TIME WITH COLLEGE GRADUATES, FAMILY MEMBER ACADEMIC LEVEL, AND TIME SPENT IN FEDERAL TRIO PROGRAMS AS PREDICTIVE FACTORS OF HIGHER GPA IN POST-SECONDARY EDUCATION AMONG ETHNIC MINORITY COLLEGE STUDENTS

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Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY
July, 2015
TIME WITH COLLEGE GRADUATES, FAMILY MEMBER ACADEMIC LEVEL, AND TIME SPENT IN FEDERAL TRIO PROGRAMS AS PREDICTIVE FACTORS OF HIGHER GPA IN POST-SECONDARY EDUCATION AMONG ETHNIC MINORITY COLLEGE STUDENTS

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ACKNOWLEDGEMENTS

Thank you first and most importantly to my Lord and Savior.

Next, I want to thank my family. To my grandparents, thank you for being the guides of my path. My wisdom, though very little, comes from both of you. God truly blessed me with unique grandparents who were able to love me with their whole hearts. The two of you are my inspiration and whom I hope to model my future after. To my mother, thank you for being the strong and determined woman that I only hope to follow after. Without you, I would not be the woman I am, I would not have the passion I possess to endure struggle, and surly I would not have gotten to this point in my career. To Michael, thank you for being consistent in your support and love for me, I am forever grateful for your presence in my life. To my uncle and auntie, thank you for being my greatest cheerleaders. I am always filled with love when I think about how you both are always looking to assist me in advancing my career. I have you to thank for the versatility and valuable connections I will have in my field. I love all of you so much and without you all, I know I wouldn’t have made it to this point. I am extremely blessed to have such a loving, encouraging, and strong family.

I also want to thank my partner. David, you have been my solid, consistent, strong presence. When turmoil consumes me, I can look, see your calm nature and be reminded that I can get through whatever is thrown my way. You are my soulmate, you balance me, and you motivate me to be a better person. I thank you for seeing so much in me and for pointing out those qualities that are rarely identified. You are the only person on this earth who knows every aspect of who I am and what I am capable of, and I am thankful that you found me suitable to be your partner. I love you.

Finally, I want to thank my friends who played a large role in all areas of my journey. I won’t mention all of you, but please know I am grateful for your presence in my life. Specifically, I want to thank my big sister LeOndra, you are the reason I even made it into graduate school. Thank you for not giving up on me and teaching me how to be a professional. To my prayer partner and sister, Martinque, thank you for being willing to go through this process with me, we made it!! Thank you for challenging me, encouraging me, praying with me, and being honest with me. We have been on this journey together and I couldn’t imagine walking along this road without you. I love you both more than this page will hold, but at the very least I want to thank you.

Acknowledgements reflect the views of the author and are not endorsed by committee members or Oklahoma State University.
Abstract: The purpose of this study was to explore academic success as measured by Cumulative Grade Point Average (GPA) among ethnic minority college students across the United States. The three predictor variables used for this study were: number of family members who completed college, amount of time spent in months (as proxy for relationship quality) with community members, and amount of time spent in a federal TRIO program. A total of 152 ethnic minority college students made up the sample for this study. A hierarchical regression analysis was conducted to analyze the relationship between GPA and the three predictors. There were no significant findings for this study at the .05 level; however, a t-test revealed a statistically significant difference between the GPA of students in a TRIO program and the GPA of students who had not been in a TRIO program. This study concluded that number of family members who completed college and amount of time spent with community members were not significant predictors of academic success among minority college students. Suggestions for future research include utilizing a measure other than time regarding impact of community members on academic success. An alternative path could also be to explore the academic achievement comparisons between college students who participated in TRIO programs and those who did not participate in TRIO programs. Another direction for future research would be to look at potential resilience factors contributing to academic success related to the predictor variables in this study.
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CHAPTER I

INTRODUCTION

Between 2009 and 2010, 66.3% of Caucasians in the United States obtained an Associate’s degree in comparison to 13.7% of African Americans, 13.5% of Hispanic Americans, 5.3% of Asian Americans, and 1.2% of Native Americans as reported by the U.S. Department of Education, National Center for Education Statistics (2012). The percentages of minority students compared to Caucasian students who obtained their Bachelor’s degree becomes more disparate with 72.9% of Caucasians graduating with their Bachelor’s degree compared to 10.3% of African Americans, 8.8% of Latino/Hispanic Americans, 7.3% of Asian Americans, and 0.8% of Native Americans. This data presents a severely disproportionate number of minority students successfully completing college. Not only do ethnic minority students obtain college degrees at an uneven rate, when they are in school, they also perform at an unreasonably lower rate as measured by GPA (Hollis-Sawyer, & Sawyer, 2008). Some research attributes lower grade point average (GPA) among ethnic minority students, specifically African American, Latino/Hispanic American, and Native American students, to factors such as dropout and stereotype threat (Osborne & Walker, 2006). This study took a strengths based approach to the topic by identifying possible predictive factors that would contribute to higher GPA among ethnic minority students.
Community members such as neighbors, teachers, and spiritual leaders, are persistent throughout one’s life and are often integral in the development of one’s future (Francois, Overstreet, & Cunningham, 2012). These relationships bring into question if these community members have any impact on the college success of a student. People in one’s neighborhood, and the neighborhood itself, can positively impact academic performance among adolescents (Ainsworth, 2010; Francois, Overstreet, & Cunningham, 2012). Researchers have also found that the strength of the student-faculty relationship predicts higher academic achievement in students. Specifically, if students feel like their teachers care about them, their education, and are supportive, students have a more positive attitude toward school and in turn display higher academic achievement (Hallinan, 2008; Ullah & Wilson, 2007). There is not, however, any research pertaining to the impact of relationships with spiritual leaders and academic success. There are also mixed results from the research conducted on spirituality and religion. Some researchers have found that being involved in religious activities has a significant positive correlation with academic achievement (Walker & Dixon, 2002). However, others have found that being involved in campus ministry is not correlated with higher GPA (Schubmehl, 2009). Research regarding spirituality and religion also shows that specific aspects of religion and spirituality, including prayer, do contribute to higher GPA (Riggins, McNeal, & Herndon, 2008). It is very possible that the reason behind the mixed results comes from the use of different definitions of spirituality or religion (Riggins, McNeal, & Herndon, 2008). Time spent in church, amount of time in prayer, level of involvement in church, and types of belief are all components of religiosity which can make up how one defines religion or spirituality (Stoppa, 2010). There is a lack of research on spirituality and religion in regard to academic
achievement, and of the research that has been conducted, some studies find significance while others do not, providing another rationale for conducting more research in this area.

Research is also lacking in the relationship, if any, between the education level of neighbors, teachers, and spiritual leaders as well as the amount of time those community members spend with students, and the impact of those relationships on student academic achievement. The time these community members spend with students and their education level could possibly be significant in the academic success of the student.

In addition to research conducted regarding community members and their contribution to students’ increased academic achievement, studies have been conducted to evaluate family members and their influence on students’ academic achievement. Family members can be defined as a variety of people, but much of the current research focuses on parents. Research indicates that there is a positive relationship between a parent’s role in a student’s life, parental treatment (i.e., communicating with their children, types of reinforcement), and amount of family involvement (attending school events, help with homework, etc.) on student academic achievement (Barrett, Singe, & Weinstein, 2000; Hoang, 2007; Sanchez, Reyes, & Singh, 2006). Along with the relationship between parents and their child’s academic achievement, researchers have found that parental education level plays a positive role in contributing to student academic achievement (Ojeda & Flores, 2008; Rimkute, Hirvonen, Tolvanen, Aunola, & Nurmi, 2012; Schlechter & Milevsky, 2010). Although this is helpful to the field of education in that it provides information useful for increased academic achievement, more research needs to be conducted on variables such as family members other than parents to provide more specificity to what has already been found. Specifically, research shows that parents impact academic achievement (Ojeda&
Flores, 2008), which may suggest that siblings or grandparents too may have some impact. It is also important that more research identifies ethnic minority students when measuring academic achievement due to the low presence of ethnic minorities in post-secondary education outlined previously. Conducting more of this research would better inform the ways in which preventative interventions, such as parent programs and student programs, can increase student academic success.

