

**ANALYZING THE IMPOSTER PHENOMENON THROUGH RECRUITMENT AND
RETENTION OF UNDERREPRESENTED MINORITIES IN AGRICULTURAL AND
NATURAL RESOURCE-RELATED FIELDS:
THE KEYS TO DIVERSITY AND INCLUSION**

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Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in
partial fulfillment of the requirements for the degree of

Doctor of Philosophy

In

Agricultural, Leadership, and Community Education

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September 22, 2021

Blacksburg, VA

Keywords: Agriculture, Agricultural Education, Critical Race Theory, Diversity, Imposter
Phenomenon, Imposter Syndrome, Inclusion, MANRRS, Natural Resources,
Racial Identity Development Theory, STEM, Underrepresented Minority Students

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ABSTRACT (Professional)

The recruitment and retention for underrepresented minority (URM) students in agriculture and natural resources have been minimal. The importance of elucidating the lack of representation of students of color and underrepresented minority (URM) students in these fields suggests that appropriate actions at the secondary school and collegiate level need consideration. According to Silas (2016, p.iii), “students of color are currently underrepresented in agricultural disciplines when examining the increasingly diverse make-up of the United States.” Examining the recruitment and retention strategies institutions are currently implementing is critical because of the narrative of these particular fields in the treatment of students of color and URM students over time. Many students of color and URM students that are currently matriculating a degree or currently in a career in these respective areas have possibly experienced the imposter phenomenon and imposter syndrome. People may feel like an imposter regarding accomplishments they believe they do not deserve or questioning their ability to receive such accolades. When an individual inhibits these feelings, this is an example of the imposter phenomenon or imposter syndrome. The imposter phenomenon, first recognized by Clance and O’Toole (1988), is a motivational disposition in which persons who have achieved some level of success feel like fakes or imposters. Individuals likely experiencing these imposter feelings during a period were examined using a lens based on the Critical Race Theory (Bell; 1987, Crenshaw, 1989; Delagado & Stefancic, 2012) and Racial Identity Development Theory (Helms, 1990; Helms, 1993). The phenomenological study examines the effects of IP/IS in URM graduate students in agricultural and natural resource-related majors and fields. This method focuses on the participants’ lived experiences regarding this phenomenon. The study itself examined how URM graduate students dealt with these particular feelings in their respective

environments and what solutions were suggested or needed. The researcher interviewed ten participants regarding their perceptions of diversity and inclusion in agriculture, natural resources, and STEM-related fields.

ABSTRACT (Public)

The need for diversity and inclusion within agriculture, natural resources, and STEM-related fields is critical and imperative as the demographics of the United States are changing. The shortage of minority individuals within agriculture, natural resources, and STEM-based fields impede the ultimate success and potential within these areas. The utilization of underrepresented minority (URM) individuals within these spaces ensure proper diversity and inclusion methods within these environments. The minimal efforts of diversity and inclusion within these environments are likely to promote feelings of an imposter within these URM individuals which would likely hinder success and motivation. The imposter phenomenon and imposter syndrome are particular feelings in which persons who have achieved some level of success possibly feel like fakes or imposters. This study examines the perceptions of URM students that have perhaps experienced feelings related to this phenomenon in less diverse and inclusive settings. The researcher examines critical race theory and racial identity development by interviewing ten participants about their perceptions of diversity and inclusion and the imposter phenomenon and imposter syndrome within the agricultural, natural resource, and STEM-related majors and fields.

ACKNOWLEDGEMENTS

First and foremost, I would like to acknowledge my Lord and Savior for allowing me this opportunity to pursue a dream that many aren't able to do and allowing me to be an inspiration to many. I would like to thank Dr. Randy Grayson and the George Washington Carver Fellowship for providing funding for my doctoral studies at Virginia Tech. While pursuing this doctoral journey, I've ultimately have learned that without faith, nothing is possible. I will forever cherish the moments of your excellent words of wisdom.

I would like to thank my advisor and dissertation chair, Dr. Donna Westfall-Rudd for your patience, guidance, and wisdom during this journey. I'm very fortunate, and I thank God that I was able to have your support and willingness to invest in my future. The amount of knowledge I have gained from you during this journey has been immeasurable, and I'm incredibly appreciative of it. Since arriving in Blacksburg, I'm thankful to you and Dr. Rick Rudd for opening your home to myself and other students within the ALCE department to enjoy great fellowship despite our hectic schedules.

I would like to express my gratitude to my dissertation committee members.

Dr. Antoine J. Alston: I'm very fortunate and blessed to have met you during a difficult time in my life in which I was seeking better direction. I'm very grateful that you believed in me and took the chance ultimately becoming my advisor in the Agricultural Education Master's Program at A&T. I vividly remember ten years ago stating that "I won't let you down." Look at us now. I thank God for your wisdom, knowledge, and mentorship throughout the years from being a student, a teacher in Eastern North Carolina, and member of my dissertation committee. Thank you for everything! AGGIE PRIDE!

Dr. C.L. Bohannon: Thank you greatly for being a part of my dissertation committee. I

remember vividly in Fall 2016 seeing the email call for registration for the Community Methodologies course you were going to teach. I noted that to myself that I had to take the course. I've been blessed to take that course and develop a relationship over the years. My admiration for you as an African American Landscape Architect resonates with myself deeply and I appreciate what you have done for the Landscape Architecture industry. I'm very fortunate for meeting you. Having Jamaican and Mid-South commonalities, I've always respected the bond. You have ultimately taught the importance of qualitative research and the impact of community viability. You are the ultimate definition of an Alpha Man. Continue to stay "Ice Cold" and doing the work of Alpha. Onward and Upward.

Dr. Tiffany Drape; Thank you for bringing great value, mentorship, and direction to my research. While taking your courses, I'm very fortunate that I was able to understand the importance of research methods and I've developed confidence regarding research methods. I'm forever grateful for the open-door visits to your office to learn more about qualitative research, technology, and the genuine suggestions given regarding my research. I'm honored to have experienced your great wisdom and phenomenal expertise. I look forward to the future research collaborations in the near future.

I would like to thank all my colleagues in the Department of Agricultural, Leadership, and Community Education. I have developed meaningful relationships, and I'm privileged to learn from each of you. I would like to express gratitude and thanks to fellow Aggies from the illustrious North Carolina Agricultural and Technical State University (NC A&T SU), Dr. Robert Bass and Dr. Chantel Simpson, for allowing me the opportunity to learn about the ALCE program. You both are the reason in which I ultimately decided to take the leap of faith from leaving the school system to pursue my doctorate. I thank you both dearly. AGGIE PRIDE!

Thank you to the organizations at Virginia Tech that have made my time in Blacksburg and the New River Valley enjoyable; Black Graduate Student Organization (BGSO), Caribbean Students Organization (CaribSO), Multicultural Academic Opportunities Program (MAOP), Virginia Tech Diggin' In The Crates (DITC), and VT MANRRS. I'm grateful to hold membership and employment within these organizations as well as DJ numerous events for these organizations. My time within these organizations has helped me develop friendships and bonds that I will forever cherish. Thank you.

To the "Ice Cold" Brothers of the Alpha Kappa Lambda, Phi Zeta, and Theta Iota Chapters of Alpha Phi Alpha Fraternity, Incorporated. Thank you for allowing me to understand the true meaning of Manly Deeds, Scholarship, and Love for All Mankind. I take pride in being an Alpha Man and representing the organization to my most extraordinary ability. I'm forever grateful for the Brotherhood.

To the members of Mount Olive Missionary Baptist Church in Fayetteville, NC and The Evangelical House of God in Spring Lake, NC. I thank you for help in raising me these last two decades. I'm very grateful for the prayers over the years. I thank God dearly for the support. There are endless people to name but I'm forever grateful your prayers, encouragement and support over the years. Thank you! Your support definitely is not overlooked.

To all my family members; the Lawrence, Bailey, Higgs, Jackson, Johnson, Troupe, and Williams families. Thank you for your prayers, love, and support during this journey. I appreciate your patience, understanding when I couldn't attend family events due to my scholastic and collegiate duties. Thank you for everything! I love you all sincerely.

Finally, I must give my sincerest and most profound appreciation to my immediate family, who have supported me through everything I do. To my wonderful parents, Gordon and

Duanna Lawrence, I thank you for motivating and inspiring me at a young age to become the man I am today. I'm forever grateful for the prayers and continual guidance you both have provided. During this journey, many roads and avenues supplied many detours, but your words of encouragement and, at times, brutal honesty kept me in line and kept me going. I love you dearly.

To my lovely sister, Masika Lawrence, I'm amazed at the young woman as well as trailblazer you have become. You have always been a motivation for me to grind hard and go hard each day. I know sometimes you act like the big sister, even though you are the little sister, but that motivated me over time to become a protector and provider and lead by example. I've always been inspired by what you have accomplished and will continue to achieve. I love you much!

To my lovely wife Jalessa and daughter Jade: I thank God for you every day, and I'm blessed to have you in my life. You have given me more strength to push through times within this journey where I didn't know what was next. I'm forever grateful for the prayers and encouragement, which were motivating factors in completing this dissertation. Thank you for believing in me, and I love you both dearly.

DEDICATION

I dedicate this dissertation to my late grandfathers, Philbert Archibald Lawrence and Willie Mack Williams Sr; uncle, Howard Shaun McLean Lawrence; and cousin, Ellis Troupe Jr. I'm grateful for your guidance and spirit while completing this journey. This dissertation is for you all. Your legacies shall continue to prevail.

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CHAPTER 1: INTRODUCTION

Higher education has been grappling with the need to address educational inequities and improve recruitment and retention of diverse students, faculty, and staff for at least 30 years (Hurtado, Arellano, Griffin, & Cuellar, 2008). Over the last several decades, student persistence and retention have been the chief concern of virtually all higher education institutions, resulting in an abundance of theoretical models of persistence and retention initiatives on college campuses across the country (Kim & Irwin, 2013). Minority student recruitment in agriculture and related fields is essential for colleges and universities throughout the country. Many working-class students are students of color (i.e., African American, Latino, Asian, or American Indian/Alaska Native), even though many White students are classified in this same category (Rendón, 2006). According to Rendón, Garcia, & Person (2004), students of color are often socially defined as "minorities" and may become targets of prejudice, stereotyping, and discrimination regardless of their numerical status. Compounding the challenges of higher education, African American students often deal with the general difficulty of adjusting to the new role of being a graduate student. The reason for this is likely being faced with a lack of adequate financial aid, a need to work to support themselves in school, and a lack of role models and mentors. In addition, many African American students are the first in their families to consider graduate education. (Ewing, Richardson, James-Myers & Russell, 1996). The importance of faculty handling implicit bias in the correct manner is paramount due to increasing number of diverse students enrolling within college campuses more often (Torres, Howard-Hamilton, and Cooper, 2003; Silas, 2016). Silas (2016) suggests that an individual's accountability is vital for the increase of cultural competence and diversity towards other groups.

According to Zavadil and Kooyman (2013), many racial/ethnic minority students struggle

with an issue often termed "imposter syndrome." This phenomenon refers to minority groups' feeling that other majority group students belong in college, but they do not. Much of the literature addressing the experiences of African American graduate students attempting to complete advanced degrees indicates that several difficulties affect the psychological well-being of these students (O'Brien, 1990). The imposter phenomenon (IP), first recognized by Clance and O'Toole (1988), is a motivational disposition in which persons who have achieved some level of success feel like fake or imposters. Recruitment of any students to any field of agriculture is obstructed by traditional perceptions of agriculture being study as "cows, sows, and plows." (Beyl, Adams & Smith, 2016). Negative historical associations exacerbate this imperfect agriculture picture among groups underrepresented in today's higher education, particularly Hispanic and Black students. (Nichols & Nelson 1993; Talbert & Larke, 1993).

Analyzing the Impostor Phenomenon/Impostor Syndrome in graduate students of color is vital in many aspects. The imposter phenomenon (IP), first recognized by Clance and O'Toole (1988), is a motivational disposition in which persons who have achieved some level of success feel like fakes or imposters. According to Grubb and McDowell (2012), these feelings of phoniness and concern happen across gender, race, and other demographic variables. Many students of color may feel that they must have assimilated in situations to survive within their respective fields. According to Silas (2016), a lack of diversity within the student population, faculty, staff, and curriculum can restrict the nature and quality of minority students' experiences both inside and outside the classroom. Having role models for these students is necessary to begin a positive trajectory towards recruitment or retention. Role models can function as teachers and coaches to develop high-quality learning environments and challenge their students to develop their full abilities (Warren & Alston, 2007).

The lack of students of color within agricultural disciplines is evident in school-based national agricultural organizations (Silas, 2016). Urban areas hold a large volume of students, yet the focus of agricultural studies in those areas may not be as strong as rural areas (Russell, 2016). Vocational educators need multicultural education training because the United States has developed into a culturally pluralistic society (Sheppard, 1983). Students of color who would be able to participate in 4-H or FFA would be a start to help develop self-efficacy while learning and performing tasks within agricultural-related and natural resource-related programs. According to Foster, Pikkert, and Hussman (1991), to increase the percentage of ethnic minorities and women that enroll in the profession of agricultural education, programs accomplish this task by increasing acceptance by administrators, increasing the salaries of new employees, and changing current societal attitudes against ethnic minorities and women teachers in agriculture. Improving teacher education programs, building support networks, and increasing recruitment efforts also helps to increase minority enrollment and women enrollment (Foster et al., 1991). The enrollment statistics and employment statistics in United States public schools reveal a gap between the cultural diversity of teachers and the students enrolled in their classes. The lack of teachers representing diverse cultures exists within agricultural education, natural resources, and STEM as well (Silas, 2016)

Statement of the Problem

Minorities have been underrepresented in most agricultural sciences areas for an extended period (Lynch 2001). According to Lynch (2001), admission requirements for many universities have made students hesitant to enroll in vocational classes, including agricultural education, while at the secondary level. Due to shifting demographics, more people from various backgrounds will be entering higher education, either as students or as employees (Silas,

2016). According to Silas (2016), with changing demographics within the higher education landscape, more interactions between these populations and individuals who have not experienced interactions with individuals of underrepresented backgrounds are likely. The relationship between URM students' behavior, knowledge, and attitude suggests that as one experiences and becomes more knowledgeable in an area, that person will develop positive connotations (Talbert, 2006; Newsom-Stewart & Sutphin, 1994; Wiley et al., 1997). However, students from minority groups are unaware of the career opportunities in agriculture because of their lack of exposure to the field of agriculture (Sutphin & Newsom-Stewart, 1995; White, Stewart & Linhardt, 1991). Additionally, according to Tracey and Sedlacek (1984), minority students must demonstrate a greater variety of characteristics, not just academic ability, to perform well as white students. According to Trefts (2019), the interest in STEM disciplines is low for both sexes specifically, females' express interest in the field at a much lower rate. Additionally, first-generation college students are likely than their counterparts to leave STEM disciplines by dropping out of college (Chen, 2015). These crucial facts are essential to analyze to determine if the imposter phenomenon or impostor syndrome prevents many students of color from enrolling in a degree program within agriculture, natural resources, STEM, or pursuing agricultural, natural resource, or STEM-related careers.

Purpose Statement and Research Questions

This study will examine the experiences of current and recently graduated underrepresented graduate students in agricultural and natural resource programs to determine the factors that were more likely to increase imposter syndrome and imposter phenomenon and those that helped reduced these negative experiences of graduate students. The study will focus on the following questions:

1. How do the imposter phenomenon and imposter syndrome create a barrier to underrepresented minority student enrollment and retention in College of Agriculture and College of Natural Resource Programs at Land Grant Universities?
2. How do agricultural and natural resource-based collegiate organizations support underrepresented minority students in conquering the barriers imposed from the imposter phenomenon and imposter syndrome?
3. What contributions of support such as professors, industry professionals, or mentors have in the mentorship of underrepresented minority students in agricultural and natural resource-related majors and fields?
4. How can Colleges of Agriculture and College of Natural Resource programs recognize the imposter phenomenon and imposter syndrome?
5. In what ways does it affect recruitment and retention trends of underrepresented minority students?

Theoretical Framework

Critical Race Theory

Matriculating through college brings many challenges to students, ranging from getting connected to others in the new context to seeking academic resources (Lee, 2018). Lee (2018) states for a student from a historically disenfranchised or racially marginalized community, college matriculation difficulties can be exacerbated because of issues of oppression, experiences with isolation (Harper & Hurtado, 2007), and struggles with a sense of belonging (Strayhorn, 2012). Racism is deeply embedded within the US society, which is sometimes difficult to recognize and address (Lee, 2018; Delgado & Stefancic, 2012; Ladson-Billings, 1998). Therefore, Critical Race Theory (CRT) is used to normalize and analyze racialized experiences

within research and practice (Lee, 2018). Understanding the tenets of critical race theory would help practitioners, professors, teachers, and leaders of Agriculture to understand how vital diversity is within the field. The philosophy that brings students, families, educators, and community members to create schools and social institutions based on acceptance, belonging and community is known as inclusion (Bloom, Perlmutter, & Burrell, 1999). Inclusion aims to establish collaborative, supportive and nurturing communities of learners based on giving all students the services and accommodation they need to learn and respecting and learning from each other's differences (Salend, 2001). According to Delgado & Stefancic (2012), critical race theory (CRT) sprang up in the 1970s, as several lawyers, activists, and legal scholars across the country realized, simultaneously, that the heady advances of the civil rights era of the 1960s had stalled and, in many respects were being rolled back. Recognizing that new theories and strategies were needed to combat the subtler forms of racism that were gaining ground, early writers such as Derrick Bell, Alan Freeman, and Richard Delgado put their minds to task (Delgado & Stefancic, 2012). According to Delgado & Stefancic (2012), the CRT movement is a collection of activists and scholars studying and transforming the relationship between race, racism, and power. To emphasize diversity inclusion with agriculture, agricultural education, and related fields, understanding the tenets of Critical Race Theory (CRT) would present the opportunity for transparency among leaders within the profession. According to Hiraldo (2010), CRT originated from the critical legal studies movement in the USA during the mid-1970s. Critical Race Theory (CRT) analyzed the role of race and racism in perpetuating social disparities between dominant and marginalized racial groups, intending to unearth what has been taken for granted in the analysis of race and privilege and the patterns of exclusion in US society

traditionally and historically (Parker & Villalpando, 2007). Critical race theory would inspire researchers to explore its effects on diversity and inclusion in numerous programs and fields.

According to Hiraldo (2010), the five tenets of the Critical Race Theory (CRT), namely, counter-storytelling; the permanence of racism; Whiteness as property; interest conversion; and the critique of liberalism, can be used to analyze the different forms of social inequities reinforced through the institution of higher education (Ladson-Billings, 1998; Delgado Bernal & Villalpando, 2002; DeCuir & Dixson, 2004; McCoy, 2006).

- Tenet One: counter-storytelling: The use of this tenet in higher education provides faculty, staff, and students of color a voice to tell their narratives regarding marginalized experiences in college campuses where an institution is becoming inclusive and not simply superficially diverse.
- Tenet Two: the permanence of racism: This tenet asserts that racism controls the political, social, and economic realms of American society. The CRT perspective of racism is regarded as an inherent part of civilization, privileging white people over colored ones in higher education and where diversity action plans become ineffective when racism is ignored in this regard.
- Tenet Three: Whiteness as property: This tenet originated from the embedded racism in American society, where the notion of whiteness operated on different levels, such as the right of possession, the right to use and enjoyment, the right to disposition, and the right of exclusion (DeCuir & Dixson; Ladson-Billings & Tate, 1995; Ladson-Billings, 1998).
- Tenet Four: interest conversion: This tenet acknowledges White people as the primary beneficiaries of civil rights legislation (Ladson-Billings, 1998; DeCuir & Dixson, 2004; McCoy, 2006), which is exemplified in affirmative action and diversity initiatives.

- Tenet Five: the critique of liberalism: This tenet comes from the notion of colorblindness, the neutrality of the law, and equal opportunity for all. According to this tenet, colorblindness is a mechanism allowing people to ignore racist policies that perpetuate social inequity found in the lack of inclusivity in the academic curriculum (Ladson-Billings, 1998) and student development theory used by student affairs professionals in higher education.

Racial Identity Development Theory

Black and White racial identity theories examine psychological development from the level of racial rather than ethnic similarity (Helms, 1990; Helms, 1993). According to Helms (1993), racial identity refers to the quality or manner of one's identification with the respective racial groups; therefore, racial identity theories generally describe a variety of modes of identification. Some Black ethnic identity theories have focused on the emotional, cognitive, and behavioral processes associated with being Black in American society (Constantine, Richardson, Benjamin & Wilson, 1998). The attempt to measure racial and cultural identity in adult populations is a relatively new phenomenon. However, theoretical speculation about such issues had been around for some time (Cross et al., in press).

The development of white identity in the United States is closely intertwined with the product and progress of racism in this country (Helms, 1993). Jones (1972,1981) identified three types of racism: (a): individual, that is, personal attitudes, beliefs, and behaviors designed to convince oneself of the superiority of Whites and the inferiority of non-white racial groups; (b) institutional, meaning social policies, laws, and regulations whose purpose is to maintain the economic and social advantages of Whites over non-Whites; and (c) cultural, that is, societal beliefs and customs that promote the assumption that the products of White culture (e.g.,

language, traditions, appearance) are superior to those of non-White cultures. Helms (1993) also notes that the greater extent that racism exists instead of denied, the less possible it is to develop a positive White identity.

As many educational institutions struggle to become more multicultural regarding their students, faculty, and staff, they also begin to examine issues of cultural representation within their curriculum (Tatum, 1992). Tatum (1992) also notes that attention is minimal to the process problems that inevitably emerge in the classroom when attention centered on race, class, or gender becomes the primary focus. Racial Identity Development Theory is critical for faculty and staff to understand how to create cultural competence in learning spaces. For teachers to develop ethnic expertise necessary to reach diverse students, Carter and Goodwin (1994) recommend that teachers should understand their teaching beliefs and practices. To begin this process, teachers should reflect on their identity development and consider how their perspectives could influence their teaching and interaction with students, especially when working with students whose cultural backgrounds are different from their own (Howard, 2006; Villegas & Lucas, 2002).

Racial identity refers to a "sense of group or collective identity based on one's perception that he or she shares a shared racial heritage with a particular racial group" (Helms 1990, p.3). Black and White racial identity theories psychologically examine racial development rather than ethnic similarities (Helms, 1993, p.4). The concept of racial identity development was initially applied to understanding people of color who have distinct cultural heritages (Atkinson, Morten & Sue, 1988). According to Helms (1993), Black racial identity theories attempt to explain the various ways in which Blacks can identify (or not identify) with other Blacks and adopt or abandon identities resulting from racial victimization. White racial identity theories attempt to explain the

various ways in which Whites can locate (or not identify) with other Whites or evolve or avoid evolving a non-oppressive White Identity. URM students must understand racial identity to develop motivation and confidence to succeed in spaces that lack diversity. Many researchers, specifically concerning the students who identify with the subject matter (Marie, 2016), have documented the influences ethnic studies curricula have played in student achievement.

The creation of different racial identity development models (racialequitytools.org, n.d) has allowed an opportunity for colleges and universities to promote diversity inclusion that helps with recruitment and retention practices. According to racialequitytools.org (n.d.), summarized frameworks examine the numerous racial identity models in different ways, focusing on the experiences of people of color, biracial and white people in the US. The models can be helpful concerning self-reflection, building empathy, and understanding of people who are situated differently from ourselves. Racialequitytools.org (n.d) explains the components of the models in the summary of Racial Identity Development through various categories such as:

People of Color

- People of Color Racial Identity Model (William Cross, developed initially as the Nigrescence Model of African American Identity). This framework focuses on the process by which African Americans come to understand their identity. (Cross, 1971; Cross 1991).
- Filipino American Identity Development, (Kevin Nadal). This framework focuses on Filipino Americans, highlighting the experience of cultural assimilation/acculturation of a distinct ethnic group. (Nadal 2011; Nadal 2010; Nadal 2009)

- Ethnic Minority Identity Development (John W. Berry). This framework focuses on the experiences of ethnic minorities, particularly immigrants to the US (Berry, 2005; Sam & Berry, 2006)

Bi-racial People

- Biracial Identity Development (W. S. Carlos Poston). Stages of identity development of biracial people. (Poston, 1990).
- Continuum of Biracial Identity Model (Kerry Ann Rockquemore and Tracey Laszloffy). Continuum rather than staged model. (Rockquemore & Laszloffy, 2005)
- Resolutions of Biracial Identity Tensions (Maria P. P. Root). Description of possible positive recommendations of biracial identity tensions. (Root & Kelley, 2003),

White People

- White Racial Identity Model (Janet E. Helms, the reference in Tatum article). This framework identifies a continuum that leads to developing an anti-racist identity. (Helms, 1990, 1993)
- Integrated Model (John and Joy Hoffman) This framework begins and ends with stages that are thought to be the same for all people. In between, different steps are articulated for People of Color and White People. (Hoffman & Hoffman, 2006).

IP and IS can have a relation between various theories relevant to the development of underrepresented populations. The approaches that are crucial to successful recruitment and retention practices concerning underrepresented minority students in colleges and universities are CRT and Racial Identity Development Theory. Both theories together as a framework would focus on the needs of the URM student experience and the consistency of the views in current educational programs within agricultural and natural resource programs. To increase the

percentage of ethnic minorities and women that matriculate into the profession of agricultural education, someone could accomplish the following tasks by; increasing acceptance by administrators, growing salaries, changing current societal attitudes against ethnic minorities and women teachers in agriculture, improving teacher education programs, and building support networks and increasing recruitment efforts (Foster, Pikkert, & Husmann, 1991). Recruitment efforts are necessary, specifically with minority students, so that the agricultural workforce reflects the diversity of the U.S. population (Frazee, Rutherford, Wingenbach, & Wolfskill, 2011).

Project Limitations

The limitations of the research study would be finding students that understand the definition of IP and IS. They can try to identify or determine if they are experiencing the effects during their graduate school career. The study is based on student enrollment from Colleges of Agriculture and Colleges of Natural Resources. There isn't a current subset of feelings of IP/IS available from previous research studies.

Definition of Terms

Constructivism is an epistemology that rejects the notion that knowledge is fixed, independent of the knower, and consists of accumulating 'truths' (Hofer & Pintrich, 2002).

Critical Theory tradition draws on Marxist scholarship to illuminate how people accept as every day a world characterized by massive inequities and the systemic exploitation of the many by the few (Brookfield, 2005).

