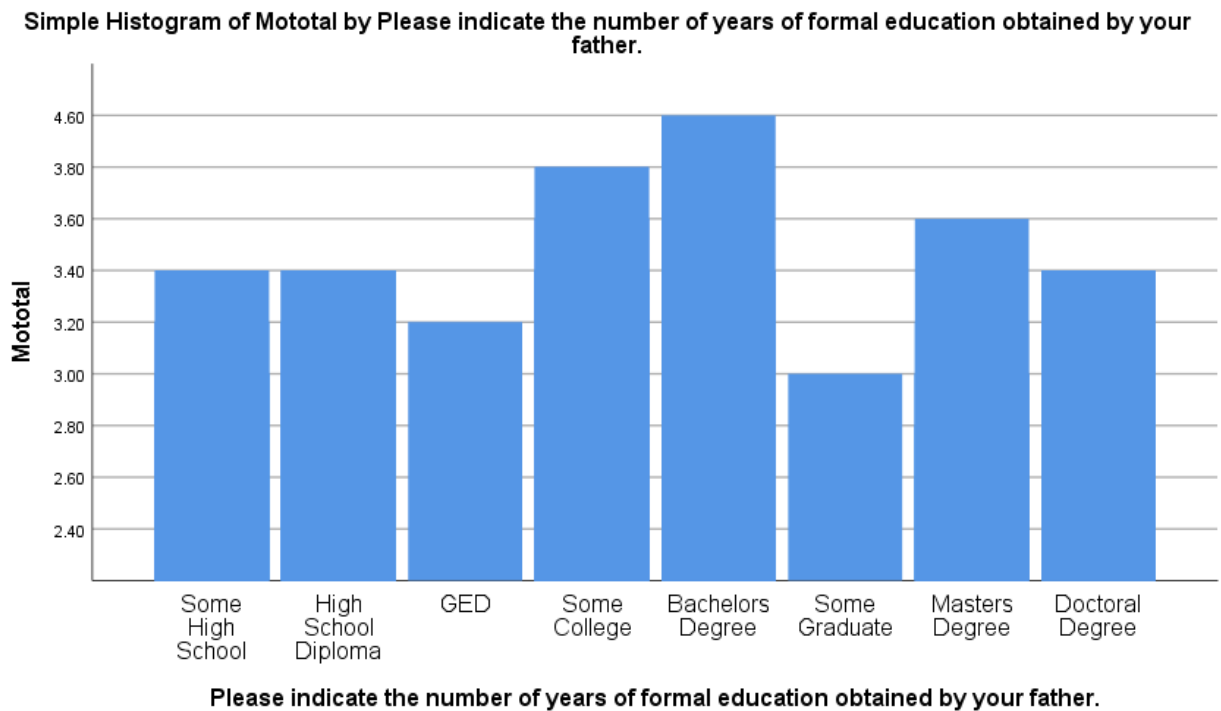
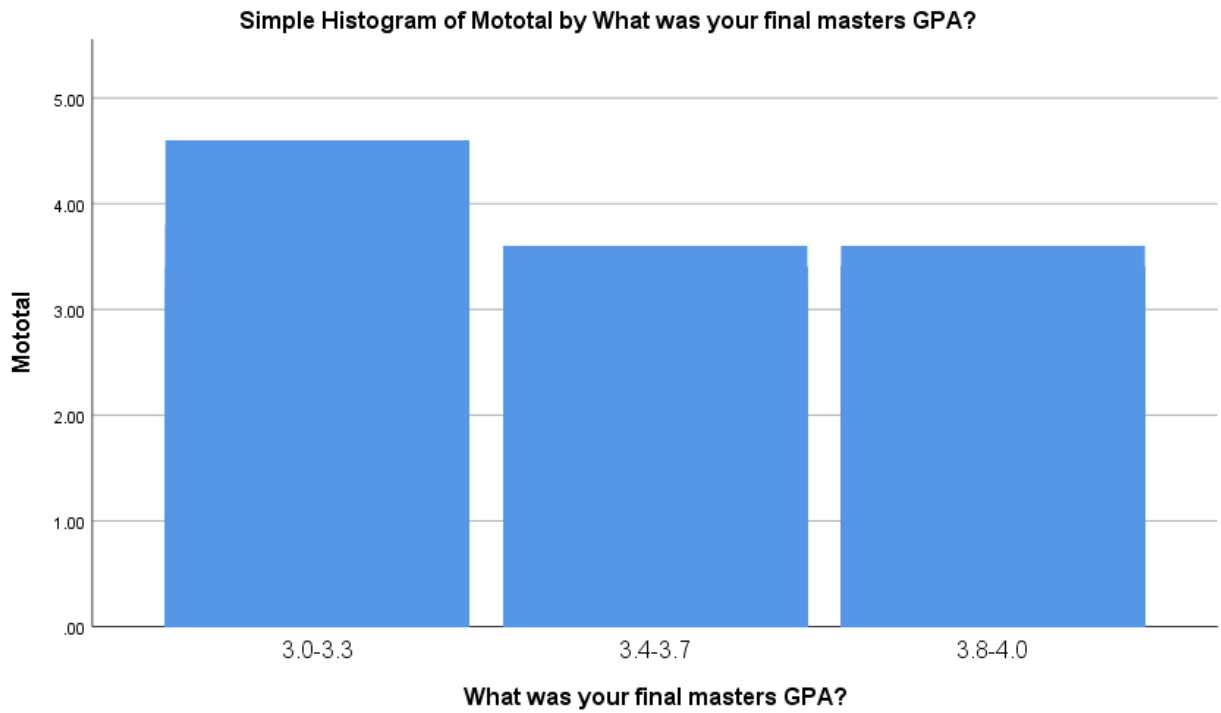


Table 47

Crosstabulation of Final Masters GPA Predicting Motivation

Mototal	3.0-3.3	3.4-3.7	3.8-4.0	Total
2.40	0	1	0	1
2.60	0	3	2	5
2.80	1	1	5	7
3.00	1	7	12	20
3.20	2	11	11	24
3.40	3	8	14	25
3.60	0	2	1	3
3.80	2	0	0	2
4.60	1	0	0	1
Total	10	33	45	88

Figure 5



In summary, research question one indicated the demographic factors of final masters GPA 3.4-3.7 (GFINAL=3.4-3.7), 70%-80% of child rearing responsibilities (CHILDPER=4.0) and education level of the mother with Some College (MOM=Some College) were significant in predicting relationship with the dependent variable confidence. There was no relationship for the demographic factors year in doctoral school, GPA last semester, final masters GPA 3.0-3.3 and 3.8-4.0, expected graduation timeframe, education level of the mother not Some College, education level of the father, socioeconomic status, marital status, employment status, child rearing responsibilities and percentage of child rearing responsibilities predicting confidence.

Research question two indicated the demographic factors education level of the mother with Some Graduate (MOM=Some Graduate), education level of the father with Bachelors Degree (PAPA=5.0), final masters GPA 3.0-3.3 (GFINAL=3.0-3.3) and expected graduation timeframe date of 2020 (EXP=2.0) significantly predicted relationship with the dependent variable motivation. There was no relationship for the demographic factors year in doctoral school, GPA last semester, final masters GPA 3.4-3.7 and 3.8-4.0, expected timeframe graduation date not 2020, education level of the mother not Some Graduate, education level of the father not Bachelors Degree, socioeconomic status, marital status, employment status, child rearing responsibilities and percentage of child rearing responsibilities predicting the dependent variable motivation.

Lessons Learned from Data Results

From the data results in Chapter 4, my research investigation showed lessons were learned. Lesson number one is the small number of participants (88) for my research study led to the inability of generalizing. The second lesson learned from the data results of my research study is the education level of parents with at least a Bachelors Degree does play an essential role on motivation and self-efficacy of African American doctoral students in College of Education disciplines at HSI's and Emerging HSI's in the southwest United States (Texas, New Mexico, Arizona, California, Nevada and Colorado). In my research investigation, 11 female participants and two male participants of African American descent reported their mother obtained a Bachelors Degree, nine female participants and five male participants of African American descent indicated their mother obtained a Masters Degree and only one male and one female participant of African American descent stated their mother earned a Doctoral Degree. Furthermore, my research study reported seven female and four male participants of African American said their dad obtained a Bachelor Degree, five female and three male participants of African American descent indicated their dad earned a Masters Degree and three female and two male participants of African American descent verified their dad obtained a Doctoral Degree.

Additionally, 20 female and seven male participants of African American descent in my research who indicated their mother had Some College. In other words, the mother initially enrolled in higher education for undergraduate studies but did not complete their undergraduate degree due to unforeseen circumstances. One African American male participant in my research exploration reported Some Graduate as the highest education level obtained by the mother. In

other words, the mother did obtain an undergraduate (Bachelors) degree and started enrollment in graduate studies but did not complete all coursework requirements as specified according to the institution to obtain the Masters Degree. Also, 17 African American female and four African American male participants indicated Some College as the highest education level achieved by the father in my research study. Finally, one African American female participant in my research stated Some Graduate as the highest education level achieved by the father. The data presented on education levels of Bachelors, Masters and Doctoral Degree obtained by the mother and father is noteworthy information for my research. Also, the data presented on education levels of Some College and Some Graduate is also noteworthy information for my research.

In my research investigation, the participants were not asked what area their mother and father obtained their Bachelors, Masters and Doctoral Degree. Secondly, the participants in my research investigation were not asked why their mother and/or father did not finish their undergraduate (Bachelors) or Graduate (Masters) degree. It would be difficult to determine if the area the mother and father earned their undergraduate, graduate and doctoral influence the participants decision to pursue doctoral studies in College of Education disciplines at HSIs and Emerging HSIs in the southwest United States (Texas, New Mexico, Arizona, California, Nevada and Colorado).

In my research exploration, all 88 participants were majoring in a College of Education discipline. Of the 88 participants majoring in a College of Education discipline at HSIs and Emerging HSIs in the southwest United States, five were majoring in an area of STEM (Science, Technology, Engineering and Mathematics). The breakdown of the majors for each of the

African American participants in STEM areas for my research are as followed: one African American female participant indicated major of Curriculum and Instruction STEM Emphasis, one African American female participant reported major of Educational Leadership Mathematics Education Emphasis, one African American male participant stated major was Higher Education Mathematics and two African American female participants reported major of Math Education.