The research presented regarding academic success currently focuses more on the Caucasian population as seen by the various publications with a high Caucasian sample and small ethnic minority sample sizes (Hallinan, 2008; Monserud, 2011; Rinkute, Hirvonen, Tolvanen, Aunola, & Nurmi, 2012; Schlechter, & Milevsky, 2010; Ullah & Wilson, 2007). Although there are studies regarding minority students and academic success, this study focused on ethnic minority students utilizing studies conducted on pre-college outreach federal TRIO programs. The purpose of a federal TRIO program is to provide students from underserved populations and various ethnic backgrounds with access to academic support they would not have otherwise. TRIO is not an acronym, but was used to describe the initial three federal assistance programs (Upward Bound, Talent Search, and Student Support Services) with TRIO as a representation of the number three. There have since been more programs that have been developed, however, the term “TRIO” still remains to describe them. The programs are formulated at all levels of primary, secondary, and post-secondary education to assist ethnic minority students and students from underserved backgrounds. Research shows that these programs are beneficial to students and positively contribute to higher academic achievement (Grimmett, 1998; Ishiyama, 2007; Laws, 1999). The authors concluded that assistance programs within the federal TRIO umbrella are helpful, however,
more research needs to be done to go beyond the scope of what previous research has shown in relation to the benefits of these programs.

Current research examines a variety of groups and factors that contribute to academic achievement, including neighbors, parent education level, religion and spirituality, and assistance programs (Barrett-Singer & Weinstein, 2000; Parker, 2003; Riggins, 2008). The purpose of this study was to continue research in these areas with the goal of providing more useful information to assist in increasing academic success among minority college students. Previous studies have not looked at the relationship between nonfamily members and student academic achievement, nor have they looked solely at ethnic minority students when conducting research on academic success. Past research has also not examined the influence of the education level of family members other than parents as an indicator of higher GPA among college students. This study will expand the research on community members, specifically neighbors, teachers, and spiritual leaders who have graduated from college, by looking at how much time students spent with them. The first hypothesis of this study was that higher academic achievement (GPA) in minority college students would be predicted by amount of time (as proxy for relationship quality) spent with community members who have graduated from college. This study also delved further into family as it relates to minority academic success by expanding from just parent/guardian academic level and also including grandparent, and sibling academic level. The second hypothesis of this study was that the number of college graduate family members, as outlined above, would also predict higher minority college student academic achievement. Lastly, this study will revisit the amount of time a student spent in the federal TRIO programs in efforts to provide useful information that will help increase academic achievement among ethnic minority college students. The
third hypothesis was that higher minority college student academic achievement would be predicted by amount of time spent in a federal TRIO program. As a result of researching these hypotheses, it was my intent to contribute to research regarding ways in which community members, families, and assistance programs can increase the level of success as measured by GPA in ethnic minority college students.
CHAPTER II

REVIEW OF LITERATURE

Although it is evident that college success is attainable for ethnic minority populations, there are a multitude of factors that can significantly hinder one’s ability to attain that success. College student dropout, stress, and other cultural hurdles such as stereotype threat (Appel & Kronberger, 2012; Chen, 2010; Cokley, McClain, Enciso, & Martinez, 2013) can all contribute to the lack of success within post-secondary education among ethnic minority students. Further, success in post-secondary education in minority populations is disproportionate to non-minority students. The United States Department of Education reported college graduation rates as follows: 72.9% Caucasian, 10.3% African American, 8.8% Hispanic, 7.3% Asian American or Pacific Islander, and 0.8% Native American in 2010. This gap in educational attainment has been fairly consistent since 1970.

Despite efforts that have been made to close this gap, ethnic minority students are still struggling through college as seen by these statistics.
Although there is research that provides a variety of reasons why there are small proportions of minority students in college, it would be beneficial to have targeted factors that could predict success among the minority students, and further, utilize those items. My study intends to look at the number of family members who have graduated college, the amount of time spent with college graduates, and participation time in federal TRIO programs as predictors of college success as measured by GPA among minority students.

Number of years spent with college graduate community members (teachers, neighbors, religious/spiritual leaders)

Throughout life, people often spend time with and encounter a variety of people who are not their family members. According to the US Bureau of Labor Statistics, the average amount of time unemployed high school students aged 15-19 spent at school per day between 2007 and 2011 was 6.4 hours. This adds up to an average of 32 hours per school week, which is almost equivalent to having a full time 40-hour work week for an adult. Further, the same population was reported to spend an average of .8 hours a day playing sports, exercising, and recreation, .2 hours a day doing spiritual, religious, or volunteer activities, and 3.8 hours a day socializing and relaxing. Altogether, these activities add up to an average of 56 hours a week that teens spend out of the home and interacting with people outside of their family. If sleep is taken into consideration at an average of 8 hours per night during the week, adolescents without a job spent on average 24 hours at home during the week. The comparison of 56 hours out of the home to 24 in the home indicates that teenagers tend to spend more time with teachers, neighbors, and people in their religious or spiritual circles than their family members. It is reasonable to
wonder then, if the time spent with these community members plays a role in college student success.

Research tells us that neighborhoods and the people in them have the ability to positively impact academic performance among adolescents (Ainsworth, 2010; Francois, Overstreet, & Cunningham, 2012). It also tells us, that the relationship between students and teachers makes a difference in academic performance among adolescents (Hallinan, 2008; Ullah & Wilson, 2007). The research targeting spirituality is mixed, however, with some researchers finding spirituality to be helpful to academic achievement (Riggins, McNeal, & Herndon, 2008; Walker & Dixon, 2002), and others finding it to be harmful to academic achievement (Schubmehl, 2009). This research is important to the field because it gives insight on how these various external factors contribute to college student success. The research is lacking, however, in specificity of how the people within these entities impact college student success. There is also little research indicating if there is any relationship between the level of education community members, teachers, and spiritual leaders have and academic success among college students. Conducting more research in this area could provide more useful information regarding how education level may play a role in success among college students. It could allow researchers to study whether a student’s knowledge of how to navigate through college or study correctly is provided by these educated community members. The research findings in this area have the potential to provide students with resources that are known to contribute to their success in college. Although there are gaps in the literature, the research that has been conducted can serve as a platform for future research to come.
Teachers and faculty serve an important role in the infrastructure of our country. They are expected to educate children, adolescents, and adults on what one needs to know to move forward in society. This has raised the question to researchers about if there is a relationship between students and teachers or faculty and how it impacts student performance. Ullah and Wilson (2007) conducted a study to identify if there was a significant positive relationship between college student’s relationship with faculty and their academic achievement. Using the theory of student development, the authors hypothesized that if a student was involved in school, they were likely to learn more. Specifically, student interaction with faculty in and outside of the classroom, doing activities such as discussing academic progress and assessing faculty’s educational practices (classroom setup, the way in which class discussions are set up, etc.) were identified as aspects of the faculty student relationship. The authors randomly selected 2,160 primarily Caucasian college freshmen and seniors from the National Survey of Student Engagement (NSSE) data pool. Ullah and Wilson (2007) found in their study that a student’s relationship with faculty as outlined above, significantly predicted student academic achievement. Limitations of their study included the lack of diversity in their sample, the use of only one university, and the relatively small significant impact faculty student relationship, GPA, and ACT had on academic achievement.

Another study, conducted by Hallinan (2008) also focused on the relationship between teachers and students. She hypothesized that students would have higher academic achievement if they felt like their teachers cared about them and their education. The longitudinal study consisted of 39,553 6th through 12th grade students
from public and Catholic schools in Chicago. The author administered surveys to the students to identify how they felt about school (strongly agree-strongly disagree) and teacher support. Hallinan (2008) found that teacher support (being supportive and encouraging) had a significantly positive influence on how much a student enjoyed school. The author further implied that teacher support impacted student academic achievement. Although the researcher had data for students in grades 6 through 12, only data from grades 6 and 10 were analyzed. This study supports the argument that teacher support plays a positive significant role in the academic achievement of students, but it is limited to 6th and 10th grade students. Future research can expand on how much teacher support positively impacts older students.

Neighbors and Religious/Spiritual Leaders

There is not much research that directly discusses the impact of neighbors and religious or spiritual leaders on academic achievement. There is, however, research that shows a positive relationship between neighborhoods (Francois et al., 2012) and mixed research involving religion or spirituality on academic achievement (Riggins, McNeal, & Herndon, 2008; Schubmehl, 2009; Walker & Dixon, 2002). Neighborhoods, religions, and spirituality do not function without people, therefore, the people who make up neighborhoods and the people who teach students about their religion or help them grow spiritually are worth attention.