Critical Race Theory (CRT) is a theoretical and interpretive mode that examines race and racism across dominant cultural modes of expression and power. (Delgado & Stefancic, 2017)

Diversity is the inclusion of individuals that represent a variety of demographics, including national origin, religion, color, socioeconomic status, sexual orientation, etc. (Silas, 2016)

Imposter Phenomenon (IP)/ Imposter Syndrome (IS) is a motivational dispositional in which persons who have achieved some success feel like fakes or imposters. (Clance & O'Toole, 1988)

Land Grant Colleges and Universities are institutions designated by its state legislature or Congress to receive benefits of the Morrill Acts of 1862, 1890, and 1994. (Association of Public and Land Grant Universities, nd)

Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS) is a national society that welcomes all people of all racial and ethnic groups to participate in agricultural and related science careers. (Dorsey, Ingram, & Radhakrishna, 2004)

Microaggressions are brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or harmful racial slights and insults toward people of color or marginalized groups. (Sue et al., 2007)

Students of Color within the research denotes any person that identifies as a minority, including African-Americans, Hispanic, Asian, and Native American, and any other ethnicity not commonly represented within in the field of agriculture or natural resources in the US (Morrison, 2010; Silas, 2016)

Role Model: A person who serves as an example by influencing others (American Academy of Child and Adolescent Psychiatry, 2019)

Underrepresented Minorities (URM) in this research are people identified as African American/Black, Asian, Hispanic/Latinx, Native American/Alaska Native, Native Hawaiian/Other Pacific Islander, who have historically comprised a minority of the US population; (National Action Council for Minority Engineers, nd).

CHAPTER 2: LITERATURE REVIEW

Introduction

Minorities today face an uncertain future regarding their participation in career and technical education (CTE). Recruitment and retention of underserved populations and underrepresented minorities (URM) in agricultural-related majors and fields are critical in developing core relationships in disciplines that need diversity and inclusion (Gordon, 2008). Many factors, influences, and barriers affect the success of minorities in agriculture. The declining number of students entering the field of agriculture has been on the rise over the years. (Scott & LaVergne, 2004). Although the profession has made conscious efforts to recruit and retain a diverse population within agricultural education, our ability to sustain a level advocated by other disciplines is mixed at best. From secondary school enrollments to faculty and staff positions at major colleges and universities, the agricultural education profession has failed to keep pace with the ever-changing ethnic influx within education systems. (LaVergne et al., 2011).

The imposter phenomenon (IP), first recognized by Clance & O'Toole (1988), is a motivational dispositional in which persons who have achieved some success feel like fakes or imposters. While impostors fear that others will detect their inadequacies, they openly humiliate themselves, externalize successes, dismiss positive affirmations of others, and report feeling fraudulent. (Ferrari & Thompson, 2006). Individuals who suffer from the IP often believe that they have fooled others into overestimating their intelligence. (Peteet, Montgomery, & Weekes, 2015). Feelings of impostorism are associated with substantial psychological distress and low self-esteem. (Peteet, Montgomery & Weekes, 2015). It is essential to determine what cause's impostor syndrome or the impostor phenomenon affects underrepresented minorities in different

agricultural, natural resource, and STEM-related majors in Colleges of Agriculture, Colleges of Natural Resources, or Land Grant Universities throughout this country.

Barriers

It is crucial to determine the barriers underrepresented populations and minorities have encountered in agriculture, agricultural education, natural resource, and STEM-related fields. The purpose of this is to ensure that barriers have been identified, solved, and mitigated. African Americans have been significant historical contributors to agriculture (Moon, 2007), but the struggles of African American farmers have been a relevant issue for decades (Brown, Dagher, & McDowell, 1992). Due to the dwindling participation of people of color in agricultural-related careers, in contrast to the substantial demographic percentage increase expected within this population in the next decade, those charged with perpetuating the leadership role of the United States in agriculture and related fields should continue to find ways to enhance participation of this group in agricultural education (Jones, 2003). Understanding minority recruitment and retention in natural resource careers is complex. (Haynes et al., 2015). Ethnic minority participation in agriculture is increasingly declining annually, even though career opportunities in these areas are steadily growing. Ethnic minorities and women face many barriers regarding their participation in vocational education, specifically agricultural education. (Warren & Alston, 2007). The importance of recruitment and retention among people of color in agriculture and related careers is essential in many facets. One factor that may influence the IP perceptions in college students is whether they are first-generation college students or the first in their family to attend college (Peteet, Montgomery, & Weekes, 2015). According to Smith (2017), Black male youth in urban areas seek to receive positive exposure and support for their future success. The African-American communities offer various cultural avenues and incentives for the success of

young Black men. Some of the cultural strengths within urban communities consists of families, kinship bonds, achievement orientation, and even churches (Smith 2017; Hill, 1997).

A barrier to note in which many minorities and underrepresented populations are not prevalent in agriculture and natural resources is historical contexts of oppression such as slavery. 1619 is known as the beginning of African enslavement in what would become the United States, when "twenty negars" arrived in Jamestown, Virginia, a colony of Great Britain. Colonists brought Blacks as forced labor in what was primarily an agrarian society (Moon, 2007). According to Moon (2007), this benefited white settlers and colonists who had begun the displacement of the native American (Indian) tribes, who, for the most part, resisted servitude through warfare and relocation to areas away from the whites. (Moon, 2007). In 1640, after escaping his master, John Punch was the first African American sentenced to serve his master for the rest of his life as a slave. Over time, many other Virginia landowners saw the benefits of enslaving Africans. (Johnson et al., 1998). The conclusion of the Civil War marked the end of slavery in the United States, and the number of African American farmers increased, reaching its peak in the 1920s (Browne, 2003).

History of Agricultural Education

Senator Justin S. Morrill of Vermont introduced the first land grant bill in 1857. The bill failed within the Senate and was reintroduced in 1859. (Walter 1993, Gordon 2008). In 1862, the bill passed the Morrill Act for Land-Grant Institutions through both houses with the help of Ohio Senator Benjamin Wade. The primary purpose of this act was to promote liberal and practical education of the industrial classes in pursuits and professions of living. (Gordon, 2008). Historians agree that neither Senator Justin Morrill, who supported the bill, nor Senator

Benjamin Wade, who guided it through Congress, had any clear thoughts of its educational implications. (Gordon, 2008).

Even though Morrill did not make straightforward guidelines about race, sex, or creed when he created the Morrill Act of 1862, many African Americans were disqualified from pursuing degrees from these institutions, particularly in the South (Neyland, 1990). Due to the opposition, only four black-land grant schools emerged under the 1862 Act. The Second Morrill Act was adopted on August 30, 1890. The purpose of the 1890 Morrill Act and the amendment to the Morrill Act of 1862 provided educational opportunities for African-American Students. Until the Second Morrill Act of 1890, all the southern states established land-grant institutions for African Americans (Baker, 1991). The slow growth of these institutions is attributed to the misappropriation of federal funds entrusted to the states for distribution to these institutions (Gordon, 2008).

Role Models

Minority students must see more people of color in positions and roles such as teachers, professors, or practitioners in respective disciplines may be motivated or influenced to pursue careers within agriculture. Role models can function as teachers and coaches to develop high-quality learning environments and challenge their students to develop their full abilities (Warren & Alston, 2007). Multicultural education is one primary strategy that programs and fields can employ to create an attitude of change toward ethnic minority and women's inclusion and support the development of minority role models. Multicultural education can be utilized as a map to direct the future and aid educators, government, communities, and the private sector in eliminating societal inequities and restricting the engagement of minorities and women in leadership roles (Warren & Alston, 2007). It is essential to have mentors and role models for

students of color within agriculture, natural resources, STEM, and related fields due to a lack of representation within the area. Mentorship within agriculture, natural resources, STEM, and related fields is essential for students because it gives the lens of what to expect and contribute to the area.

Racial and ethnic minority students can be exposed to STEM careers early by connecting with role models in those professions (Lewis, 2003; Torntazky, Macias, and Solis, 2006). Access and exposure to role models are essential because visualizing or seeing people who achieve positive outcomes (such as attaining a professional position in the STEM workforce) can raise one's self-efficacy and achieve these outcomes (Bandura, 1977; Museus et al., 2011). Much research has focused on the presence and importance of faculty role models in the significant choice decision (Griffith, 2010). According to Griffith (2010), the fraction of female and minority faculty in STEM departments is meager, so if role models of the same gender or race are imperative factors in major choice, this could play an essential role in the underrepresentation of women and minorities in STEM field majors.

Underrepresented minorities are significant to recruit because they would help eradicate the notion that minorities are not looking towards careers in agriculture. There have to be role models or people who look like them to help recruit underrepresented populations within agriculture. Westbrook & Alston (2007) emphasizes that African American students surround African American professors are more likely to remain in the agricultural field because they have role models or mentors. The purpose of a role model or mentor is to help students establish contacts, develop networks and uncover career opportunities (Westbrook & Alston, 2007). African American students often deal with the general difficulty of adjusting to the new role of the graduate student. In many instances, students lack adequate financial aid, a need to work to

support themselves in school, and a lack of role models and mentors. Also, many African American students are the first in their families to consider graduate education. (Ewing, Richardson, James-Myers & Russell, 1996). Role models can function as teachers and coaches to develop high-quality learning environments and challenge their students to develop their full abilities (Warren & Alston, 2007).

The importance of agriculture education in rural and urban spaces for students of color is crucial. Many students of color in the secondary levels possibly would have more interest in agricultural, natural resources, and STEM-related majors and fields if there is more representation in the positions and support from guidance counselors to encourage them to take relevant courses. The establishment of urban agricultural education programs could play a critical role in increasing participation and enrollment at both high school and university levels. (Henry, Morris & Talbert, 2014). Suppose administrators and teachers of urban agricultural education programs are interested in recruiting students into their programs. In that case, emphasis on involving the parents or guardians in the recruitment process. Recruitment events such as an open house could arrange for former students who have pursued post-secondary degrees and careers in agriculture to talk with current and future students and their parents, specifically the mother or female guardian, about opportunities available in the agricultural sciences. (Esters & Bowen, 2004). Diversity inclusion is also the act of acknowledging these differences and, in turn, fostering an atmosphere to teach every student in the classroom effectively (LaVergne et al., 2011).

Recruitment in Agriculture and Natural Resources

Many challenges exist for the recruitment of students into agriculture disciplines, one of which is the out-of-date perception of agriculture disciplines and perception of agriculture as a

modern profession. (Beyl, Adams & Smith, 2016). Many universities encounter considerable difficulty recruiting ethnic minorities to undergraduate food and agricultural sciences majors (Wiley, Bowen & Bowen, 1998). According to Beyl et al. (2016), agriculture is less perceived as a cutting-edge and technologically advanced research area. Students tend to enroll in colleges because of the major they offer (Cole & Thompson, 1999). Cole & Thompson (1999) emphasizes that it is critical when conducting a recruitment activity to get past the general university information to specific information about majors. Recruiters must be knowledgeable about major and program availability, employment opportunities for graduates, a course requirement for the numerous majors, and avoid sex-role stereotypes (Cole & Thompson, 1999). From secondary school enrollments to faculty and staff positions at major colleges and universities, the agricultural education profession has failed to keep pace with the ever-changing ethnic influx. (LaVergne et al., 2011). According to Goecker et al. (2010), there continues to be a shortage of qualified graduates for agriculture and natural resources job openings in the United States. One of the reasons for this national shortage of eligible agriculture graduates possibly attributes to a decline in student enrollment in colleges of agriculture (COAs) (Baker, Settle, Chiarelli & Irani, 2013). Educating students about career opportunities in agriculture could increase diversity in the agricultural workforce (Russell, 2016).

According to Setterbo et al. (2017), to fill the gap between workforce needs and agriculture and natural resource (ANR) college graduates, relevant strategies must recruit students with minimal or no connection to ANR. College graduates with expertise in food, agriculture, renewable natural resources, and the environment are essential to our ability to address the U.S. priorities of food security, sustainable energy, and environmental quality (Goecker et al., 2010). Due to educational barriers and group perceptions, few underrepresented

groups pursue careers in agriculture (Talbert, Larke, Jones & Moore, 1997). Talbert et al. (1997) also noted traditionally underrepresented groups had perceived agriculture as limited to farming, ranching, and related careers. There is a particular need for insight on administrators' perceptions of their roles related to diversity within colleges of agriculture, which barriers administrators perceive to be the most significant hindrances to the recruitment and retention of underrepresented students (Silas, 2016). Strategies that administrators use to assist students in circumventing these barriers are imperative, and which methods have been most effective (Silas, 2016). According to Ellis (2013), current opportunities and challenges within higher education are forcing educators to question how to evaluate existing strengths to ensure that the institution is capable of addressing students' needs while preserving the essence of traditional teaching and learning. Educators must consider the best approaches for maximizing and leveraging educational opportunities to increase learning productivity therefore amplifying the college degree value (Ellis, 2013).

Agricultural programs need to recruit inner-city and minority youth (Alston & Westbrook, 2006). Despite the implementation of diversity scholarships and career-related programs from organizations such as the United States Department of Agriculture (USDA) and Future Farmers of America (FFA), there are very few underrepresented students enrolling in colleges of agriculture across the country (FAIS 2013). Attracting urban, underrepresented populations to college majors and careers in agriculture remains a problematic situation for colleges of agriculture and agricultural professionals (Fraze, Wingenbach, Rutherford, & Wolfskill, 2011). Frazee et al. (2011) also state that much of the research has focused on recruiting general populations of students to the profession and students' attitudes toward majors and careers in agriculture. Due to the dwindling participation of people of color in agricultural-

related jobs in substantial demographic percentage and population increase projected within the next decade, those charged with perpetuating the leadership role of the United States in agriculture and related fields should continue to find ways to enhance participation of this group (Jones, 2003). According to Westbrook & Alston (2006), lack of interest in agriculture is a significant concern regarding African American enrollment in agriculture.

Retention in Agricultural, Natural Resource, and STEM-Related Fields

Universities throughout the country have established criteria for selecting students for admission (Garton, Ball, & Dyer, 2002). Garton et al. (2002) explain that students' academic performance and continued enrollment concern universities and their respective colleges. One of the significant problems plaguing college administrators nationwide is recruiting and retaining quality students who are likely to enter the agricultural industry upon graduation (Dyer, Breja, & Wittler, 2002). Retention is a term that is used to describe student persistence, which is successful completion of an academic year and the continuance towards the next year of study (Hagedorn, 2005). The lack of students of color within agricultural disciplines reflects the demographics of school-based national agricultural organizations (Silas, 2016). According to Dyer et al. (2002), students who have experience in agriculture completed high school agriculture courses were members of the FFA, 4-H, and live in a rural setting are likely to complete a degree in a college of agriculture. First-year students who have not had those experiences are less likely to complete a degree within those areas (Dyer et al., 2002). Understanding the importance of FFA and 4-H for minority recruitment and retention in agriculture is needed from a secondary school level to the collegiate level. Participating in school-based agricultural, natural resource, or STEM-based organizations for students of color would help develop self-efficacy and confidence. Career and Technical Education (CTE)

researchers recognized the need for cultural and multicultural education within their respective disciplines to address a diverse society (Braundy, 2000; Friendenberg, 1999). The FFA is an intra-curricular activity for CTE agriculture (Gordon, 2008). Gordon (2008) explains that many years prior to the FFA movement, vocational agriculture clubs existed in many parts of the United States.

Ethnic minority participation in the field of agriculture is increasingly declining on an annual basis, even though career opportunities in these areas are steadily growing (Warren & Alston, 2007). Retention of underrepresented minorities in agriculture, agricultural education, STEM, and related fields creates awareness about the importance of understanding the dynamics of diversity inclusion and demographic shifts that the United States is currently experiencing. By 2050 the demographics of the United States population will drastically change, and half the population will consist of what the world now considers to be underrepresented groups. (Wright, 2014). According to Wright (2014), the demographic change through population within corporate agribusiness provides proof of a need to increase ethnic & cultural diversity in research on the lived experiences of underserved groups. More focused efforts should be in place to specifically recruit ethnic minority and female students interested in agricultural occupations (Luft, 1996). Warren & Alston (2007) states that in today's educational environment, teachers will consistently interact with students from varying socioeconomic backgrounds, ethnicities, and cultures, unlike their own, requiring individuals to be sensitive to individual needs.

Colleges of agriculture should consider collaborating with agricultural and STEM industry-based jobs to help bridge gaps of diversity inclusion to develop positive rapport among underrepresented groups. Students' academic performance and their intention to continue to complete their degrees are a concern for universities and their respective colleges (Garton, Dyer,

& King, 2001). Recent studies have focused on assessing the learning styles in colleges of agriculture (Garton, Dyer, King, & Ball, 2000). Hurtado and Ruiz (2012) explain that changes in demographics are a good thing, as low representation among ethnic groups can create a detrimental effect on campus climate. According to Hurtado and Ruiz (2012), college is an ideal environment for students to experience racial and ethnic differences, appreciate the difference, and learn how to treat one another as equal citizens. Diversity within colleges and universities could weaken racist perspectives prevalent in society; college may be a student's first-time engaging individuals from different racial and ethnic backgrounds (Saenz, 2010). Inclusion is a philosophy that brings students, families, educators, and community members together to create schools and other social institutions based on acceptance, belonging, and community (Sapon-Shervin, 2003).

An essential component to recruitment and retention of underrepresented minorities in colleges of agriculture is the self-efficacy of those students. Student motivation and the social factors that impact student engagement perceives one of the most important psychological concepts in education (Vallerand, Blais, Briere, & Pelletier, 1992). Understanding the sense of belonging and self-efficacy within students of color in agriculture creates awareness about how vital this is for recruitment and retention. Subjective judgments of self-worth, or self-esteem, are often based on what individuals perceive others to think about them. (Peteet, Brown, Lige & Lanaway, 2015). Principles guiding Social Cognitive Career Theory (SCCT) are rooted in Bandura's (1986) Social Cognitive Theory emphasizing the critical components of self-efficacy and outcome expectations. (Lent et al., 1994, Henry et al, 2014). The discussion on motivation, student engagement, and student achievement is prevalent in current studies in various

educational disciplines worldwide; however, a literature review on agricultural education yielded no such trend (Anderson, 2013).

Agricultural-based programs such as 4-H, Collegiate FFA, Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS), and other field-specific organizations are essential for retaining underrepresented minorities in colleges of agriculture. Organizations such as these help students of color understand the importance of these organizations for career development and career-building. They would possibly help recruit other minority students to join these organizations.

Prejudices and Microaggressions

The importance of addressing issues such as prejudice is paramount in roles within agriculture-related disciplines. Understanding many factors and influences for students of color in agricultural, natural resources, and STEM-related majors and fields would allow teachers, guidance counselors, faculty, and staff of colleges and universities an advantage in creating avenues of diversity and inclusion. Programs such as FFA and 4-H are crucial means of development with students of color during childhood because they would expose them to opportunities within agriculture. In the study, Cano & Bankston (1990) conducted factors that influence participation and non-participation of ethnic minority youth in Ohio 4-H programs. The minority youth felt that a more extensive and targeted effort to advertise 4-H would make more minority kids aware of 4-H. Parental involvement is a crucial factor in the promotion of agricultural education as well. The more knowledge parents would know about agricultural education, FFA, and 4-H would give them a prime opportunity to persuade in the activities within these programs. Parents expressed strong interest in the educational opportunities and activities provided through the 4-H program. Parents were pleased with the leadership skills

developed by their children through 4-H (Cano & Bankston, 1990). Many parents would support their children to participate within 4-H and FFA because of the development of leadership, growth, and the hard and soft skills that someone would obtain through these respective programs.

Self-Efficacy in Agriculture, Natural Resources, and STEM

Understanding the sense of belonging and self-efficacy within students of color in agriculture creates awareness about how vital this is for recruitment and retention. Subjective judgments of self-worth, or self-esteem, are often based on what individuals perceive others to think about them. (Peteet, Brown, Lige & Lanaway, 2015). Principles guiding Social Cognitive Career Theory (SCCT) are rooted in Bandura's (1986) Social Cognitive Theory emphasizing the critical components of self-efficacy and outcome expectations. (Lent et al., 1994, Henry et al., 2014). Bandura (1994) defines self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 1). The research in agricultural education mirrors the dualistic nature of the theory of self-efficacy, addressing both the development of and outcomes associated with agriculture teachers' self-efficacy (McKim & Velez, 2016). Furthermore, according to McKim and Velez (2016), research in agricultural education using self-efficacy theory has yielded significant insight into the development of self-efficacy and the relationship between self-efficacy and career persistence.

Promoting agriculture, agricultural education, natural resources, STEM, and related fields through urban and rural contexts to students of color can be valuable. The role of secondary teachers is essential when it comes to this, but the advantages of having minority teachers or practitioners for recruiting would be very beneficial. It could prove to be helpful in recruitment

efforts if universities and colleges created more agriculture programs to be brought into areas that are heavily populated with African American youth, including but not limited to schools and neighborhoods. It would also be beneficial if more agriculture companies and industries showed African Americans participating in the industry. Making these images more vivid and available would possibly help African American youth see the jobs they could have if they chose agriculture as a career (Jordan, 2014).

Internal Model/Construct Map

The imposter phenomenon represents the characteristics and behaviors of individuals who do not attribute their success to their intellectual abilities and prowess (Clance & Imes, 1978). The imposter phenomenon is problematic because it can be debilitating and cause psychological harm and distress, especially among communities of color (Cokley, McClain, Enciso, & Martinez, 2013). With underrepresented students facing so many barriers related to higher education, it is essential to acknowledge interventions that can assist students in circumventing these barriers (Silas, 2016).

The internal model addresses the critical content areas in which perceived fraudulence and self-efficacy are likely to occur. The content areas under which perceived actions in the model would be categorized are the sense of affirmation/belonging, sense of control, and sense of competence (Peteet et al., 2015). The sense of affirmation/belonging aligns with the perceived or possible effects of self-acceptance, optimism, and exploration. The sense of control aligns with personal responsibility, purpose in life, and well-being. The sense of competence aligns with the perceived traits or actions of positive relationships, environmental mastery, and performance outcomes. The internal model suggests the needed use of the construct map to determine the high level of imposter feelings with low self-efficacy and the low level of imposter

feelings with high self-efficacy.

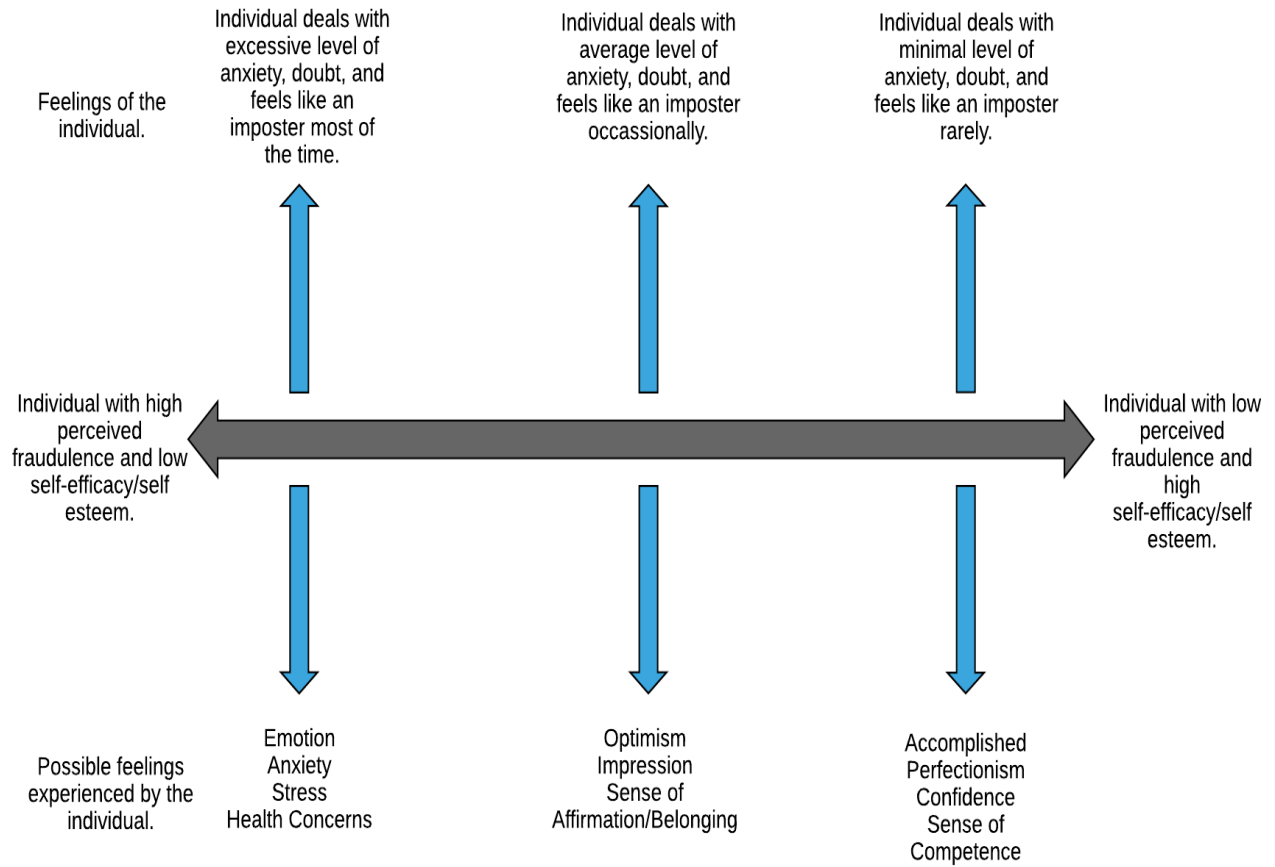


Figure 1: Construct Map of the Imposter Phenomenon/Imposter Syndrome

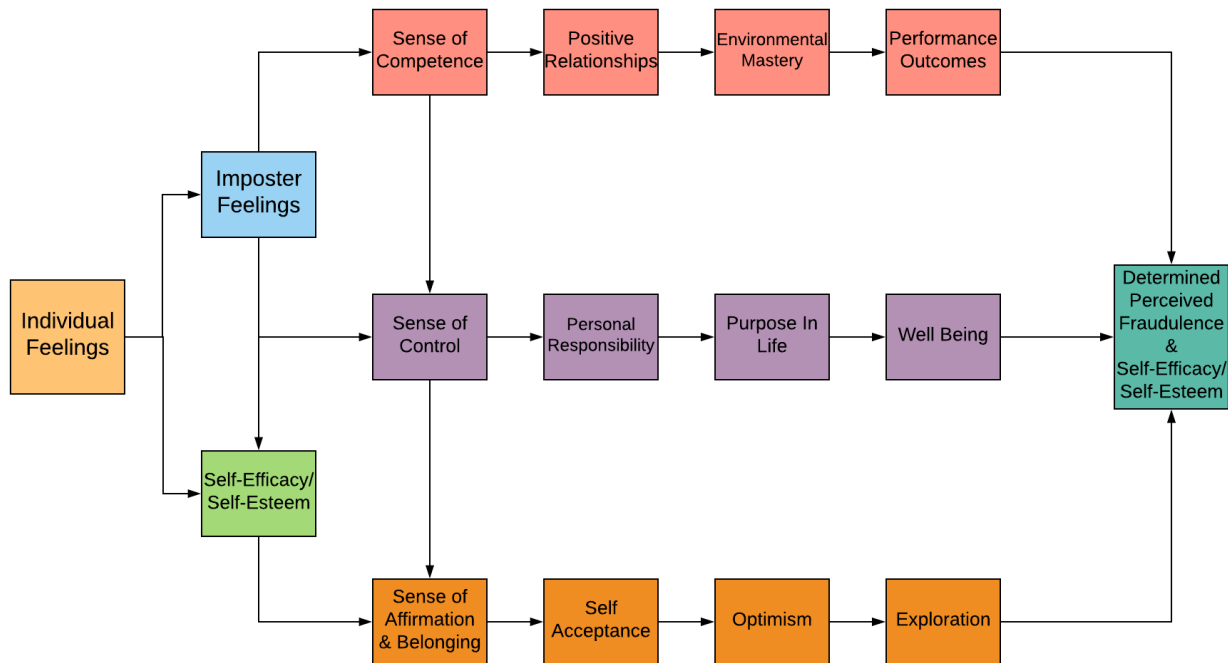


Figure 2: Internal Model of the Imposter Phenomenon/Imposter Syndrome

External Model

The relationships between the Imposter Phenomenon/Imposter Syndrome, Racial Identity Development Theory, and Critical Race Theory (CRT) relate by two crucial components: recruitment and retention and experiential learning. Experiential learning, defined through the work of John Dewey, where he claimed that powerful learning experiences could result in more substantial learning outcomes (Giles & Eyler, 1994). Giles and Eyler (1994) summarize the work of Dewey as it pertains to the experiential learning theory. They state that since all learning experiences occur along a continuum, learning that builds upon previous experiences is the Principle of Continuity. The Principle of Interaction relates to the situation of the incident and how the past is linked to present circumstances. Experiential learning is critical to consider perceived fraudulence because URM students often feel the need for competence and affirmation to feel accomplished or successful. If there is constant and consistent mastery in experiential

learning, URM students are less likely to feel the continuous pressure of imposter feelings and perceived fraudulence.