The third lesson learned was my research study discuss the importance of the participants of African American descent having child rearing responsibilities. Child rearing responsibilities had no relationship to motivation; however, 70%-80% of child rearing responsibilities had a relationship with self-efficacy. For the participants in my research study who indicated having child rearing responsibilities encounter a challenge in managing multiple roles plus fulfilling obligations of roles and responsibilities outside the classroom (Benshoff, Cashwell, & Rowell, 2015). Additionally, those who indicated child rearing responsibilities in my research also fit the criteria demographic of a 21st century graduate student family oriented with major responsibilities (Jeffreys, 1998; Polson, 2003; Hyun, Quinn, Madon, & Lustig, 2006)

Based on these lessons learned from my research, the main purpose of Chapter five is to mention major implications and recommendations. From my research, each lesson learned discusses how the implications and recommendations suggested can improve for those who planned to replicate my study. In Chapter five, a call to action is addressed accordingly to what my research study dictated from the data results. Chapter five also entailed comparisons and contrasts from my research to other research base on demographic factors investigated.

CHAPTER V

DISCUSSION OF RESULTS IN COMPARISON TO OTHER STUDIES

The main area of focus for my research study were doctoral students who self-identified themselves as African American. Participants of African American descent in my research study were doctoral students in College of Education disciplines at HSIs or Emerging HSIs in the southwest United States. My research exploration verified 100% of the participants (N=88) who self-identified themselves as African American with 77.3% (N=68) females and 22.7% (N=20) males. Another study compared to my research study which focused primarily on participants of African American descent was conducted by McGaskey (2015). McGaskey (2015) conducted a study regarding African American PhD students at southern Predominately White Institutions (PWIs) to determine personal and academic factors influence research productivity. 332 doctoral students who self-identified themselves as African American participated in the study. Furthermore, 76.5% of the self-identified African American participants in the study were females (N=181). In addition, 25% (N=84) of the self-identified African American participants were pursuing doctoral degrees in the field of education. Both my research study and McGaskey (2015) indicated validity regarding the number of participants self-identifying themselves as African American pursuing doctoral degrees in the College of Education discipline fields.

The second area of discussion related to results of my research study in comparison to other studies is confidence regarding publication of self-identified African Americans pursuing doctoral studies in education disciplines. My research exploration indicated Some Confidence as the highest recorded frequency at 38.6% (N=34) and Much Confidence was the least recorded

frequency regarding confidence level of publishing at least one journal article, book chapter prior to degree completion. In my research study, the data indicated female participants of African American descent report combination confidence level of Complete Confidence (N=15), Much Confidence (N=5) and Some Confidence (N=24) more than male participants of African American descent Complete Confidence (N=4), Much Confidence (N=1) and Some Confidence (N=10). Moreover, female participants of African American descent in my research study data verified combination confidence level of Very Little Confidence (N=14) and No Confidence (N=10) more than male participants of African American descent Very Little Confidence (N=4) and No Confidence (N=1). The confidence level scale utilized in my research investigation regarding publication of a journal article, book chapter prior to degree completion were as follows: 1=No Confidence, 2=Very Little Confidence, 3=Some Confidence, 4=Much Confidence and 5=Complete Confidence. The coding of gender for my study utilized 1=male and 2=female. The next section is detailed comparison of McGaskey (2015) regarding publication activity of African American doctoral students.

McGaskey (2015) defined publication activity as simply referring to scholarly works published via article, book review, book chapter, monograph, textbook or other. McGaskey (2015) indicated 50.3% (N=167) of those who self-identified themselves as African American did not have any publication activity and 49.7 % (N=165) indicated having publishing activity. Regarding publication activity, McGaskey (2015) utilized coding measured dichotomously 0=no activity and 1=activity. Also, McGaskey (2015) utilized coding of gender with 0=male and 1=female. These variables were measured dichotomously (McGaskey, 2015). McGaskey (2015)

did not specified how many male and female participants of African American said having publication activity or no publication activity.

Kuo, Woo, and Bang (2017) utilized the instrument Self-Efficacy in Research Method-Short (SERM-S) to measure self-efficacy of graduate students conducting research. The SERM-S consisted of 12 items utilizing the Likert Scale from 0 (no confidence) to 9 (total confidence). The SERM-S utilized in previous research studies indicated very high reliable consistency ranging from .89 to .96 (Morrison & Lent, 2014; Phillips & Russell, 1994). The reliability consistency score range for Kuo, Woo, and Bang (2017) research study was .92. Their results indicated significance between research self-efficacy and research motivation which accounted 17% of the variance for publication in Model 1 (Kuo, Woo, & Bang, 2017). Additionally, there was no predictive relationship between extrinsic motivation and research productivity (Kuo, Woo, & Bang, 2017). Kuo, Woo, and Bang (2017) discovered from their study advisory relationship had a significant relationship between intrinsic and failure avoidance research motivation and research productivity; however, there was no relationship between research self-efficacy and research productivity.

In my research study, 11 participants of African American descent indicated No Confidence in publishing a journal article, book chapter prior to degree completion and 18 participants of African American descent reported Very Little Confidence in publishing a journal article, book chapter prior to degree completion. This data validated Nettles and Millett (2016) statement that doctoral students of African American descent in disciplines of education, social sciences, sciences and mathematics have less publications than their peers. Although my research

did not ask the participants of African American how many publications/publication activities they had experienced, I the researcher assumed 19 participants of African American descent who stated Complete Confidence had at least one journal article and/book chapter completed during their doctoral journey. The 19 participants of African American decent stated Complete Confidence in publishing a journal article, book chapter prior to degree completion validated one of the advantages of students having greater scholarly output. Researchers reported a key advantage for students having greater scholarly output is being involved early in research related activities does play a role in the increasing of self-efficacy in research (Kahn & Scott, 1997; Love et al., 2007).

Sverdlik, Hall, McAlpine, and Hubbard (2018) conducted a review study on nine articles dealing with self-efficacy. The themes identified by Sverdlik, Hall, McAlpine, and Hubbard (2018) from other researchers regarding self-efficacy include (1) low self-efficacy is related to behaviors that are self-handicapping, (2) correlation between research self-efficacy and interest in research and research productivity and (3) strong predictor indication regarding dropout intentions of doctoral students is perceived competence (Forester, Kahn, & Hesson-McInnis, 2004; Lambie & Vaccaro, 2011; Litalien & Guay, 2015).

Researchers have indicated self-efficacy more likely an essential component that is an influence in shaping the identity development paths of doctoral students (Austin, 2002; Flowers & Lazaros, 2009; Virtanen et al., 2016). Schunk and Pajares (2009) stated their definition of self-efficacy as how individuals perceive their competencies in relation to learning and achieving desired goals. Researchers defined self-efficacy in relation to context in doctoral research as

“one’s confidence in successfully performing tasks associated in conducting research (Forester et al., 2004, p.4). Additionally, researchers reported a significant correlation between research self-efficacy consisting of research interest and production of scholarly publications (Lambie & Vaccaro, 2011). The next section addressed validation of researchers whose participants indicated Complete Confidence in conducting research leading to publication of a journal article and/book chapter prior to degree completion.

My research study indicated the majority of the African American participants report Complete Confidence in the following: (1) complete doctoral writing coursework requirements with at least a “B” or better, (2) complete doctoral education coursework requirements with at least a “B” or better, (3) earn a cumulative GPA of at least 3.0 after three years of doctoral study, (4) complete coursework requirements for a doctorate in education with at least a 3.0 GPA, (5) excel over the next two terms/quarters/semesters and (6) complete the dissertation. Lamar and Helm (2017) conducted a study regarding confidence of counselor education and supervision doctoral students in doing research. They stated confidence is a very essential component for researcher identity among the participants (Lamar & Helm, 2017). Also, the participants reported feeling more confident than others regarding whether they are ready for this or are they able to do this (Lamar & Helm, 2017). One participant named Lilly reported teaching and conducting research made her completely confident in that area (Lamar & Helm, 2017). Another participant named Juliet stated her confidence over a period of three years. She is in the stage of her doctoral study that she can honestly say she understands and gets it (Lamar & Helm, 2017). In the following section, the area of my research results of 29 participants indicating No Confidence

and Very Little Confidence in publishing a journal article, book chapter prior to degree completion addressed validation of researchers discussing participants who struggle with confidence regarding research leading to publication of a journal article, book chapter prior to degree completion.

Participants in the Lamar and Helm (2017) study expressed struggles with confidence regarding research. One participant named Eve shared doubts of being able to conduct her own research on a conceptual level. Another participant named Charley constantly sought positive feedback as a coping mechanism to express his doubt as being ready to conduct research (Lamar & Helm, 2017). After receiving the positive feedback, Charley felt more confident; however, he felt he needed someone to hold his hand in the research process. In comparison to this research, these participants would probably exhibit very little confidence or no confidence in publishing a journal article and/or book chapter prior to degree completion. Lastly, it was reported one participant faked confidence. Stephanie, the participant who was close to graduation, expressed fears of being exposed as not good in research (Lamar & Helm, 2017). The following section does validate what researchers have stated regarding low levels of self-efficacy (Confidence) influence negative behaviors of doctoral students.

Researchers did report doctoral students who have a low self-efficacy would probably engage in self-handicapping negative behaviors so that they will not be negatively perceived or others having the perception of these doctoral students as incompetent (Schwinger & Stiensmeier-Pelster, 2011). The identification of some self-handicapping negative behaviors by doctoral students researchers reported include the following: (1) procrastination, (2) low effort,

(3) perfectionism, (4) overcommitment, (5) low effort, (6) disorganization and (7) decision to conduct work in an environment that could be plausibly compromised (Kearns, Gardiner, & Marshall, 2008). Additionally, some other negative self-efficacy handicapping behaviors doctoral students exhibit as reported by researchers include (1) objectives or thesis topic constantly change, (2) communication with supervisor, department and peers become non-existence and (3) submission of work for review is constantly delayed as a stalling tactic of negative self-handicapping behavior (Ahern & Manathunga, 2004). It is possible low self-efficacy can be an essential component risk factor leading to behaviors that are negative, delayed growth in developing an identity regarding academia and the production of an effective dissertation can be greatly comprised regarding quality of the dissertation and the time and effort of successfully submit a quality dissertation worthy of defense (Sverdlik, Hall, McAlpine, & Hubbard, 2018).

In my research study, 65.9% (N=58) indicated after at least three years of study they can earn a cumulative GPA of at least 3.0, 68.2% (N=60) stated complete confidence in earning a cumulative GPA of at least 3.0 completing coursework requirements for a doctorate in education, 50% (N=44) mentioned complete confidence in excelling over the next two terms/quarters/semesters and 42% (N=37) indicated complete confidence in completing the dissertation. My research study also recorded only 1.1% of the participants (N=1) exhibited very little confidence in defending the dissertation with success. Furthermore, researchers clearly indicated the strongest predictor of dropout intentions variables such as perception of relatedness

with colleagues, publication rate, etc. studied was academic competence (Litalien & Guay, 2015).