Ainsworth (2010) addressed how neighborhood setting may influence academic outcomes of high school students by conducting a longitudinal study with 8,953 Black and White high school seniors from U.S Census data taken in 1992. The author used
math and reading test scores as indicators of academic achievement and identified number of college graduates (role models) in the neighborhoods for this study. Using regression analysis, the researcher found that White neighbors who are role models were more influential than Black neighbors who were role models. The author suggested this finding may be due to White role models having more decision making power in the neighborhood, or due to there being more White role models in neighborhoods than Black role models. Ainsworth (2010) discussed the use of zip codes to define neighborhoods as being a limitation because zip codes cover a larger geographical area that may not be considered a “neighborhood”. The author encouraged future researchers to try using a different method to identify one’s “neighborhood” for more definitive data.

A study conducted by Walker and Dixon (2002) consisted of 212 African American and Caucasian undergraduate students who were given a questionnaire measuring academic performance (GPA), spirituality and religious participation. The researchers found that there was a small but significant relationship between spirituality/religious participation, and academic achievement among African American and Caucasian students. The researchers suggested more research on this topic should be done to explore the relationship in further detail which can assist in specifying what type of religious participation influences GPA and what level of involvement other religious leaders have in those activities. The authors look only at African Americans and Caucasians whose primary religion was Christianity, which limits the range of utility for this study due to the variety of religious activities in which other cultures engage.

It is important to note that the previous study was conducted 11 years ago, and little research has followed. Being aware of this brings significance to research that
needs to be done to continue exploring the relationship between religious or spiritual leaders and academic performance among minority college students.

**Number of college graduate family members (parents/guardians, siblings, and grandparents)**

Family members, specifically parents/guardians, grandparents, and siblings often have influence on who they spend time with regularly. Family members can impact decisions as small as what to eat in the morning to decisions as large as whether to attend college. Once adolescents leave their family members to attend college, they are able to develop their individual identity; however, they sometimes revert to what is familiar to them in particular situations. Research shows that household structure plays a role in educational attainment among children (Monserud & Elder, 2011).

Current research discusses the role of a parent on student success, parental treatment in relation to student success, and family involvement relating to student success (Barrett Singer & Weinstein, 2000; Hoang, 2007; Sanchez, Reyes, & Singh, 2006). In general, this research tells us that there is a relationship between parents and their children’s academic success. It also brings into focus increased student success as a result of family involvement of some sort. The current research strives to make the significance of these relationships more present to encourage continued research. Alternatively, there is not much research that discusses specific education level of parents or other family members as they relate to student success in college. This presents an issue within the literature because it limits the benefit of the research already in press. More specified research relating to education level and student success can provide more
information about the type of family involvement that correlates with student success. This research can also improve the field by providing information that could assist in raising the percentage of minority students successfully completing college. Delving further into the relationship between family members college level and student success can provide implications related to level of parental involvement in school programs, provide a positive influence on students, and provide encouragement for families to attend higher levels of education. My study is intended to identify if a parent or other close family member’s completion of college (AA or above) predicts success among minority college students.

Rimkute, Hirvonen, Tolvanen, Aunola, and Nurmi (2012) hypothesized that a mother and father’s expectations for their offspring’s future education, their level of education, and their child’s academic achievement would predict that student’s educational expectations. Rimkute et al. (2012) conducted a longitudinal study, following Finnish children who were born in 1993 and started kindergarten in 1999 for 10 years. These participants were given a questionnaire at 7th and 9th grade. Their parents were also given a questionnaire to collect data regarding their education level and make-up of their home. Rimkute et al. (2012) found that the adolescents whose parents had higher levels of education predicted higher educational expectations among those adolescents. They also found academic expectations of parents to predict higher educational expectations among adolescents.

The Rimkute (2012) study is one of few that take this particular approach to success among adolescents. The researchers noted that they did not take the relationship and communication between parents and adolescents into account for their study. They
also mentioned their study looked at “short-term” goals of adolescents, meaning they did not conduct research on what the adolescent may be interested in doing after secondary education or vocational training. Another limitation addressed in this study was with regards to the missing or incomplete data. The authors used parent occupation as an indicator for level of education if the parent did not provide education level in the given questionnaire. “Don’t know” answers were also removed for the purposes of less convoluted analyses. One limitation to this study relating to my current study is the generalizability of the results. Since this study was conducted in a different country, there may be cultural factors that would impact the results differently if it were done in the United States. This study also focuses on 7th and 9th grade students, and my study is focused on the college minority population; specifically Asian Americans, African Americans, Latino Americans, and Native Americans. The authors of this study included vocational education, which is not included in my study, however, the authors of this study placed vocational education with “upper secondary school courses”. The field would benefit from more research looking at close family members as well as parents, whereas this study specifically looked at mothers and fathers.

Conversely, another study conducted by Ojeda and Flores (2008), identified gender, generation level, parents’ education level, and perceived educational barriers as predictors of educational aspirations among Mexican American high school students. The author reported the sample consisting of 186 9th through 12th grade Mexican American students with a mean age of 16.4 years. Through hierarchical regression, the researchers found that all four variables, including parent’s education level, served as predictors of educational aspirations among Mexican American high school students. Further, the
researchers found that of the four variables, perceived educational barriers uniquely predicted educational aspirations among Mexican American high school students.

Ojeda and Flores (2008) reported that these findings provide implications for Social Cognitive Career Theory (SCCT) by supporting the need to take person, background contextual, and proximal contextual variables into consideration with regard to educational aspirations. In this study, the author reported that mother and father’s education level did not uniquely contribute to educational aspirations of Mexican American high school students, however, the authors did suggest that the influence of mother and father’s education level should be studied in future research due to variances in results between a mother’s education level and a father’s education level. This study also reported the relationship between parents and adolescents was not taken into account when conducting research. The author of this study identified the way in which this study identified educational aspirations as being a limitation. Ojeda and Flores (2008) reported using a single item to measure educational aspirations, and suggested a scale to be used for future research. Other limitations noted by the author were cultural factors that may have played a role in the results that were not taken into account. Specifically, the author mentioned biculturalism, ethnicity-related issues, cultural values, and ethnic identity as factors to take into account for future research. Whereas this study’s participants were high school Mexican Americans, more research should be done to include college students of more than one ethnic minority background.

Another study, conducted by Schlechter and Milevsky (2010) hones in on the relationship between parental level of education, psychological well-being, academic achievement and reasons for pursuing higher education in adolescents. The authors of
this study take a different approach from the former studies mentioned because parental level of education is their primary predictor for psychological well-being, academic achievement, and pursuing higher education among adolescents. This study consisted of primarily Caucasian college freshman. The researchers collected data from indices specific to their hypotheses. Academic achievement was collected via student self-report of letter grades A-F and SAT scores. The researchers found that parental education level did not significantly impact psychological well-being among the college freshman. Further, the authors reported finding no significance between parental education level and academic achievement in this study. Interestingly, the authors did find significance in their third hypothesis, which was the higher a parent’s education level, the higher the motivation level of the adolescent to pursue higher education due to societal expectations.

According to the author, a possible reason why they did not yield significant results for their first two hypotheses was that by the time students get to college, parental involvement tends to decrease which may have impacted their results. Some limitations discussed in this article include correlational nature of the study, small sample size, and minimal diversity within their sample. The authors also discussed absence of socioeconomic status and child rearing as factors in their study, which could have impacted their findings. Schlechter and Milevsky (2010) analyzed data regarding parental education level. The authors categorized education level by labeling parents who did not graduate high school as “less than high school” and parents who graduated college or went beyond college as “advanced degree”. The authors suggested that for future research, providing additional levels of the parent education level would be beneficial and allow for more distinguishability within the study. Specifically, they
suggested making the levels of education more precise, for example differentiating between parents who received no more than an 8th grade education, an Associate’s degree, a master’s degree, and so on.

It is clear that there is research indicating some relationship between parent education level and academic achievement. What is missing in the research is a focus on parents and other family members who have an AA degree or more. Also, although academic achievement is identified in the research, a view academic achievement from the college level is lacking. Lastly, current research seems to largely neglect minority student in data collection, with many studies presenting findings that have largely Caucasian participant samples.

Federal TRIO Programs

Oftentimes the argument presented when discussing academic success among minority students is their lack of preparedness for college. As a result of this argument, the federal government developed what are called “TRIO” Programs. The program title TRIO was developed to represent the number three, and to communicate that there were three federal programs that were created (Upward Bound, Talent Search, and Student Support Services). Since then, more programs have been created and placed under the TRIO umbrella. The purpose of TRIO programs in low-income communities has been pivotal in history. Federal TRIO programs were created as a result of the Economic Opportunity Act in 1964. These programs were developed in efforts to provide services for students who would otherwise be unable to obtain them. Services including career counseling, individual tutoring, and mentoring were aspects of the TRIO programs that
were meant to help low income, minority, and disabled students obtain post-secondary education.