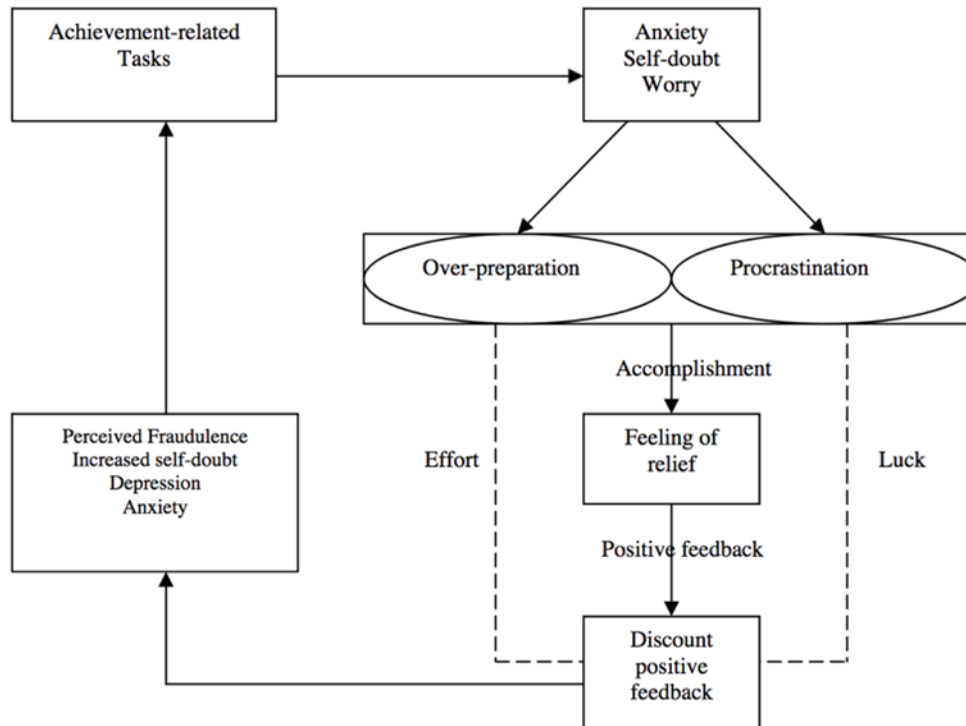


Figure 3: Clance's (1985) model of the Imposter Cycle, as depicted in Sakulku & Alexander (2011).

Summary

Recruitment and retention of underrepresented minorities in agricultural and natural resource-related fields and disciplines are essential. Underrepresented minorities need to feel welcomed in agriculture and natural resources colleges to promote better recruitment and retention practices. It is vital for colleges of agriculture and colleges of natural resources to be willing to recruit in communities where the underserved and underrepresented minorities are located. Many urban and rural communities contain these particular populations of underrepresented minority students.

Analyzing the Impostor Phenomenon/Impostor Syndrome in students of color is vital in many facets. Many students of color may feel that they must have assimilated in situations to survive within their respective fields. The importance of having role models for these students would be necessary to begin a positive trajectory towards recruitment or retention. Role models can function as teachers and coaches to develop high-quality learning environments and challenge their students to develop their full abilities (Warren & Alston, 2007).

CHAPTER 3: METHODOLOGY

Qualitative research methods in this study will help determine if the imposter syndrome (IS) or imposter phenomenon (IP) has been a barrier to recruitment and retention of underrepresented minorities in agricultural, natural resource, and STEM-related majors, disciplines, and fields. The purpose of this study is to obtain a better understanding of the perceptions of URM graduate students regarding their experiences in Colleges of Agriculture and College of Natural Resources to determine if IP/IS was a factor. Interviews occurred with URM students/students of color from Colleges of Agriculture, Colleges of Natural Resources, and Colleges of Sciences at Land-Grant colleges and universities and at selective conferences to learn about student experiences and if students are currently experiencing the Imposter Phenomenon or Imposter Syndrome. The targeted sample size was current graduate students and recently graduated masters or doctoral students of color. The research would identify recommendations for increasing retention and recruitment among minority students in agriculture. This study aims to add to the body of knowledge related to mitigating barriers for URM populations and providing meaningful dialogue relating to actions that can address this issue.

Researchers Ontology

The current research that I'm proposing to lead to my dissertation is the recruitment and retention of underrepresented minorities (URM) in agricultural and natural resource and related fields by analyzing the imposter phenomenon and imposter syndrome. I'm interested in studying how it affects students' performance within these fields from secondary school to the collegiate level. My knowledge within my research is created by understanding URM students' interaction

with their environment, which includes other people. The specific qualitative paradigms that identify and align with are constructivism, critical theory, and critical race theory.

The researcher's reason for choosing constructivism, critical theory, and critical race theory (CRT) is to highlight the effects of minorities in agriculture, natural resources, and related fields by gaining a thorough knowledge of the recruitment and retention of URM students. African American students often deal with the general difficulty of adjusting to the new role of a graduate student. These students often lack adequate financial aid, a need to work to support themselves in school, and a lack of role models and mentors. In addition, many African American students are the first in their families to consider graduate education. (Ewing, Richardson, James-Myers & Russell, 1996). Understanding many factors and influences for students of color in agricultural education early on by agricultural education teachers, guidance counselors, faculty, and staff of colleges and universities would be advantageous in creating avenues of diversity inclusion.

Researchers Epistemology

Constructivism accentuates integrated curricula and having teachers use materials in such a way that learners become actively involved. Constructivism is an approach within teaching that should influence and inspire teachers to teach their students despite complexities among students. According to Hofer & Pintrich (2002), constructivism has been the other significant area of theoretical work in recent years. Constructivism is an epistemology that rejects the notion that knowledge is fixed, independent of the knower, and consists of accumulating 'truths.' Constructivism refers to the belief that persons actively construct their perspectives by interpreting their experience; developmentalism refers to the idea that these constructions evolve through eras marked by principles of stability and change (Brookfield, 2005; Kegan 1982;1994).

Critical theory and critical race theory (CRT) are the other paradigms that I believe play an impactful role in the pedagogy of URM students. According to Brookfield (2005), critical theory tradition draws on Marxist scholarship to illuminate how people accept as every day a world characterized by massive inequities and the systemic exploitation of the many by the few. In critical theory, reality is objective and influenced by oppressive experiences. Understanding the imposter phenomenon and imposter syndrome within agriculture through the critical race theory (CRT) allows for a thorough understanding of teachers' classroom practices and their confidence to teach in diverse learning environments.

As a former agricultural education teacher, I've experienced and witnessed the lack of representation of people of color within agriculture, agricultural education, and related fields. In terms of my experiences as a student teacher and teacher in 4 years, I would constantly question the causes of the lack of representation of students of color within many agricultural education courses. During my tenure as a student-teacher, out of 70 students taught, six students were minorities. When I taught in my classroom, I had more minority students enrolled in courses due to the school's population and limited Career and Technical Education (CTE) courses. I have also questioned the lack of representation of teachers of color in agricultural education, the agriculture industry, and related fields. My basis of returning to graduate school to pursue a doctoral degree has influenced my thinking on pursuing research on recruitment and retention of URM populations in agriculture and the importance of increasing diversity inclusion in the field. There wasn't a significant representation of teachers of color in many agricultural education professional development events I attended as a teacher, and there wasn't a substantial representation of teachers of color.

Institutional Review Board (IRB)

The researcher prepared and applied to the Virginia Tech Institutional Review Board (IRB) regarding human subject's research. The researcher received IRB approval before any data collection occurred. The researcher asked all participants to provide informed consent to participate in the study. The consent from participants was provided through signature on a hard-copy and scanned consent form that met approval by the IRB review committee. The researcher provided the consent form with the first recruitment contact email and again with the confirmation of an interview. Lastly, the researcher reviewed the consent form before the beginning of the semi-structured interviews.

Population

The target populations for the study comprised of current and graduated masters and doctoral students. A purposeful population, also known as a theoretical sample defined by Corbin & Strauss (2008), is a sample selected based on "persons, sites, or events where he or she purposefully can gather data related to categories, their properties, and dimensions" (p. 153). The target population for the study would be three students at an 1862 land grant institution from each Census-defined region in the United States: Northeast, Midwest, South, and West (United States Census, 2019). The researcher implemented an Institutional Review Board (IRB) qualitative phenomenological study to understand the feelings of URM students in their respective discipline in agriculture, natural resources, STEM, or related fields. The researcher also implemented a qualitative phenomenological study to obtain information regarding the motivation to seek a career within agriculture, natural resources, or STEM-related fields. The researcher recruited participants from communities within the GroupMe platform dedicated to URM graduate students and professionals. The researcher contacted the MANRRS organization

to locate potential participants that would be interested in the study. The researcher built the study method based upon Moustakas' (1994) phenomenological approach.

Phenomenology

While researching underrepresented and marginalized populations, phenomenology can be beneficial because it provides thorough analysis and in-depth examination of a particular issue or experience from the viewpoint of the population affected. The researcher According the Creswell (2017), phenomenological research is a design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of an individuals about a phenomenon as described by participants. Creswell (2017) suggests that the description is culminated by the essence of experiences for several individuals who have experienced the phenomenon. The conduction of interviews is necessary due to strong philosophical underpinnings (Giorgi, 2009; Moustakas, 1994).

Phenomenology can be described as the qualitative analysis of the conscious experiences of phenomena from the first-person point of view of the participant (Privitera & Ahlgrim-Delzell, 2019). The researcher understands the participants conscious experience was vital towards developing a successful study. Privitera & Ahlgrim-Delzell (2019) describes a conscious experience as any experience that a person has lived through or performed and can bring to memory in a such way as to recall that experience. The participant's conscious experience intentionality or meaning must be considerate by the researcher by first identifying objects of awareness. Objects of awareness as defined by Privitera & Ahlgrim-Delzell (2019) are those things that bring an experience to memory or consciousness. This was important tactic for the researcher to ensure the participants holistically explained their experiences to suggest understandings of their particular experiences and narratives.

Interviews

In qualitative interviews, the researcher conducts face-to-face interviews with participants, telephone interviews, or engages in focus group interviews with six to eight interviewees in each group (Creswell, 2014, p. 190). According to Creswell (2014), these interviews involve unstructured and generally open-ended questions that are few and intended to elicit views and opinions from the participants. The participant interviews helped collect information about the attitudes and perceptions of individuals where the data are in a narrative form. Interviews helped gather information about the philosophy and perceptions of individuals one-on-one or in groups; They can be structured, semi-structured, or unstructured. (Privitera & Ahlgrim-Delzell, 2019). Privitera & Ahlgrim-Delzell (2019) detail that interviews require establishing rapport with the person interviewed so that individual(s) are motivated to respond honestly.

Semi-structured interviews were the data collection technique for the study. According to Privitera & Ahlgrim-Delzell (2019), a semi-structured interview is an interview with a set of questions presented to all the individuals interviewed, but the responses are open-ended. A semi-structured interview is a method of inquiry that will allow the interviewer to explore a particular reply further (Charmaz, 2014). In addition to the interviewer exploring emergent themes during the interviews, the interview protocols are based on the open-coding process to explore emerging themes, clarify questions, expose unique perspectives, and seek saturation (Charmaz, 2014). The researcher developed interview questions from the literature review and the a priori table: the literature and theory-informed the structure of the interview protocol.

The researcher gave the option to participants to view their transcriptions before completion of transcription of the audio recording. This process is called member checking

(Flick, 2006). Study participants can confirm that their transcript is accurate and representative of their thoughts during the interview. Member checking is a strategy to add reliability to qualitative research (Creswell & Poth, 2017). Additionally, the researcher's developed themes from the study were shared with the study participants by request. The researcher conducted a follow-up interview with some study participants to clarify the emergence of themes in the data (Charmaz, 2014).

Data Analysis

Data analysis in qualitative research will proceed hand-in-hand with other parts of developing the qualitative study, namely the data collection and the write-up of findings (Creswell, 2014, p.195). The researcher collected data as semi-structured interviews were conducted. Before coding, a thorough reading of transcripts occurred multiple times before the analysis of the data. Coding is the process of organizing the data by bracketing chunks (or text or image segments) and writing a word representing a category in the margins (Rossman & Rallis, 2012). Open-coding is the systematic process of labeling concepts, defining and developing category types based on their properties and dimensions without pre-definition (Charmaz, 2014).

The researcher organized and prepared the data for analysis. According to Creswell (2014), this included transcribing interviews, optically scanning material, typing field notes, cataloging all visual material, and sorting and arranging the data into different types depending on the sources of information. The researcher developed a codebook from the open-coding process to determine the coding themes. Researchers might develop a qualitative codebook, a table containing a list of pre-determined codes that researchers use to code the data (Creswell, 2014, p.199). According to Creswell (2014, p.199), the codebook intends to provide definitions

for codes and to maximize coherence among codes-especially when multiple codes are involved. The researcher wrote descriptions for the codes to prevent code meanings from being altered. The researcher used data analysis software, Atlas.ti, for open-coding, which allows for modification and interpretation of code definitions.

The researcher sought to understand the perceptions of underrepresented minority individuals and their feelings regarding the imposter phenomenon and the imposter syndrome in agriculture, natural resources, and STEM-related fields. The researcher sought to understand if such feelings affects the recruitment and retention of URM students within agricultural, natural resource, and STEM-related disciplines. The accountability from administrators to ensure URM individuals understand if they are experiencing feelings of an imposter is vital for majors and programs. The reasoning to develop contingency plans that will help aid these individuals is critical for retention within these disciplines

The qualitative phenomenological method the researcher employed in analyzing transcripts of participant interviews within the study. In this method, the researcher will follow six systematic steps: (1) interview participants to develop descriptions of the personal experience of the phenomenon under study; (2) develop a list of significant statements; (3) take the statements and group them into larger units of information called themes; (4) develop written description of what the participants experienced with the phenomenon; (5) a written description of how the experience happened; and (6) written composite description of the phenomenon incorporating steps 4 and 5.

Data Preparation

All audio recordings were transcribed accurately by the researcher. The researcher returned transcripts of the semi-structured interviews of the study participants for member-

checking (Creswell, 2014; Flick, 2006). Member checking involves verifying the participants' coding, representations, and interpretations (Privitera & Ahlgrim-DeLzell, 2019). Study participants confirmed that their words are representative of their thoughts on the phenomena. Member checking is a reliability strategy in qualitative research (Creswell & Poth, 2017).

The researcher prepared all of the transcripts for data analysis. All documents will be blinded, meaning that identifying information will be removed to protect the study participants. Pseudonyms were assigned to each participant by the researcher to protect the identity of the participants. People who have potentially been mentioned in the interview by participants who are not the participants will remain anonymous with their position title.

The researcher ensured confidentiality of the participants by keeping data on the researcher's password-protected laptop, saved in a password-protected Virginia Tech Google Drive folder, and Atlas.ti on the researcher's computer. The blinded data will be reviewed by the researcher and the dissertation committee as required. Upon the completion of data analysis and publication, the researcher destroyed all un-masked materials.

Validity and Reliability

Validity is one of the strengths of qualitative research. Validity is based on determining whether the findings are accurate from the researcher's standpoint, the participant, or the readers of an account (Creswell & Miller, 2000). Qualitative validity means that the researcher checks for the accuracy of the findings by employing specific procedures, while qualitative reliability indicates that the researcher's approach is consistent across different researchers and different projects (Creswell, 2014; Gibbs, 2007).

The Criteria of Trustworthiness (Privitera & Ahlgrim-DeLzell, 2019; Guba & Lincoln, 1989; Lincoln & Guba, 1985) is used to use validity and reliability among many qualitative

researchers. To ensure that standards of rigor were used by the researcher while using qualitative research methods, issues of trustworthiness were met based on the four criteria of trustworthiness: transferability, dependability, confirmability, and credibility (Guba & Lincoln, 1989; Lincoln & Guba, 1985).

Despite the number of 1862 land grant institutions, transferability addressed by the researcher ensured a high depth of detail regarding participants and the interview. This study would promote the introduction of the study to occur at other institutions. Doing this will provide context for the reader and allow the reader to understand the importance and quality of the study.

The use of member-checking with the transcript and developed themes supports the study's reliability and trustworthiness (Creswell & Poth, 2017). Multiple perspectives in the data from two different populations recently graduated masters and doctoral URM students and current masters and doctoral URM students, provides validity and reliability (Corbin & Strauss, 2008).

CHAPTER 4: FINDINGS

Introduction

This chapter will identify the findings through the responses of the participants of the study. The researcher provides a review of the purpose of the study, the research questions that helped guided the study. Following the research questions, Table 4-1 will describe the themes and related subthemes that emerged during the coding of interview transcripts. Table 4-2 will describe the study participants' demographics.

The purpose of this study was to examine the experiences of current and recently graduated underrepresented graduate students in agricultural and natural resource programs to determine the factors that were more likely to increase or contribute to the imposter syndrome and imposter phenomenon. The research provided detail and those that helped reduced these negative experiences of graduate students. This study sought to address the gaps in the literature by answering the following research questions:

1. How does the imposter syndrome/imposter phenomenon create a barrier to underrepresented minority student enrollment and retention in College of Agriculture and Colleges of Natural Resources programs at Land Grant Universities?
2. How do agricultural and natural resource-based collegiate organizations support underrepresented minority students in conquering the barriers imposed from the imposter phenomenon/imposter syndrome?
3. What contributions of support such as professors, industry professionals, or mentors have in the mentorship of underrepresented minority students in agricultural and natural resource-related majors and fields?

4. How can Colleges of Agriculture and College of Natural Resource programs recognize the imposter phenomenon and imposter syndrome?
5. In what ways does it affect recruitment and retention trends of underrepresented minority students?

Themes

The following themes in Table 4-1 emerged from the data analysis process. The trends that are reflective of the data are as follows:

Table 1: Themes and related subthemes that emerged from the data analysis.

Theme Number	Themes	Subtheme A	Subtheme B	Subtheme C	Subtheme D
1	The Road to Diversity and Inclusion	"Who am I?" : Understanding Racial Identity	Racial Microaggressions and Racism	Addressing Barriers and Challenges of Diversity and Inclusion	N/A
2	"Fake It Til You Make It" : Navigating The Feelings of the Imposter Phenomenon & Imposter Syndrome	Navigation of the Imposter Phenomenon & Imposter Syndrome	Navigation of the Predominantly White Institutions (PWI)	First-Generation College Student Experiences	N/A
3	Mentorship and Advisement	The Importance of Role Models	Student/Advisor Relationship	N/A	N/A
4	Underrepresented Minority (URM) Experiences	Equality and Access	Secondary School/Pre-College Experiences	Funding	Leadership
5	We Are Family!	Historically Black College and Universities (HBCU) Recruitment and Impact at PWI's	Family Support	The Impact of MANRRS	N/A
6	The Pathways: Understanding The Climate and The Culture of Programs and Organizations	Agricultural/Natural Resource Climatic Culture	STEM Disciplines Climatic Culture	N/A	N/A

Participant Information

This study focused on the experiences of ten graduate students who are currently completing their degree or have recently graduated. Each participant represented within the various themes and subthemes in which they described their experiences to the researcher. The study participants' demographic information is provided in Table 4-2.

Table 2: Demographic Characteristic of Study Participants

Pseudonym	Bachelor's	Master's	Doctorate	First Generation	Discipline	Race
Participant 1	HBCU	PWI	PWI	No	STEM	African-American
Participant 2	HBCU	HBCU	N/A	Yes	Natural Resources	African-American
Participant 3	HBCU	HBCU	PWI	Yes	Agriculture	African-American
Participant 4	HBCU	PWI	PWI	No	Agriculture/Engineering	African-American
Participant 5	PWI	PWI	N/A	Yes	Agriculture	Native American/American Indian
Participant 6	HBCU	PWI	N/A	Yes	Agriculture	African-American
Participant 7	HBCU	HBCU/PWI	PWI	Yes	Agriculture	African-American
Participant 8	HBCU	PWI	N/A	Yes	STEM	African-American
Participant 9	PWI	PWI	N/A	Yes	Agriculture	African-American
Participant 10	HBCU	HBCU	PWI	Yes	Agriculture	African-American

*Participant 7 received her second Master's in the program she is currently completing for her doctorate.

The remainder of this chapter is organized by themes and subthemes created during the coding of transcripts. Six themes are derivative from trends that the researcher recognized as he analyzed the data from the transcripts. The following themes are as follows and are presented as and discussed in-depth by the researcher: 1.) The Road to Diversity and Inclusion; 2.) "Fake it

Til You Make It": Navigating the feelings of the imposter phenomenon/imposter syndrome; 3.) Mentorship and Advisement; 4.) URM Experiences; 5) We Are Family; 6) The Pathways: Understanding the Climate and Culture of Programs and Organizations. The subthemes were derivative of critical trends based on each theme recognized and analyzed by the researcher.

Theme 1: The Road to Diversity and Inclusion

Diversity and inclusion are recognized and viewed as critical components regarding recruitment and retention throughout many programs and disciplines within agriculture, natural resources, and STEM. The perceptions of what diversity and inclusion look like within these disciplines were expressed broadly from participants' previous experiences within the study.

Subtheme 1a: "Who Am I?": Racial Identity and Makeup. The participants expressed split perceptions regarding the participation of conversations about race within the classroom. Most participants perceived racial identity as a person's racial origin based on ethnic or continental backgrounds. Many participants felt racial identity was essential to thoroughly understand while matriculating and navigating the predominantly white spaces at their respective institutions.

Participant 2 defined racial identity as

is just wherever you identify racially in America. And I'm going to say specifically in America because the concept of race is different in different places. So, for the American conception of race, I would consider myself to be Black or African-American. And I only consider this because I know that my ancestors were slaves, sharecroppers of African descent, Creole, Caribbean descent, etc. So that's where I would like, define it precisely. But it is just race is simply a placeholder, a namesake for really othering. So, I guess that's how I kind of view race in a sense.

When asked how she handles discussions about race within the classroom, she stated,

I don't know that I do. I feel like; I feel like in the classroom, I am not an active participant in racial discussions, and I only am not. Excuse me. Because when you are constantly the only one you don't want to be like, I don't want to speak for the people you know what I'm saying. I only want to speak for myself whether I am a part of the majority, minority, whatever group. I only want to be able to speak for myself under certain circumstances. So, usually, if I hear anything racial or somebody trying to shade somebody or say something, I am a snitch so that I will tell the professor or, like if I'm a TA, I will address it then.

But fortunately, as a TA, I've never had to address anything, and nobody hasn't ever tried anything with me. I'm going to presume it is because of respect, or they just don't want anything negative on their part to come from it. But in general, I just would tell the professor, tell them what's going on. I don't really engage with the conversation simply for the fact that college-aged students, there is a lot of learning and unlearning that is occurring. I think that as a graduate student, you see that because you're no longer in undergrad. You see that the developmental process is different. So, I kind of just stray away from talking about it (Laughs). Not because I don't want to, because we can talk about race all day, child.

Participant 4 described racial identity as such;

Racial identity? Let's see; I guess if we go down to it if you think about academia and the constructs of that, just who came up with these categories. Racial identity is your background, who you're aligned with, who you're most comfortable with; that's how I see racial identity. As I said, we didn't come up with these constructs. We're just living in the

world and using those constructs. I identify as an African-American male or a Black male.

When asked if he participates in classroom discussions about race, Participant 4 stated that

In the workplace, which I'm in now, I really don't like to talk about race. Being on campus, I was the only black person in my office, and just in the College of Ag at Iowa State, I was one of the only Black people in my department. We didn't like to talk about race or politics or anything like that, but there were a few opportunities where I had to educate a few people on things, especially being in the field of agriculture. A lot of these ____ folks are from rural areas, and the only viewpoint they get of us is from TV or videos and stuff like that. We really can't write our own narratives because we know only media and things like that.

In instances like that, I have opened up and talked to a few people about some things, preconceived notions that they might've had on race and things like that, and got them straight on it. For the most part, they were open. It was an opportunity for me to let them know what was going on, but it's not something I felt was my job to do. It wasn't my job every time a racial topic came up that I needed to answer. It's not my job, for the most part. There's Google; there are other ways for folks to research on their own as well.