Consequently, there was one area where the participants indicated a confidence level of very little confidence or no confidence with high reservation and that area was publishing at least one journal article or book chapter prior to degree completion. 20.5% indicated very little confidence (N=18) and 12.5% indicated no confidence (N=11) in my research study. It is suggested to note doctoral students with strong academic competence would more likely to accomplish tasks/goals of defending the dissertation with success, excel over the next two semesters/quarters/terms, complete the dissertation and earn a cumulative GPA of at 3.0 after at least three years of doctoral study. In the next section, motivation of African Americans pursuing doctoral studies in College of Education disciplines are addressed.

In my research study, 88 participants self-identified themselves as African American and of the 88 participants, 77.3% (N=68) were females and 22.7% (N=20) were males. All 100% (N=88) of the participants in my research investigation were doctoral students in a College of Education discipline. Additionally, 38.6% (N=34) out of the 88 participants who self-identified themselves as African American were in year one of doctoral studies enrollment. First year of doctoral studies enrollment was the highest recorded frequency for the demographic factor Year in School. Furthermore, three questions were reversed in my research study because they were stated in a negative connotation. These questions were as followed: (1) If something looks too complicated, I will not even bother to try it, (2) When trying to learn something new, I soon give up if I am not initially successful and (3) I avoid trying to learn new things when they look too

difficult for me. My research addressed questions regarding motivation on a Likert Scale from 1 strongly agree to 5 strongly disagree.

The three questions in this research which had a negative connotation were reversed to 1 representing strongly disagree instead of strongly agree and 5 representing strongly agree instead of strongly disagree. Most participants in my study responded Agree regarding sticking to it until finish a project unpleasant to do, failure makes me try harder and knowing the subjects where I am weak academically and I try to improve them. On the questions that were reversed, most of the participants responded Disagree regarding if something looks too complicated I will not even bother to try it and when trying to learn something new I soon give up if I am not initially successful. Consequently, most of the participants responded Agree regarding I avoid trying to learn new things when they look too difficult for me. In the next section, a detailed discussion of Mason (2012) study is compared to my research study regarding motivation.

Mason (2012) conducted a study regarding role of psychological needs and student satisfaction impacting doctoral student motivation. 125 doctoral students participated in the study and of the 125 participants, 65.2% were females (N=82). Furthermore, out of the 125 doctoral students who participated in the Mason (2012) study, 21.7% were in the field of Education (N=27). Mason (2012) reported out of 125 participants in doctoral studies, 26.7% were enrolled for one year (first year in doctoral studies) (N=33). First year in doctoral studies was the highest recorded frequency regarding year in school in the study conducted by Mason (2012). Lastly, Mason (2012) and this research featured questions on motivation that were reversed. In the study conducted by Mason (2012), the question “I do not feel motivated to continue this program” was

on a Likert Scale from 1 strongly disagree to 5 strongly agree was reversed. Instead of 1 being strongly disagree, 1 represents strongly agree and 5 represents strongly disagree instead of strongly agree.

Mason (2012) discovered in the research study the relationship between autonomy, competence and relatedness and motivation to continue was positive. This validated Mason's (2012) point doctoral students who believed pursuing their research interests without limitations were more motivated to complete their doctoral studies versus doctoral students who had limitations on pursuing their research interests. Furthermore, the results indicated students with high levels of competence were motivated to complete their doctoral studies than students who did not exhibit high levels of competence (Mason, 2012). Furthermore, the results of Mason's (2012) study concluded students who had strong relatedness with their advisors were motivated to complete their doctoral degree. In addition, there was a positive relationship between autonomy and relatedness to graduate student program satisfaction; however, there was no relationship between competence and graduate student program satisfaction (Mason, 2012). Mason (2012) concluded there was a relationship connection between autonomy, graduate student program satisfaction and motivation to continue. Well-being of PhD students related to motivation is addressed in the next section.

Sverdlik, Hall, McAlpine and Hubbard (2018) conducted a unique study on experiences and well-being of PhD students. The participants were the articles. They reviewed 163 empirical articles and discovered 37 empirical articles dealt with motivation. Some of the themes identified by Sverdlik, Hall, McAlpine, & Hubbard (2018) regarding motivation from other researchers

include (1) lack of motivation is the main reason for graduate school departure, (2) reasons for pursuing doctoral degrees range from intrinsic motivation such as interest to extrinsic motivation such as employability and (3) students motivation of pursuing doctoral degrees for intrinsic reasons had reported better satisfaction and well-being during their doctoral studies (Devos et al., 2017; Geraniou, 2010; Ivankova & Stick, 2007; Leonard, Becker, & Coate, 2005; O'Meara, Knudson, & Jones, 2013). Timeframe in completing doctoral studies related to motivation is the next area addressed for discussion.

In my research study investigation, the timeframe year 2020 was the highest recorded frequency regarding expected graduation date (Year). Furthermore, expected graduation date (Year) 2020 (EXP=2.0) was the independent demographic factor variable which showed a relationship to motivation in my research study. In comparison, one research study mentioned the motivation of African Americans in completing their doctoral degree. Although Merriweather Hunn (2008) research did not state the expected timeframe graduation of her research participants, the participants did express motivation of obtaining the doctoral degree because they believed it was doable and had believeth in themselves that they could accomplish the goal (Merriweather Hunn, 2008). Merriweather Hunn (2008) mentioned African American participants in her research study they were internally motivated to complete their doctoral degree simply because they knew the sacrifice of persistence and felt very competent of finishing the mission of completing the doctoral degree. Although Merriweather Hunn (2008) did not discussed the education level of the participants mother and father, it did state the importance of the participants to have complete focus and concentration of keeping in mind the end goal they

had developed for themselves. Education level of mother and father is the next area to be addressed in relation to motivation.

In my research exploration, the demographic factors of father's education level of Bachelors Degree and mother's education level of Some Graduate was in relationship to motivation. Craig, Verma, Stokes, Evans and Arbol (2018) described in the research how parental influence played a major role in Katrina, Ryan and Sam being introduced to the Science, Technology, Engineering and Mathematics (STEM) field. Katrina discovered her love of science through her father who was a scientist. Although their research did not indicate the education level of Katrina's father, it is important to note how a father's active role in his occupation can influence his son or daughter decision to pursue an occupation in a worthwhile field. Craig et al (2018) discussed how Ryan got into the STEM field by looking at his mother's chemistry book. Their research did not indicate the education level of Ryan's mother and father. Also, the research did not indicate the education level of Sam's parents; however, it is important to note how parental influences of each participant lead to pursue careers in STEM fields.

My research study indicated the education level of the mother with Some Graduate and education level of the father with Bachelors Degree were significant to motivation. It was reported that out of the 88 participants, 12.5% (N=11) indicated their father's education level was Bachelors Degree. Furthermore, the education level of the mother with Some College was significant in relationship to confidence. However, the highest frequency recorded regarding education level of the father in this study was High School Diploma at 33% (N=29). The education level of the father being High School Diploma was not significant in relation to

motivation and confidence. Consequently, the highest frequency regarding education level of the mother in this study was Some College at 30.7% (N=27) which again was significant in relation to confidence. The next section addressed areas of doctoral studies in Mathematics Education.

Out of 88 participants of African American descent in my research study, one-point one percent are pursuing doctoral degree in Educational Leadership with an emphasis on Mathematics Education (N=1), 1.1% pursuing doctoral degree in Higher Education/Mathematics (N=1) and 2.3% are pursuing doctoral degree in Mathematics Education. Jett (2011) conducted a case study of an African American male doctoral student in Mathematics named Roger and Roger shared his experiences teaching mathematics in higher education. It is important to note that some institutions of higher learning structure mathematics education doctoral programs in College of Education (Curriculum & Instruction) and mathematics education doctoral programs can be structured in STEM field discipline. In order to increase the number of African Americans especially males pursuing doctoral degrees in mathematics and/or mathematics education, it is very important for policy makers and stakeholders not to create stereotypes of African American male students lacking mathematical intelligence (Martin, 2009).

By creating the stereotype of African American male students lacking mathematical intelligence, policy makers and stakeholders probably will make it difficult to debunk the myth of African American male students have deficiencies in mathematics (Martin, 2009). One manner which policy makers and stakeholders can reduce the myth of African American males having mathematical deficiencies is to explore research that highlights strengths in mathematics education of African American male students (Jett, 2011). When the strengths in mathematics

education of African American are highlighted in the forefront, policy makers and stakeholders will be more informed to make effective policy changes to change the perception of African American males pursuing doctoral studies in mathematics education and teaching mathematics in higher education (Jett, 2011). Final Masters GPA is discussed in the following section in relation to motivation.

In my research study, final Masters GPA 3.0-3.3 was significantly related to motivation. However, final Masters GPA 3.0-3.3 was the least recorded frequency regarding final Masters GPA at 11.4% (N=10). 51.1% of the participants who self-identified themselves as African American indicated having a final masters GPA ranging from 3.8 to 4.0 (N=45), 37.5% indicated having a final masters GPA ranging from 3.4 to 3.7 (N=33). In my research exploration, final Masters GPA was significant in relation to confidence and motivation. Those who indicated final Masters GPA in the 3.0-3.3 range were motivated to complete their doctoral degree in College of Education Discipline at HSIs and/or Emerging HSIs in the Southwest United States (Texas, New Mexico, Arizona, California, Nevada and Colorado). Furthermore, those who indicated final Masters GPA in the 3.4-3.7 range were more confident in completing their doctoral degree in College of Education Disciplines at HSIs and/or Emerging HSIs in the Southwest United States.

Hands (2018) conducted a study regarding motivation of pursuing a doctoral degree in library and information science. Only two African Americans participated in the study. One of the participants stated in Hands (2018) study stated an important factor in pursuing a PhD was undergraduate coursework and masters level coursework. My research study and Hands (2018)

research both validated final Masters GPA as key demographic factor in pursuing doctoral studies. Motivating factors in pursuing doctoral studies is discussed in the next section.

Regarding post graduate experience, researchers conducted a study of 11 teachers to explore their motivation in pursuing PhDs. The result is the pursuit of the PhD obviously is the next step after earning a Masters degree. They discovered these 11 teachers were ready and prepared for the challenge of taking on doctoral studies (Kowlaczuk-Waledziak, Lopes, Menezes, & Tormenta, 2017). However, it was noted the main reason for motivation in pursuing doctoral studies was the desire to pursue research opportunities plus making connections while engaging in academia (Kowlaczuk-Waledziak, Lopes, Menezes, & Tormenta, 2017). The respondents felt it was a very important necessity to conduct research and have the mentality of a researcher (Kowlaczuk-Waledziak, Lopes, Menezes, & Tormenta, 2017). Consequently, there were educators from Poland who felt not having enough in-service trainings to commence in their PhD studies (Kowlaczuk-Waledziak, Lopes, Menezes, & Tormenta, 2017). They expressed the necessity of having more activities to stimulate their intellectuality in preparation for doctoral studies (Kowlaczuk-Waledziak, Lopes, Menezes, & Tormenta, 2017). The following section addressed comparison to my research study.