Officially, there are 8 programs under the TRIO umbrella. These programs include, Upward Bound, Veterans Upward Bound, Talent Search, Student Support Services, Educational Opportunity Centers, Staff and Leadership Training Authority, Ronald E. McNair Post baccalaureate Achievement Program, and Upward Bound Math-Science. All programs, with the exception of the Staff and Leadership Training Authority Program, aim to serve low-income minorities with disadvantaged backgrounds, also known as “TRIO-eligible” students. Some of the core efforts of the TRIO programs include helping students return to high school, getting students into post-secondary education, and assisting students in successfully completing their degree programs. These programs are also unique in that they serve a variety of populations. Some of the programs focus specifically on elementary through high school students (e.g. Upward Bound), and other programs focus on the college TRIO-eligible population including graduate school (e.g. Ronald E. McNair Post baccalaureate Achievement Program). With the exception of the Staff and Leadership Training Authority, the TRIO programs were created and are intended to help disadvantaged populations succeed academically through their lives.

**Elementary Through High School Programs**

The elementary through high school TRIO programs include Upward Bound, Veterans Upward Bound, Upward Bound Math-Science, and Talent Search. The purpose of the programs at this level is to enhance matriculation through elementary school and
high school. These programs are aimed at underserved populations in which students from various backgrounds are exposed to negative extra-curricular activities, such as gang involvement, from their families (Yoder, Whitbeck, & Hoyt, 2003). The efforts of the programs at the high school level are meant to encourage students by reinforcing their ability, offering assistance through tutoring and mentoring, and providing information regarding post-secondary education that they may not have otherwise obtained.

Upward Bound is the first program that was developed through the TRIO program. Specifically, the purpose of the upward bound program was, and still is, to help students develop skill and motivation to succeed in post-secondary education. Upward Bound specifically targets students between the ages of 13-19 years old, or grades 9-12, who have had difficulty succeeding academically. The assumption of this program, as well as the other TRIO programs, is that the population in which they are assisting consists of children and youth who had inadequate secondary school preparation. Upward bound provides tutoring, counseling, and individual student assistance in efforts to help students adequately prepare for college. Laws (1999) conducted a study in which he hypothesized that the influence of the upward bound program would be positive in relation to higher GPA, lower drop-out rate, and higher math and English performance among the population upward bound targets.

The author conducted a study, using freshman students who were not in the upward bound program compared to freshman students who were in the upward bound program. The author made efforts to match both groups socioeconomically and academically. His study was done in an effort to see how the program benefitted the population it was intended to serve as well as see what would make the program better.
and more useful for the population it was intended to serve. The study included 26 students in each group who all attended the same Historically Black College where the TRIO program was also held. The author reported insignificant results regarding GPA comparison and dropout rate between the groups and further reported an inverse result in which students who were not involved in the upward bound program in high school had better grades in math than their upward bound counterparts. Conversely, students involved in the English focused upward bound program did obtain higher GPA’s than their peers not in upward bound. The author stated that the mixed results may be an indication of the effectiveness of the programs. Laws (1999) explained that further research in this area may show areas of growth for the upward bound programs. The author also explained that these results may be indicative of potential adjustments to be made with upward bound programs.

Since this study, there is little research that has followed up on whether the program is more effective than no program. The changes that have been made, if any, may not be reflective of the effectiveness of the current TRIO programs. Limitations identified include sample size and region. The sample size for this study was relatively small and, as a result, may not accurately reflect the effectiveness of this TRIO program. It is also important to note that the study was conducted at a historically black college which is not generalizable to the predominantly white institutions.

The Response to Intervention (RtI) model has been implemented, and research using this model has also been conducted in efforts to analyze the effectiveness of the Upward Bound program. The RtI model is set up in three tiers which are sometimes labeled core program (tier one), early/supplemental interventions (tier two), and intensive
intervention (tier three). These tiers identify where the focus of the program should be in order for it to be most effective. The first tier is broad, and specifically for the Upward Bound program, tier one focuses on the program itself. Tier two becomes more detailed and oriented to the interventions used such as mentoring for Upward Bound. Tier three allows continued focus on the intervention with individuals as well as data collection regarding effectiveness of the program.

Thus, there is an increased need to further explore the current impact federal TRIO programs have on college minority student success. The field would also benefit from looking at how much these programs influence college success as measured by GPA in minority students.

College and Graduate School Level Programs

The college and graduate school level TRIO programs include Student Support Services, Educational Opportunity Centers, and the Ronald E. McNair Post baccalaureate Program. Similar to the elementary through high school programs, the college and graduate school level programs are geared toward underserved populations, which are specified in the Economic Opportunity Act of 1964. Students from disadvantaged backgrounds, low-income students, and first generation students are some specific types of students the college level programs work with. Although similar to the elementary and high school programs, the aim of the college and graduate school level programs is focused more on retention once in college. These programs provide assistance with basic college requirement needs and provide more guidance and transition to post-secondary
education. Along with retention, degree completion is a focus of the TRIO programs beyond the elementary and high school level.

The Ronald E. McNair program was designed to achieve both goals of the college and graduate school level programs by assisting students going into college and continuing that assistance through graduate school. Specifically, this program focuses on building the academic potential of students through mentoring, research involvement, and internships. In a study done by Grimmett (1998), aspects of the McNair program such as mentorship, research, and internships were assessed. The authors used an American Association of Universities Research I University to obtain their sample of 42 students who were recent (6 months or more) graduates of college and the McNair program. Identified as an “ex post facto” research design, the authors utilized surveys to obtain information regarding mentorship, research, and internship from the graduates to identify the effectiveness of the McNair program. The researchers of this study found that, from the surveys completed by the graduates, the overall effective aspects of the program included the financial support, and the opportunities provided for research, internship, and mentoring activities. Specifically, the former students identified the opportunity to conduct research projects as allowing them to follow their research interests. According to the study, students also identified internships as beneficial learning experiences. In regards to mentoring, the study showed that former students believed the mentors were helpful teachers, advocates, and guides when academic culture was involved. The authors identified this study being useful to the forward movement of TRIO programs, specifically the McNair program, but also pointed out limitations to this study. The limitations identified by the authors included small sample size, possible
misinterpretation of results due to inability to randomize the findings, and the lack of manipulation of the independent variable.

Although the TRIO program research focuses on the benefits of having mentorship, further supporting the effectiveness of those benefits comes from the student perception of mentorships. Ishiyama (2007) conducted a study to identify undergraduate students perception of a research mentoring relationship within the realm of the McNair program. The participants were 33 undergraduate McNair students placed in three different classifications: White/Caucasian students who were classified as low-income and first generation, African American students who were classified as low-income and first generation, and African American students who were continuing generation students. The sample of students was collected from one University, and the University was classified as predominantly White. The author found that overall, the perception of what a mentor is responsible for doing did not differ across the groups. Ishiyama (2007) did, however, find that both African American groups valued a personal connection through mentorship significantly more than White students. Further specified, the author reported personal consideration from the mentor aspect was perceived as important from the viewpoint of the mentee. The author speculated these results indicating that African American students may understand the significance of a mentor within the research role of college, but place more value on the personal relationship due to the cultural makeup of the University. The author also noted limitations to this study being the small sample size, and mentioned the need for more of these types of studies to be done across institutions to provide more clarity as to why the perceptions of the mentor role are different between African Americans and whites.
Parker (2003) wrote a report to provide evidence regarding the benefit of the McNair program for underrepresented populations in doctoral programs. The author shows ten years’ worth of evidence affirming the utility of the McNair program by providing statistical information regarding the increase in Ph.D.’s successfully attained by ethnic minorities. Parker (2003) points out the adequate preparation done through what the McNair program offers to undergraduate students and how resources such as mentorship, research, and internships positively impact success among this population. While the studies mentioned focus on the McNair program, its origin as a TRIO program indicates that all of the programs have one overarching goal and serve a similar purpose. The purpose of this study is to strengthen this research and encourage continued improvements of these types of programs.

The research questions for this study include the following:

1. Is higher GPA among ethnic minority students predicted by the amount of time (as a proxy for relationship quality) a student spends with community members with college degrees (neighbors, teachers, or spiritual leaders)?

2. Is higher GPA among ethnic minority students predicted by the number of family members (guardians, parents, grandparents, or siblings) who have graduated college?