Participant 9 perspective on racial identity was very detailed due to the complexity of racial identity from his lens and origin. He defined racial identity as such:

"Man, that's a loaded question. For me, with the racial identity, especially I would say at a PWI, it's so much variation between races. It's so much diversity even within people who call themselves Black, or people who identify at a school like this where you got Native Americans who are Black, but then you got folks from all over the world who are

from the Diaspora are also Black. It's like when you are at a school like this. It's crazy to think about just the diversity between American Black and what we see as Black, and then people from all over the world and just the division in many ways. From the roles that I've been in working with black folks, I see it as more of a culture almost than a race. Also, you have folks who don't maybe identify as black because they are of African descent but don't necessarily see themselves as part of that. I think it's crazy. A lot of it depends on where you are in the world, but regardless of where you are when people see you and you look like you're of African descent, you black to them."

When asked by the researcher how he responds to classroom discussions about race, he discussed a particular approach that he learned through a mentor and explained the effects. He states that"

My approach, man, is I always try to start with a little bit of education. Not too much because I feel like as teachers, as educators, our natural instinct is to try to give information, give information, and shape the way that people think immediately. I feel like race is one of the things where you almost want to let people get it out first. For instance, I know one of the things that one of my mentors used to do a lot was this race continuum exercise where you get people on. You put them in a line, and then you ask a question like, how okay would you be with your kids being in an interracial relationship or being LGBT or whatever? Then your parents, your grandparents, and then move along that continuum. By doing that first without shaping the way they look at race, you see the prejudices, the racism, all of the stuff from the beginning. It caused them to be like, oh maybe I ain't what I thought I was. So, for me, I try to get folks that mirror first so that they can look at themselves for who they are, whether that's who they want themselves to

be or who you're telling yourself you are. Then we get into some education and deep conversations to really unpack and learn and see how far we can go.

The researcher asked Participant 9 if he felt that type of exercise was advantageous; he stated emphatically,

Absolutely. Because what it does, is it takes the student out of that; you taught for years, man. It's like a machine; it's like a factory. Coming to class, you got your lessons and students. They trained on how to do school. They got their notes. You do school. But when you do these exercises, it takes them out of it, just the grind and that kind of automation of school. It gets them thinking as people and thinking, damn, this is how I really think about other people; This is how I interact in my day-to-day life; This is how my parents would look at a situation. Even worse, this is how my grandparents would look at a problem. I think it just gets them thinking just outside of memorizing and learning information to really internalize and wow. Maybe the way I've been thinking, me and my people around me are, perhaps it's not before getting into the information, before getting to the learning.

Participant 5 stated that he defines racial identity as what your ethnicity is. When asked how you would describe your race, he said, "Native American. If I had to choose just one, that's what it would be. The researcher then asked Participant 5 how does he respond to classroom discussions about race; he discussed his particular reservations as,

"If it's related to my field, typically, it's not that I wouldn't feel uncomfortable, it's that it's a pretty homogenous field. It's a predominantly white field, so if the topic of race does come up, it's probably for some reason to talk about why I would be interested in it or why people like me aren't interested or as represented in the field. It's a weird topic at that

point because it's pretty much just saying either, "Why are you here?" or "Why aren't more people like you here?"

The researcher followed up with the question asking if he likes to steer away from those conversations, so to speak, Participant 5 states,

"It depends on what the point of the conversation is. If they want to do something about it and not just; If they want just to get numbers to say they have numbers, then I think it's an exercise in futility, but if they're talking about creating an inclusive environment, that's another topic, but that doesn't necessarily come in regards to race, in my opinion. When you have an inclusive environment, it lends itself to creating a diverse background in all aspects, in regards to race, socioeconomic standing, et cetera.

Subtheme 1b: Racial microaggressions and racism

Racial microaggressions and racism are essential regarding diversity and inclusion within agricultural, natural resources, and STEM programs and disciplines. The participants agreed that programs at PWI's, specifically programs and majors, have to acknowledge within different colleges' the importance of combating issues such as racial microaggressions and racism to recruit better and retain URM students. The majority of the participants admitted they had been affected by racial microaggressions and racism at some point at their respective universities. Some participants even expressed having to deal with similar issues at the workplace.

Participant 8 describes a particular situation while traveling with students abroad to Israel to compete in a competition. He felt the moment of racism/racial microaggressions as their student advisor/teacher was a lesson to his students. His students participated in a Safe Cracking competition as part of the First Robotics organization at their school in which other countries represented.

The researcher asked Participant 8 if he could first describe and elaborate on his participation as a student advisor/teacher in those respective organizations, and he stated,

I guess what I did for both of those organizations, with First Robotics, you pretty much had a parameter in which you had to build a robot. The robot needed to have a unique functionality to compete in a regional tournament amongst other districts who also made robots to complete specific tasks within a particular parameter and guidelines set forth by the competition itself. I was part of the facilitating build process, team organization, team monitoring, and overall overseeing the robot's build process for the competition.

Safe Cracking, also very similar, I was the faculty advisor for a group of six students in which we traveled to Israel to compete in a national tournament. We went to Israel and competed on a national level. We also built a safe, which was to be unlocked using physics principles and concepts. We built, and I facilitated the build process for that, within parameters set forth by the tournament committee.

The researcher asked Participant 8 to elaborate on his experience of traveling to Israel as a student advisor. Participant 8 explains how it was a fantastic experience. He continues by stating that

"Israel was a wonderful experience. I'm so, so thankful I got the opportunity to go to Israel to be with these students and share that experience with them. Our safe did well; we saw a lot of wonderful safes from the likes of Canada, Angola, Spain, Ecuador, Argentina; all of these places came and competed. We got a chance to unlock their safes playfully and competitively, meet these students from other countries, share contacts, share ideas with other instructors all across the world. That was just an amazing experience for seven days.

The researcher asks Participant 8 what his presence of mind as a Black man going to Israel and taking students to Israel coming from a prestigious HBCU and PWI was, and how that experience reflection affected the participant. He expresses with sincerity,

Well, you know what? It didn't come without experiencing racism on the most significant leg on the trip. I was definitely racially profiled when it came to airlines and my flights and getting through security, especially with the demographic of students I was with on the trip. Being a male, African American figure with some Jewish students never struck right with many people in points of authority. There was a lot of additional screening; most times, spoken in Hebrew so that I wouldn't understand it. It was just intense to the point where we almost missed our flight to Israel because of all these additional screenings, not to mention we were actually carrying a safe, which looks like a bomb, so that wasn't a great part of it.

He also expresses to the researcher with earnestness,

"Well, the good thing about it was it wasn't new for me. I'm prepared for it because this isn't new for me. For my students, though, these precious, innocent, to some degree, have never been exposed to this type of scene; it was so eye-opening. That was the beauty behind the devil, do you know what I'm saying? But then they were like, "What's going on?" They were concerned for me. I knew this was going to happen because I knew how this works, and I know how people think. They don't. They haven't seen it like this before. For me as a teacher, this became a teachable moment where they saw it play out on their own, and they felt their own emotions, and I didn't have to really steer that at all. I guess that's me looking at the bright side of a dark moment.

For me, I didn't know if we were going to miss our flight. I was like, "Dang, if they make us miss our flight, that's pretty extreme," do you know what I mean? Because it was at that cutoff, the gate was closing. My students were all clear. They had me in the back with my bag, and they were taking a long time trying to screen my bag. They're doing it on my flight, and it's gated up. I'm like, "If I have us miss this flight, that would be extreme," because we were way ahead of time. It wasn't like we were running late. I don't understand how they would have us miss a whole flight to Israel. Do you know what I'm saying? It ain't no flight to Dallas where you can just hop on the next one.

Participant 10 described a particular time when he had to tell barriers and challenges in which racism became a focal point. He states,

"I would say other challenges that I may be experienced where I maybe was a little behind on the terminology. I realized I wasn't as exposed to the terminology thrown at me, but I feel like I did catch on well after a while. It's just the repetition. I am again going back to the process. I can't allocate a lot of the learning curves and things like that to racial experiences or anything like that, but I can account for the fact that I have been in a bar and been called a "nigger" to my face. Do you know what I'm saying? That happened.

The researcher then asked Participant 10 how did he handle that particular situation. He explains he was at a bar near his campus and explains,

"I was downstairs one night, and they did the karaoke night. I was there with a frat brother, and both of us took our ladies at the time. It was like something; I don't know. The girl just came over to the table and started making all these weird comments, and then it was like, it turned into her somehow having some brass knuckles and showing

them to his lady, and then he got up trying to ask her to leave, and she wouldn't. Then she's calling him a nigger, then next thing I know, I stand up, and I'm like, "Hey, you got to chill out," and just asked her to leave. She called me one. I'm like, "Hey, that ain't what you want to do." I was like, "Well, I am a gentleman," so I went and talked to the security guard, and I was like, "Hey man, get your girl." I'm like, "Get your girl. I'm telling you it's about to be a problem in here."

I mean, it's crazy, man. People feel like they can just say whatever they want to say and do whatever they want to do, and there will not be any repercussions. She did get kicked out, which I appreciate. I appreciate them handling the situation the way it's supposed to be dealt with and not just letting her slide with that kind of stuff. I can say that of the experiences that I had, I feel like there were enough experiences to make me feel like there are people who feel the same way that we think and don't look like us. There are many people out here like that, and I can respect that, but I also know that we still have problems and issues. I still dealt with issues and problems that may or may not have been racial. Sometimes they're always cloaked. I know that sounds crazy, but that's just how it is.

Participant 7 explains the intersectionality of being a woman and African-American plays within her role in her respective program and department regarding her identity. When asked about her differences by the researcher, she states that,

I do think that the intersectionality of me being a woman and maybe an African American is something that plays into the role within my department is definitely race because the majority of some people there are women. The field that I'm in is predominantly women, but cultural differences and acceptance are an issue. And when I

first got here, I was very sure that it was race, but I think it's also just their culture, the culture that they have within their department, because, I mean, it's not all over Virginia Tech. I don't feel the same way when I'm in other departments. It's just that my department's culture is that they're secluded to themselves, not open, and my culture as an African American woman is that we're open. We talk, we discuss, we're collected together.

The researcher then asks if it's all race, and she insistently explains,

Yes. And that's not what is portrayed. I think there was an instance where I definitely felt like my race was an issue. I brought that up to my advisor, and it was played off as if it was in my head. And it's very obvious that my advisor gets all the minority students; it's undeniable. Not everybody is an advocate; not everybody is able and capable and aware, like aware of cultural and racial differences. And so, I noticed that some people are just, deliberately racist, and then some people are; it's the culture of I'm to myself. I do my own thing. I don't need you type thing. So that's the experience I'm having outside of that. That's about it.

Subtheme 1c: Addressing barriers and challenges of diversity and inclusion

Diversity and inclusion discussions happen in many spaces within academia and corporate environments. The participants discussed the challenges and barriers regarding diversity and inclusion in their respective areas. They explained their feelings and reservations about what happens to consider diversity and inclusion. Participants also expressed the importance of not having biases while trying to champion diversity and inclusion, respectively.

Participant 5 explains being a part of a leadership policy group at his respective university. He explained to the researcher an experience in which he felt tokenized by the dean

of his college. The participant felt this example of an issue regarding a missed opportunity to understand the impact of inclusivity within the college thoroughly. He explains that,

I'm sure this might be a question, but my identity versus others, I was a member of a group at North Carolina State University. It was leadership in policy, and it was a fellowship to get individuals in agriculture experience in public policy and leadership. In that group, we had a sit-down with the dean of our college, the College of Agriculture and Life Sciences, and it was just our group and him, and he comes in, and he's very nonchalant, very relaxed, very loose, and he says, "So I heard we had a really good crop this year." He said, "Now we have two," and by two, he means me and another student; he means minorities; he said, "Now, which one of you is Hispanic?" He just reduced who we were and why we were there to just our race. The reason it made seem as though we were tokenized.

Participant 5 also explains that he felt he was good enough to be there. He states that,

"I knew I was good enough to be there on my own merit, and however you get a seat at the table, that is what it is, but once you're at the table, everybody gets to eat. You all have access to the food. Maybe some people see that their table is a little better and they don't have to reach over to get food, or the plate gets passed to them first, but once you get a seat at the table, you know you're eventually going to get to eat, and you're going to get to use those resources. Yeah, I mean it's hard to get that seat, but if you can continue to get seats at tables and you can continue to help others like you get seats at those tables, eventually it becomes normalized."

He also explains to the interviewer that,

"It's going to continue to take time to normalize things. Slavery was a period of over 200 years, segregation was a period of around 50 to 70 years, and so we're not too far out from those. If those things went on that long, it's going to take just as long or twice as long to get everybody on equal footing and get things normalized. It just takes time."

Participant 2 explains how she had to address some barriers and challenges of diversity and inclusion during experiences at her respective PWI she attended. She states from an incident in one of her classes that,

"Ehhhhhh. Like the obvious thing to say is racism, but I will also say just, an undervaluing of students you know of color just not knowing, really like what differences we have you know what I'm saying or not. Or even professors just not knowing the things that their students are saying. Do you know what I'm saying? I remember one time I was in a lab, and this was when I was in grad school, I was in a lab, and I always wear acrylic nails. And, I, as I said before, I've been very fortunate, nobody has ever said anything racist to me, but they have said racist-esque ethnic's, xenophobic-esque things about other racist and ethnic backgrounds around me. And we were talking about nails. And umm, the dude like proceeds to like make jokes and like banter about Asian people, Vietnamese, like any sort of Asian person. Vietnamese, Chinese, anybody who does nails and thinking it's funny. And me, I'm not confrontational, so I didn't say anything but the girl who was behind him, in a different, in his group like addressed it, you know what I'm saying?

Umm. And it was never reported to a professor, but well, I told one of my professors. Still, it was never told to the professor of record for that course, but I mean like those are

some things too because even if you are a student of color. You're not the student of color being attacked as a minority; the attack is similar because it makes you think, what are they saying when I'm not around? Do you know what I'm saying? There were no Asian people in my class, so he liked the freedom to just speak like that. Do you know what I'm saying? To talk like that and say unwanted negative things. Umm, that was definitely; that's conflicting in many spaces because you just don't know what people are going to say."

She continues to detail to the researcher,

I will also say the mindset is a little different. A lot of PWIs have students who are legacy students. Their grandparents went to the schools, umm so they feel very entitled by their ability to be at a university of such whereas you'll find in most cases of Black students almost a survival mode-esque feature to be at a PWI like trying to get through and getting the degree for your family especially you have first-generation students, do you understand what I'm saying? Many of our successes have been attributed to our family, so sometimes, when you're going to a PWI, it's not even your own success to get through. It's your family success; you know what I'm saying? It's your mother's success, umm, that whole sort of thing. So, I will say that those are like some things were difficulties of going to a PWI in general. Umm yeah."

Participant 3 describes his experience as an Agriculture Education teacher and dealing with the barriers and challenges from not being fully acquainted with agriculture early on. The researcher asked Participant 3 how that experience was for him to teach agriculture education in his hometown after college. He explains to the researcher,

It was cool. You know I just wanted to go back and teach the youth what I've learned, you feel me, and I knew I made it out by going to school then I went and got my Bachelor's and Master's, so I was just trying to show them that they can do it. I had what I didn't know, and I taught to myself before teaching them so they could be the best students."

But it was different initially because we were only in control of one other Ag classroom. It was four Ag teachers, one of the other teachers, who helped with the opening and closing ceremonies with the lady downstairs who did the pathways, and it was their program. They ain't really like help, or they ain't want the help you feel me?"

The researcher asked Participant 3 to detail his experience with the three other agriculture teachers within his program and explain why he felt the veteran agriculture teachers didn't like help. Participant 3 goes into detail and explains that,

"So, I was teaching them and putting them, plug them through the Supervised Agricultural Experience or the experience they do, their Agriscience project we did and get them in tune with that. And then if I feel like they had great students normally good for them when they came and asked for applications for the opening and closing and if they want to do FFA, you know, I'll send them their way. But other than that, it was their program, basically. They kind of share the students. They only wanted permission. I guess because they, I think they come from and have an Ag background. I wasn't an officer in FFA, so they really didn't care to hear what we had to say to be honest."

The researcher asked Participant 3 to explain why he believed that they didn't care to hear the opinion of the other agriculture teachers. The researcher also wanted to know how the participant

felt as an HBCU alum and African-American male to experience within the workplace.

Participant 3 explains that,

"I just, mean you know, I just roll with it, man. I coached football, so I had that, but I still felt like I was touching the youth as well, so I was still doing it. I wasn't paying them any mind, but you know I just let it be. Let them do they, let it roll, let them do it. I still teach my kids the way I teach my kids. If they need something, I'll let them have it. If I didn't, but other than that, you know it's a shame they act that way, but I mean people, you can't help, you can't help how people are."

He explains how his assigned teaching mentor from the agriculture education program didn't mentor him. He continues by stating that,

The lady over the Ag portion was supposed to be my mentor, but man, she didn't mentor and guide me the way she was supposed to. It was her program. She wanted to run it. She tried to keep it a secret from us, didn't want anybody's input and nothing like that, so it's like, bro, okay, you all got it. You all take care of it."

The researcher asks with astonishment why he felt that she didn't want to deal with the other teachers. Participant 3 explained his reasoning for her distance and added that a fellow teacher that works alongside the mentor was state FFA officers in the past. He continues by adding,

Yeah, she didn't. She's downstairs, and we're upstairs, you know? We deal with all the freshmen, and she deals with the tenth grade through twelfth grade. She should have connected with everybody for all the Ag teachers to help her program, but I feel like she just wasn't messing with us.

Well, it's four agriculture teachers; two of us are, you know, African-American, and it's a Caucasian male and another Caucasian woman. She messed with the Caucasian male,

and I guess because he was an officer. She kind of messed with the Caucasian woman but not really, but me, myself, I'm sorry, the African-American woman, and the other Caucasian woman, she didn't really deal with us. She only dealt with him because he was an officer. I guess she felt like we ain't have any insight for her program.

Theme 2: "Fake It 'til You Make It.": Navigating the Feelings of the Imposter

Phenomenon/Imposter Syndrome

Feelings of the imposter phenomenon and imposter syndrome have been a catalyst for URM students in different academic programs and workplaces. The perceptions that the imposter syndrome and imposter phenomenon can vary in everyday life as a URM student at a PWI or in a career.

Subtheme 2a: Navigation of the Imposter Phenomenon & Imposter Syndrome

The participant's feelings differed regarding navigating the imposter phenomenon and imposter syndrome in certain situations. The majority of the participants felt that the imposter phenomenon and imposter syndrome are based on the foundation of race. Some of the participants believed that being in environments in which were predominantly white played a role in questioning their ability or adequacy in certain situations. Participants, asked by the researcher if they felt they were bluffing and pretending to be something they are not sometimes.

Participant 1 discusses a moment in time during his doctoral program when he felt that he was bluffing. He continues by saying,

I wouldn't say faking. Bluffing is a good word, but I think almost every paper I've written, I've had to just stop trying to do what I believe is one and just put something down. It did feel like BS every single time just because, my thought, I've never been able to confirm whether my thought process has anything to do with what is really wanted

until my master's defense. They were delighted with it, but I thought that was BS. I thought it was the easiest thing I've done. I could have done that in high school. So, but it didn't make me feel like I wasn't capable. It just made me feel like this is kind of like BS. What's being asked of me is BS, and I don't know how it's being perceived because all I ever hear really is praise and then silence when I'm confused. I don't get too many answers, though. I might be getting a little off-topic, but----."

The researcher asked Participant 1 to elaborate more on why he had such feelings about his masters' defense. He eagerly explains that,

Yeah, I feel like I threw some stuff on paper that was coherent but was pretty basic, really basic to me. And, I spent a lot of time trying to figure out, "What am I missing? What am I missing? What am I not doing?" And, when I finally just had to give up trying to figure out what I'm not doing and just put stuff down on paper, it didn't feel like any kind of high-level thinking or processing. But, the feedback I got was that "Ah, this is really deep and very insightful." I did get some corrections from my advisor when I turned in my first draft, and that was basically, "Okay, I have to cite other people who said stuff that I didn't even know said it." These are my thoughts, and I was asked, "Oh, well, who said this?" I was like, "I did when I was thinking to myself." Then, I had to go and find papers that did it.

And so, because of that, it felt like it wasn't arrived at like that, but you're just BSing because you have to pretend like you did things some other way than it was really done. And, the praise for, "Oh, this is so deep," is like, "It wasn't that deep, dude. Y'all are just using basic thinking. This was not difficult at all. What was difficult was realizing that you wanted this easy stuff, not something deeper because I thought this was a higher

education program." And, that it did feel like getting praised for faking like there was more to it, you know? And then, I think, in classes, the bluffing was because, a lot of the times, I just say stuff off the top of my head at the moment. It was not thought out beforehand. It just came to me, and I just said my thinking on the spot. Again, people are like, "Oh, that's deep." It's like, "Okay."

Participant 2 explains a situation in which she felt that her appearance played a critical role.

When asked, she states,

Like I was being fake or something? She continues by adding, "Or, or putting on something to get through school. I feel like that's just what I do. You know? I feel like I'm not always 110% Participant 2 when I'm at school. Umm, I feel like I'm quieter at school, you know, unless I'm very, very comfortable. Most times, I'm really not like unless it's like small groups of people I don't express so much personality. Umm, I will particularly say if I have male professors, I'm, in which I have primarily male professors, I'm way less likely to engage with them a lot. I'll still try to do things for academic reasons, but like getting in close relationships or really trying to be cool with my professor, whereas I would do it in other classes, I wouldn't do that.

One circumstance I did, but that's because I was dealing with things that I needed help from my professor so that I would not fail. But other than that, I kind of stray away from being my whole self in classes because, in a way like I don't how much they get it. And I will give you an example. In graduate school, umm, I had a wetlands lab, and every single time we had wetlands lab, it was different—a totally different lab. And so, not to say that to them my hair would be a big deal, but when you're doing fieldwork, and you're

outside, you have to like dress for whatever it is that you're doing and a part of, for most Black girls dressing for what you're doing is doing your hair for what you have to do. So, I can't, if I know, we are going to be in pines, and thorns, and you know falling other stuff, I shouldn't have my hair out. My hair should be protected in some type of way.

Umm, but the issue with this professor was there was just a general lack of respect for the student. Umm, a general seriousness about the fact we have paid for this time and therefore he could use as much of our time as he had that was necessary. And, not to give us like parameters around it, I didn't feel like I could be the one to be like, as the only one, "Well, I need you to let me know what we're doing way in advance because you know I have to make sure that my hair is correct for that, do you know what I'm saying? I don't think that they care. Or that they're concerned. And it seems so small, but it's so big because if I was to like have hair loss or something crazy happened, they were doing a prescribed fire, and we're going walk through something like I would need to know something like that. It's important for personal health, and just safety and health in the field."

Participant 6 explains how she felt like she lacked confidence as a college student through her writing styles. She presents with some concern that,

"I would say a lot of times throughout my writing. I felt that I didn't have the proper skill to produce many papers—any kind of written material or any type of display that had any type of text. So, a lot of times, I felt like I needed more guidance or more assistance and aid in those areas. So, at Virginia State University, for example, we had a lot of resources

that would look over your paperwork. A lot of editors, a lot of peer-to-peer editing are available at any time. So, that was very helpful in those things."

The researcher asks if she felt that is attained primarily in writing for manuscripts, publications, classroom assignments, and her thesis. Participant 6 explains that,

"Yeah, so throughout the general experience of my graduate school in particular, because of how much writing you have to do and how much you have to fit into a small piece of paper a lot of times. And so, you have to really be concise in your writing. And I think that was really hard. Even in your thoughts when you're speaking. And so, I think it's hard to do that open as a black person within our culture.

We use certain types of words to describe our experiences that really can't go into paper or manuscripts that are professional. And so, you have to realize that you have to gain better writing skills, better communication skills, and use different words to describe your experiences. Because that is a considerable portion in graduate school in social science, I think it's challenging to have conversations sometimes, or you feel like you can't always express yourself because you're not going to have a theory to support it, stuff like that."

The researcher asked Participant 6 to continue elaborating on her personal experiences regarding the subject and if she felt that impacted her personally. She states that,

Yeah, it is definitely being able to utilize the structure of research and discussion. I think that's something that I never considered, something that I feel very confident in, or I guess it's hard to understand a lot of the material. Because it is something that's new, and I think it takes time to understand a lot of that material faster than, I guess you would say other groups that have been around language and have been used to those approaches."

Participant 5 describes the time he mostly felt that he has dealt with feelings of the imposter phenomenon, and imposter syndrome is around the first day of classes. He describes those instances as,

Every day, the first day of classes. Every day, that's once a semester, for sure. Maybe some of the presentation days. Every presentation day as well. It just takes a long time to feel like you belong, especially in the ivory towers of academia, especially when you don't have the background of everybody else. It just takes a long time to feel like you belong. That's just something I think nobody will ever really be able to give you a good answer or solution or how to get over it. I think it's just individual by individual, and you just take it day by day, and eventually, it gets to where you can go about your day and go about your business and feel pretty confident in the work you've done and where you're at and the progress you've made.

The researcher asks Participant 6 if he felt being an underrepresented minority played a role in those feelings, and he states,

Not as much. It more made me feel that way when other people pointed it out. Why do we need to have a conversation about, as you said earlier, about getting more people like me? Why is that such a focus? Why are you just looking? Are you looking to check a box, or are you looking to get more people with diverse backgrounds because of the ideas and the ingenuity it brings? What are the ulterior motives?

That's the time when race lends itself to the imposter phenomenon, in my opinion, is when it's made a point because, in my opinion, nobody feels like they're in the right place all the time and like they always belong.

Everybody's going to feel that way, and definitely, again, when you're in the halls of academia, I mean, it's going to feel that way because everybody's graded. I mean, they sit down, they assign you a grade so you can know where you stand amongst your peers. You have a class ranking. You know where you rank amongst your peers, and if you're not on the top, there's somebody above you. There's somebody statistically better than you. That would lend itself to feeling somewhat inadequate in any scenario. I guess my answer would be only when it's made a point do I feel my race attributed to my feelings of the imposter phenomenon."