In my research study, 38.6% (N=34) of the 88 participants of African American descent indicated Some Confidence in publishing a journal article and/or book chapter prior to degree completion. With that being said, the 11 participants in the Kowlaczuk-Waledziak, Lopes, Menezes, and Tormenta (2017) study would respond in my research study investigation having Some Confidence in publishing a journal article and/book chapter prior to degree completion.

Additionally, these 11 participants would plausibly exhibit complete confidence in the following areas: (1) completing doctoral coursework requirements in education with at least a “B” or better, (2) completing doctoral writing coursework requirements with at least a “B” or better, (3) earning a cumulative GPA of at least 3.0 after completing three years of doctoral study, (4) completing coursework requirements in Education with at least a 3.0 GPA, (5) excelling over the next two terms/quarters/semesters and (6) completing the dissertation. Also, these 11 participants would probably feel motivated in sticking to a project until it is completed even if its unpleasant to them, failure makes them try harder and would to try to improve in areas of academia which they are not proficient. In my research study investigation, the educators from Poland who reported not having stimulating activities to stimulate intellectuality would respond Disagree if something looks too complicated, they would not bother to try it and when trying to learn something new they would soon give up if initially not successful.

Regarding motivation, researchers have pointed various factors for individuals pursuing doctoral degrees. One factor explored by researchers for individual motivation in pursuing doctoral degrees is development intellectually (Dust, 2006; Leonard et al., 2005; Patchner, 1982; Wellington & Sikes, 2007). A second factor explored by researchers for individual motivation in pursuing doctoral degrees is interest in the field (Austin, 2002; Brailsford, 2010; De Welde & Laursen, 2008; Leonard et al., 2005; Walford, 2006). Other factors explored by researchers for individual motivation in pursuing doctoral degrees are acquiring valuable research experience (De Welde & Laursen, 2008; Dust, 2006; Stubb, Pyhalto, & Lonka, 2012), adjustments needed in making life changes (Dust, 2006; Wellington & Sikes, 2007) and drift (i.e. transitioning into

graduate education at a pace that is gradual instead of accelerated without navigating through alternatives that are more effortful; Walford, 2006).

In my research investigation, there were six questions asked to address the motivation of participants pursuing doctoral degrees in College of Education disciplines at HSIs and/or emerging HSIs. In three of the questions, 51.1% of the participants (N=45) indicated they agree when having to do something unpleasant, they will stick to it until its finished, 52.3% of the participants (N=46) indicated they agree failure makes me try harder and 45.5% of the participants (N=40) indicated they agree in trying to improve upon the areas in academia where they are weak. The other three questions were stated in a negative connotation which led to reversing strongly agree as a 5 on the Likert Scale instead of a 1, agree becoming a 4 on the Likert Scale instead of a 2, strongly disagree becoming a 1 on the Likert Scale instead of a 5 and disagree becoming a 2 on the Likert Scale instead of a 4.

The demographic factor employment status for my research study indicated 86.4% (N=76) of the participants were full time employees. Leonard et al. (2005) conducted a research study of 89 alumni who earned doctorates in education (PhD, EdD) to explore reasons students decided to pursue doctoral studies and was the pursuit was worth the effort. Their findings stated these students had internal reasons in pursuing doctoral degrees; however, those pursuing doctoral degrees for vocation purposes reported not being satisfied with the process and result of their doctorate. My study did not ask participants to indicate if they are pursuing doctoral studies for vocational purposes in College of Education disciplines.

In addition, Stubb et al. (2012) reported students had better well-being when they stress the importance of valuing each step in the doctoral process instead of the product. Again, those students who stress emphasis of valuing each step in the doctoral process would probably finish a task if its unpleasant, try harder when they have failure and improve upon areas they know are lacking in academia. In Stubb et al. (2012) study, students in the social sciences disciplines indicated they value going through the doctoral process; consequently, students in natural sciences disciplines indicated valuing the product of the doctorate (Sverdlik, Hall, McAlpine, & Hubbard, 2018). Studies conducted on motivation in doctoral students plausibly suggest students who are both motivated within themselves and concentrate on valuing the doctoral process indicate greater satisfaction, strong well-being and success in academia during the doctoral process (Sverdlik, Hall, McAlpine, & Hubbard, 2018). Researchers have identified motivation to succeed be the essential predictor regarding achievement and persistence in doctoral education (Brown & Watson, 2010; Dewett, Shin, Toh, & Semadeni, 2005; Hegarty, 2011; O'Meara et al., 2013; Onwuegbuzie, Rosli, Ingram, & Frels, 2014). Furthermore, researchers who conducted studies on motivation in graduate education indicate age as one factor motivational variables correlate with individual differences (Cao, 2012; Kusrkar, Kruitwagen, Cate, & Croiset, 2010). The next area for discussion of results focused on family support in a positive manner comparing to other studies reported.

My research study had 77.3% (N=68) of the participants who self-identified themselves as African American were females. Also, 51.1% of the African American participants (N=45) indicated having responsibilities of child rearing. 29.5% of the African American participants

(N=26) reported having 90%-100% child rearing responsibilities. However, 3.4% out of the 88 participants (N=3) mentioned having 70%-80% of child rearing responsibilities was very significant in relation to confidence. Furthermore, my research study reported 48.9% (N=43) of the participants marital status as married. Marital status had no significant relationship to self-efficacy (Confidence) and motivation in my research study.

Appling, Haskins, and Daigle (2018) did a qualitative study of eight African American doctoral students who valued the importance of motherhood. All the participants emphatically made it clear being a mother is priority number one (Appling, Haskins, & Daigle, 2018). One of the participants stated clearly when arriving home she cannot be a doctoral student. This participant has the mindset of being a mother 24 hours a day (Appling, Haskins, & Daigle, 2018). Every female African American participant in the study conducted by Appling, Haskins, and Daigle (2018) clearly express acknowledgement of being a proud African American female without reservation or hesitation.

Simultaneously, all eight African American female participants in the study clarified they have a genuine desire in obtaining a doctoral degree (Appling, Haskins, & Daigle, 2018). Each participant in the study who have the desire in obtaining the doctoral degree allows them to be empowered in modeling new methods of being an African American mother (Appling, Haskins, & Daigle, 2018). “African American mothers with doctoral degrees serve as role models for other African American mothers, African American women, and their own children” (Appling, Haskins, & Daigle, 2018, p.64).

Another research study which validated family support in a positive manner was by Trujillo (2007). Trujillo (2007) shared his personal experiences as a researcher impacted family support. His work as a researcher changed the way he views his family. One key change was the method of how he shares simple moments and simple things. Another perspective change that occurred is that as a result of sharing simple things and moments, the feelings of loneliness disappeared in a slow manner (Trujillo, 2007). Research which contradicted positive family support is the next section area discussed.

My research reported none of the 88 participants who self-identified themselves as African American state their experiences with their fathers were negative. Also, my research indicated motivation was an essential variable regarding academic success on the doctoral level. Amini et al. (2008) study identified motivation as one theme vital for academia success on the doctoral level.

In the study conducted by Castro, Garcia, Cavazos, and Castro (2011), four of the seven female doctoral student participants indicated their experiences with their father growing up was very negative. They indicated their fathers had issues with sustaining gainful employment, abuse, alcohol and extramarital relationships. Furthermore, five of the seven participants reported lack of support by their parents regarding education endeavors. In contrast to the Castro, Garcia, Cavazos, and Garcia (2011) study, this research reported none of the 88 participants state their experiences with their fathers were negative. However, Castro, Garcia, Cavazos, and Garcia (2011) stated four of the seven participants did utilize the negative their negative experiences with their fathers as motivation. These participants agreed failure makes them try harder, finish a

task if looks unpleasant to them and improve upon areas in academia where they are deficient. Moreover, they disagreed and/or strongly disagreed of not bothering to attempt a task if it looks difficult, will not give up initially when attempting to learn something new and refusing avoidance of learning new when they look difficult.

Another study that showed the opposite of family support was a study conducted by Henfield, Owens, and Witherspoon. Their study comprised of 11 African American doctoral students in Counselor Education and all 11 participants did not mention family support among intermediate family on a collective form (Henfield, Owens, & Witherspoon, 2011). Their source of family support came from Black Greek Student Association and Black Greek fraternities and sororities. In their study, the researchers seemed this family support among Black Greek fraternities and sororities does play a major role in providing necessity to associate with students who have similar ethnicity backgrounds plus having an environmental outlet to release their emotions (Henfield, Owens, & Witherspoon, 2011). However, researchers have identified family as an essential component support system (Herndon & Hirt, 2004).

Henfield, Owens, and Witherspoon (2011) did not discussed family members as a collective form of support; however, the reason for missing this information are not clearly specified. It could be related to students separating themselves apart from family obligations/commitments which could be a distraction in obtaining their degree (Guiffrida, 2005) or beginning the process of exhibiting appropriate relationship development (e.g., intimacy vs. isolation; Erickson, 1968). Additionally, their research validates other researchers stating students of African American descent need to associate with peers of the same ethnicity

background and spaces (Harper & Patton 2007; McClure, 2006; Soloranzo et al., 2000). Peer support as a family outlet in Counselor Education is the next area to be addressed.

Before addressing peer support as a family outlet in Counselor Education, it is important to note I the researcher did not interrogate where the African American participants did their undergraduate and graduate studies prior to enrolling in doctoral studies at Hispanic Serving Institutions (HSIs) and/or Emerging HSI in a College of Education Discipline. Henfield, Woo, and Washington (2013) conducted a research regarding the perception challenges of 11 African American doctoral students encountered in the field of Counselor Education. One theme to emerge from the study was the previous educational experiences of the participants (Henfield, Woo, & Washington, 2013).

One participant named Dawson reported he was expecting isolation due to his undergraduate experience at a Predominately White Institution (PWI). Another participant named Constance did her undergraduate studies at a Historically Black and University (HBCU); however, she did expressed doubts about entering the counselor education doctoral program (Henfield, Woo, & Washington, 2013). A third participant named Jamila did indicate not attending a HBCU for undergraduate studies; however, she did attend a PWI that did have opportunities for African Americans to interact with one another. The statements of the last two participants of African American descent does validate researchers stating African American students need support from peers who are of the same ethnicity (Harper & Patton, 2007). Limitations of the study are addressed in the next section.