3. Is higher GPA among ethnic minority students predicted by the amount of time a student spends in a federal TRIO program?
Although this study was intended to analyze each predictor variable in relation to the other predictor variables, the research questions are written separately to clearly present each predictor variable.
CHAPTER III

METHODOLOGY

Participants

A power analysis was conducted for this study to evaluate the minimum sample size needed to identify an effect. The results of this analysis concluded that in order for the study to be significant, at least 107 college students would need to participate. The sample included self-identified African American, Latin/Hispanic American, Asian American, and Native American students who were 18 and older. These participants were enrolled in public, private, historically Black, and historically Hispanic institutions across the country.

Design and Procedures

The design and procedure for this study was approved by Oklahoma State University’s (OSU) Institutional Review Board (IRB). Participant data was collected from the university’s Psychology Department and College of Education SONA systems.
Students followed a link from the SONA system leading them to an anonymous online data collection site (qualtrics) and they were asked to answer a series of questions following reading and completing an informed consent form. Students who met criteria (ethnic minority group member aged 18 or older) for the study were granted access needed to participate through the SONA system. Filtering questions were also included in the demographic sheet for data to be collected from the minority college student population of this study. The students had an opportunity to participate in a raffle for a $50 visa gift card as an incentive for their participation. Later, the protocol was modified so that OSU students were offered .5 hours of extra credit through the SONA system upon completion of the survey. A separate link was provided for students to follow at the end of the questionnaires to provide contact information for the raffle if they choose to participate. This kept any identifying information separate from data collected for this study. The students who participated in the study and were given SONA credit were not eligible to enter the raffle because they obtained SONA credit instead.

Regional and national participant data was also collected through convenience and snowball sampling methods. Request for participation e-mails were sent to the listservs of the National Association of Black Psychologists, the National Latino Psychological Association, the Society of Indian Psychologists, the Asian American Psychological Association, and Division 45 of the American Psychological Association. Embedded in these e-mails was specific information regarding the type of students being recruited for this study and a request to forward the participation request to other students who met the participant criteria. The students who chose to participate were directed to a link in the e-mail that led them to a data collection site in which they were instructed to
answer a series of questions. Prior to participating in this study, participants were notified that their participation was voluntary. A consent form explaining the purpose of the study and the participant’s ability to discontinue the study was provided in the email.

All information about students who chose to participate in this study remained confidential. The primary researcher removed any identifying information from OSU students who chose to participate prior to analyzing the data collected and after confirming their participation in the study through the SONA system.

**Instruments**

Participants completed a demographic sheet and the following questionnaires online.

*Demographic Sheet.* The demographic sheet was used to collect information about the participants. This information included questions about their age, race, gender, grade level in college, geographic location, institution information, college major, number of completed credit hours, and GPA.

*Family Education Questionnaire.* This self-authored questionnaire included five questions inquiring about family members (parents/guardians, grandparents, and siblings) who were college graduates and what level of post-secondary education they completed. The five questions used were chosen due to the nature of the research question and the specificity needed in responses. This questionnaire was reviewed by an expert panel.

*Federal TRIO Program Questionnaire (Upward Bound, Ronald E. McNair, etc.).* The questionnaire that was used to assess satisfaction of federal TRIO programs came from the University of Michigan National Quality Research Center’s (NQRC) American
Customer Satisfaction Index (ACSI), which was created in 1994 to measure the goods and services of companies. This questionnaire was adapted from a study done by Serenko (2011), regarding student satisfaction with Canadian music programs. Specifically, for the purposes of this study, this questionnaire omitted the questions regarding tuition fee change tolerance (TCT), which identifies student tolerance to change in tuition fees for the program, and perceived value (PV) which are in the adapted Serenko questionnaire. This questionnaire assessed the following with regard to federal TRIO programs: PE=prior expectations, PQ=perceived quality, SS=Student satisfaction, PL=perceived loyalty, WOM=word of mouth, and SC=student complaints. Items were measured on a 10-point likert type scale with 1 being the lowest and 10 being the highest. For example, a Perceived Quality (PQ) question on this questionnaire is “What is your evaluation of the extent to which the program quality of the TRIO program is consistent?” The 10-point likert type scale format ranged from 1 (very low) to 10 (very high). This format was consistent with the way in which the questionnaire was adapted by Serenko (2011). This questionnaire is measured using the structural econometrics model, which is a statistical model used to identify estimates of parameter values, which when used in the model's equation, enable predictions for future values of utilization of the program. Seven additional questions were asked at the beginning of this questionnaire to identify the TRIO program in which the participants were involved. These questions asked how much time spent (in years) the participants had in their specific program.

Relationship Structures (ECR-RS) Questionnaire. Relationships with community members (i.e., neighbors, teachers, and spiritual leaders), were measured through an
adapted Relationship Structures Questionnaire developed by Fraley, Heffernan, Vicary, and Brumbaugh (2011). There was a 9 item scale for each relationship domain measured in this study (neighbor, teacher, and spiritual leader). Items from this questionnaire were measured on a 7-point likert type scale, which is consistent with the way in which it was developed. For example, one question on this scale is, “I find it easy to depend on this person.” The participant chose from a likert type scale format with the following 7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree. Participants were asked the same 9 questions for each relationship domain. The test-retest reliability of the scale is approximately .80 for the relationship domain. The domains measured for this study are considered relationship domains. One question, created specifically for this study, preceded each relationship domain questionnaire to obtain the amount of time in hours the participant spent with neighbors, teachers, or spiritual leaders. Two questions followed this questionnaire obtaining information on how long the participant has known a specific person in each relationship domain and how much time the participant has spent with a specific person in each domain. These questions were developed based on the assumption that time would serve as a proxy for relationship quality. The questions were also reviewed by an expert panel for reliability and validity purposes.

Analysis

Hierarchical regression was used to analyze the data from this study. Hierarchical regression permits the researcher to see how much each independent variable impacts the dependent variable and at what level. Hierarchical regression compares how much each
independent variable predicts the dependent variable with respect to the other independent variables.

The first hypothesis was that more time spent (as a proxy for relationship quality) with community members who were college graduates would predict a higher GPA among minority college students. A regression equation was constructed with self-reported GPA as the dependent variable and time measured in hours as the independent or predictor variable. The second hypothesis was that amount of college graduate family members, specifically parents/guardians, grandparents, and siblings, predicted a higher GPA for minority college students. GPA was the dependent variable and number of family members was the predictor variable for this regression equation. The last hypothesis was that participation in a federal TRIO program would predict a higher GPA among minority college students. This regression equation had GPA serve as the dependent variable and time participation in years serve as the predictor variable. Each analysis also controlled for the following variables: age, year in college, geographic location, type of university (i.e. Historically Black, Historically Hispanic, Public, Private, Other), and gender.

Expected Outcomes

It was expected that GPA among ethnic minority students would be higher for students who spent more time (as a proxy for relationship quality) with community members with college degrees (neighbors, teachers, or spiritual leaders). It was also expected that GPA among ethnic minority students would have a positive relationship with the number of family members (guardians, parents, grandparents, or siblings) who
had graduated college. Finally, it was hypothesized that GPA among ethnic minority students would yield a positive relationship with the amount of time students spent in Federal TRIO programs. In conclusion, the expectation of this study was that all three predictor variables, in relation to one another, would have an overall positive relationship with GPA of ethnic minority college students.
CHAPTER IV

FINDINGS

Participant information

A total of 238 people read and approved the consent form. Of these, 2 people did not consent to participate in the study and 63 people went no further on the survey. Of the remaining participants, 16 people were removed because they were Caucasian, 3 people were removed for not providing a GPA and 2 were removed for not providing a GPA on a 4.0 scale. This left a total sample of 152 students (n= 26 males, n= 126 females) remaining for inclusion in the study. The power analysis called for 107, which indicates there were enough participants to complete the analysis proposed for this study.

Of the participants, 52% identified as African American, 27% identified as Latino/Hispanic American, 6.6% identified as Asian American, 5.3% identified as Native American, another 5.3% identified as Biracial, 2.6% identified as other, and 1.3% declined to answer. The age of participants ranged from 18 to 62 years old (M = 23.07, SD = 7.44).
The 152 participant sample was asked to report their cumulative GPA on a 4.0 scale \((M = 3.16, SD = .52)\). The participants were also asked to report their current college grade level and the results are as follows: 34.9% Seniors, 28.9% Juniors, 15.1% Sophomores, 14.5% Freshman, and 6.6% declined to provide response. With regard to family household income, 36.8% of participants reported the annual family household income of the homes they were raised in was above $40,000, 17.8% reported income between $30,000 and $39,999, 14.5% reported less than $10,000, 11.8% reported between $20,000 and $29,999, 10.5% reported between $10,000 and $19,999, and 8.6% declined to answer.