Participant 2 explains to the researcher her reasonings for the imposter phenomenon and imposter syndrome and why she feels it's temporary. She also describes how the imposter phenomenon and imposter syndrome have affected her role within natural resources. She explains to the researcher that being in natural resources amplifies the imposter phenomenon and imposter syndrome as a woman of color. She details with the interviewer, "

Mmm. Like, like going back to what I said just being in um-, it's always temporary. I'll say that. It's never-, I don't ever feel like it for long because you have the affirmation from your mentors and from yourself that you're doing what you're supposed to be doing. You're passionate about what you're supposed to be doing. But, I will say in general, being in natural resources makes you feel like you don't belong because I'm in the foundations of biology, the foundations of zoology; you know what I'm saying? It's still on the degradation of black people and the enslavement of black people; it's just kind of like any way you look at it. So, in many senses, I don't feel like where most black people see themselves working in natural resources, because if we kind of think about it, you know, people think of farming or like going outside just in general purposes if you're

from a city or a suburb, these are like, very like quote-on-quote wild things to do, you know what I'm saying? But people from rural communities, from the country or you know, people who are with it all the time, it's so typical. You know what I'm saying? It's so typical to see a tractor going down the road, or it's so normal to understand what the birds are, you know, around your house, or you know that "Don't go out that way cause of snakes," you know what I'm saying? So, I just think it is not especially forestry that is so white-dominated and so masculine. Those things make you feel like an imposter because it's something that is portrayed to be so masculine and so "Not where a woman should be." You know what I mean? Or not where black people should be, you know what I'm saying?

She also details that,

Like I mean, even growing up like, black people don't go outside, you know what I'm saying? Black people don't like water. Black people don't, you know, do the cold or whatever. Every single thing that I been told that black people don't do, I've done. You know what I'm saying? So, I think the imposter syndrome really starts from the beginning, and what we're influencing our children to think about what we can and cannot do as people.

The researcher asks Participant 2 if she feels that being a URM student fits the imposter phenomenon and the imposter syndrome feeling. She emphatically states that,

"I think it amplifies it because you're just an oddball. You know what I'm saying? And being a minority, you can also speak of it in terms of mindset, right? So, you're coming from-, if you're coming from-, if you're a group of people where all of their parents are married, all of their parents are upper-middle-class, all of their schoolings are paid for

like you know what I'm saying? Those types of things continue to tack you down, tack you down, right? So, my perspective as a child of a single parent, in a suburb, you know, there's like logistics of it where my perspective is different.

I'm going to give you an example – I had a class where a majority of our course was given discussions, and there were student learning discussions; you know we picked a top-, well we had topics to choose from, we did the research, you present with your partner. One of the topics I presented was a topic I felt strongly about at the time, which was hunting. It was also a topic I was very uneducated about. So, a part of this was challenging myself and my beliefs on hunting and understanding the practice. Why I grew up in a suburb, my mom remembers from her grandparents living in Michigan, years ago, you know, we talking like 1900-, 1950's and beyond you know <...>, you know where people hunt, where, you know, she ate squirrel, you know. My grandma wrings the neck of chickens, and you know stuff like that, but those are not personal to my experiences, and those were not things that I valued or liked.

She continues by adding,

But-, and then you have like this serious combativeness. It's not a combativeness where it's like let's have a constructive conversation about how you feel the way you feel. What perspectives are-, you know kind of like in social science. Like when you understand how groups of people are normalized or understand something. It was more like, "You are wrong!" and that's it, you know. There's no reason. There's no information. There's no statistic. There's no research – you're wrong, because your opinion is based on these perspectives, so I think a lot of times, even before you get to the point to say or have your own opinion, you believe that your viewpoint, your ideas are wrong. You don't speak up,

because you're -, you don't even want to be correct, because you're afraid of your being wrong, you know? Um, I think that's a part of learning too, it's just allowing yourself to be free to speak in spaces, but it can often feel defensive by the fact that everybody around you is right and you're wrong.

Subtheme 2b: Navigation of the PWI

Many participants felt that navigating a predominantly white institution (PWI) can bring feelings of the imposter phenomenon and imposter syndrome in numerous facets and situations. The participants who attended a Historically Black College and University (HBCU) before attending a PWI felt that navigating a PWI could be intimidating and stressful at times. Participant 1 details a moment when he felt that he was thinking about and considering leaving his program. He states that,

"Yeah, I would have to say the thought has crossed my mind, but it didn't really get to the point of making a plan or leaving. But, it definitely crossed my mind like, "What if this doesn't work out? What am I going to do next?"

The researcher asks Participant 1 were there circumstances that led to the consideration of leaving his program. He explains to the researcher,

Yeah, it's just I do feel like I'm flying blind through this program, so it's doing that like, "Well, if I'm flying blind, I have no way to really guarantee my own success." It feels like the luck of the draw. Even though I'm totally capable of doing things the way I do it, I'm being asked things in just this other culturally-based way. In the early stages, I was like, "Well, you know, everything I was worried about happening is happening. It really is happening, and I'm struggling," and it didn't seem like the professors really understood. It had to cross my mind like, "Well, this might not work out."

Participant 1 continues to detail his challenges of navigating his respective PWI by stating that,

Let's see, I think the biggest challenge was, you come here, you're just one of enormous number, and there's no real personal interaction. Even though you interact with people, it does not seem like a community. It's just a bunch of people trying to all get their degree, and the socializing is just convenience, not actually a part of the program. So, that was one challenge, just accepting, "All right, well, you're on your own even though all these people surround you."

He continues explaining to the researcher,

"Okay, so, I guess there are a few challenges. Another challenge would be navigating the program, understanding what's actually being asked of me. Today, I can't honestly say I really understand the system, and it doesn't feel like I'm supposed to understand it. It feels like this is a system where they want me to fly blind and be a slave to those in power. It's more about the power dynamic than it is about the scholarship, so that's been one big challenge. The other is, I think, one of the unforeseen challenges. The one that caught me off guard was finding out that the people who recruited me had assumptions about what I wanted to do in my research just because of activities I told them about that I was doing. So, I have my own nonprofit that's still getting off the ground, and they just assumed that I wanted to do my Ph.D. research based on that nonprofit work. And, since that nonprofit work is helping Black youth, there was an assumption that I wanted to talk about race and go into the field. I feel like they try to push a lot of Black people into talking about race, and that wasn't my interest at all, and I didn't find that out until a couple of years into my program. So, I was butting a lot of heads without even knowing where the -- was coming from because it wasn't discussed until a couple of years in. It's like, "Oh, well, I thought

you wanted to talk about race." I was like, "No." Literally, critical race theory was the first class recommended to me because of that, and I thought that had something to do with my goals. It turns out it really didn't. Yeah, I think those were the significant challenges."

Participant 7 attests that there have been many barriers or challenges that she has dealt with while pursuing her doctorate. She describes that some of the obstacles and challenges obtained while navigating her respective PWI are,

"They're very... I want to say career-driven, but it's very different. I'm still having a hard time trying to articulate it, but it's numbers. It's not quality is the quantity with them. So, there's a lot of disconnect to research, there's a disconnect to the passion and the impact, and so with those differences in culture, it's hard for me to connect within the classroom to what it is that we're doing. Yes, they have the resources when it comes down to getting into the community and meeting different community partners. Because I'm a community person, so yes, they have those resources to do that, but I guess the drive behind it is lacking, and I think for me, what pushes me to do this degree is the drive and impact.

That was very difficult; that was a barrier. Another barrier would have to be the lack of support. I don't feel as though that there is a strong support system when things go wrong or even when things are great. Within a PWI, of course, everyone has to find their own niche, and they have to find community and try to make that work. However, coming from a historically black college, I didn't have to find my community; my community was right there, and I guess that can be very different from international or any other minority group is that we're trying to navigate spaces that we don't understand.

Participant 7 continues by explaining to the researcher,

Leadership I had a lot of people in the past kind of build me as a leader and put me in positions to be a leader and advocate for me as to be a leader in something, and there is no push. In my opinion, there is no push for me to be a leader. It's a lot of showcasing of whoever is at the top of a research project; they kind of navigate everything; whereas I was in undergrad, I was in a lab, there was a lot of opportunity for me.

In undergrad, I was in a lab. There were many opportunities for me to be able to contribute and be a leader, where that's not necessarily how it works. It's like work underneath someone else rather than being at the top and trying to navigate an exposure. Another issue is, I worked for cooperative extension a lot in my other masters at A&T, and I had a lot of exposure to people, whereas I'm also working in cooperative extension in Virginia, but I haven't met agents. I haven't had direct interaction with them, so I feel very disconnected, so that's a barrier."

Subtheme 2c: First-generation college students

A few participants identified as first-generation college students, and they detailed how being a first-generation college student impacted them during their college experience.

Participant 9 describes how he learned about the nuances of being a first-generation college student while acknowledging his differences between fellow counterparts through his experiences to the interviewer. He explains to the interviewer that,

I learned first-generation because we only had two Black people in our Ag program when I was in it. What I learned was the first generation was different, depending on where you were from. So, when I was first-gen, I was the first one to go to school and all that. We were all broke. Our family was broke. But then, at Ag Ed, a lot of them had never been to college. Their parents had never been to college, but their parents owned these big farms.

So, they first-gen, well they were coming in there with Suburban trucks, Camaro's. These were the Ag folks that had money, but their parents didn't go to school. Their parents just made it off of agriculture, whether it be large animals, cattle, dairy, or some of them was in the soybean corner, soybean capital. I feel like, within my major, it showed me a whole different world and that first-gen don't necessarily mean that you're black, and it doesn't mean that you broke. Some places people were able to make it, their parents just didn't go to school."

The interviewer asked Participant 9 how did he react to those differences, and he stated that,

"I was shocked in a lot of ways. Because for me, my view, what I figured about people in agriculture, especially white folks, were living in the types of areas where my school was, was all broke. But they weren't, and they're looking at me like, what are you doing here? On the other hand, I wanted to learn and figure out what they are doing differently? Why are they succeeding? Why are they able to make the kind of money they're making and having the success they have, and for other folks, our folks ain't. Over time, I ended up creating more relationships and learning more. But at the beginning of it, man them, folks, they weren't comfortable with me being in them classes, especially talking about diversity."

Participant 5 describes his experiences as a first-generation college student learning how to rely on himself in numerous situations because he didn't have his family to rely upon. Participant 5 explains to the interviewer that,

I mean, it's definitely you get to see that everybody's world is not the same. I mean, the world I live in is different than the world you live in, just based on our past experiences. That's going to be for everybody. I think the here and the now are something that most

people can bond over. If you're really in a similar situation, you're able to bond over it and produce those shared experiences. My experience as a first-generation college student has lent itself to a different set of views because I don't have my parents or anybody close in my family to rely on. I had to more so meet other people outside of my family to give me some guidance on certain things."

The interviewer asked Participant 5 how did that make him feel overall not having familial guidance, and he details,

Yeah, I would say it wasn't too different. Maybe I didn't have people available 24/7 at all hours of the night, but during business hours, I could typically find somebody to help me and who wanted to see me succeed and maybe had just as much passion as if I was their own family member. I was lucky to have found that, but again, you have to seek out. If you don't seek out, you definitely won't find that. It's a little bit more legwork.

Participant 6 details that her experiences as a first-generation college student were challenging and definitely an adjustment for her. She details the support of family while being was important during this time. Participant 6 details to the interviewer that,

I am the first in the family to attend college, and that experience has been hard. You don't have a lot of resources, but at the same time, your family is very supportive, and they make you feel really confident. They give you that confidence; they make you feel supported. You realize that a lot of the material you're reading is material you've always been told in life. It's never been conceptualized in that way before, but those are the things that you probably heard people tell you, and those are things that you probably hear your friends say, "People never tell me that." So, you realize that your upbringing has a massive impact on some of the paths that you take in life. I think that's an overall

good experience as you become a young adult, and you become comfortable in your profession so that you're doing some-.

She continues explaining to the researcher,

“And you become comfortable in your profession so that you're doing something that you love and something that's meaningful. So overall, I think being a first-generation college student, you're able to communicate your experience to your peers that are younger than you, your family that are younger than you. But you also get to tell your older family members like, "Hey, Nah, I went to college with people your age as well; you can go back to school too." So, I think it was just an overall experience that you can communicate with everyone.”

The interviewer asks Participant 5 if coming from the West Coast was an adjustment to coming to the East Coast, particularly the Mid-Atlantic. She emphasizes that,

“It was a huge adjustment. And I think because I've always wanted to go to a Historical Black College and coming from the West Coast, the closest Black college is in Texas. So, you knew you were going to have to leave home for that experience in general. So, I always looked forward to it, and my parents always supported it.

So, because I'm involved with a lot of young people, I'll come into contact with parents that are not as supportive of their children leaving the state. And so, I think that's the major influence in general when it comes from your family of whether or not you should leave to go to school. And so, I personally had to get experience because my family supported it. Everyone was happy that I was going away to school.

She continues by adding that,

They were surprised I was going to study agriculture. No one had ever thought about that in that sense. So, it was an eye-opener for the whole community, but even throughout high school, on-campus, while I was in the high school, I was known as that girl that I was going to go to a black college because I always talked about it as something that I believed in.

And so, I think it's important that it's known to be an option and an excellent option for black people to take advantage of. And overall, I think the black college experience is so unique because a lot of people want to, well, a lot of organizations, a lot of corporations, they want to talk about diversity, and so they come to Black colleges to recruit

And so, in my opinion, you have a better advantage of getting into that corporate American industry because black colleges attract a lot of the corporate America recruiters. That's kind of their target is to attend the black college's career fairs. And so, I think that's an advantage as a first-generation college student because we don't have access to people in high positions."

Theme 3: Mentorship and Advisement

The majority of the study participants explained how mentorship and advisement were critical while matriculating their respective degrees. Mentorship and advisement have been important regarding success in their program and play a role in recruiting and retaining students in their programs and their university.

Subtheme 3a: The importance of role models

Some participants explained to the interviewer the experiences of having a staff member or professor of color during their graduate experience played a significant role during their

college career. Many participants explained that they had more role models of color during their undergraduate college experience than graduate college experience due to attending an HBCU where most faculty and staff are of color. Half of the participants also explained and emphasized they did have role models during their graduate school experience in which they ended up having role models that were not of color.

Participant 10 details his admiration for having different Black Male professors in which he could confide to and admire their work in their respective areas of discipline. The interviewer asks if he took any courses under a professor or faculty member of color and if he could describe that experience. He explains to the interviewer that those professors made him feel like a mentee. Participant 10 states, "Yes. I had two black male professors in the African-American studies department. Both of them, really, you know how you have people that make you feel like a mentee?"

He continues by adding,

That's how they felt. They made me feel like that. I immediately gravitated to them. And I think for me, the fact that I even saw black male professors really just, I really admired that. Because I saw it before, but you know what I'm saying, to be at a white institution, you're representing a little bit more because that they're already few and far between. So, for you to be a black professor in a white institution and teaching the things you're teaching is beautiful. It was like a breath of fresh air when I went to their classes, they were long, sometimes boring, but I got something from each class. I was able to think differently about many things, talk about my experiences, and have those opportunities to vent because they correlated with what we discussed in class. So, I think that was also

important too, being able to have that representation, being able to have a course designated for that type of dialogue, so yeah.

The interviewer continues by asking Participant 10 if there were any professors of color within his program, and he says,

Yeah, one of my two advisers were black; he's a black man. And he was my first connection to Virginia Tech when I decided to explore the department. And so, he was very influential in not only the process of getting in but how to really navigate the things that were coming ahead. He always made a point to prepare me for what was coming. And I really appreciated that. And in the talks that he gave me and the realness of our conversations, he always was straightforward with me. He was setting me straight. If I was wrong, he let me know. He would definitely inquire about my personal life as well. And I think it's essential to have a relationship with your advisors, too, because it allows you to be more open and comfortable with talking to them about the things that you're experiencing on campus too. So yeah, definitely having black professors in our department, both in and out of the department were very influential for me.

Participant 2 emphasizes the importance of mentorship for students within their respective major or program before the interviewer asking the question regarding role models. The participant's response was regarding the visibility of organizations. She explains to the interviewer,

"So, I think again, like I was saying way previously, is that it has to start at the beginning. If you're getting into a natural resource program, off rip, I think something physical needs to get into you. These are all of the clubs, organizations, that we offer in our department, that we offer in our degree program, that is specifically catered to what-, like it may not even be as specific as "these are catered to wildlife." I don't know what it is, but like

whatever it is, you know, these are all the organizations that we house in our college. And these are all the professors, and these are all the things the professors studied because one thing when you're in grad school, you're looking for professors who are studying what you want to study to further your knowledge on that topic. And also, when you build relationships with professors, you're more likely to get, you know, recommendation letters. More likely to get, you know, those advocates for you to go to or those advocates for careers or those people sending you those emails from those job sites. You know, so like those things off rip, uh I think that students, especially students of color, but just students in general need mentors. And, it doesn't, I don't -, I-, I would say because I-, I know it's not NCAT. I want to say it's at North Carolina State, where they get mentors like faculty and staff mentors, like from jump, they get mentors. And, I mean, you can see that with any sort of um, student success work. When they have those meetings on a regular-. Like I even remember when I was going to academic success meetings, making goals, attaining goals, um, figuring through barriers that students may navigate daily, weekly, monthly, and yearly. Um, I think it's always nice to have that at any stage of life because we all need somebody to talk to, and not saying we all need guidance, but even direction is important. Like, seeing your options is important. Knowing you can take four different classes to learn the same thing is important, you know what I'm saying? And sometimes, academic advising just doesn't cover that because academic advising is not student success. It's not student retention. It's not, you know, it's not those things. Academic advising is simply "here are the classes we offer. If you have a question, I'll answer it, plus register you for class."

Participant 2 eagerly explains to the interviewer the professors of color who are considered role models, instrumental to her during her graduate career. Participant 2 details that,

"Oh, so many, so many, so many. Um, I would have to say without a shadow of a doubt, I would not have made it through any of this without great professors because education is first and foremost, but my conservation biology teacher/just somebody who has just been a mentor, Dr. Sherri Rodriguez. I loved her. She always supported me and reached out to me. Always. The thing is, I think somebody could take it a different way, but when you're a minority student, and you have a minority professor who reaches out to you about the shoes that only you can relate to, it is such a safety net to have. Do you know what I'm saying? Like, when Trump was elected, she reached out to me as a student to ask how I was doing; do you know what I'm saying? Like outside of being a person, outside of being black. How was I doing as a student, and then how was I doing in the space, like the natural resources space, as a black woman?

Dr. Drew Lanham is just-, he's not even a mentor as much as he's just an icon like I think all black people in natural resources love that man. Most of them have never even met him to like know, so um, just his wonder about me and his kindness just as a person and again passion. Like, his passion for birds is the same way I feel passionate about salamanders, you know what I'm saying? It's just like, you just can't, you can't find it. It's no way you can put it in a box. Uh, another one I would say is dendrology professor. My dendrology professor is the only reason that I met my advisor. My advisor is probably one of the cornerstones of my natural resource experiences simply because we are the same person work-wise. So, I built an excellent working relationship with him and, like a fantastic relationship for the passion of what I was studying. And I value that a lot

because I think it's very easy to lose touch with yourself. It's mainly like, now that I'm towards the end, it's easy to lose passion or lose that fire because you're not in it anymore. You're just assessing it. So, uh, I would say, I would say those. I would say them. Them the most of just my collegiate experiences."

Participant 7 details that she took a course with an African-American professor in which she felt the relationship was organic and could relate. She explains to the interviewer,

If I could rate it, I would rate it a nine out of 10 compared to all the other classes where there were about six or seven, just because of the way that they taught the class. And there was more than one way in which that particular person presented information and had the availability. I understand many professors don't have time, but he interacted with students and addressed issues. And that person ended up being a mentor of mine right after the course. I feel the interaction we had was more organic, and several people were in the class. Still, they try their hardest to find different ways to educate a person rather than memorizing or regurgitating or anything like that. They applied it to everyday life and made it very simple to understand. And when a person can genuinely take the information they know and make it so that everyone can use it in their growth, I think that's a better education than anything.

The interviewer asked her whether she felt like that particular professor could be considered a mentor. She continues by adding,

Yeah. It really did. And not just for me, it was other students who weren't of African descent, but they also felt, and we had conversations about it, that they were genuine, and they could make you feel comfortable. And if you didn't understand something, you could ask and made the floor. We had conversations where we just debated about things,

and we were able to speak our minds and apply the actual work concepts freely. We're at least where I felt people would understand if I said anything and articulated anything.

They did know where it was coming from."

Participant 4 explains to the interviewer that he didn't have any professors of color while working on his Master's Degree and Doctorate but explains his logic on Memorandums of Understanding between Agriculture programs at HBCU's and PWI's regarding faculty of color being present. He clarifies with the interviewer about not having a professor of color, explaining,

Not in graduate school. That did not exist. Not in graduate school. At all. Nah. But that leads to a more significant issue. Suppose you want to go into that. You know how many HBCU's that have Ag-programs might have like Memorandums of Understanding with these PWI's, and you know they might have a PI from an HBCU who comes to their campus and work for a summer, but that's not reciprocated to the HBCU. As far as resources, or you have a resource that's cultivated at an HBCU, and then they teach at a PWI, and it's a brain drain, you know? So there definitely needs to be more. Once people of color that are in Ag get those advanced degrees, we have to, we have to go back.

If I'm not mistaken, I think A&T produces the second most Black Ag graduates under UF. It has to be a two-way street with those Memorandums of Understandings, and we have to be able not to exploit, but get out and work on them as well, so we can build our faculty up, and things like that. But there wasn't. I didn't have any black faculty members when I was doing my graduate work. I'm working my brain now, going through all my classes. No, none of them, none of them were black—none of them. I had one guy that was Chinese. That was it. But yeah, none of them were black."

Subtheme 3b: Student/advisor relationship

The participants determined that the relationship between the student and the advisor is critical to their success while pursuing their respective degrees in graduate school. The student/advisor relationship subtheme details the positivity and negativity the participants experienced while working on their degrees.

Participant 5 explains to the interviewer why he was considering leaving his program due to the relationship with his advisor. He explains that his reasoning was for the consideration was lack of mentorship. Participant 5 states,

Since arriving at Virginia Tech, I am on my second advisor, which most students don't make it to a second advisor. They usually drop out if they have a terrible experience with the first one, so I've been lucky enough to survive that."

The interviewer asks Participant 5 about his feeling of surviving one advisor and having a second advisor while in his current program. He clarifies to the interviewer by stating,

Definitely, it's just like bosses. Some bosses are good bosses. Other bosses, they're not as suited to you. I wouldn't say there are good and bad bosses. Just everybody's different in what they need and what I needed wasn't what I was getting, but being able to find that and having the help of my mentors at Virginia Tech, it really made a big difference. Having the community resources that I have had while being in the Carver Program, a program for underrepresented minorities in agriculture and STEM; If I hadn't had that resource, I don't think I would have made it as far. I wouldn't have had the courage to find a second advisor."

The interviewer asked Participant 5 if there was assistance finding another advisor through the Carver program or navigating that role independently. Participant 5 details that,

It was beneficial to have funding that followed me because if I didn't have funding that followed me, I wouldn't have been able to find another advisor so easily. Also, having the resources of the Carver in terms of their network of "Hey, we know that this advisor has a good track record with underrepresented minorities." Because when they know that, not to say everybody's the same, but underrepresented minorities do face a similar set of challenges regardless of if they came from a good background, a bad background, disadvantaged or not. From the outside looking in, people's perception of us is similar because the first thing you see about a book is the cover. Typically, if you're browsing in the bookstore, you typically make your decision based on the cover of the book whether you want to pick it up and see what's inside."

Participant 10 speaks highly of the relationship between himself and his advisor during his doctoral program. He talks about certain situations his advisor had him in and how he had to adapt, making him a better student. Participant 10 says to the interviewer,

I appreciate having advisors and people around me who have helped me see who I am and have really been able to help shape what I was becoming there. To be able to help shape my process. And I'm going to go on record and say, Dr. Kim is the truth. She is a white woman professor at Virginia Tech. And I have never experienced any advisor like her, never. So appreciative of everything that she did.

And if I have to say, I feel like I have to say she put me in places where I could grow and develop. And she saw my weaknesses, she let me know what they were, and then she walked me through how to fix them. You can't beat that kind of guy. It wasn't like she spoon-fed me, but at the same time, she kept it real with me. She was honest with me.

She was upfront with me, and she had a true sense of what was going on. She sure ain't blind; I'll tell you that."

Participant 9 explains how he has had his share of experiences with advisors from his undergraduate and graduate experience. He explains to the interviewer how one advisor thought he should possibly not return to school after leaving school briefly. He elucidates to the interviewer,"

Man, it was the craziest. At the time, honestly, bro, there was one night, and I dropped out, and I was waiting to find out whether they were going to accept my petition to get back in school again. It was one night that was like, "Oh, I was the one that made it out of my neighborhood and went to this big school and all this kind of stuff." All I could think about was I was about to have to go back. I remember like it was yesterday. I was at Buffalo Wild Wings with one of my mentors because I was telling him everything. He was telling me just to keep my head up. Don't worry about it. We'll make a plan and all of that. I got a call on my cell phone that night from my advisor at the time. This advisor was a Black man, and he told me that maybe college wasn't for me that night. This was from a Black man, so I trusted this dude. Because Ag Ed at a PWI, ain't a whole lot of Black men."

He continues by adding,

So, he was the only one that I knew at the time that was in my education. He told me maybe college wasn't for me. He was like, "Look, I know you've been working at Walmart." Because I was working almost full time at Walmart at the time, maybe you could just put your effort into working at Walmart and become a manager because the managers make a lot of money, which was true, which was true. It's crazy how life

happens. I had just had a conversation with our general manager the week before. He was asking me like, "Man, are you serious about this?" My general manager at Walmart was making \$150,000. I was young too. So, you can see how at that time, my mind was telling me, "Man, I just talked to the manager last week." He was like, "If I'm willing to move and relocate, I can become a manager and an assistant manager, and next thing you know, I'd be making a lot of money." Walmart isn't a bad idea. So now I'm telling myself, what am I doing in school wasting all this money?

Participant 3 explains how his advisor Master's program was very influential in preparing for his doctoral program. The interviewer asks if his Master's program at his respective HBCU helped him adjust to his current doctoral program at a PWI. Participant 3 states to the interviewer that,

I mean, I could say it molded me in certain ways. I mean, I got a different atmosphere when I was at an HBCU well at Tennessee State than Virginia Tech, so I feel like I got a lot of school spirit. In Nashville, I meant Tennessee; I got friends, family, fraternity brothers. I got that at Virginia Tech; it's just a different kind of experience, but I can say my advisor from Tennessee State did get me prepared to come to Virginia Tech.

He also explained to the interviewer how his advisor helped attend a PWI for his doctoral program, stating,

Really, man, it had been set. The program set me up to go to the HBCU summit with my advisor from TSU. I had a great advisor. We basically knocked out what I need to do when I graduate with my Master's. Basically, you'll teach for three years, then you to a university, basically a PWI university, you know a good university, like Virginia Tech and he named some more. We chose Virginia Tech. He set me up and took me to the HBCU summit and conference. The rest was history. So, he set up on a great count for

success to map out our goals and then gave me a full ride. Well, I thought they gave me a full ride. Yeah, they gave me a great scholarship package. They put me on an assistantship.