Limitations

One limitation of my study is small number of participants (N=88) led to the inability of generalizing. Although random sampling was utilized, my study only focused on African American doctoral students in College of Education Disciplines at Hispanic Serving Institutions and/or Emerging Hispanic Serving Institutions in the Southwest United States. Originally, the category of sampling for my research study was to be purposive sampling. In purposive sampling, the onus is on the researcher who utilized this method to identify specific characteristics of population and locate those individuals meeting the criteria of the population (Johnson & Christensen, 2008). The specific characteristics in the study was designed only for African American doctoral students enrolled in doctoral programs specifically in the College of Education discipline at HSIs and/or emerging HSIs of higher learning in the Southwest United States.

The sampling for this study was convenient sampling and the reason is because the resources were limited in the research study. I, the researcher, was able to reach the specific population of African American doctoral students in College of Education Disciplines at Hispanic Serving Institutions and/or emerging HSIs in the Southwest United States. Convenient sampling is simply the inclusion in sample of individuals who are available, volunteer or recruited without issues and show genuine interest in becoming a participant for research study (Johnson & Christensen, 2008). Convenient sampling is not recommended for researchers to make generalization of a population; however, researchers have no alternative to utilize

convenient sampling due to restrictions from a practical standpoint (Johnson & Christensen, 2008).

Another limitation is the utilization of HSIs and/or Emerging HSIs in my research study instead of utilizing Historically Black Colleges and Universities. The reason is because I the researcher wanted to avoid biases; in addition, I as the researcher is a product of an HBCU both as an undergraduate and graduate. To address the limitation for future studies, I the researcher recommend comparing African American doctoral students in all disciplines at HSIs and/or Emerging HSIs to African American doctoral students in all disciplines at HBCUs to get a clearer picture of motivation and self-efficacy (Confidence) in relationship to demographic factors of gender, employment status, marital status, education level of mother and father, final Masters GPA, last semester GPA, percentage of child rearing responsibilities, year in school, income (socioeconomic) status and child rearing responsibilities.

A third limitation was the utilization of geographic region for my research study. In my research investigation, the only region focused upon was the southwest region of the United States with HSIs and/or Emerging HSIs. The southwest region comprised of these states: (1) Texas, (2) New Mexico, (3) Arizona, (4) California, (5) Nevada and (6) Colorado. Therefore, utilizing only the southwest region led to the inability to generalize across the United States. The next area for discussion is for the need of recommendations and/or implications significant in my research compared to other research to be addressed.

Recommendations/Implications Significant in my Research Study

The first major significance of my research study investigation which emerged was the African American doctoral students in my study who had child rearing responsibilities. African American participants in my study who reported having 70%-80% child rearing responsibilities was significant in relationship to self-efficacy (Confidence). Therefore, participants of African American descent in my research exploration who reported having 70%-80% responsibilities in child rearing exhibited confidence in completing their doctoral degree in College of Education Disciplines at HSIs and Emerging HSIs in the Southwest United States. The three participants of African American descent in my research study who reported 70%-80% responsibilities in child rearing were all females.

Two of the three female participants of African American descent with 70%-80% child rearing responsibilities indicated High School Diploma as the highest level of education obtained by both mother and father. Furthermore, the one other female participant of African American descent with 70%-80% child rearing responsibilities indicated Some College as the highest level of education obtained by both mother and father. These three African American female participants represented different College of Education discipline majors. The majors were Leadership in Nursing, Education Leadership and Curriculum and Instruction. One comment stated by an African American female participant with 70%-80% responsibilities in child rearing was both significant and prominent regarding self-efficacy (Confidence). This participant said "I would have not stayed in this EdD program had it not been for my university champion Dr. Jewett. There is a strong connection between blacks who having a champion and complete their

dissertation.” This statement is powerful, significant and prominent simply because it takes real good mentorship from an advisor willing to advocate for students in completing doctoral studies. Recommendations from my research compared to other research regarding responsibilities of child rearing are provided in the next section.

One recommendation from my research study regarding significance of child rearing responsibilities is for the establishment of a family friendly cultural environment. In conjunction with a family friendly cultural environment, it is important for doctoral coordinators, faculty, staff and administrators be cognizant of the unique needs of their doctoral students who have child rearing responsibilities. In other words, doctoral students who have responsibilities in child rearing ranging from 70%-80% have needs different from doctoral students who have 90% - 100% child rearing responsibilities. Therefore, it is very important for faculty, staff, administrators and doctoral coordinators in College of Education disciplines to engage and design strategies in providing needs for their students in their doctoral program who have child rearing responsibilities. The next section addressed validation from previous research of establishing family friendly cultural environment for doctoral students with child rearing responsibilities.

One recommendation proposed by Appling, Haskins, & Daigle (2018) to institute a family friendly culture that will be receptive to needs of African American women regarding career development. This suggestion could benefit African American women who desire to pursue doctoral studies and raise their children. It is important for faculty and administrators in academia be knowledgeable and adaptable working with African American women in higher

education to provide effective support and intervention (Appling, Haskins, & Daigle, 2018). To encourage African American females who desire obtaining a doctoral degree while still have child rearing responsibilities, Appling, Haskins, and Daigle (2018) strongly suggested that institutions of higher learning develop mechanisms in place so mothers can plausibly have an opportunity to make connections with other individuals who have similar identities and/or have firsthand knowledge experience collaborating on developmental issues related to the combining of motherhood with other identities. Recommendations regarding significance between motivation and self-efficacy (Confidence) in relationship to education level of mother and father is addressed in the next section.

In my research study, the mother and father who obtained an education level of at least Some College were motivated and confident in completing their doctoral degree in College of Education disciplines at HSIs and/or Emerging HSIs in the Southwest United States. 27 African American participants (20 females and seven males) in my research study indicated Some College as the highest level of education obtained by the mother. 21 participants of African American descent (17 females and four males) in my research study reported Some College as the highest level of education obtained by the father. One recommendation regarding the significance in education level of mother and father is to have college recruiters be involved in convincing the parents with Some College education come back to complete their undergraduate (baccalaureate) degree. By returning to college and completing their baccalaureate degree, the mother and father can serve as role models for their children who desire to pursue doctoral studies.

Additionally, 29 participants of African American descent (21 females and eight males) in my research study reported their mother obtained higher education degrees (13 with a Bachelors Degree, 14 with a Masters Degree and two with a Doctoral Degree). 24 participants of African American descent in my research study indicated their father obtained higher education degrees (11 with a Bachelors Degree, eight with a Masters Degree and five with a Doctoral Degree). One African American participant stated the highest education level obtained by the mother was Some Graduate and one African American female participant stated Some Graduate as the highest education level obtained by the father. One recommendation is to involve college recruiters in encouraging mothers and fathers with Some Graduate education to go back and finish their graduate their degrees. Another recommendation for future studies is the need for detailed interrogation of mother and father education background. In other words, find out what area of study did the mother and father earned their Bachelors Degree, Masters Degree and Doctoral Degree. In addition, find out from African American doctoral students why their mother and father did obtain Some College and Some Graduate as the highest level of education earned. Furthermore, find out if African American doctoral students are in College of Education Disciplines because their mother and father earned higher education degrees in College of Education Disciplines. Recommendations for replications of future studies is entailed in the next section.

One recommendation for future studies is involve African American doctoral students in all disciplines at HSIs and/or Emerging HSIs, HBCUs (Historically Black Colleges and Universities), and PWIs (Predominately White Institutions). By including all disciplines, future

research studies can truly exhibit a representation of what demographics are in relationship to motivation and confidence in African Americans completing doctoral degrees. Another recommendation would be to include the demographic factor age to see if it is significant to motivation and confidence of African Americans completing their doctoral degree. One reason for inclusion of age as an independent demographic factor suggested is simply to discover if age is significant to motivation and/or self-efficacy (Confidence) or if age is not significant to motivation and self-efficacy (Confidence). It is worth clarifying most graduate students pursuing graduate studies are mostly in the 20-29 and 30-39 age range (Benshoff, Cashwell, & Roswell, 2015). Moreover, it is noted for clarification graduate students in 30-39, 40-49 and 50-59 age ranges who have various work experiences over a period time in their lifetime matriculate in graduate school for the purpose of commencing a new career (Benshoff, Cashwell, & Roswell, 2015).

Another recommendation for future studies is to include interviews regarding experiences in doctoral school with faculty and experiences of climate culture in doctoral school. Interviews with African American doctoral students in College of Education Disciplines at HSIs and/or Emerging HSIs in Southwest United States were not utilized in my research. The focus of my research was to investigate which independent demographic factors were significant related to self-efficacy (Confidence) and motivation. Based on all the recommendations, a call to action is discussed in the next section.

A Call to Action

According to the findings of my research, one call to action is to have faculty who are strong advocates for African American doctoral students in all disciplines, especially College of Education. To reiterate, a powerful statement was made by an African American female participant in my research study who had a strong faculty advocate. This African American female stated “I would have not stayed in this EdD program if it had not been for my university champion Dr. Jewett. There is a strong connection between Blacks who having a champion and complete their dissertation.” Another call to action is to have faculty and administrators in College of Education Disciplines at HSIs and/or Emerging HSIs in the Southwest United States who strong advocates for equity in education. A female African American participant in my research study noted “Passionate about issues of Equity in Education.”

In my research study, the 88 African American participants represented diverse majors in College of Education Disciplines at HSIs and/or Emerging HSIs in the Southwest United States. With that being said, a third call to action would be to recruit and retain faculty of African American descent in College of Education Disciplines at HSIs and/or Emerging HSIs in the Southwest United States. By having more African American faculty in College of Education Disciplines at HSIs and/or Emerging HSIs in the Southwest United States, it gives African American doctoral students someone they can look up to for mentoring and advising in career development once they complete their doctoral degree. The next section entails one College of Education discipline area which addressed the need for recruiting and retaining African American faculty.

A Call to Action in Recruiting and Retaining Counselor Education Faculty of African American Descent

In the area of counselor education, one main implication regarding retention of African American doctoral students in recruiting and retaining counselor education faculty who are of African American descent (Henfield, Woo, & Washington, 2013). Researchers have mentioned without the ability to recruit and retain counselor education faculty of African American descent, it becomes very difficult to retain African American students simply because African American professors in counselor education provide a significant role in mentoring and supporting doctoral students of African American descent (Brooks & Steen, 2010; Henfield et al., 2011). As a result, university personnel and counselor education programs are mandated to explore and discuss potential barriers (Henfield, Woo, & Washington, 2013). Researchers have reported one barrier to retaining and recruiting talented African American faculty in counselor education is not enough time for mentorship by senior faculty (Bradley & Holcomb-McCoy, 2004; Brooks & Steen, 2010). The next call to action which needs to be addressed in improving cultural ethnicities relations between faculty and doctoral students of African American descent.