Participants were also asked to report how many people lived in the household they were raised in \((M = 4.63, SD = 2.55)\). Geographically, 27.6% of participants reported currently living in Oklahoma, 21.7% in California, 18.4% in Michigan, 17.1% in Texas, and 2.0% in Illinois. Individually, 1.3% of the participants reported living in Colorado, Florida, Georgia, Kansas, or Pennsylvania. Another 0.7% of participants reported that they currently live in Louisiana, Maryland, Missouri, New Jersey, New Mexico, New York, North Carolina, Ohio, Tennessee, or Utah, making up the remaining 7% of participants. Participants were asked if they lived on or off-campus and 34.2% reported living on campus, while 64.5% reported living off campus and 1.3% declined to answer. Participants were also asked to report what their University was defined as, and 4.6% of the participants reported currently attending a Historically Hispanic College or University, 3.9% of the participants reported attending a Historically Black College or University, 88.8% reported other, and 2.6% declined to answer. Participants were asked what type of university they currently attended, and 90.8% reported that they attend a
Public University, 8.6% reported that they attend a Private University, and 0.7% declined to answer. Three participants did not report their current number of credit hours completed; however, 149 students did report this information ($M = 68.34$, $SD = 38.39$).

The participants also reported their majors, and Psychology, at 24.3%, was the most commonly reported major among the participants. Other majors included Engineering at 5.3%, Accounting, Biology, Sociology, or Undecided at 3.9% separately, Business, Counseling, Education, or Health Education and Promotion at 3.3% respectively, Finance, Neuroscience, Nursing, Social Work or Political Science at 2.6% singly, Computer Science, or Communications at 2.0% each, and Entrepreneurship, Health Science, Human Development, Human Health Promotion, Kinesiology, Speech-Language Pathology, or Women’s Studies at 1.3% each. The remaining participants identified obtaining their degree in African American Studies, Anthropology, Apparel Design, Biochemistry, Creative Writing, Exercise Science, Film, French, Health Ethics, Human Sciences, Jazz Studies, Liberal Arts, Nutritional Science, Organizational Studies, Performance Studies, Physical Education, Public Health, Public Policy, Sport Management, Studio Art, or Zoology.

The sample sizes for each of the predictor variables are different due to the relevance each variable had to the participants. Some participants ($n = 35$) did not fully complete the survey, but did provide enough information to analyze their answers with respect to one or more of the variables. Other participants did complete the survey, however, they did not meet criteria to answer all questions, and therefore they were directed to the end of the survey after completing the questions that were relevant to their participation.
**Analysis**

For the research analysis, self-reported GPA was used as the dependent variable, and three predictor variables were identified. These predictor variables were formulated into three parts of one research question: Does time spent with college graduates, family member academic level, and amount of time spent in federal TRIO programs predict higher GPA in post-secondary education among ethnic minority college students?

A total of 43 participants reported participating in a TRIO program, leaving 72 who indicated that they did not participate in a TRIO program, and two declined to answer. These responses provided a total of 117 participants who completed this portion of the survey and left 43 participants for the analysis. Further demographic information is reported on the ethnicity of students who participated in federal TRIO programs, and Table 3 shows the diversity within this sub-sample of participants. A total calculation was made regarding the amount of time, in months, spent in a federal TRIO program (Upward Bound, Veteran’s Upward Bound, Upward Bound Math-Science, Talent Search, Student Support Services, Educational Opportunity Centers, and Ronald E. McNair Post-Baccalaureate Achievement Programs) ($M=128.15, SD=34.45$). Age ($M=24.05, SD=9.3$), gender (Male= 7, Female= 36), and GPA ($M= 3.38, SD= .43$), were calculated to obtain a better idea of the group within this study who had participated in TRIO programs. Even though the TRIO variable was not included in the final regression, as the participation in the TRIO programs was of interest, a t-test was conducted between the GPA of TRIO participants ($M= 3.38, SD= .43$) and overall participant GPA ($M = 3.16, SD = .52$). The t-test revealed a significant correlation between the two groups ($t=3.012, p=.003$).
Of the 152 total participants for this study, 123 reported on the amount of time (in hours) they spent with neighbors. A total of four participants stopped at this point in the survey, leaving 119 who reported on the amount of time they spent with teachers. Another two participants stopped after answering questions pertaining to neighbors and teachers, leaving 117 who reported on the amount of time they spent with spiritual leaders. For this portion of the survey, 117 participants completed questions pertaining to time spent with all three categories of community members. A total calculation was made regarding amount of time, in hours, the participants spent with neighbors, teachers, and spiritual leaders \((M = 142.16, SD = 34.77)\).

Of the 152 participants, 94 reported that they did have at least one family member who completed college, 57 reported that they did not have a family member who completed college, and one person declined to answer the question. Of the 94 participants who did have at least one family member complete college, 82 participants reported how many of their family members completed college. Table 1 shows the frequency distribution for these 82 people with regard to their family members combined (parents, grandparents, and siblings) who completed college. More specifically, participants reported how many parents/guardians who completed college \((M=2.43, SD=2.37)\), how many grandparents completed college \((M=1.92, SD=2.48)\), and how many siblings completed college \((M=2.48, SD=3.87)\). Participants were also asked to report the highest degree that was obtained by their family members which is seen in Table 2.

Correlations were conducted with regard to GPA and the two predictor variables used for the final analysis, and both variables were positively correlated with GPA at the
.01 level. This was done due to the null results found from the two variables used in analysis of this study. Table 5 shows the correlation between number of family members who have college degrees and GPA, as well as time spent with community members and GPA. Table 5 also has age, sex, and college level as those were control variables in the initial analysis. Although this study conducted analysis at the .05 level, the significant correlation between the dependent variable and the two predictor variables indicates that there is some relationship between the predictor variables and GPA.

This study controlled for the following variables: age, year in college, geographic location, type of university, and gender. The analysis intended for this study was a hierarchical regression analysis, and the order in which the predictor variables were imputed by the preference of the researcher, which was based on previous research. Unfortunately, there were not enough participants (n=20) who were in TRIO programs and met criteria for the other two variables to include the third hypothesis in the analysis. Therefore, to prevent increasing error by running separate regression analyses, only number of family members who graduated college (family member academic level) and time spent with community members were used as predictors in the analysis.

A hierarchical regression was performed to determine if the two predictor variables used (time spent with community members and number of family members who completed college) predicted higher GPA’s among the ethnic minority student population in this sample. All statistical tests used were conducted with a .05 alpha level. A two stage hierarchical regression was conducted using GPA as the dependent variable, the control variables outlined above entered at stage one, and time spent with community members and number of family members who graduated college entered at stage two.
The TRIO program predictor variable was removed from the analysis due to the variable not meeting the assumptions for a hierarchical regression.

Time spent with community members was not a significant predictor of higher GPA among ethnic minority college students ($\beta = .154$, $F_{(5,61)} = 1.338$, $p = .25$). Further, the number of family members who completed college also was not a significant predictor of GPA ($\beta = .16$, $F_{(2, 59)} = .188$, $p = .16$) these figures can also be seen in Table 4. Thus, the hierarchical regression yielded non-significant results for this study. Additionally, this researcher found that approximately 3.8% of the variance in GPA was attributable to the control variables, and approximately 8.2% of the variance in GPA was attributable to the predictor variables. Table 5 also shows the correlations among the variables included in this study.
CHAPTER V

CONCLUSION

The purpose of the current study was to explore whether time spent with community members, number of family members who completed college, and time spent in a federal TRIO program, predict academic success among ethnic minority college students. Using a sample population of ethnic minority college students from across the country, the results showed that none of the variables significantly predicted higher GPA among ethnic minority college students. Further, controlling for age, year in college, geographic location, type of university, and gender did not yield significance in the results of this study. These results are in contrast with previous research conducted by Ullah and Wilson (2007), who found that college academic achievement was significantly positively predicted by their interaction with the student’s faculty member outside of the classroom. The study done by Ullah and Wilson identified time spent with a high school teacher as being impactful for increased academic success; and the current study looked at minority college students specifically. In contrast, Ullah and Wilson (2007) did not focus on minority populations. Ullah and Wilson’s study also focused on college faculty while the current study was targeting high school teachers.
As discussed above, the rationale behind focusing on high school teachers was to add to the literature regarding the impact teachers in general may have on student academic success. The results of this study imply that the outcome was not similar to previous research. The results of this study does not show that time spent with high school teachers influences college success as does time spent with college faculty as shown in the Ullah and Wilson study. Future researchers, however, may be interested to conduct more studies regarding this hypothesis independently.