Participant 6 was asked by the interviewer what advice she would give URM students that are possibly experiencing feelings of being an imposter or advice that would be beneficial for them.

Participant 6 explains,

I think it's important for those students to have a relationship with their advisor. Just in general, because that's the person that's constantly critiquing. So, if it's not so much of a good relationship, then the student needs to realize that they're doing all that they can do and that it's going to be okay as long as you seek the proper resources.

You can develop yourself with other resources outside of your advisors. Because I've heard different stories, and there's only so much that a teacher can do because you're only working with that professor, that teacher, for a class. And then you should always have another option to work with another professor. But when you're with your advisor, you have to work with them the whole time.

And so, I think it's important that students realize their relationship with them so that they don't take a lot of the criticism, the critique, the direction, personal sometimes. Or if they don't let it get to their actual performance and what they're producing as far as completing their dissertation, thesis, or even if it's a non-thesis, they're completing their work to get their degree."

Theme 4: Underrepresented Minority (URM) Experiences

Highlighting the experiences of URM students at their respective PWI is essential. These experiences were significant in determining the effect these experiences had on participants and

if the imposter phenomenon/imposter syndrome played a role within these experiences. Still, it was also crucial for the researcher to understand the different experiences that led them to the position they are currently in or the particular situation at that time.

Subtheme 4a: Equality and access

Some participants explained how equality and access students of color should have compared to their white counterparts. Those participants understood some of those positions of equality and access within certain situations paints a vivid picture of recruitment and retention in many colleges and universities.

Participant 1 explained how his involvement in numerous organizations during his graduate career made him realize the importance of networking and how exclusion for people of color in some of these fields can happen. Participant 1 explains to the interviewer about an experience he had within an organization and states,

So, my participation in that program affected my collegiate experience because it helped me stay ahead of the curve. I understood what we're talking about in classes, things like that. In college, my involvement with a society of physics students and NSBE, I would say it made things more fun. I guess I was part of a community, but, to be honest, maybe I just wasn't involved enough in college for it to feel like a strong community. It was more like, "Hey, look, there's a balance to this work. There's something to enjoy, fun stuff. We get to travel, get exposed to the world." Honestly, that's about all I really took from that."

The researcher asks Participant 1 how those experiences in those organizations affected his decisions regarding his education. He states that,

One specific thing about the participation was understanding a lot of this works on the good ol' boy network. So, it's important to network. But, at the same time, it also taught me that, since I don't really relate to people, relate to a lot of the folks in these programs, that it's also difficult to network, so I have to kind of fake the funk a little bit and pretend like I'm into stuff that I'm not into at all to get those benefits that people give.

The researcher then asked Participant 1 would consider that experience forms of feeling like an imposter or dealing with the imposter syndrome. He eagerly adds,

You know, I think that would creep into the imposter syndrome stuff because, yeah, it's like playing a role. You're playing a role, and you do it in a way where you don't want people to really find out too much about you. You just want to keep it very surface and professional because, you know, if they know all the sides to you, it might scare them away. You just don't know how they'll react. You just play a role, smile, shuck, and jive, do the little tap dance that you know they like.

Participant 9 explains to the researcher how he felt he had to act or dress a particular way to fit within his respective program. Participant 9 specifies to the researcher that,

Yeah, man. This was crazy. One of my advisors at the time when I got back in school, one of the dudes like, "You got to learn how to act Whiter. You got to learn basically how to play the game and how to make them think that I'm basically someone I'm not." I'm not where I'm from, and so for me, I remember that semester I had switched the clothes up. They had me dressing differently. It was just about being something that I wasn't. I did okay that semester, but I was miserable. I'm like, why do I have to act differently to get these A's, just to get good grades and to be accepted? See, I realized after that semester that I didn't have to do all that. I could've been myself; I just had to do

what I was supposed to do and execute on the assignments, execute on the meetings, go in the office hours, and all of that. Often, people are telling you; you got to act a certain way; you got to do a certain thing. You got to be an imposter just to make it, and that's not the truth. That's not the truth."

Participant 3 explains to the researcher how he feels that inner-city youth lack familiarity with agriculture where he is from due to lack of exposure. He explains to the researcher how the different schools within his area have agricultural education programs but not in the inner city.

Participant 3 explains,

I'm not gone say they're doing enough, but they're doing something you feel me? You know, they had in one point in time six, I believe six, Ag programs in the high schools, so they targeted some of the high schools, but some of the programs fell off because, you know, inner-city youth, we ain't taught about agriculture.

We're not taught about agriculture, so we don't know about agriculture. But you know, McGavock, Glen Cliff, Weiss Creek, umm, and a couple of schools had Ag programs. So, it's like 4-6 schools; I believe they target there, but I mean Nashville is large, so I suggest they have to do a little more. You know, the college, if you don't know about Ag going through high school, you probably won't major in it within college unless one of your family members own a farm or something like that, you know. The boys from West Tennessee grew up on farms, so they know about Ag. I'm from right in Davidson County, so I'm from Middle Tennessee, and we ain't really have that. Ag more, you know, we don't really do Ag in the inner-city schools.

Participant 7 tells the researcher that she had to address a barrier to dealing with cultural shock within education. She describes to the interviewer that,

I would have to say a cultural shock, and I think cultural in the aspect of education. So, with more African American education, there's a holistic part where I feel as though people are more aware of your social, physical, and mental health, and it's essential within those educational rounds. Then within predominantly white spaces, they lack in those areas.

They're very, I want to say, career-driven, but it's very different. I'm still having a hard time trying to articulate it, but it's numbers; it's not quality is the quantity with them. So, there's a lot of disconnect to research, there's a disconnect to the passion and the impact, and so with those differences in culture, it's hard for me to connect within the classroom to what it is that we're doing. Yes, they have the resources when it comes down to getting into the community and meeting different community partners. Because I'm a community person, they have those resources to do that, but I guess the drive behind it is lacking, and I think what pushes me to do this degree is the drive and impact.

Leadership I had a lot of people in the past kind of build me as a leader and put me in positions to be a leader and advocate for me as to be a leader in something, and there is no push. In my opinion, there is no push for me to be a leader. It's a lot of showcasing of whoever is at the top of a research project; they kind of navigate everything; whereas I was in undergrad, I was in a lab, there was a lot of opportunity for me.

She continues to emphasize to the interviewer that,

In undergrad, I was in a lab. There were many opportunities for me to be able to contribute and be a leader, where that's not necessarily how it works. It's like work underneath someone else rather than being at the top and trying to navigate an exposure. Another issue is, I worked for cooperative extension a lot in my other masters at A&T,

and I had a lot of exposure to people, whereas I'm also working in cooperative extension in Virginia, but I haven't met agents. I haven't had direct interaction with them, so I feel very disconnected, so that's a barrier.

Participant 6 explains the importance of why African-Americans and other racial backgrounds that lack support in areas should have roles within in research. She goes in-depth by emphasizing her barriers and challenges while adapting to her Master's program at her PWI. She states,

Yeah. So, just adapting to a master's program's overall structure and realizing that I am writing a thesis. I think that was very difficult because I had expressed to one of my mentors that I wanted to do graduate school, and he always tried to distinguish the difference between a thesis and a non-thesis.

And I thought I understood until I actually sat there until I got to the Master's program and was handed a guide book that every portion of a thesis and that I was going to have to write and scope that. And I think that was very hard, and that was a challenge, just overall, constructing a research project and then writing about it in a research paper."

The researcher asked Participant 6 if she felt that going the thesis route instead of the non-thesis route was the best choice for her and if the non-thesis path is a consideration. Participant 6 details to the interviewer,

I think it's for a select group of people that can handle it because it is a lot and it's very challenging, and it's something that you really have to prepare for. And I think my background in writing hasn't always been well in general. And it's just something that you have to consider. And I think as African-Americans, we don't have an advantage when it

comes to English and the English language because we do have a lot of cuts in our language.

Our vernacular is different in general. And so, we don't have proper grammar, and I think we have to consider that. And then we have to consider that we don't necessarily have access to a lot of resources as far as our parents being educators or our families being within the educational system.

Because I think the thesis option is really taking you towards the research component of what university's purpose are or what education's purpose is. And so, I believe it is important that, if students want to be educators, I think it's important that a thesis option is available. It is offered because I learned that a lot of research situates a lot of policies. It provides a lot of background information for development in school structure."

Subtheme 4b: Secondary School/Pre-College Experiences

Many of the participants explained to the researcher that their secondary school and pre-college experiences and activities played a critical part in their success today. Participants also expressed that it helped with their confidence while pursuing their degree and in respective leadership roles.

Participant 6 details her experiences in high school participating in state legislative activities, and creating a nonprofit organization with her father and cousin. Participant 6 tells the interviewer,

So, I'm currently involved with Building Youth Tomorrow Today, a nonprofit. And with that nonprofit, we work with The Freedom School, and we work with the Sweet Potato Project. Between all three of those groups, there's youth that participates in agricultural

production and education. And so, we all partner with African-American farmers to form an educational base for the students and the community.

So, that's a way to combine all of the organizations to have a way to be a resource. And one for the community, so that it's accessible, and so that all the community members know of one place to go when it comes to food, when it comes to agriculture, when it comes to youth involvement and when it comes to mentorship."

The researcher asks Participant 6 how long she has been involved with this particular organization. She adds,

So, myself, I've been with Building Youth Tomorrow Today since 2012. And it was an organization that I co-founded with my father and my cousin. And that's been an ongoing project since then. We look to build youth up within their organizations' participation within our leadership skills development as a nonprofit. And overall helping them provide post-high school opportunities.

Although, we heavily advocate for college readiness and college prep. And so, we've been involved with The Freedom School since 2015. So, it's been about five years working with The Freedom School and two years ago with the Sweet Potato Project, a program that's more about entrepreneurship and youth development. So, we just have our students participate in those programs to build their organizational experiences when it comes to leadership."

Participant 6 continues to explain to the interviewer how she became involved with these agricultural and community-based organizations during secondary school. She explains to the interviewer,

Okay. So, a lot of my experience in high school was more of community development, not so much agriculture, but definitely natural resources and in terms of redeveloping brownfields. So, with that organization, it was the Youth Council for Sustainable Communities. So, we looked into redeveloping brownfields, put for contaminated lots within communities. We saw that a lot of them were within people of color communities. We really advocated for redeveloping many brownfields into a community garden because we could do a lot of mapping, which brought in a lot of evidence that there wasn't access to fresh food and how that impacted the nutrition levels within those people within those communities. So, a lot of it was a lot of community development-based, but structured around being able to allow communities to be safer within a sense of toxins and redeveloping lots to be more sustainable."

Participant 10 explains the organization he was involved in high school during after-school hours when asked by the researcher if he was involved in any agricultural and natural resource organizations during secondary school. Participant 10 also explains how the pre-college program he was involved in played a pivotal role in attending college. He details with the interviewer that "It depends on what you consider to be agriculture. Agriculture is pretty broad for me. It's more than just like plants and animals and farm animals. Do you know what I'm saying? Like tractors and farmers." He continues by explaining,

I was in the CNA course, and I decided that I didn't want to do the facility with the people in that class. I wanted to be at the veterinary hospital. So, I was doing that. And they had me going to the pet spa, where I was taking care of the cats and the dogs and stuff, and dealing with the kennels and the cleaning and all that kind of stuff. So that's probably as closest to agriculture as I got. I was in a math, science, and engineering

program called GAMSEC (Greensboro Area Mathematics and Science Education Center)."

Participant 10 details his sentiments about the program with the interviewer; he states,

That program was great, man, because it took a lot of us and put us all together and just kept us going during the summertime and during school, on the weekends. Cause we would go on Saturdays, and then when school was out, we would go like we were going to school Monday through Thursday on campus. They feed us lunch on campus and everything, man. It was great."

The researcher asks Participant 10 did the experience expose him to college he eventually attended because pre-college preparatory programs were held at that institution. He eagerly emphasizes,

Yeah. A&T was like home already for me. Because to be honest with you, I listened to the orientation, but me and some guys left early and went to the mall because I had a car. So, we just, and we had a whole dorm to ourselves, so it was just kind of like "Well, let's go back to the dorm, let's grab some people." And then we go to the mall. And we did. Like I didn't have to be there. I was a local; everybody knew where to go. I knew where to go. So, don't even sweat it; let's ride."

He continues by adding,

Okay. So, it's crazy because my cousin and I were like always around each other all the time. We had our little crew, like me, him, and three of our homegirls, and they all would hang with us. We all had the same classes and everything. So, we viewed each other all day, and it was these other guys that we used to ride with. And we would always get in trouble with them. I don't know what it was. We always do dumb stuff like skipping or

riding around campus, yelling out the window, doing dumb stuff, that kind of stuff. We're trying to talk to girls and stuff on campus.

And we in high school, they in college, you know that. But it was crazy because as much trouble as we got into, we even got kicked out for three days, that kind of stuff. Despite that, we still were selected for MSEN Day, and we took home two golds and three silvers, and the same ladies that were looking at us like, "Oh, you little troublemakers," just were sitting there shocked, and that was probably the best feeling ever, man. We came up that stadium because the testing occurred at Fayetteville, man. I remember we came and competed there."

Participant 1 detailed to the interviewer his interests in robotics is and how he applied that experience to real-world situations. He explains, "I was a part of the robotics team in high school. That was a pretty positive experience, actually. That was a great experience, to be honest. The researcher asked him what did he take from the experience."

He continues by stating to the researcher,

What I took from that was teamwork, the value of teamwork. I learned a lot of my strengths in school, how to apply stuff that I learned in my physics classes to real-world context and mathematics as well. I also learned that people sometimes make decisions that aren't rational. I have to be patient with that because there was one instance where I'd done a bunch of calculations, and I told people, "Hey, if you make this choice, the robot's going to break right here," and they made that choice because it would make the robot look cool, but it broke right where I told them it would, and I got all frustrated. So, the lesson learned was, "Hey, just be calm. That's going to happen. Just be ready to fix it." So, yeah, that was an important life lesson which I'm using now more than ever."

The interviewer asked Participant 1 what did he take from that experience in the organization and how that affected his collegiate experience, and he stated,

So, my participation in that program affected my collegiate experience because it really helped me stay ahead of the curve. I understood what we're talking about in classes, things like that. In college, my involvement with a society of physics students and NSBE, I would say it made things more fun. I guess I was part of a community, but, to be honest, maybe I just wasn't involved enough in college for it to feel like a strong community. It was more like, "Hey, look, there's a balance to this work. There's something to enjoy, fun stuff. We get to travel, get exposed to the world." Honestly, that's about all I really took from that.

The majority of the participants in the study weren't involved in agricultural, natural resources, STEM-based organizations, or pre-college programs. Participant 4 states, "No. We didn't have any in my area. Not in my part of the county, or I don't think it might have been in any county period, to be very honest with you. No, we didn't have that at all."

Participant 3 wasn't involved in any organizations during secondary school but said he volunteered for an FFA event with his advisor as a graduate student and while teaching. He explains,

I mean, it was cool. It was different. I mean, I was learning something I didn't know about it. You know I'm a city boy from, I'm from Nashville, but I'm still from the inner city, so I ain't grow up on agriculture, so it was like kind of different, you know looking at them how they judge various events. I had to help out with Floral events and plant events, so I got all the plants set up, put up, and took them down to get judged and scored. Then break everything back down. I was just helping them set up things, you

know, but it was cool to set up and learn, but I mean, you know, I felt like I was behind because they had been learning all that all their life from being in it all their life. I wasn't around it or didn't learn it until I got older in college, so you know, it was kind of like I felt out of place a little bit, but I mean still did what I had to do."

Participant 7 explains that she was involved with agriculture during secondary school but not directly with the programs and organizations. Participant 7 details with the interviewer,

I was involved, but not directly. So, I come from an agricultural background and have family members that worked in cooperative extension as agents and directors, but where I lived per se, they did not have, which is weird because it was around the farm, and they did not have an organization and FFA, but I was not a part of that. I attended some meetings, but I wasn't a part, and they did not have a 4-H. So, when I did spend the summers with my family members and my grandparents used to live on the farm, my cousins lived in the area. I helped with different projects and stuff that they did, but I wasn't directly in those programs.

Participant 9 explains to the researcher,

Not Ag Ed. The only thing I was involved in was a Summer Bridge Program at Illinois for minority students, for minority students in Ag. But anything else, no, because in Chicago, the only school that had FFA, 4-H, that kind of stuff was ... I forgot the name of that school. Chicago High School for Ag. That was the only school that had any of that kind of stuff. So, I didn't even know what any of that was until I got to college. I wasn't involved in anything agricultural-related, like FFA, 4H, any of that in high school. We just didn't have it."

Subtheme 4c: Funding

Some of the participants alluded to the vital role funding was to their collegiate undergraduate and graduate experience. Funding allows attending colleges or universities that some students couldn't imagine getting into due to financial costs. Participant 7 explains how she attended a PWI and how funding was a factor. She explains,

I personally believe in personal guidance, so I had already made up my mind that I wanted to get my Ph.D. and I wanted it to be something in community relations and definitely in nutrition and my initial first school that I wanted to attend was top three in the field when it came to nutrition. And of course, when you start to look at the rankings, they're much higher in predominantly white institutions. So luckily, I had connections in which I could get interviews and stuff like that, and there were possibilities for funding, which also attributed to attending a predominantly white institution. But it's just the fact that you're getting the best education based on course rankings and stuff like that and networking.

Participant 2 describes how finances were somewhat of a factor when asked by the researcher if she considered leaving her program. Participant 2 elucidates,

Uh, I think feeling isolated. Umm, I also think the struggle to figure out what is the right way. Though it's the process of it, you know what I'm saying, I kind of wish like, from the get-go, when you find out as you're coming to grad school, you get like an email, or you get umm, they gave us a booklet that went through the stuff which was kind of nice. I did like that booklet, but just like writing stuff; you know what I'm saying like or maybe like a skills background type of thing. Like I think me not knowing how to be a scientific writer, with a lot of pressure on my head because I at first felt very frustrated about so

many edits with things. Or umm, just like being somewhere that I didn't conveniently want to be and of course like, number one thing is finances. Like graduate students are severely underpaid. So, I just, yeah. I had to say that finances were definitely number one. Finances had to be number one because academics is not impossible for me. It was some challenging classes I took, but I had to push past it. But I think financially, just like knowing that your courses are paid for and everything like that, the stipend is simply for living expenses, and everybody's living expenses vary. And there is no consistent or like a great place in Blacksburg or Radford for graduate students to stay that would be affordable of grad income, so that's kind of hard when I only had two weeks to figure out where I was going to live.

Participant 6 explains how her involvement with organizations throughout high school that she learned about lobbying laws. That would eventually lead her to realize the importance of lobbying for college funding, eventually led to USDA to help with funding for graduate school. She explained to the researcher how her participation and experience within those organizations have a lifelong impact. She described the occurrence as,

So, yeah, those organizations have a lifelong impact. You realize early what impact you can have on legislation. You realize how the law is a substantial factor in your life. You recognize how law manipulates and control situations. So, you maneuver around those laws. I think a lot of times, as black people, we feel like we don't have a lot of freedom because we have laws that are ready to really put us back in slavery and to put us back in jail and prison, and that's obvious within the prison population.

So those organizations really gave me the opportunity to learn about different laws.

Simple laws, like what to say when you get pulled over or more strategic law, such as

how to lobby against laws that will prevent funding for future organizations, like the ones that we were currently participating in. So, you learn that there are other people making decisions and that those people making decisions have been put in place by a structure of votes so that there is a certain responsibility that they have on the people's behalf to represent them.

She continues by adding,

I thought that was a very important, basically experience because even as graduate students, we know that, "Oh, we could participate in these councils. Oh, we have a voice. Our money supports this institution." So, you realize that you can use your voice in different situations to voice your experience and make the experience better for the next and continue life cycles.

The researcher asked Participant 6 if that participation influenced decisions within her education during her collegiate career, and she explains,

So, because my college education was supported or financed by my current employer, I think it does have a direct impact in some way, but not necessarily when it comes to the actual content of education that I study. So, the USDA had a scholarship program where I was obligated to work for the USDA when I graduated. So, I worked within the agriculture business industry. However, I enjoyed my education as a master's student, where it was more focused on agriculture leadership in education, which connects more to my personal work as a youth advocate advisor with *Building Youth Tomorrow Today* organization. So, I currently work within the field of my degree. However, I'm not doing the actual work that I would like to do when it comes to my passion for youth development and college readiness.

Participant 5 explains that he feels he is part of the campus community by paying his tuition when asked about his participation within organizations or feeling like he is a part of the campus community. Participant 5 details with the researcher that,

Paying my tuition makes me feel like I'm part of the campus community. There's nothing anybody else needs to do for me in terms of that. That's definitely just my belief. Yeah, I pay the tuition. I have the opportunity to go to the classes, and I get the athletic tickets. I mean to me, that's as much as they can do. That's all they're really required to do. The rest is what students get together and do themselves. They set up their own organizations. They achieve leadership in their own organizations, and they provide support to the students. Typically, these are under the direction of faculty and staff, and you have the option to join as many as you can handle.

Subtheme 4d: Leadership

The participants explained to the interviewer how leadership has been beneficial to their collegiate experience. The participants also explained the importance of proper administration for mentoring and advisement within their respective areas.

Participant 5 explains,

I was a member of the Wharton Leadership Fellowship. I mentioned earlier that I was involved in getting students in agriculture experience in public policy. That was a good experience, but a mixed bag as well. I got to experience many things that I would never have gotten the opportunity to participate in, but I don't feel like I had the proper mentorship throughout that program. There was some inner turmoil when our program director or program founder kind of left for another job throughout the middle. Once he left, its kind of shifted in the hands of people who didn't have the same leadership skills,

so yeah, I still got to do some of the experiences. I wasn't able to make the most out of every opportunity due to some being my shortcomings and learning how to navigate under the new leadership. Overall, it was a very good experience, but it definitely taught me how important good leadership is and how you have to be fluid and ready to change at any moment.

It just gave me a chance to see more of the world being a member, a part of that membership, and fellowship allowed me to see aspects of the legal process policy and regulation that I would have never gotten to see before. That gave me the chance to work in our state's capital and to further that and segue that into an opportunity to work in our nation's capital, Washington, D.C., within agriculture regulatory affairs. "

Participant 6 explains how she believes that leadership roles give self-confidence and motivation in various ways. She explains,

I think these organizations are the core and the foundation to having enough confidence and motivation to be in these positions and pursue. To be the only black person in the room is scary a lot of times. These organizations give you the confidence to be in those rooms and not only the confidence but the cultural competence to represent yourself within these rooms in your background and where you come from. I think that's very important."

She continues by emphasizing that,

Often, organizations want you to conform to the white, what I would say, the white standard, whiteness. But I think at these organizations, because you bring young people together, we control the image that we want to see, and we provide that to these industries, to these corporations. I think that's the difference between having our own

space, where we're comfortable as African-Americans, and inviting the industries to our space. Then having to go to their conferences and being involved in their space, which is what we see, in my opinion, when it comes to, for example, historically black college and a predominantly white college that is both land grant institutions."

Participant 9 explains to the interviewer,

I think by the time I became a professional, I was pretty set. I was pretty good. I think when I was an undergrad in grad school, it definitely helped me out. Grad school, too, helped me be connected to other Black and Latino folks. It helped me be in the room with other administrators and just to really connect in a way that I probably wouldn't have come to Virginia Tech as I did. As a professional, I was pretty set. I was pretty good. It was good to be involved in the help. It was more about just service. Then once that was good, I'm like, all right. Y'all good."

Participant 10 explained not having any leadership roles within agricultural and natural resource organizations but dealt with leadership roles within other organizations that displayed motivation and self-efficacy. Participant 10 tells the interviewer, "I have not. The closest to leadership that I got was I was Mr. FFA, in undergrad. That was about it. So, I got to be on the float.

The interviewer asks Participant 10 if he ever considered taking leadership roles within respective agricultural organizations at both institutions he attended, and he explains,

No. To be honest, I don't think I've ever been the political type. So, I never really saw myself as sitting in those seats like that. I don't mind doing some of the work and getting my hands dirty, and I don't feel like those positions are really what you do in that. So, it

seemed like it was a lot more delegation or having people do things, getting other people to organize certain things. But I don't know.

The researcher asked Participant 10 why he didn't want to participate in some of these leadership roles in agricultural or natural resource organizations. He states, "I feel like everybody got the role. I got a role to play. Some people are the best fit for those positions, and I'm just not one of those people."

He continues by explaining to the researcher,

It's easy to take leadership on something that interests you. I wasn't fully committed to those organizations in the first place. So, I didn't really see myself being as involved enough to take a leadership role in those things. Now, in regards to my own personal business, oh yeah. I'm going to take full responsibility for everything that has to occur for me to be successful. What I was doing was I was walking around the school, the businesses, and the whole downtown area. I was just walking from door to door. Peeking in to see what the environment was like. If I saw people in there either doing hair or selling certain types of products related to the ones I was holding, I would talk to them. I would just go and try and speak to the manager and have that conversation to build a path for myself.

You can do that when you have the motivation and the self-efficacy to do something for yourself or pursue your passion. But if you're looking at something that... I honestly look at a lot of these programs as, if you want to look at also something else that has maybe helped me shape the way that I see racial identity, let's look at some of these programs. Did Black people find them? And are they really for us? Some of these are not inclusive as they were before. FFA, to speak for one, has not had the best pattern."

He also emphasizes,

For one, it has not had the best pattern of racial equality off sale equity, even in a way that they even brought us in. They took the organizations we formed, broke them up, and put them back into their image. And not only that, it wasn't even into their image. They created an entire vision for us to make sure that we were separate, gave us black jackets instead of blue jackets like everybody else in FFA, that's intentional."

Theme 5: We Are Family!

Participants explained how imperative having a support system was to succeed while matriculating their education during their undergraduate and graduate experience. Many of the participants felt that family members were essential to giving them encouragement and motivation during times that may seem challenging. This theme will explain the relevance and importance of support through HBCU camaraderie, family, and the MANRRS organization.

Subtheme 5a: Historically Black Colleges and Universities (HBCU) Recruitment and Impact at PWI's

Out of the ten participants, seven are an alumnus of a Historically Black College and University (HBCU). The participants expressed how attending an HBCU helped them prepare for many life challenges, including attending a PWI. Some participants also told their specific experiences and situations; they didn't feel like their respective HBCU helped them. Some participants expressed their feelings if the imposter phenomenon and imposter syndrome can occur at an HBCU instead of a PWI.