Another call to action is to improve cultural ethnicity relationships between faculty and doctoral students of African American descent in College of Education Disciplines. In my research study, 11.4% (N=10) reported comments on their cultural ethnicities when asked if they would like to add anything else. Eight females and two males who spoke about their cultural ethnicity represented variety of majors in College of Education Disciplines at HSIs and Emerging HSIs in the Southwest United States. Six participants acknowledged their cultural

ethnicity was more than African American. The cultural ethnicities identified were Native American, Nova Scotian, Irish, Mexican, German and Latino American. As a call to action in improving cultural ethnicity relationships between faculty and students, it is also important to note a recommendation for future studies is inclusion of students who identified themselves as African American who were born outside the United States. The next section entailed about research which identify the importance of cultural ethnicity relationships in doctoral studies.

A Call to Action in Improving Cultural Ethnicity Relationships Between Faculty and Doctoral Students of Non-Caucasian Descent

Additionally, it was suggested faculty need to make a sincere effort to have a meaningful dialogue regarding race on the levels of honesty and openly (Henfield Woo, & Washington, 2013). By doing this, it would be beneficial to have continuous meaningful dialogue regarding obstacles of being an individual of minority cultural ethnicity. Furthermore, this would assist faculty in developing strategies and mechanisms to assure students of minority cultural ethnicity become comfortable in the counselor education doctoral program (Henfield, Woo, & Washington, 2013). It was suggested for faculty to acknowledge how oppression in history can influence how students perceive the behavior and non-behavior of faculty (Henfield, Woo, & Washington, 2013). A recommendation for faculty in counselor education doctoral programs creating respect among cultural ethnicity differences is to communicate in a manner which reflects value of individuality (Henfield, Woo, & Washington, 2013). Researchers have indicated African Americans in counselor education doctoral programs expressed a genuine desire for mentorship support (Henfield et al., 2011). Additionally, the inadequate amount of diverse

faculty can be evidence of structural challenge and lead students to genuinely seek mentorship from a faculty member who is of the same cultural ethnic identity (Lewis et al, 2004). A final call to action addressed in the next section is assisting African American doctoral students with well-being when they feel less confidence with certain task and/or tasks.

A Call to Action in Boosting Morale of African American Doctoral Students

In my research study, the levels of confidence and motivation were addressed regarding certain tasks capable of being accomplished while in doctoral school. One task question where African American doctoral students in my research expressed Very Little Confidence and No Confidence is publishing at least one journal article and/or book chapter prior to degree completion. 11 participants of African American descent (10 females and one male) in my research study expressed No Confidence in performing the task of publishing at least journal article and/or book chapter prior to degree completion. 18 participants of African American descent in my research study (14 females and four males) expressed Very Little Confidence in performing the task of publishing at least one journal article and/or book chapter prior to degree completion. The next section entails research which discussed well-being of doctoral students.

Shavers and Moore (2014) challenged faculty, staff and administrators to question themselves whether overall well-being is essentially worth a high price for doctoral students to academically persist in completing their doctoral degree. In order to assist African Americans having confidence and motivation along with overall well-being, it was suggested university officials and faculty collaborate to have a supportive campus environment that includes overall well-being of the doctoral students (Shavers & Moore, 2014). Another suggestion stated by

Shavers and Moore (2014) to ensure overall well-being of doctoral students is for universities to have orientation creativity approach which allows the students to develop confidence in designing their own academic and wellness plan. Also, it was recommended for university officials and faculty to search for alternative mechanisms in evaluating student performance. These include satisfaction scores and wellness ratings and other evaluation mechanisms which determine overall well-being of students (Shavers & Moore, 2014).

Conclusion

In my research study, the demographic factors of (1) education level of the mother Some Graduate, (2) expected timeframe graduation completion of within one-year 2020, (3) education level of the father Bachelors Degree and (4) final Masters GPA 3.0-3.3 were significantly related to motivation. These demographic factors were significant in African Americans motivated to complete their doctoral degree in College of Education disciplines at HSIs and/or Emerging HSIs in Texas, New Mexico, Arizona, California, Nevada and Colorado. The demographics of (1) final Masters GPA 3.4-3.7, (2) education level of the mother Some College and (3) 70% -80% of child rearing responsibilities were related to confidence. These demographic factors were significant in African Americans exhibiting confidence to complete their doctoral degree in College of Education disciplines at HSIs and/or Emerging HSIs in Texas, New Mexico, Arizona, California, Nevada and Colorado.

One demographic factor my research did not address was age. If age was included in the independent demographic factor, then age could be significant or not significant in relation to confidence and motivation. For reiteration and clarification, individuals in the 30-39, 40-49 and

50-59 age range are in graduate school for the sole purpose of commencing in a new career due to having multiple work experiences over a lifetime period (Benshoff, Cashwell, & Roswell, 2015). Additionally, it is important to note for reiteration, most graduate students who pursue post baccalaureate studies (graduate degrees) for the sole purpose of career advancement are in the 20-29 and 30-39 age range (Benshoff, Cashwell, & Roswell, 2015). For anyone who would like to replicate this study for future research studies, it is highly recommended to include age as an independent demographic factor to determine significant relationship between age and self-efficacy (Confidence) and motivation.

For future studies, anyone who would like to replicate my study need to address challenges African American doctoral students encounter in child rearing responsibilities at HSIs and Emerging HSIs. In addition, another suggestion recommended for future replication of my study is to address African American doctoral students who were born outside the United States and consider their cultural ethnic identity as Black and/or non-Caucasian. Also, future replication of my study must be addressed in detail the reason for parents of African American doctoral students who indicate education level of Some College and Some Graduate. The second issue regarding education level of mother and father which needs to be addressed is simply are African American doctoral students are pursuing doctoral studies in College of Education disciplines because their mother and father higher education degrees are in College of Education disciplines or they are pursuing doctoral degrees in areas their mother and father earned Bachelors and Masters Degrees.

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APPENDIX A

Appendix A

Welcome to my research study!

Investigator: Matthew Lloyd Atterberry, MS, Doctoral Candidate

Background: The purpose of this research study is to explore factors leading to under-representation of African Americans in doctoral programs in College of Education disciplines at Hispanic Serving Institutions (HSIs). Also, another purpose of this research study is to identify factors leading African Americans to pursue doctoral studies in College of Education disciplines at HSIs. Thirdly, the purpose of the research is to explore how these factors impact African Americans enrolling in doctoral programs in College of Education disciplines at HSIs.

Procedure: In order to gather information regarding your experiences as an African American doctoral student in College of Education disciplines at HSIs, you are being asked to complete this online survey. The time it takes to complete the survey will vary by individual. Please answer questions fully pertaining to your doctoral experience. You may answer questions at your own pace online. Should you encounter a question that you choose not to answer, you may skip that question. After skipping a question, you may proceed in continuing the survey.

Voluntary Participation: Your participation in this research study is completely voluntary. You also have the right to withdraw at any time. We hope you will complete the survey to assist us to learn more about African American doctoral students enrolled in College of Education disciplines at HSIs.

Risks or Possible Discomforts Associated with the Study: There are no anticipated risks associated with your participation in this study.

Confidentiality: All survey responses received will be treated confidentially. All information gathered will be anonymous. No identifying information will be kept. The survey responses will be stored on a secure server. However, given that surveys can be completed from any computer (e.g., personal, work, school), it is not possible to guarantee the security of the computer on which you choose to enter your responses. As a participant in this study, please be aware that certain technologies exist which can be used to monitor, record data you enter on certain websites you visit.

Who to Contact for Research Related Questions: For questions about the research itself, to report any adverse effects during, following participation, contact the researcher:

Matthew Lloyd Atterberry, EdD Candidate (803) 383-4260 matthew.atterberry01@utrgv.edu

APPENDIX B

Appendix B

Graduate Student Self-Efficacy Survey

Q1 Assuming you were motivated to do your best, please indicate how much confidence you have that you could do each of the following at your college.

On a scale from no confidence at all to complete confidence:

Complete dissertation writing course requirements with a grade of at least a “B” or better

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Complete doctoral course requirements in education with a grade of at least a “B” or better

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Complete doctoral statistical requirements with grades of at a “B” or better

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Earn a cumulative grade point average of at least 3.0 on a 4.0 scale after at least three years of study

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Complete coursework requirements for doctorate in education with a grade point average of at least 3.0 on a 4.0 scale

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Excel over the next two quarters/terms/semesters

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Pass all qualifying exams

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Successfully defend the dissertation proposal

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Complete the dissertation

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Successfully defend the dissertation

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Publish at least one journal article or book chapter prior to degree completion

No Confidence
Very Little Confidence
Some Confidence
Much Confidence
Complete Confidence

Q2 Please keep in mind your academics when answering the questions below and indicate whether you strongly agree or strongly disagree with the following statements:

When I have something unpleasant to do, I stick to it until I finish it

Strongly Disagree
Disagree
Neither Agree nor Disagree
Agree
Strongly Agree

Failure makes me try harder

Strongly Disagree
Disagree
Neither Agree nor Disagree
Agree
Strongly Agree

I know the subjects where I am academically weak and I try to improve them

Strongly Disagree
Disagree
Neither Agree nor Disagree
Agree
Strongly Agree

If something looks too complicated, I will not even bother to try it

Strongly Disagree
Disagree
Neither Agree nor Disagree
Agree
Strongly Agree

When trying to learn something new, I soon give up if I am not initially successful

Strongly Disagree
Disagree
Neither Agree nor Disagree
Agree
Strongly Agree

I avoid trying to learn new things when they look too difficult for me

Strongly Disagree
Disagree
Neither Agree nor Disagree
Agree
Strongly Agree

Q3 Background Questions

Name of your school (1)

Please indicate your year in school: (e.g. first year=1, second year=2, third year=3, etc.) (2)

What is your academic major/concentration? (3)

What is your cumulative GPA as of last semester (e.g., 3.0/4.0)? If this is your first year in school, please indicate N/A (4)

What was your final master's grade point average? (5)

Please indicate the number of years of formal education obtained by your mother (e.g., high school=12, 13; undergraduate=16, 17; graduate=18, 19; doctorate=22, 23) (6)

Please indicate the number of years of formal education obtained by your father (e.g., high school=12, 13; undergraduate=16, 17; graduate=18, 19; doctorate=22, 23) (7)

If no mother or father was present in the home, please indicate the number of years of formal education obtained by a legal guardian (e.g., high school=12, 13; undergraduate=16, 17; graduate=18, 19; doctorate=22, 23) (8)

Are you a U.S. Citizen or Permanent Resident? Please write yes or no (9)

Please indicate which cultural group you most identify with (10)

Check which gender you identify yourself (11)

If there anything else you'd like to share about how you identified yourself?(12)

When do you expect to graduate from the program? (13)

2019

2020

2021

2022

2023

2024 or beyond

Q4 Please indicate your approximate yearly family income (in U.S. dollars):

Less than \$25,000 (1)

\$25,000- \$49,999 (2)

\$50,000- \$74,999 (3)

More than \$75,000 (4)

Q5 Please indicate your marital status

Single (1)

Married (2)

Divorced (3)

Widowed (4)

Q6 Please indicate your student status

Full-time (1)

Part-time (2)

Click to write Choice 3 (3) [On Scholarship]

Q7 Please indicate your employment status

Full-time (1)

Part-time (2)

Unemployed (3)

Q8 Do you have child rearing responsibilities?