Support and encouragement were seen as indicators of academic success among 6th through 12th grade students from the Hallinan (2008) study conducted on the relationship between students and teachers. The Hallinan study is more similar to what the current study was focusing on with regard to the student-teacher relationship, yet, the current study identified time as a proxy for relationship quality. The time spent predictor was used in an effort to identify time spent and relationship quality as interchangeable. Unfortunately, the current study’s results does not warrant such a generalization. The current study also expanded to community members in a more universal sense, identifying neighbors, spiritual leaders, and teachers. Past research conducted with regard to neighbors focused more on neighborhoods (Francois et al., 2012). Also, past research conducted with regard to spiritual leaders focused more on spirituality and religion (Riggins, McNeal, & Herndon, 2008; Schubmehl, 2009; Walker & Dixon, 2002). These studies left room for research to be conducted more specifically with neighbors and spiritual leaders, which was why those community members were included in this study. Although the results related to the community group were not significant, viewing those outcomes from a strengths based approach could serve as beneficial to the literature
and guide future research for more strengths based type studies. Further, future research can look at the resilience of these college students who did not spend time with teachers, neighbors, or spiritual leaders to identify what other factors may play a role in the academic success of minority students.

The current study also identified time spent in a federal TRIO program as a possible predictor of academic success among college students. Since TRIO programs were geared toward students with disadvantaged backgrounds, and largely to assist first generation college students, the current study did not obtain much information to add to the literature for this participant group. It is important to highlight, however, that the GPA among TRIO participants was higher when compared to all other participants included in this study. This information provides insight to the potential effectiveness of federal TRIO programs on academic achievement as measured by GPA. Although this study did not have enough participants from TRIO programs to include in the regression analysis, the difference in GPA warrants future research on TRIO programs with relation to academic success.

This study identified time spent with community members with college degrees, number of family members with college degrees, and time spent in federal TRIO programs as possible predictors of academic success, yet, the participants who had family members who were college graduates generally did not participate in the federal TRIO programs. These conflicting predictors made the analysis difficult. The idea behind the addition of time spent in TRIO programs was to enhance current research that assessed specific aspects of TRIO programs (Grimmett, 1998). The goal was to present TRIO programs as beneficial on a more individual level, viewing the programs overall rather
than general aspects of the program. As a result of a small sample size for this portion of the current study, the researcher encourages more research to be conducted in this area of TRIO programs in efforts to show their value in the community and in the lives of TRIO-eligible students.

Limitations

As with most studies, there are limitations that should be taken into consideration. The average GPA for the participants of this study was 3.16, indicating that participants for this study may have been higher achieving individuals, which could potentially account for some of the non-significant results. Perhaps the higher achieving students were motivated to complete the study more than those who were not as high achieving. The speculation then becomes, would the results look different if the participant group consisted of students with a broader range of achievement levels? This study was also intended to obtain retrospective information, which depended heavily on the memory of the participant. Time spent with community members referred to how much time a participant spent with community members during high school. Since the participant population was college students, it can be assumed that participants were anywhere from three months to ten or more years removed from high school, which would further imply that information regarding time spent with community members may have been skewed. The predictor of time spent in a federal TRIO program also depended on the memory of the participant, as this predictor was retrospective in nature.

Assumptions regarding why students did not complete the survey should also be addressed. Many participants completed the survey, but were ineligible to complete
certain questions because they did not meet the criteria (e.g., participating in a TRIO program, having family members who graduated college). Other speculation is that students did not have the desire to calculate the amount of time they spent with people every week when they were in high school. Other limitations include the ability to generalize to a larger population given the variation in participant responses and self-report. Collecting data through convenience and snowball sampling was a limitation given the possibility that the data collection method generated a participant group of higher achieving students. Finally, academic success is defined as GPA in this study; however, academic success can be defined in a variety of different ways. GPA is also viewed differently across universities, university types, and majors. As a result, this study is limited to GPA as academic success and does not provide insight on other definitions of academic success.

Implications and Directions for Future Research

Based on study results, there are a number of implications and directions for future research. The results of this study could possibly suggest resilience among minority college students, signifying that students may not need any of these variables to be academically successful. While previous research shows that there is some individual connection between academic success and each of the predictor variables, this study suggests that there are other factors contributing to the success of these students. This would warrant future research pertaining to the origin of the resilience shown by the population that makes up this sample. Following the predictors already outlined in this study, future research can also be done to replicate this study in a different manner. Specifically, a longitudinal study would be more appropriate to target more accurate
answers to the questions raised from the current study. Conducting research while students are in high school regarding the amount of time they spend with different community members may yield different results. More research specific to the three types of community members outlined in this study would potentially provide information on how those community members can be more effective in aiding adolescents in reaching their goals academically.

Another way to adjust this study would be to separate the predictor variables. As previously stated, two of the three predictor variables conflicted with one another, therefore, not as much information was obtained with regard to TRIO programs. More information and research conducted with TRIO programs would provide valuable information to TRIO professionals who are interested in if the TRIO programs are accomplishing their respective missions.

More research should be conducted specific to family members outlined in this study. Researching parents, grandparents, and siblings would potentially provide valuable information for those family members with regard to how they can utilize their education to help their family members. Lastly, this study focused on minority college students, which is unique to this study. Future research maintaining this focus would be beneficial in providing information to minority families specific to how they can assist their family members to be successful academically.
REFERENCES


Demographic Sheet

1. What is your age? ______

2. What ethnicity do you identify as?
   a. Drop down menu includes: African American, Latino American, Native American, and Asian American

3. What is your sex?
   a. Drop down menu includes: Male, Female, Other

4. What is your current college grade level?
   a. Drop down menu includes: Freshman, Sophomore, Junior, Senior
5. **What state do you live in?** (Please spell out full state name): ________________

6. **What is your university defined as?**
   
a. Drop down menu includes: historically black, historically Hispanic, public, private, other

7. **What is your current cumulative GPA on a 4.0 scale?: ____**

8. **Do you currently live on or off campus?**
   
a. Drop down menu includes: On Campus, Off campus

9. **What type of degree are you attempting to complete?_____________**

10. **How many credit hours/credit units have you completed?______**

11. **What is your family’s current household income?**
   
a. Drop down menu includes: above $40,000, between $30,000 and $39,999, between $20,000 and $29,999, between $10,000 and $19,999, less than $10,000, and declined to answer.
Family Education Questionnaire

1. Has anyone in your family completed college?
   a. Drop down menu includes: yes, no

2. How many of your parents/guardians have completed college?

3. How many of your grandparents have completed college?

4. How many of your siblings have completed college?

5. From the following list, please indicate the highest degree your family members completed after high school.
   a. Drop down boxes next to each name include: Associates degree, Bachelor’s degree, Master’s degree, Doctorate level or higher, other or not applicable.

   Parent/Guardian 1
   Parent/Guardian 2
   Parent/Guardian 3
   Parent/Guardian 4
   Grandparent 1
   Grandparent 2
   Grandparent 3
   Grandparent 4
   Sibling 1
   Sibling 2
   Sibling 3
   Sibling 4
Relationship Structures (ECR-RS) Questionnaire

1. During high school, how much time, in hours per week, did you spend with neighbors who have college degrees?

   Approximately (fill in the blank) hours per week

Please answer the following questions with respect to the neighbor who most influenced you to attend college

1. It helps to turn to this person in times of need.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

2. I usually discuss my problems and concerns with this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

3. I talk things over with this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

4. I find it easy to depend on this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

5. I don't feel comfortable opening up to this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

6. I prefer not to show this person how I feel deep down.
7. I often worry that this person doesn't really care for me.
   a. (Likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

8. I'm afraid that this person may abandon me.
   a. (Likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

9. I worry that this person won't care about me as much as I care about him or her.
   a. (Likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

10. Please indicate (in years and months, ex: 2 years and 5 months) how long you have known this person.

   Years (fill in the blank) Months (fill in the blank)

1. Approximately how many hours in a typical week during high school did you spend with this person?

   Approximately (fill in the blank) hours per week
2. During high school, how much time, in hours per week, did you spend with teachers who have college degrees?