Most participants spoke about how they were recruited from their HBCU to attend their respective PWI for graduate school. They also talked about the relevance and importance of HBCU recruitment and retention at these PWI's to promote diversity and inclusion.

Participant 4 explains to the interviewer how a racial issue on his respective campus garnered much attention. He told other alumni of his HBCU not to attend this particular PWI for graduate school. Participant 5 explains,

The more significant issue that you see overall with non-majority students in a majority environment is that many majority students don't have to deal with cultural and racial issues. All they have to do is worry about whatever's going on in their personal life and school. We have to worry about personal life, school, research, any racist stuff that's occurring on campus because that affects us emotionally and mentally. That takes our attention away from why we're on campus in the first place, which is to conduct research. I had a huge issue with that at Iowa State. I actually got into it with the president of the university at that time.

The researcher asked Participant 5 if he could be more in-depth about the situation. He states,

Absolutely. I can send you some links to those news articles, but it was a lot of racial stuff going on campus. It wasn't just with Black students; it was with the Latinx community as well, a lot of racist things. I'll give you an example. I wasn't at the tailgate. There was a big Iowa, Iowa State game, and this is when Trump was running and stuff like that. Our president at the time was walking around with Trump and things like that, so we had a group of students protesting the whole thing. When they were protesting, they had signs, they were in the tailgate area, and some of them were accosted. Their signs were taken and ripped up, which led to a more extensive forum on campus where many people opened up. They talked about a lot of the racial issues that were going on campus towards them. This would happen year after year, and the president didn't show any empathy. So, I got up to the microphone, and I told him like, "I come from HBCU,

and if you think that I'm going to tell people from A&T to come to this institution where all you do is recruit us, but your retention is piss poor. You're not watching out. There's no mechanism in place to keep us retained. There're no resources for us. I'm not going to put people from my institution that I love in danger in coming here. I'm not going to do that."

He emphasizes to the researcher,

We were going back and forth about that, and I kept my word. I told folks from A&T, "Do not come to Iowa State." To my knowledge, I don't think anybody from A&T actually came to Iowa State after me. A lot of the PWIs don't realize the power that students from HBCU have. When we tell our universities, our departments that they're not treating us well, they're not going to tell folks to apply. It was a lot of stuff like that and dealing with administration. The sad thing is that many people in the administration were Black, so that's another issue. You get to these positions of power, and I understand you've got to put food on the table, but you're caring for them. You're not really helping us out.

We had a few marches. We took over the administration building. We took over the school council meeting and all of that stuff. My whole thing is, I didn't want to do that, but I had to do it for the undergrads that were there because they were lost in the sauce, too. My whole thing is, I wonder what I could have produced if my energy was not in that activism, and I could have put that in my research instead."

He explained to the researcher how he didn't care if the president had a relationship with the chancellor of his HBCU. He details to the interviewer,

There were a few Aggies before me that went there that were there when I was there. The president of Iowa State at the time was homeboys with Chancellor Martin. I told him, "I don't care if that's your homeboy or not; I'm telling folks from A&T not to go here. Point blank. I don't care what relationship you have with him."

Participant 1 explains how attending an HBCU has helped with mentorship and advisement after undergrad and seeks mentorship from time to time. The researcher asks if he still seeks mentorship and advisement from professors and faculty of color in his respective programs. He states, "From my undergrad HBCU, yes, yes. From the other two graduate schools, absolutely not."

Participant 8 explains how he doesn't believe that the term imposter phenomenon and imposter syndrome can be used at an HBCU or even on the secondary school level when asked by the researcher. Participant 8 goes into detail, saying,

Absolutely not. Well, here's the thing, at Morehouse, of course not. It would make no sense to say that there because the population is the population. It's just a population of a small majority in that environment, Atlanta at large. Do you know what I'm saying? Let's just keep it funky. As far as the Jewish school, I'm sure it took place, yes, there, because again, I found myself as the only Black face out there in the school. Do you know what I'm saying? Especially that I'm a non-Jew, but a non-Jew Black in the school who was on the faculty per se, so that was a different thing. I did experience, yet again, there, but it wasn't like I could have a shared conversation about it because who was I talking to? Myself? There were some Jewish; I would say, allies I had. Other than that, it's not much you could really do, but it's a very unsettling environment, especially when particular circumstances against you arise.

The researcher also asked Participant 8 did he feel that his respective HBCU prepared him for graduate school at his particular PWI. He explained that,

I would say yes and no. I would say no, it didn't prepare me because within my department, my area, my study of focus being physics, that's a very small, minor department in the educational realm of Morehouse. Morehouse is more centered; the science is more bio or chemistry, more engineering, but mainly in part, business, the liberal arts, do you know what I mean? Those types of majors configure the bulk of what our institute is. At Virginia Tech, it's the inverse; it's the science, the engineering, that's where their power is compared to liberal arts where our power is and our philosophy and our humanity. That's a big adjustment there.

He also details,

In the sense of academics? No, I don't feel like it prepared me. But, what it did do was it created a mentality and a way of thinking that made me confident that I could figure out what I did not know and get my goal accomplished. It gave me that tool."

Subtheme 5b: Family support

Many participants explained to the researcher how family support was critical to their success while attending school. Some of the participants described how his family would support and give guidance relating to classwork and life.

Participant 3 details about the support while deciding to attend graduate school for his doctorate and he felt that he was putting his family in a better situation. Participant 3 explains,

My mom would call and check on me, or my sister would, but like to be honest, when I was in Nashville, I did a lot. You know it was like, my father's dead, so my twin brother lives out of town, you know. Still, my mom's them, you know, be struggling they self, so

I was like, I was, you know I did a lot of, I worked a lot, so I was able to help them out and help you know, do my household, so you know so, she called and encouraged me. Still, it isn't, you know, you know, she just is like pray about it you know, pray because we were brought up in the church, so we pray.

He continues by adding,

She just, you know, encouraged me, you know, "Like, it's going to be good," that type of nature but you know financially or anything like that, Nah. I mean, whatever they could give me sometimes I'd accept it, but you know, but I don't really call them with my problems because I know they are struggling back home. So, you know, I just suck it up and take on the chin."

Participant 7 describes that advice from her family given regarding pushing through despite the circumstances. Participant 7 explains,

It's the mentality that black people have, that you just push through it, it'll be all right, praise God type of thing, and I'm not saying those things are not good, but they're not very objective. Like there are some things that you just don't know how to engage and maneuver through. So, when you're coming from our culture of individuals that don't have that upper hand in the academic arena, there's not so much that you can ask them, right? And we're at a disadvantage. I believe that minority, not just being African-American. Still, minorities have a disadvantage when you haven't had generations and generations and generations of education versus other people who have had tons of aunts and uncles that are doctors, lawyers, who received an education, and Ph.D. graduates. That's difficult to navigate.

There have been situations where I have told family members I'm experiencing something I don't know if it's prejudice or racism or this, but the first thing, I guess, is because of history and their experience; everything has to be about race. And sometimes, it isn't about race. Sometimes it isn't, and sometimes it is, but I need more than they dislike you. And what do you do with that?"

Participant 6 says that she has spoken to parents of the students who are participants of the after-school program she is involved with that don't want their children to go out of state for college. She expresses to the interviewer,

We've always tried to figure that out. And I think that's probably a good study to be explored. Because a lot of times, I mean, students will often say that their parents are scared. And so, I don't know what that fear is. And a lot of times, we do hear of black kids going missing or your students not making the best decisions because they are far away from home. So, I think maybe those are things that we have to address as far as you should perhaps attend college tours. Perhaps you should travel more as a family, little things like that."

Participant 10 explains what it was like being a first-generation college student, and sometimes his parents didn't understand things. He clarifies to the interviewer earlier instances during grade school and then advises during college. He states,

It was, I don't know. I think I felt it more growing up and being in high school, middle school. When we needed help in school, I didn't need it much, but my sister struggled with reading, and my mom would make me teach her. But my parents would also struggle with helping us out. And that may have been attributed to them just going to high school; they didn't really know how to teach. Not to say that they don't know the

information; they just probably don't know how to explain it to us so that we could have understood at that time. But I guess that sometimes can play a role in my experience, being that it's not like I can rely on my parents for understanding what I was going through. So, I got a lot of my guidance in college from other adults. So, I think we all can relate to how that would play out if your own family members felt like they weren't being confided in when they may have wanted to be, but I don't know.

The interviewer asks if he could explain times he received advice from other family members during college or more self-navigation. He explains to the researcher that it was more self-navigation and his parents never really understood things in which he had to carry on that self-navigation into college. Participant 10 explains to the interviewer,

As I said, I did a lot of self-navigation. There were many things that, as I said, my parents didn't understand that was going on. Things were going on after school, and you needed to be there or sometimes the extracurriculars or needing to get other jobs outside of the school. Even when it came down to when I started working in the club, my parents thought I was partying, much as I would tell them, I'm not partying, I'm working, getting paid. My dad, he just, to him, it was like, "No, you out here to party." But Will Smith said it; parents just don't understand.

I just hope I can have some level of understanding when it comes to talking to my kids. My biggest thing is making sure that I'm constantly changing, always trying to better myself in the way I usually interact with but respond to my kids. And I don't want to repeat those same patterns. Try to prevent that as much as possible."

Subtheme 5c: The Impact of MANRRS

The organization, Minorities In Agriculture, Natural Resource and Related Sciences (MANRRS), has been identified by the majority of the participants as an accentuation towards their success within the college experience and was a great way to network with URM students. MANRRS played a significant role regarding leadership roles for most participants as well. Participant 9 describes his first introduction to MANRRS through the summer program that brought him to college. He explains how MANRRS was influential for many URM students and was the core of everything. He expresses to the researcher,

I was involved with MANRRS since maybe my freshman or sophomore year of college. Because I was out of school and came back when I came back, I was really involved in that. MANRRS was actually mandatory at my school if you went through the Summer Bridge Program. So, what it did was it gave us that support that we needed. It kept giving us that support. We didn't know anything different, so for underrepresented students in the College of Ag that wasn't part of MANRRS, they would complain about certain things; I was like, I ain't never experienced any of that. So, we knew nothing different, and I would say MANRRS; I didn't appreciate my MANRRS experience until I got to grad school and was like, "Oh, it's not the same everywhere." I was also a part of, oh what else did we have? We had a Collegiate FFA. I wasn't messing with that. We had an Ag Leadership club. I wasn't messing with that, really. I was like an Ag ambassador for the college, which also included working, like helping out with all the 4-H stuff and all of that."

The researcher asked Participant 9 if his participation in MANRRS affected his undergraduate and graduate experience in various ways. He explained to the researcher,

It built me a network man. It made me a network, and it helped me think about myself as being bigger than the school. I'm not just a student of Ag at Illinois. I'm bumping shoulder with people all over the world. I'm working with these different companies, building contacts at all these different companies. Now I'm working on my public speaking. I'm working on my presentation and my dialog, all the things. So now I'm good. I really have nothing to worry about. I think it gives you that sense of relief that even if your department that you're in or the college that you in don't support you at the highest level, I got a whole thing over there where I'm good. I don't have to depend on what could be a flawed system. So, it helped me as far as my leadership. It put me in rooms even at my institution that I wouldn't have been in. That I wouldn't have been in because it put me around the deans. It put me around other influential people that if it weren't for a focused program like MANRRS, they would've never been meeting with us or trying to hear what our point of view was.

So, it really elevated me on campus, in my college, and inspired me to take leadership in other non-Ag things, which I think was also important. Because in MANRRS, we were actually learning how to be leaders. In these different clubs and groups, you don't learn anything about leadership. You just get a position, and you try to figure it out. We were the few people, especially coming out of Ag Ed; we knew what leadership was. We learned how to do these things, but you don't know what you know. You don't know how valuable that information is until you get out and start using it in other places."

The researcher asks Participant 9 if MANRRS influenced the decisions he made regarding his education and current career. He continues by adding,

Oh yeah. Indeed, and I think what ended up happening was even the leadership that I've taken on campus. The kind of jobs that I've taken were all based on different skills that I learned in Ag Ed, whether it's the community development piece, whether it's the leadership like the pure leadership piece, or whether it's the facilitation. All of those things are things that I used in my career. I find it really interesting that two of my previous bosses, not people who were right above me but people who were above them, were former extension agents. They were doing nothing to do with Ag, but one was our Dean of Students. Another is one of the biggest fundraisers on campus. You can clearly see the difference in how they work with people and how they navigate the system. It's all based on what they learned in leadership through Ag Ed."

Participant 4 explains agricultural organizations he was initially a member of to the researcher, which introduced him to MANRRS. Participant 4 explains,

The first organization I was in was called ASABE: American Society of Ag and Biological Engineers. That's my profession's society. When I was at A&T, I was the president of our student chapter; I think my junior and senior years.

My mentor, Dr. Gale, took me to my first ASABE conference, and I went to several subsequent conferences after that. Then, I think it was my junior year; I found out about MANRRS. Dr. Gale told me he was actually one of the people that brought MANRRS to A&T. I think one of my first MANRRS conferences; where did we go? I think we were in Overland Park.

Yeah, and then, where did we go? When I was at Penn State, I was at the MANRRS conference in Orlando, and then where did I go? That might've been my last...No. Was it? It might have been. I think I went to present a poster, but maybe it was Orlando. Then,

after that, I attempted to go, but I got too busy with my work. I was still active with the MANRRS chapter at Penn State and then the MANRRS chapter at Iowa State; I was active with them. Then, I went to one of the regional meetings for the one at Iowa State. One of the regional meetings that I already set up was at the University of Minnesota. So, I was active, but initially on the undergrad level, but on a graduate-level; well, once I got to Iowa State, I kind of just stepped back. I would help them with whatever they needed and stuff like that, you know?"

Participant 6 explains how participating in secondary school organizations influenced her to join MANRRS during her undergraduate and graduate careers. She explains to the researcher,

During my undergrad years, I knew I wanted to continue my involvement. So, at Virginia State University, I was involved in MANRRS, and MANRRS was very, very affording when it came to internships, job opportunities, studying abroad. So, it motivated me to find those opportunities. So, it allowed me to be inspired as a freshman in college to mentor within my new community, which was Petersburg, Virginia.

I was mentoring at Ebenezer Baptist Church, at the Boys and Girls Club on Main Street. I had an opportunity to mentor in Richmond. So, it was just a great opportunity at a university. Being at a university was an excellent opportunity to work within communities that I identified in but in a different space to serve. So that was awesome. I was so happy that Virginia State University was active and had additional resources, and I was willing to participate because of my previous experiences at home."

Participant 6 explains to the researcher that despite working in her degree field, she isn't doing the work she would like to do regarding her passion for youth development and college

readiness. The researcher asked Participant 6 how she would want to work in that realm someday. She details to the researcher,

“So, I think students must take advantage of organizations such as MANRRS and be heavily involved in organizations in general because you get to see different careers that are out there. You get those positions that you never really knew existed or you never thought about. So those positions include the cooperative extension and working at a university, and learning the programs they have that work directly with farmers if you come from that background. Or you have organizations that are reliant on USDA funds and programs that have open positions at a federal level, and you have to know what agency to apply for within USDA.

So, students must be aware of these jobs and these positions to know what they can do to prepare for those positions and what kinds of connections they should make. These organizations provide the opportunity to know what's out there to understand that, "Oh, USDA has civil rights. Oh, they have an education outreach department, or they have an animal science and animal care department." So, it's just an excellent way to explore different careers that are out there. So, I personally would enjoy supporting any type of agency that is funding organizations, or that is funding research."

Some participants expressed to the researcher that they were a part of MANRRS to a certain extent and would participate in events occasionally. Participant 7 explains,

“I am part of an organization, but they're not agricultural-based. As I said before about my department, it did have something more like nutrition, science kind of base. That would be something that I would have participated in and been in, I know in the past, I've

been a part of MANRRS, but within Virginia Tech, I have not been a part, been there, aided, but my schedule is hectic."

Participant 10 tells the researcher, "Yeah, I dealt with MANRRS. That was pretty much it for the grad school because other than that, I was dealing with my fraternity as an advisor."

He also explains to the researcher how he would recruit fellow students to some of the MANRRS meetings and events at his PWI. Participant 10 states,

"Yes, I would let them know that things were going on and if I was going and try to bring some people with me or something like that. I let them know I was headed down there or headed to whatever meeting, something that was open to them. That was pretty much how I would do that, but I wasn't organized about it because I wasn't even then about showing up to the meetings myself. So, we had a lot on our plate, considering we were doing our dissertations and thesis, all that kind of proposals, all that teaching. So, a lot of times, I would stay in my office and grade because that's what I had to take care of."

Participant 2 details to the interviewer that she was a part of MANRRS briefly during undergrad but not during graduate school. She explains to the researcher,

"As such an undergrad, I was briefly a part of MANRRS. It was very new at Clemson at the time when I started. So, I didn't get to do as many things with them other than maybe like fundraising, you know, like cute stuff like movie nights and stuff like that. Just kind of like fellowships type of stuff, so it was still nice to know there were other people. Still, I also think that it's kind of hard when, like everybody's not, you don't have people in that group who are a part of your discipline because the dialogue is different with every profession. Numerous times in those groups, as much as you want to be able to make friends, socialize, and do that sort of thing, you also want to further your knowledge and

ability to understand where you're working. You hear from people who look like you, potentially act like you, or just have the same ideas and background. And, in general, Clemson has an extensive AVS program, Animal Veterinary Sciences, so a lot of the people in it were animal and veterinary science people. Nonetheless, I loved them and appreciated the opportunity. Then in graduate school, I had been a part of the International Wildfire Association."

The researcher asked some participants about recruitment, leadership roles, and other ways MANRRS affected them or should be promoted. Participant 6 details the importance of recruitment and leadership roles within MANRRS. She explains how she has recruited fellow students to MANRRS and the reputation of recruiting students from other disciplines to join and participate in MANRRS. She explains to the researcher,

"Yeah, that's always an important topic within MANRRS, in my experience, because I have been a member of MANRRS for six years. All of the years that I was in college, I participated in MANRRS. We've always wanted to recruit not an only agricultural college of ag students, but students in the other sciences. So that was very important. So, we recruited mathematic students, students in engineering programs, sciences, chemistry, and biology. So that has always been a thing. I've always been actively recruited within the college of agriculture. I have seen great success within a lot of my peers, as far as obtaining jobs in internships by attending some of our MANRRS conferences."

The researcher asked if she has ever had any leadership roles or considered any leadership roles within her respective MANRRS chapters. Participant 6 details to the researcher,

"So, I've only had leadership roles within my chapter organization, which were vice-president, secretary, sergeant at arms, and, I think, graduate representative. However,

MANRRS also has a national society leadership role that I've always considered, never participated in. But it's something I definitely look forward to. If I return back to graduate school, I would like to hold a role in the national office organizational structure."

Participant 9 describes that MANRRS was the organization he constantly promoted to URM students to join and participate in meetings at the respective PWI's he attended. He explains to the researcher,

"MANRRS. MANRRS. Literally, every underrepresented person I would meet, whether at Illinois or Virginia Tech, if they had anything to do with Ag or related sciences, I would invite them just to be a part of that network. Then once I began to work in academic support and student success, I referred students then, ones I would work with. I think you can benefit by being a part of this community and the resources that come along with it. Absolutely as an undergrad, grad, and as a professional."

The researcher asked Participant 9 if he's been in any leadership roles within MANRRS or his respective chapter. He states,

"I guess in MANRRS, I was a professional advisor. In grad school, I was a graduate advisor. Then in undergrad, I was like the liaison to the greater college board. I was a student in undergrad, but I was on the leadership board for the College of Ag. My position was just to be the liaison for MANRRS. I can't think of a time since I haven't been involved in MANRRS in the past two years. Before that, for the project for a decade, I had a leadership position."

The researcher asked participants what should organizations such as MANRRS do to improve college programs for career opportunities. Participant 9 states,

I think what I've noticed here, at least, is that if the advisor doesn't work or isn't a high-level official in the college, so almost at a dean level, then it's going to be very difficult for your MANRRS chapter to be really, really successful. Especially at a larger school. So, I think a part of the strategy should be to if there are no Black and Latino people who can really lead a chapter in your dean's office, that there should be clear instructions and a focus. Or partnering with whatever academic unit, academic college, the dean's office in whatever school it is to make sure that MANRRS is taken care of and not just seen as another club on campus, because it's not just a club."

Participant 4 expresses to the researcher that exposure to MANRRS is needed and the consideration professional city-wide MANRRS chapters. He explains to the researcher,

"I mean, I like how MANRRS has Junior MANRRS. I do like that, starting that maybe, starting that even more in that may be partnering with school systems and not just individual schools. And trying to, perhaps if you have a university chapter have one member from that chapter, adopt the school and start up a program there, that might be something to do."

He goes in-depth with the researcher by stating,

"But I just think overall exposure needs to be increased. Like, if you compare MANRRS to FFA, right? Their resources are crazy.

They are crazy. And this is my personal opinion, but I haven't been involved in MANRRS in a long time. Sometimes I think we get pennies compared to them, you know? And right now, the big thing is diversity and inclusion. So, I would say we have to leverage that more. You have all of the enormous Ag companies, Bayer and Syngenta.

MANRRS has to leverage itself more than what's occurring because we're a viable resource, you know? And I can remember one time that I think a big company had donated to MANRRS overall. And I think we tried to get a donation from them, and it didn't work out, because overall, I mean, they had donated MANRRS and not to the individual chapter."

He also emphasizes to the researcher,

"Now I think about it; I think one thing MANRRS can do, they have to get involved in the inner cities, especially with... The big thing is urban agriculture now, you know? I think maybe applying for funding with different municipalities and stuff like that, starting MANRRS in some of these cities, not just at the university level.

I mean, treat it like professional MANRRS chapters; in some of the inner cities that have urban agriculture, it would renew that image, it would bring new blood in, and it won't be traditional agriculture, so to speak, you know?"

Theme 6: The Pathways: Understanding the climate and the culture of programs and organizations.

Participants expressed to the interviewer some of the challenges and barriers within their respective programs and colleges may have them question themselves. They may be experiencing the imposter phenomenon and imposter syndrome. Participants also gave specifics to what a URM student should do if they are experiencing the imposter phenomenon or imposter syndrome.

Subtheme 6a: Agricultural/Natural Resource Climatic culture

Some participants expressed to the interviewer how they felt they had to navigate the culture in their respective major, program, or field within agriculture or natural resources.

Participant 4 expressed to the interviewer the challenge and barriers he had to address while attending the respective PWI's for graduate school. He explains to the researcher,

"I would just say; Barriers, hmm. The first one, I would say, is the community, the development of the community. At both schools, there was a Black Students Association, so that did help. One is just getting your legs up under you when you're moving into a new situation, as far as starting new research, learning the ropes, and stuff like that. Another one is finding allies, people that really support you. They want you to succeed. It's not about what you can give them; it's more mutual. I would say, also, just. What were some challenges?

I'll say this, man. I had a huge issue at Iowa State. It's just that, as African-American students, we've always thought that we had to be ten times better. Seeing a lot of the mediocre work that was being produced that really bothered me from some of my counterparts is just other white folks and stuff like that, and knowing that I couldn't do that. I have a higher expectation of myself, and there's always going to be a microscope on me."

Participant 5 detailed to the researcher how colleges of agriculture should expand their leadership, outreach, and mentorship. The participant suggested this based on experiences from his undergraduate and graduate career at a PWI. He also details how URM students have to seek out professors of color instead of relying on organizations or the program. He explains to the researcher,

That's more of a you kind of seek that out yourself type thing. To be honest, when you think of professors, and you think of what it means to be one if you're a professor at a university such as Virginia Tech, North Carolina State University, pretty much just any

university, you are a subject matter expert, but that subject matter only encompasses a very small fraction of all knowledge in that field. Just as a poultry immunologist is not the same as a swine immunologist, those are two similar things, but they're entirely different."

He continues by adding,

Typically, you don't need a huge legion of these professors in the same field. Typically, you would only have one in each field, maybe two if it's a really, really happening field, but they would have different expertise regardless. It's kind of unrealistic for a university just to sit there and hire the mold breakers because at the end of the day, you kind of miss out on the overall package, so you can't just hire people because you want a little bit of what I would call flavor in the department. You can't just expect students to go to the flavor just because they're of that color as well. People want to follow their interests, not just go and be the minority professor because they look similar. It might be an easier route to go to be understood, feel valued, and gain confidence.

Then at the same time, they would just be overwhelmed because I know that many professors of color the students of color do flock to them. Professor of color likely become even more overwhelmed with their community obligations because they take on the role for some of these underrepresented minorities as well."

The researcher asks Participant 5 if he felt that if colleges or programs hire more people of color for diversity and inclusion purposes, would that help with recruitment and retention efforts. He clarifies to the researcher,

Yeah. If you take the time to hire a professor who can relate to students of a different demographic, if you take the time to hire somebody like that, that's good at their job and can relate, I mean to me, it's a home run hire because I mean it really does so much for not only just the academic development of those students because they can reach their goals, but just for their mutual wellbeing, just seeing that somebody like that because honestly, if you're going to a four-year university, especially in agriculture, you probably do have ambitions of either becoming a professor or going out into the workforce. Regardless you're still underrepresented no matter which route you take because a majority of the bachelor's holders in agriculture are predominantly white as well."

Participant 7 explains the importance of being prepared for conferences regarding the presentation of research or networking. She explains to the interviewer,

I think what's missing is that you have to have a game plan when you go into these conferences. Even before the game plan, I mean, I know it's challenging to get abstracts accepted or accepted for presentations, so I can't say how you maneuver that. That's just because some people choose. However, once you get in and go to these conferences, it needs to be some programming or some type of guidance before attending what these organizations can do to help people maneuver these spaces because you can get overwhelmed. You can feel like, "Oh, I don't deserve to be here, or my research is not as good." That's not the mentality you need to have going in. And mentality is of you have this innovative thing, this at least whatever you're working on, someone else's isn't working on, and you want to be able to project that to other people and tell them how important it is and be confident in what you found, right?"

She continues in detail, stating,

Not necessarily be confident in how you're being perceived or whatever. It's more of what your work is, right? And so, when people go into these conferences, it's important for them to know how to navigate and communicate with people. And remember that it's just conversation. Engaging with them, finding out whatever they're doing is interesting or what they find interesting, with a particular person latch onto that and just be organic about interactions you are having. You're not going to meet everybody. You're not going to be friends with everybody, but if you can get one or two individuals to meet to talk about career opportunities or talk about what you want to do and what you desire to do. That you have that, I'll personally say I've experienced where I've been in a group of people, and we ate right after a presentation.