Yes (1)

No (2)

If you have child rearing responsibilities, please indicate what percentage

10%-20%

30%-40%

50%-60%

70%-80%

90%-100%

APPENDIX C

Appendix C

Dummy Codes (Year in School)

African American participants in my research study who stated they are in Year 1 of doctoral studies

1st Year= Years_1=1

2nd Year=Years_2=0

3rd Year=Years_3=0

4th Year=Years_4=0

African American participants in my research study who stated they are in Year 2 of doctoral studies

2nd Year=Years_2=1

1st Year=Years_1=0

3rd Year=Years_3=0

4th Year=Years_4=0

African American participants in my research study who stated they are in Year 3 of doctoral studies

3rd Year=Years_3=1

1st Year=Years_1=0

2nd Year=Years_2=0

4th Year=Years_4=0

African American participants in my research study who stated they are in Year 4 or more of doctoral studies

4th Year or More=Years_4=1

1st Year=Years_1=0

2nd Year=Years_2=0

3rd Year=Years_3=0

APPENDIX D

Appendix D

Dummy Codes (Income Socioeconomic Status)

African American participants in my research study who indicated income socioeconomic status less than \$25000

Less than \$25000=Income_1=1 (INCOME=1.0)
\$25000-\$49999=Income_2=0 (INCOME=2.0)
\$50000-\$74999=Income_3=0 (INCOME=3.0)
Greater than \$75000=Income_4=0 (INCOME=4.0)

African American participants in my research study who indicated income socioeconomic status \$25000-\$49999

\$25000-\$49999=Income_2=1 (INCOME=2.0)
Less than \$25000=Income_1=0 (INCOME=1.0)
\$50000-\$74999=Income_3=0 (INCOME=3.0)
Greater than \$75000=Income_4=0 (INCOME=4.0)

African American participants in my research study who indicated income socioeconomic status \$50000-\$74999

\$50000-\$74999=Income_3=1 (INCOME=3.0)
Less than \$25000=Income_1=0 (INCOME=1.0)
\$25000-\$49999=Income_2=0 (INCOME=2.0)
Greater than \$75000=Income_4=0 (INCOME=4.0)

African American participants in my research study who indicated income socioeconomic status greater than \$75000

Greater than \$75000=Income_4=1 (INCOME=4.0)
Less than \$25000=Income_1=0 (INCOME=1.0)
\$25000-\$49999=Income_2=0 (INCOME=2.0)
\$50000-\$74999=Income_3=0 (INCOME=3.0)

APPENDIX E

Appendix E

Dummy Codes (Marital Status)

African American participants in my research study who reported marital status as Single

Single=Marital_1=1 (MARITAL=1.0)

Married=Marital_2=0 (MARITAL=2.0)

Divorced=Marital_3=0 (MARITAL=3.0)

Widowed=Marital_4=0 (MARITAL=4.0)

African American participants in my research study who reported marital status as Married

Married=Marital_2=1 (MARITAL=2.0)

Single=Marital_1=0 (MARITAL=1.0)

Divorced=Marital_3=0 (MARITAL=3.0)

Widowed=Marital_4=0 (MARITAL=4.0)

African American participants in my research study who reported marital status as Divorced

Divorced=Marital_3=1 (MARITAL=3.0)

Single=Marital_1=0 (MARITAL=1.0)

Married=Marital_2=0 (MARITAL=2.0)

Widowed=Marital_4=0 (MARITAL=4.0)

African American participants in my research study who reported marital status as Widowed

Widowed=Marital_4=1 (MARITAL=4.0)

Single=Marital_1=0 (MARITAL=1.0)

Married=Marital_2=0 (MARITAL=2.0)

Divorced=Marital_3=0 (MARITAL=3.0)

APPENDIX F

Appendix F

Dummy Codes (Employment Status)

African American participants in my research study who replied employment status as Full Time

Full Time=EmpStatus_1=1 (EMP=1.0)

Part Time=EmpStatus_2=0 (EMP=2.0)

On Scholarship=Emp Status_3=0 (EMP=3.0)

African American participants in my research study who replied employment status as Part Time

Part Time=EmpStatus_2=1 (EMP=2.0)

Full Time=EmpStatus_1=0 (EMP=1.0)

On Scholarship=EmpStatus_3=0 (EMP=3.0)

African American participants in my research study who replied employment status as On Scholarship

On Scholarship=EmpStatus_3=1 (EMP=3.0)

Full Time=EmpStatus_1=0 (EMP=1.0)

Part Time=EmpStatus_2=0 (EMP=2.0)

Dummy Codes (Child Rearing Responsibilities)

African American participants in my research study who responded YES to having child rearing responsibilities

ChildRear_1=1 (CHILD=YES)

ChildRear_2=0 (CHILD=NO)

African American participants in my research study who responded NO to having child rearing responsibilities

ChildRear_2=1 (CHILD=NO)

ChildRear_1=0 (CHILD=YES)

APPENDIX G

Appendix G

Dummy Codes (Percentage of Child Rearing Responsibilities)

African American participants in my research study who confirmed having 10%-20% child rearing responsibilities

10%-20%=PercentChild_1=1
30%-40%=PercentChild_2=0
50%-60%=PercentChild_3=0
70%-80%=PercentChild_4=0
90%-100%=PercentChild_5=0
0%=PercentChild_6=0

African American participants in my research study who confirmed having 30%-40% child rearing responsibilities

30%-40%=PercentChild_2=1
10%-20%=PercentChild_1=0
50%-60%=PercentChild_3=0
70%-80%=PercentChild_4=0
90%-100%=PercentChild_5=0
0%=PercentChild_6=0

African American participants in my research study who confirmed having 50%-60% child rearing responsibilities

50%-60%=PercentChild_3=1
10%-20%=PercentChild_1=0
30%-40%=PercentChild_2=0
70%-80%=PercentChild_4=0
90%-100%=PercentChild_5=0
0%=PercentChild_6=0

African American participants in my research study who confirmed having 70%-80% child rearing responsibilities

70%-80%=PercentChild_4=1
10%-20%=PercentChild_1=0
30%-40%=PercentChild_2=0
50%-60%=PercentChild_3=0
90%-100%=PercentChild_5=0
0%=PercentChild_6=0

African American participants in my research study who confirmed having 90%-100% child rearing responsibilities

90%-100%=PercentChild_5=1
10%-20%=PercentChild_1=0
30%-40%=PerecentChild_2=0
50%-60%=PercentChild_3=0
70%-80%=PercentChild_4=0
0%=PercentChild_6=0

African American participants in my research study who confirmed having 0% child rearing responsibilities

0%=PercentChild_6=1
10%-20%=PercentChild_1=0
30%-40%=PercentChild_2=0
50%-60%=PercentChild_3=0
70%-80%=PercentChild_4=0
90%-100%=PercentChild_5=0

APPENDIX H

Appendix H

Dummy Codes (Last Semester GPA)

African American participants in my research study who communicated last semester GPA of 3.0-3.3

3.0-3.3=GPALASTSEM_1=1
3.4-3.7=GPALASTSEM_2=0
3.8-4.0=GPALASTSEM_3=0

African American participants in my research study who communicated last semester GPA of 3.4-3.7

3.4-3.7=GPALASTSEM_2=1
3.0-3.3=GPALASTSEM_1=0
3.8-4.0=GPALASTSEM_3=0

African American participants in my research study who communicated last semester GPA of 3.8-4.0

3.8-4.0=GPALASTSEM_3=1
3.0-3.3=GPALASTSEM_1=0
3.4-3.7=GPALASTSEM_2=0

Dummy Codes (Final Masters GPA)

African American participants in my research study who validated final Masters GPA of 3.0-3.3

3.0-3.3=GFINM_1=1
3.4-3.7=GFINM_2=0
3.8-4.0=GFINM_3=0

African American participants in my research study who validated final Masters GPA of 3.4-3.7

3.4-3.7=GFINM_2=1
3.0-3.3=GFINM_1=0
3.8-4.0=GFINM_3=0

African American participants in my research study who validated final Masters GPA of 3.8-4.0

3.8-4.0=GFINM_3=1

3.0-3.3=GFINM_1=0

3.4-3.7=GFINM_2=0

APPENDIX I

Appendix I

Dummy Codes (Expected Graduation Date) (Year)

African American participants in my research study who identified 2019 as year of expected graduation date

2019=ExpectGrad_1=1 (EXP 1.0)
2020=ExpectGrad_2=0 (EXP 2.0)
2021=ExpectGrad_3=0 (EXP 3.0)
2022=ExpectGrad_4=0 (EXP 4.0)
2023=ExpectGrad_5=0 (EXP 6.0)
2024=ExpectGrad_6=0 (EXP 7.0)

or

Beyond

African American participants in my research study who identified 2020 as year of expected graduation date

2020=ExpectGrad_2=1 (EXP 2.0)
2019=ExpectGrad_1=0 (EXP 1.0)
2021=ExpectGrad_3=0 (EXP 3.0)
2022=ExpectGrad_4=0 (EXP 4.0)
2023=ExpectGrad_5=0 (EXP 6.0)
2024=ExpectGrad_6=0 (EXP 7.0)

or

Beyond

African American participants in my research study who identified 2021 as year of expected graduation date

2021=ExpectGrad_3=1 (EXP 3.0)
2019=ExpectGrad_1=0 (EXP 1.0)
2020=ExpectGrad_2=0 (EXP 2.0)
2022=ExpectGrad_4=0 (EXP 4.0)
2023=ExpectGrad_5=0 (EXP 6.0)
2024=ExpectGrad_6=0 (EXP 7.0)

or

Beyond

African American participants in my research study who identified 2022 as the year of expected graduation date

2022=ExpectGrad_4=1 (EXP 4.0)
2019=ExpectGrad_1=0 (EXP 1.0)
2020=ExpectGrad_2=0 (EXP 2.0)
2021=ExpectGrad_3=0 (EXP 3.0)
2023=ExpectGrad_5=0 (EXP 6.0)
2024=ExpectGrad_6=0 (EXP 7.0)

or

Beyond

African American participants in my research study who identified 2023 as the year of expected graduation date