Approximately (fill in the blank) hours per week

Please answer the following questions with respect to the teacher who most influenced you to attend college

2. It helps to turn to this person in times of need.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

3. I usually discuss my problems and concerns with this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

4. I talk things over with this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

5. I find it easy to depend on this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

6. I don't feel comfortable opening up to this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

7. I prefer not to show this person how I feel deep down.
8. I often worry that this person doesn't really care for me.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

9. I'm afraid that this person may abandon me.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

10. I worry that this person won't care about me as much as I care about him or her.
    a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

11. Please indicate (in years and months, ex: 2 years and 5 months) how long you have known this person.
    Years (fill in the blank) Months (fill in the blank)

12. Approximately how many hours in a typical week during high school did you spend with this person?
    Approximately (fill in the blank) hours per week
3. During high school, how much time, in hours per week, did you spend with spiritual leaders who have college degrees?

Approximately (fill in the blank) hours per week

Please answer the following questions with respect to the spiritual leader who most influenced you to attend college

1. It helps to turn to this person in times of need.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

2. I usually discuss my problems and concerns with this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

3. I talk things over with this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

4. I find it easy to depend on this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

5. I don't feel comfortable opening up to this person.
   a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

6. I prefer not to show this person how I feel deep down.
a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

7. I often worry that this person doesn't really care for me.

a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

8. I'm afraid that this person may abandon me.

a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

9. I worry that this person won't care about me as much as I care about him or her.

a. (likert scale format-7 options: Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree or Disagree, Somewhat Agree, Agree, Strongly Agree)

10. Please indicate (in years and months, ex: 2 years and 5 months) how long you have known this person.

Years (fill in the blank) Months (fill in the blank)

11. Approximately how many hours in a typical week during high school did you spend with this person?

Approximately (fill in the blank) hours per week
Federal TRIO Program Questionnaire

1. How much time (in years and months) did you spend in Upward Bound?
   (check box for not applicable drop down box for years drop down box for months)

2. How much time (in years and months) did you spend in Veterans Upward Bound?
   (check box for not applicable drop down box for years drop down box for months)

3. How much time (in years and months) did you spend in Upward Bound Math-Science?
   (check box for not applicable drop down box for years drop down box for months)

4. How much time (in years and months) did you spend in Talent Search?
   (check box for not applicable drop down box for years drop down box for months)

5. How much time (in years and months) did you spend in Student Support Services?
   (check box for not applicable drop down box for years drop down box for months)

6. How much time (in years and months) did you spend in Educational Opportunity Centers?
   (check box for not applicable drop down box for years drop down box for months)

7. How much time (in years and months) did you spend in Ronald E. McNair Post-Baccalaureate Achievement Program?
   (check box for not applicable drop down box for years drop down box for months)

Please answer all questions below based on your overall experience as a student in a Federal TRIO Program. There are no right or wrong answers – all we are interested in is a number that truly reflects your feelings. (**regular numbering will be used for actual survey; letters will not precede numbers and numbers will be continuous)

PE1. Prior to enrollment, what were your overall expectations of the program quality of the TRIO program? (likert scale format 10 options- 1=very low, 5=neutral, 10=very high)
PE2. Prior to enrollment, what were your expectations of the extent to which the TRIO program would meet your personal requirements? (likert scale format 10 options-1=very low, 5=neutral, 10=very high)

PE3. Prior to enrollment, what were your expectations of the consistent program quality of the TRIO program? (likert scale format 10 options-1=very low, 5=neutral, 10=very high)

PQ1. What is your overall evaluation of the program quality of the TRIO program? (likert scale format 10 options-1=very low, 5=neutral, 10=very high)

PQ2. What is your evaluation of the extent to which the TRIO program meets your personal requirements? (likert scale format 10 options-1=very low, 5=neutral, 10=very high)

PQ3. What is your evaluation of the extent to which the program quality of the TRIO program is consistent? (likert scale format 10 options-1=very low, 5=neutral, 10=very high)

SS1. Overall, how satisfied are you with the TRIO program? (all things considered) (likert scale format 10 options-1=very dissatisfied, 5=neutral, 10=very satisfied)

SS2. Considering your expectations, to what extent has the TRIO program fallen short or exceeded your expectations? (likert scale format 10 options-1=fallen very short5=neutral, 10=exceeded by far)

SS3. How close is the TRIO program to your ideal student assistance program? (likert scale format 10 options-1=very far from ideal, 5=neutral, 10=very close to ideal)

PL1. Thinking about the time when you entered the TRIO program, how likely is it that you would choose this program again? (likert scale format 10 options-1=very unlikely, 5=neutral, 10=very likely)

PL2. To what degree do you believe that you made a right decision choosing the TRIO program? (likert scale format 10 options-1=totally wrong choice, 5=neutral, 10=totally right choice)
WOM1. I would say positive things about the TRIO program to other people. (likert scale format 10 options-1=strongly disagree, 5=neutral, 10=strongly agree)

WOM2. I would recommend the TRIO program to potential students who seek my advice. (likert scale format 10 options-1=strongly disagree, 5=neutral, 10=strongly agree)

WOM3. I would encourage potential students to apply to the TRIO program (likert scale format 10 options-1=strongly disagree, 5=neutral, 10=strongly agree)

SC. Have you ever complained (either formally or informally) about the ___ TRIO program? (drop down box: yes/no. If yes, how many times? space provided)
Table 1.

*Frequencies of Family Members who Completed College Overall*

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parents</strong></td>
<td></td>
</tr>
<tr>
<td>One Parent</td>
<td>25.7%</td>
</tr>
<tr>
<td>Two Parents</td>
<td>16.4%</td>
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<tr>
<td>Three or more</td>
<td>2%</td>
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<tr>
<td><strong>Grandparents</strong></td>
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<tr>
<td>One Grandparent</td>
<td>9.9%</td>
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<tr>
<td>Two Grandparents</td>
<td>5.9%</td>
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<tr>
<td>Three or more</td>
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<tr>
<td><strong>Siblings</strong></td>
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<td>One Sibling</td>
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<tr>
<td>Two Siblings</td>
<td>5.9%</td>
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<tr>
<td>Three or more</td>
<td>4.6%</td>
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Table 2.

*Frequencies of Degrees Obtained by Specific Family Members*

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<td>Siblings</td>
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<td>Bachelor’s Degree</td>
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<td>Parents/Guardians</td>
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<td>Grandparents</td>
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<td>Siblings</td>
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<td>Master’s Degree</td>
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<td>Parents/Guardians</td>
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<td>Grandparents</td>
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<tr>
<td>Grandparents</td>
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<td>Siblings</td>
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Table 3.

*Frequencies of TRIO Student Race*

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<th>Ethnicity</th>
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<td>Black/African American</td>
<td>48.8%</td>
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<td>Latin/Hispanic American</td>
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<td>Asian American</td>
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<td>Native American</td>
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<tr>
<td>Biracial</td>
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<tr>
<td>Decline to Answer</td>
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Table 4.

*Summary of Hierarchal Regression Analysis for Variables Predicting GPA*

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<th>$t$</th>
<th>$\beta$</th>
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*Note.* Geo.Loc=Geographic Location, Type=Type of University, Academic=Academic Standing, Community=Total time spent with community members, FamGrad=Number of family members who graduated college
Table 5.

*Pearson Product Moment Correlations among Key Variables*

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<th>3.</th>
<th>4.</th>
<th>5.</th>
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<tr>
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<td>3. Sex</td>
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<td>4. College Level</td>
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<td>5. Community Hours</td>
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<td>.213**</td>
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<td>6. FamGrad</td>
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</tbody>
</table>

*Note.* *p* < .05; **p** < .01. Community=Total time spent with community members, FamGrad=Number of family members who graduated college
VITA

Gabrielle Vanessa Helene Johnson

Candidate for the Degree of

Doctor of Philosophy

Thesis: TIME WITH COLLEGE GRADUATES, FAMILY MEMBER ACADEMIC LEVEL, AND TIME SPENT IN FEDERAL TRIO PROGRAMS AS PREDICTIVE FACTORS OF HIGHER GPA IN POST-SECONDARY EDUCATION AMONG ETHNIC MINORITY COLLEGE STUDENTS

Major Field: Educational Psychology, Counseling Psychology Specialization

Education:

Completed the requirements for the Doctor of Philosophy in Educational Psychology at Oklahoma State University, Stillwater, Oklahoma in July, 2015.

Completed the requirements for the Master of Science in Educational Psychology at Oklahoma State University, Stillwater, Oklahoma in July, 2011.

Completed the requirements for the Bachelor of Arts in Psychology at California State University, Long Beach, Long Beach, California in 2010.

Professional Memberships: National Association of Black Psychologists, American Psychological Association