2023=ExpectGrad_5=1 (EXP 6.0)
2019=ExpectGrad_1=0 (EXP 1.0)
2020=ExpectGrad_2=0 (EXP 2.0)
2021=ExpectGrad_3=0 (EXP 3.0)
2022=ExpectGrad_4=0 (EXP 4.0)
2024=ExpectGrad_6=0 (EXP 7.0)

or

Beyond

African American participants in my research study who identified 2024 or Beyond as the year of expected graduation date

2024=ExpectGrad_6=1 (EXP 7.0)
or Beyond
2019=ExpectGrad_1=0 (EXP 1.0)
2020=ExpectGrad_2=0 (EXP 2.0)
2021=ExpectGrad_3=0 (EXP 3.0)
2022=ExpectGrad_4=0 (EXP 4.0)
2023=ExpectGrad_5=0 (EXP 6.0)

APPENDIX J

Appendix J

Dummy Codes (Education Level of Mother)

African American participants in my research study who replied Some High School as the highest level of education obtained by the mother

Some High School=MOMSCHOOL_1=1
High School Diploma=MOMSCHOOL_2=0
GED=MOMSCHOOL_3=0
Some College=MOMSCHOOL_4=0
Bachelors Degree=MOMSCHOOL_5=0
Some Graduate=MOMSCHOOL_6=0
Masters Degree=MOMSCHOOL_7=0
Doctoral Degree=MOMSCHOOL_8=0

African American participants in my research study who replied High School Diploma as the highest level of education obtained by the mother

High School Diploma=MOMSCHOOL_2=1
Some High School=MOMSCHOOL_1=0
GED=MOMSCHOOL_3=0
Some College=MOMSCHOOL_4=0
Bachelors Degree=MOMSCHOOL_5=0
Some Graduate=MOMSCHOOL_6=0
Masters Degree=MOMSCHOOL_7=0
Doctoral Degree=MOMSCHOOL_8=0

African American participants in my research study who replied GED as the highest level of education obtained by the mother

GED=MOMSCHOOL_3=1
Some High School=MOMSCHOOL_1=0
High School Diploma=MOMSCHOOL_2=0
Some College=MOMSCHOOL_4=0
Bachelors Degree=MOMSCHOOL_5=0
Some Graduate=MOMSCHOOL_6=0
Masters Degree=MOMSCHOOL_7=0
Doctoral Degree=MOMSCHOOL_8=0

African American participants in my research study who replied Some College as the highest level of education obtained by the mother

Some College=MOMSCHOOL_4=1
Some High School=MOMSCHOOL_1=0
High School Diploma=MOMSCHOOL_2=0
GED=MOMSCHOOL_3=0
Bachelors Degree=MOMSCHOOL_5=0
Some Graduate=MOMSCHOOL_6=0
Masters Degree=MOMSCHOOL_7=0
Doctoral Degree=MOMSCHOOL_8=0

African American participants in my research study who replied Bachelors Degree as the highest level of education obtained by the mother

Bachelors Degree=MOMSCHOOL_5=1
Some High School=MOMSCHOOL_1=0
High School Diploma=MOMSCHOOL_2=0
GED=MOMSCHOOL_3=0
Some College=MOMSCHOOL_4=0
Some Graduate=MOMSCHOOL_6=0
Masters Degree=MOMSCHOOL_7=0
Doctoral Degree=MOMSCHOOL_8=0

African American participants in my research study who replied Some Graduate as the highest level of education obtained by the mother

Some Graduate=MOMSCHOOL_6=1
Some High School=MOMSCHOOLZ-1=0
High School Diploma=MOMSCHOOL_2=0
GED=MOMSCHOOL_3=0
Some College=MOMSCHOOL_4=0
Bachelors Degree=MOMSCHOOL_5=0
Masters Degree=MOMSCHOOL_7=0
Doctoral Degree=MOMSCHOOL_8=0

African American participants in my research study who replied Masters Degree as the highest level of education obtained by the mother

Masters Degree=MOMSCHOOL_7=1
Some High School=MOMSCHOOL_1=0
High School Diploma=MOMSCHOOL_2=0
GED=MOMSCHOOL_3=0
Some College=MOMSCHOOL_4=0
Bachelors Degree=MOMSCHOOL_5=0
Some Graduate=MOMSCHOOL_6=0
Doctoral Degree=MOMSCHOOL_8=0

African American participants in my research study who replied Doctoral Degree as the highest level of education obtained by the mother

Doctoral Degree=MOMSCHOOL_8=1
Some High School=MOMSCHOOL_1=0
High School Diploma=MOMSCHOOL_2=0
GED=MOMSCHOOL_3=0
Some College=MOMSCHOOL_4=0
Bachelors Degree=MOMSCHOOL_5=0
Some Graduate=MOMSCHOOL_6=0
Masters Degree=MOMSCHOOL_7=0

APPENDIX K

Appendix K

Dummy Codes (Education Level of Father)

African American participants in my research study who answered Some High School as the highest level of education obtained by the father

Some High School=PapaEd_1=1	(PAPA 1.0)
High School Diploma=PapaEd_2=0	(PAPA 2.0)
GED=PapaEd_3=0	(PAPA 3.0)
Some College=PapaEd_4=0	(PAPA 4.0)
Bachelors Degree=PapaEd_5=0	(PAPA 5.0)
Some Graduate=PapaEd_6=0	(PAPA 6.0)
Masters Degree=PapaEd_7=0	(PAPA 7.0)
Doctoral Degree=PapaEd_8=0	(PAPA 8.0)

African American participants in my research study who answered High School Diploma as the highest level of education obtained by the father

High School Diploma=PapaEd_2=1	(PAPA 2.0)
Some High School=PapaEd_1=0	(PAPA 1.0)
GED=PapaEd_3=0	(PAPA 3.0)
Some College=PapaEd_4=0	(PAPA 4.0)
Bachelors Degree=PapaEd_5=0	(PAPA 5.0)
Some Graduate=PapaEd_6=0	(PAPA 6.0)
Masters Degree=PapaEd_7=0	(PAPA 7.0)
Doctoral Degree=PapaEd_8=0	(PAPA 8.0)

African American participants in my research study who answered GED as the highest level of education obtained by the father

GED=PapaEd_3=1	(PAPA 3.0)
Some High School_1=0	(PAPA 1.0)
High School Diploma_2=0	(PAPA 2.0)
Some College=PapaEd_4=0	(PAPA 4.0)
Bachelors Degree=PapaEd_5=0	(PAPA 5.0)
Some Graduate=PapaEd_6=0	(PAPA 6.0)
Masters Degree=PapaEd_7=0	(PAPA 7.0)
Doctoral Degree=PapaEd_8=0	(PAPA 8.0)

African American participants in my research study who answered Some College as the highest level of education obtained by the father

Some College=PapaEd_4=1	(PAPA 4.0)
Some High School=PapaEd_1=0	(PAPA 1.0)
High School Diploma=PapaEd_2=0	(PAPA 2.0)
GED=PapaEd_3=0	(PAPA 3.0)
Bachelors Degree=PapaEd_5=0	(PAPA 5.0)
Some Graduate=PapaEd_6=0	(PAPA 6.0)
Masters Degree=PapaEd_7=0	(PAPA 7.0)
Doctoral Degree=PapaEd_8=0	(PAPA 8.0)

African American participants in my research study who answered Bachelors Degree as the highest level of education obtained by the father

Bachelors Degree=PapaEd_5=1	(PAPA 5.0)
Some High School=PapaEd_1=0	(PAPA 1.0)
High School Diploma=PapaEd_2=0	(PAPA 2.0)
GED=PapaEd_3=0	(PAPA 3.0)
Some College=PapaEd_4=0	(PAPA 4.0)
Some Graduate=PapaEd_6=0	(PAPA 6.0)
Masters Degree=PapaEd_7=0	(PAPA 7.0)
Doctoral Degree=PapaEd_8=0	(PAPA 8.0)

African American participants in my research study who answered Some Graduate as the highest level of education obtained by the father

Some Graduate=PapaEd_6=1	(PAPA 6.0)
Some High School=PapaEd_1=0	(PAPA 1.0)
High School Diploma=PapaEd_2=0	(PAPA 2.0)
GED=PapaEd_3=0	(PAPA 3.0)
Some College=PapaEd_4=0	(PAPA 4.0)
Bachelors Degree=PapaEd_5=0	(PAPA 5.0)
Masters Degree=PapaEd_7=0	(PAPA 7.0)
Doctoral Degree=PapaEd_8=0	(PAPA 8.0)

African American participants in my research study who answered Masters Degree as the highest level of education obtained by the father

Masters Degree=PapaEd_7=1	(PAPA 7.0)
Some High School=PapaEd_1=0	(PAPA 1.0)
High School Diploma=PapaEd_2=0	(PAPA 2.0)
GED=PapaEd_3=0	(PAPA 3.0)
Some College=PapaEd_4=0	(PAPA 4.0)
Bachelors Degree=PapaEd_5=0	(PAPA 5.0)
Some Graduate=PapaEd_6=0	(PAPA 6.0)
Doctoral Degree=PapaEd_8=0	(PAPA 8.0)

African American participants in my research study who answered Doctoral Degree as the highest level of education obtained by the father

Doctoral Degree=PapaEd_8=1	(PAPA 8.0)
Some High School=PapaEd_1=0	(PAPA 1.0)
High School Diploma=PapaEd_2=0	(PAPA 2.0)
GED=PapaEd_3=0	(PAPA 3.0)
Some College=PapaEd_4=0	(PAPA 4.0)
Bachelors Degree=PapaEd_5=0	(PAPA 5.0)
Some Graduate=PapaEd_6=0	(PAPA 6.0)
Masters Degree=PapaEd_7=0	(PAPA 7.0)

BIOGRAPHICAL SKETCH

Matthew Lloyd Atterberry earned a doctoral degree in Curriculum & Instruction with Higher Education Specialization at The University of Texas Rio Grande Valley in May 2020. He was born in Bronx, New York on February 18, 1974 with a developmental delay. He did not speak a word until around age four, five or six. He nodded his head up and down for response of Yes and shook his left to right for response of No. Matthew always had a thirst for knowledge and now he is the first in his family to earn a doctoral degree. Matthew earned a Bachelors Degree in Elementary Education from Benedict College in Columbia, South Carolina on May 11, 1997 and earned a Masters Degree in Rehabilitation Counseling from South Carolina State University in Orangeburg, South Carolina on May 11, 2007. Matthew has professional experiences in higher education at Voorhees College, Paine College, South Carolina State University and The University of Texas Rio Grande Valley. Matthew defended his dissertation on February 7, 2020. Currently, Matthew lives at 2001 Robin Ave. McAllen, TX 78504 and atterberrym@yahoo.com is the personal email address of Matthew Lloyd Atterberry.