And I didn't feel like I had anything to contribute or anything that was research-related that I was engaging with them. And so, not necessarily do I feel like an imposter, but I just felt a disconnect. You are going to feel a disconnect, and that's okay. Just know that just because you have one of those experiences does not mean that the experience will be like that the next time. So, I have had other conferences I've connected so well, so it's a hit or miss, but don't internalize it as if you don't have anything to contribute. It's just; sometimes, there's just no connection there when it comes to certain people. And that's all I can say is just have a game plan and have your game face on when it comes to entering conferences and try to steer away from that fear and that internalized idea that you're not enough or whatever you're doing isn't enough. It's not directly on you. Just remember that it's not directly on you. It's about what you're doing, not who you are."

Subtheme 6b: STEM Disciplines climatic culture

Both of the participants within STEM expressed to the interviewer how they felt they had to navigate the culture in their respective major, program, or field within agriculture or natural resources. Participant 8 describes a time in which he felt the culture of his department was somewhat intimidating compared to the environment and culture at the HBCU he attended during his undergraduate career. He explains to the interviewer,

Okay, I'll say this. At Morehouse, that experience was unique because that's the only time you're not the minority. You share a sense of peace and comfort within that environment, and you never really lack the confidence that you can't do something. I don't think I ever had that experience in that four or five-year environment I had.

At Virginia Tech, it was different because there were other races and just a lot more resources and levels of understanding, I would say, in specific departments. Tools, funding, etcetera would make it very intimidating compared to some of my white counterparts. It became evident that there was a gap there. I think in large part that's just the departmental resources over years and years and years and years, the things that they can have to really investigate ideas and gather information and produce learning."

He also explains that,

It came back to them in that form, and it's just not a field of study within my department that is a focal point at a liberal arts college like Morehouse. That was an intimidating thing, coming to Virginia Tech to be an instructor on that level because the bar felt higher.

Participant 1 expressed a time when he felt his department misunderstood him based on his interaction with one of the instructors within his department. He explained to the researcher that

he felt like he was experiencing the imposter phenomenon and imposter syndrome during his doctorate. He explains,

I think the biggest experience is just pretending like you know what people are talking about, but you don't, so you have to not your head during conversations and then try to find ways of asking people what they are talking about without either looking dumb or looking inadequate or looking like you weren't paying attention are. I think it's that last one that really creates a lot of anxiety is like, "I am paying attention. I just don't understand," and people don't get that. "How don't you understand?" Because you're using references I'm not familiar with. There's a lot of unspoken understandings going on, and I don't know what they are. So, you just try to. You hope. Experience is sort of more like hoping that what you're doing, what you're putting all this effort into, is the right thing to even put all your effort into.

Yeah, because it's different. It's really different. Yeah, I think it is because there's a lot of Eurocentric cultural context that I've discovered along the way only in hindsight really as like, "Okay, that's how everybody knows what that means." Even within my first year, I learned that asking certain questions had offensive implications. And, because of the cultural way that the white professors just naturally operate, they're thinking I mean what they would mean by that question, and it is an entirely different thing. The question was, "Can you give me the big picture?" You're like, "What are we talking about?" "Can you give me the big picture?"

He continues to elaborate about the conversation with his department head regarding asking about the bigger picture to a professor. He highlights that,

Well, I did confirm this with the head of my department, who is a white male, that I had to ask him, "Hey, culturally, am I asking ... When I ask for the big picture, is that taken as asking for every single detail of the class all at once?" He said yeah. I was like, "That's not what I'm asking for." But, would that be offensive to a teacher to ask the teacher, "Hey, teach me everything that ..." Does that get interpreted as me asking, "Teach me everything from the whole semester right now?" He's like, "Yeah, that's how that would be taken." I was like, "Oh, I can see how that would be offensive," and he said yeah, and he didn't even know that there was another interpretation of it. I shared with him what I was asking for, and he paused and said, "Oh, yeah, that would ..."

He didn't even know how to reply, really. It was his first-time hearing that, so he had to think about it, and the conversation just got left there. But, I discovered that, man, there are certain questions that I've always, being at an HBCU, growing from a Black family, being around Black people, when you ask for people, "Okay, wait, tell me a big picture first," that's an easy thing to do. You're not asking for every single detail. You're asking for like a summary. We just call it a big picture, but to us, a big picture is, "What's the context?" And then, you go into details, whereas, apparently, in this culture, that's not what they do, and that has been a very ... That has made it extremely difficult to pretend like I know what people are talking about. Obviously, we had to wait until the end of a semester to get that big picture statement and then have to go back and then relearn everything because I never learned it in the first place. It was just confusing."

Summary

The results from the analysis of interviews of participants have been shared with the researcher throughout this chapter. The researcher executed a thorough analysis of participant interview transcripts which led to six primary themes. The following themes discussed in-depth within the chapter are: 1.) The Road to Diversity and Inclusion; 2.) "Fake it Til You Make It": Navigating the Feelings of the Imposter Phenomenon and Imposter Syndrome; 3.) Mentorship and Advisement; 4.) URM Experiences; 5) We Are Family; 6) The Pathways: Understanding the Climate and Culture of Programs and Organizations.

CHAPTER 5: SUMMARY AND DISCUSSION

Introduction

Chapter five includes a condensed summary of the study, an overview of the need for the study, limitations of the study, assumptions, followed by a conclusive discussion regarding the overall findings based on the research questions and objectives. Recommendations for practice and future research are also included.

As discussed throughout this document, the purpose of this study was to examine the experiences of current and recently graduated URM graduate students in agricultural and natural resource programs. The purpose of the researcher was to determine the factors that were more likely to increase imposter syndrome and imposter phenomenon and those that helped reduced these negative experiences of graduate students. This study looked to address the gaps within the literature by focusing on the following questions:

1. How does the imposter syndrome/imposter phenomenon create a barrier to underrepresented minority student enrollment and retention in College of Agriculture Programs at Land Grant Universities?
2. How do agricultural and natural resource-based collegiate organizations support underrepresented minority students in conquering the barriers imposed from the imposter phenomenon/imposter syndrome?
3. What contributions do faculty and staff of color mentor underrepresented minority students in agricultural and natural resource-related majors and fields?
4. How can Colleges of Agriculture Programs recognize the Imposter Phenomenon/Imposter Syndrome and how it affects recruitment and retention trends of underrepresented minority students?

Summary of Study

The researcher asked participants questions regarding their perceptions of the imposter phenomenon and imposter syndrome that possibly occurs within URM students in Agricultural, Natural Resource, and STEM majors and fields. The researcher also asked participants how the imposter phenomenon and imposter syndrome affect the recruitment and retention trends among URM students in these respective majors and occupations. The study included 10 participants (n=10) in which nine participants were African-American, and one participant was Native American. Out of the 10 participants, seven participants' background was in Agriculture, two participants' experience was in STEM, and one participant's background was in Natural Resources. Out of the 10 participants, seven attended and matriculated degrees from an HBCU before attending a PWI for graduate school.

This qualitative phenomenological study was formed from a snowball sample at Virginia Tech and branched off to other students and alumni from numerous institutions. The researcher acquired from emails sent to the researcher based on recruitment flyers and advertisements posted in respective GroupMe accounts for URM graduate students at Virginia Tech and other institutions nationwide. The researcher sent follow-up emails to individuals that expressed to the researcher regarding participation in the qualitative study. Some participants founded was through word of mouth from original participants in the study.

Significance of the Study

There is an increased demand for diversity and inclusion within the agricultural, natural resource, and STEM education and career fields. There is also a critical needs assessment regarding the mental health statuses of underrepresented individuals in these particular spaces that are limited in diversity and inclusion. Understanding relationships between the mental

health of URM individuals and navigating majority-white areas within these fields can help reveal the impact of the imposter phenomenon and imposter syndrome of URM individuals. Understanding these relationships will also determine if recruitment and retention within these fields are affected. People of color daily have to navigate majority-white spaces while finding the strength and courage of mental preparation for challenges within these spaces. The examples of underrepresented minorities' lack of representation in these fields are most likely the culprit of racial microaggressions, oppression, and lack of understanding through majority white populations. The discussion regarding the underrepresentation of minorities in these various fields is likely, but unfortunately, there haven't been many solutions towards changing that narrative. According to Cropps (2019), the underrepresentation of Black women in graduate education is a vicious cycle.

There is a significant difference in the completion of college between minority students and white students. Race and socioeconomic status of students influence the achievement gap. (Petty, 2018). Numerous studies on college student retention and academic performance show that minorities are more likely to face obstacles that play a prominent role in that student's success (Ballard, Gilmore, Keith & Ore, 2008). According to Petty (2018), to describe the gaps between African American and Latino students compared to their white counterparts and those from low-income households. Understanding the importance of analyzing the imposter phenomenon and imposter syndrome of URM students will suggest and create needed literature about proper recruitment and retention strategies in agriculture, natural resources, STEM, and related fields in which diversity and inclusion are imperative. Academic achievement and success can easily be affected by the notion of race, class, and gender; therefore, an individual may experience the imposter phenomenon and imposter syndrome. Colleges of Agriculture,

Natural Resources, and STEM-related fields should consider in-depth communication focusing on underrepresented groups. The purpose of this addresses barriers that would possibly increase the success rate of minority students within these spaces.

Assumptions

1. The sample studied represents URM individuals who have experienced the imposter phenomenon and imposter syndrome within agricultural, natural resource, and STEM-related majors and fields.
2. Research participants in this study answered all the questions asked by the researcher open and honestly.

Limitations of the Study

Interviews for participants for the study took place from March 2020 to January 2021. There were limitations to finding and acquiring participants for the study due to the COVID-19 Pandemic shut down, which prompted a smaller sample size than initially anticipated. The study's other limitations did not include Asian and Hispanic/Latinx participants' different perspectives from other URM groups regarding the imposter phenomenon and imposter syndrome.

Discussion

In this section, the researcher describes how the participants' responses relate to the literature around the subthemes. The overarching theme and related subthemes will present the information. Attention to detail regarding the Imposter Phenomenon and Imposter Syndrome among the first-generation URM students was very prominent throughout the research study. As explained to the researcher, the participants in this study dealt with the imposter phenomenon and imposter syndrome in numerous instances. The findings within the study suggest that the

imposter phenomenon and imposter syndrome were much more prevalent to the participants that identified themselves as first-generation college students. Many of the participants were first-generation college students when attending their respective undergraduate institutions and graduate institution. When asked by the researcher if they felt that being an underrepresented minority played a role in the feelings of being an imposter, the majority of the participants agreed. The majority of participants echoed that being exposed to the many resources at their respective PWI coming from an HBCU was somewhat overwhelming.

Research implies that first-generation students experience the imposter phenomenon more often and at higher levels than other students (Martinez et al., 2009; Terenzini et al., 1996). The participants that also identified as first-generation college students explained to the researcher that family support was critical to their motivation and success during graduate school. According to Blackwell & Pinder (2014), the family environment can influence self-efficacy through parental support and encouragement. Ramsey & Brown (2018) emphasizes that the imposter syndrome predominantly works against successful academic goals. Academic libraries can contribute to the effort necessary to counter imposter syndrome through various initiatives that support students to find their place on campus, gain confidence in their abilities, and deepen their understanding of their evolving academic identity (Ramsey & Brown, 2018). Differences in the levels of academic performance between Black and White students are often attributed to weaknesses in Black students' academic and personal orientations to college (Feagin, Vera, & Imani, 1996).

Participant 2 explained to the researcher how she felt that her appearance as a Black woman in a natural resource setting could bring feelings of the imposter syndrome. She detailed to the researcher,

"I would say a big way I'm different is because I don't believe in, would say, I would say there is like an outdoorsman logic. You know there's like an outdoorsman look. It's very like gritty, arduous, umm you know flannel, and you know khaki pants or harsh denim jeans and boots, whereas me, I'm like, lighter, I'm like flowy, hippie-esque. Umm, I don't like as much equipment-type stuff. I don't enjoy, I guess, that grungy type feels of it. I enjoy being able to express femininely if I want to in those sorts of settings. In which in graduate school I feel like you see more, and in undergrad, I don't feel like more because people, because some people are developing their personalities of who they are."

According to Quinlan (1999), "Women often have different needs and concerns from their male counterparts and face a complex, interrelated set of career issues that may be outside men's experience. Such problems may consist of feelings of isolation, high-stress levels, and low self-efficacy. They can potentially cause women to have a more difficult time establishing mentoring relationships than their male counterparts (Quinlan 1999; Patton 2009). According to Silas (2016), by assisting students of color in circumventing barriers in higher education, universities will be able to inch closer to their goals of facilitating a student-centered experienced. Colleges and universities must ensure that the imposter phenomenon/imposter syndrome is understood thoroughly among faculty and staff so proper procedures can be taught to undergraduate and graduate students about coping with the phenomenon if experienced.

Understanding Diversity and Inclusion: Why It's Needed in Agricultural, Natural Resources, and STEM Programs and Fields?

The participants felt that diversity and inclusion at these colleges and universities were lacking, especially in their respective majors or program. Many participants agreed that

recruitment is essential at these colleges and universities, but retaining students of color is even more vital. Personal experience can bring influence and perspective to the beliefs they most likely have. The retention of college students is a complex issue, representing an interplay of individual, institutional, and societal factors (Brunsden, Davies, Shevlin, & Bracken, 2000) that attribute to student difficulty and dropout. Recruitment and retention of students should be a priority of colleges, regardless of whether or not a student is a minority (Silas, 2016). According to Silas (2016), universities are providing opportunities for students to better themselves. Programs such as FFA, 4-H, MANRRS, and relevant collegiate extracurricular programs are essential for students of color within agriculture. Programs such as these create motivation and self-efficacy for URM students if they feel confident and feel welcomed. Colleges students in both undergraduate and graduate pursuing careers in agriculture must be aware of and educated in the cultural diversity of the agriculture industry, be mindful of the misconceptions they might have, and work to manage their bias in their professional careers (Drape, Lawrence, & Westfall-Rudd, 2020).

Most of the participants mentioned that the push for diversity and inclusion often comes along with the side effects of racial microaggressions. Many participants expressed that creating inclusive and welcoming spaces and environments is imperative for recruitment and retention strategies for programs and fields. Participants said to the researcher how they are different in various ways compared to their white counterparts. Participant 7 earlier explained to the researcher that she dealt with a very passive-aggressive professor during class. She believed that her race played a factor in that, and when she reached to her advisor about the situation, the advisor was somewhat dismissive.

Diversity and inclusion are an educational philosophy that welcomes all learners by engaging them actively in educational programs regardless of their race, ethnicity, or exceptionality (LaVergne, Larke Jr, Elbert & Jones, 2011). LaVergne et al. (2011) state that diversity inclusion is also the act of acknowledging these differences and, in turn, fostering an atmosphere to teach every student in the classroom effectively. According to Wehbe-Alamah and Fry (2014), creating a culturally sensitive and welcoming academic environment for diverse students consists of five components: (1) student-centeredness; (2) on-going cultural assessment and evaluation of students, faculty, staff, and the academic department; (3) educational and curricular adaption and accommodation; (4) on-going cultural competence training; and (5) programmatic adaption, accommodation, and revision. Suppose participants continue to engage in concentrated efforts to cultivate diverse and inclusive environments. The climate within colleges of agriculture could shift, thereby dealing with some of the perception issues plaguing the field.

Importance of Pre-College Programs and Secondary School Organizations for Urban and Rural Youth

Participants expressed that participating in pre-college programs or secondary school programs that focused on agriculture, natural resources, and STEM impacted their decision to the major in which they enrolled their degree. According to Wiley, Bowen, Bowen, and Heinsohn, (1997), “Colleges of agricultural sciences should create pre-college programs for ethnic minority students to deliver the desired knowledge and, if needed, changed attitudes toward the food and agricultural sciences” (p. 28). Opportunities for recruitment into agriculture, natural resource, or STEM-related programs and fields for rural and urban youth is very critical. Recruiting and retaining historically underserved and underrepresented populations in colleges and universities

with agriculture and natural resources are critically needed. Recruiters need to visit high schools and market their programs to guidance counselors and teachers (Westbrook & Alston, 2007) in the inner city or underserved communities to help promote the importance of agriculture. Researchers have emphasized recruiting and selecting diverse students in graduate education is essential (McKinney & Capper, 2010), although the research on program admission decisions is scant (Karanxha, Agosto, & Bellara, 2014). Dyer and Breja (1999) reported that retention predicted by examining the criteria students admitted is likely. After-school and extracurricular activities enrich the experience, knowledge, and life skills needed for youth success upon entering adulthood (Smith, 2017). Phipps (2008) states that agricultural-related youth programs are formal and non-formal programs tailored for youth on agricultural education instruction, natural resources, and related topics in school. These programs consist of agricultural leadership, urban gardening/horticulture, nutrition, agri-science, and STEM-related clubs or programs that deliver youth healthy living, learning, literacy, leadership, and professional development, life skills, and citizenship opportunities (Phipps, 2008). Enrollment in secondary agriculture classes and agricultural experience were two factors that appeared to have a more accurate predictive value of student retention (Dyer & Breja, 1999). According to Outley (2008), negative perceptions of careers in agriculture and natural resources are also a significant barrier to the recruitment and retention of minorities. Programs such as Junior MANRRS, FFA, and 4-H would be a start to help recruit URM students to agriculture, natural resource, and STEM-based fields if the proper exposure is available. According to Haas, Mincemoyer, & Perkins (2015), 4-H youth programs utilize structured activities as a means to develop leadership, citizenship, and critical life skills. It is essential if URM students in K-12 grades are exposed to professionals in these fields early to develop an interest or passion for pursuing an education or career within

these fields. Inner city youth gear their perceptions on engineering education, and horticulture fields greater than youth in rural areas participating in agricultural areas and environmental backgrounds (Alston & Crutchfield, 2009).

HBCU Experience Played A Significant Role in Navigating PWI's for Graduate School

Historically Black Colleges and Universities (HBCUs) many times provide opportunities for camaraderie among students of color. The seven participants that attended an HBCU during their undergraduate experience expressed that attending an HBCU helped with confidence during their PWI (Predominantly White Institution) experience. Many participants said they chose or decided to go to graduate school at a PWI due to HBCU's not having their major or program of choice to enroll in a graduate degree. Some of the participants expressed that the HBCU environment was more comfortable navigating than their respective PWI because of the support received from their professors, fellow students, and the overall atmosphere of their respective HBCU. Some participants expressed to the researcher that the barriers and challenges faced were the lack of support at their PWI. According to Davis (1991), social support networks and minority undergraduate students' academic success-related outcomes are essential. Davis (1991) also contended that social support is positively related to an individual's health and well-being. African Americans at HBCUs differ in intellectual and psychological development from African Americans at PWIs. African Americans at HBCUs develop stronger relationships with fellow students, professors, and advisors. Additionally, they have greater satisfaction in their academic performance; they are more involved with organizations; they have a greater desire to succeed. African Americans attending PWIs tend to be separated from, are less social, and stay to themselves (Wardlow, Graham, & Scott, 1995; Westbrook & Alston, 2007).

Participant 10 expressed how he felt that HBCUs often prepare students to be workers rather than owners. He explained to the researcher,

The hindrance was recognizing my own experience and seeing what it was doing to other students, not just black students, but students in general, in the department. This might just be based on my own personal views, but I'm sure that what I'm saying makes sense. When I look at how our department taught us, and the way that we were being pushed as far as finding careers and things like that, they pushed us so hard to get into production, working in plants, producing meat. I never even got exposed to the plants like that, but definitely the meat. It was almost like they wanted us to just go straight to that like- It felt like they were building a workforce. It seemed like I was being backed into a corner of decisions as far as what I could do with what I was. Despite the fact that there are so many other options, it just wasn't being pushed like that. Because they don't teach you that, "Oh, you go to college to mow grass." "But what about the fact that you could have been telling me I could have gone to college to own the business that has people that cut grass?" Do you know what I mean? Like-

He expressed to the researcher that he did better understand once attending graduate school and his perception changed looking in hindsight. He explains that,

It's not the conversations, especially if you want us to advance in our communities if this is what we really, you're going to be about. Or are you just trying to build a workforce for white America?" I don't know. I feel like that's where we were being pushed. But when I got to the graduate level, there was a whole different type of mindset. And when I got exposed to writers like Paula Faris and understanding what it means to have a teacher-to-student relationship, or a student-to-student relationship, or student-to-teacher

relationship. Understanding what those things mean and what those concepts mean helped me to really look back at not only my work experiences and the racial things that I dealt with in that sense too. Or even my experiences in college and high school, looking at how my teachers taught us, thinking about, "What were the format? What was their formula for teaching us and making sure that we got the information?" A lot of it was like memorization-type stuff.

And then, once we got to a certain point, it was like, "Okay." College was, "Let's go to these plants. We'll expose you to the other stuff, but we're going to put you to work." So, I mean, it was cool. I understood it, but I feel like where it lacked was, I never was taught to think outside of that. I wanted to, and I was reacting to it, but I wasn't able to really process my thoughts on working outside that box within agriculture. And that took me going somewhere else, to see other people's trains of thoughts, and to see how that same thing ... A lot of those kids that grew up on farms still think like that too. They're like, "I'm going to college, and I'm going back to the farm."

He also details that,

And I had to look at how they process it because some of those kids were looking at it as a sense of, "Oh, I can do things with what I'm learning and make it better for this operation we already have." But it's not like I was really exposed to that. You don't just, "I'll just walk around and talking to farmers back home." So, it's all new experiences, man. It's all new experiences. And we just got to take them in for the process and respect the process.

According to Seidman (2005), campus climate and the ability to cope with a campus environment, among other factors, affected the likelihood of a student matriculating through

college. There must be transitional programs between HBCU's and PWI's that can help assist and aid students to adapt to these respective environments. The interchange is vital for both types of institutions which would help facilitate consistent and constant recruitment and retention patterns these institutions would desire to have.

MANRRS Helps with URM Students' Navigation in Agriculture and Natural Resources'

Majors and Fields

The majority of the participants say there were involved with MANRRS during a period while in college. MANRRS and other agricultural organizations can bridge students' success, motivation, and self-efficacy in their major field or program. Participants expressed that MANRRS was a "breath of fresh air" from their actual major or program in which they felt comfortable and could be themselves. Organizations such as MANRRS could somewhat decrease or prevent URM individuals from having feelings of the imposter phenomenon and the imposter syndrome due to the available resources. Students of color are likely to feel more comfortable around others who like them and can relate. One of the biggest challenges facing agriculture and natural resource professionals and educators is recruiting and retaining traditionally underserved populations (Outley, 2008). MANRRS plays a pivotal role in helping URM individuals recruit and retain agricultural, natural resource, and STEM-based programs. Student organizations such as Collegiate FFA, Collegiate 4-H, and societies such as Gamma Sigma Delta play a critical role in academic support, social support, mentorship, and professional development (Barber, 2020). Still, URM students have to be encouraged thoroughly or feel like they belong in these organizations. Currently, MANRRS is the only organization that focuses primarily on providing activities, programs, and network opportunities to support the

professional development of underrepresented minorities within agricultural careers (MANRRS, 2018).

Critical Race Theory and Racial Identity Development Theory Impact in the 'Cancel Culture' Era

Many challenges exist for recruiting students into agriculture disciplines, one of which is the old perception of agriculture as a modern profession (Beyl, Adams & Smith, 2016). Critical Race Theory (CRT) has been misunderstood recently and viewed negatively within many circles. There have been bills passed in numerous municipalities and states to ban the teaching of CRT in multiple school systems and local education agencies. There has even been a push to ban some CRT courses and programs at some colleges and universities. CRT must be understood and not misunderstood within agriculture, natural resources, and STEM-related fields. According to Simpson (2019), CRT particularly indicates the inherence of race and racism and its pervasiveness within society. CRT criticized through a current example of the New York Times (2019) 1619 Project recently, which sought to put the history and effects of enslavement and Black Americans' contributions to democratic reforms at the center of American History (Sawchuk, 2021). According to Sawchuk (2021), this academic understanding of critical race theory differs from representation in recent popular books and, especially, from its portrayal by critics-often, though not exclusively, conservative Republicans.

Participant 1 describes how he felt about the teaching of CRT in a course and how he felt other races misunderstand his race. He explains,

Yeah, so there were these different crits. Different crits are like: there was critical race theory, which was originally just talking about race in education and started talking about the difference between Blacks and whites, and then it expanded into white critical theory

and Asian critical theory and LGBTQ critical theory with these different set of groups, and there was a passage that really encapsulated where it was saying, "Well, no one else has had to deal with these specific instances for one of those other subgroups," and I was like, "Black people have dealt with all of it, so you can't try to specialize one group while simultaneously denying another one. That's the exact opposite of what you claim you're doing." So, there was a lot of that. There was a lot of that lack of understanding of my racial group for another people's benefit. I thought that was very offensive, and, for the professor to be apparently very naïve to that, I thought it was typical of a predominantly white institute.

The critical race theory (CRT) movement is a collection of activists and scholars engaged in studying and transforming the relationship between race, racism, and power (Delgado & Stefancic, 2017). CRT acknowledges the endemic nature of race, racism, and White supremacy within US society and its institutions (Matsuda et al., 1993, Dixson & Rousseau, 2006). According to Solórzano, Villalpando, and Oseguera (2005), there are at least five defining elements that form the "basic assumptions, perspectives, research methods" (p.274) of CRT: (a) the centrality of race and racism; (b) the challenge to the dominant ideology, including challenges to colorblindness and race neutrality; (c) a commitment to social justice and praxis; (d) the centrality of experiential knowledge; and (e) an historical context and interdisciplinary perspective. CRT validates the experiential knowledge of people of color as necessary and legitimate means of gaining insight into the lived realities of racial inequity and institutional racism (Delgado-Gaitan, 1994). According to Depouw and Matias (2016), through counter-

storytelling, or stories counter to dominant majoritarian ideology, we validate the experiential knowledge of parents and highlight the relationship between academic research and lived reality.

Understanding the imposter phenomenon and imposter syndrome within agricultural and STEM-related careers through the critical race theory (CRT) allows for a thorough understanding of practices teachers use in their classrooms and their confidence to teach in a diverse learning environment. CRT's validation of the experiential knowledge of people of color and its emphasis on interdisciplinary work and the commitment to social justice and praxis means that CRT is in dialogue with social context and heterogeneous experiences. (Depouw & Matias, 2016). Areas of CRT that yield an intersectional approach to critical race analyses include critical race feminism (CRF) (Wing, 2003), LatCrit (Bender & Valdes, 2012), Asian American Pacific Islander (AAPI) Crit (Teranishi, Behringer, Grey & Parker, 2009) and Tribal Crit (Brayboy, 2005).

Interdisciplinary and conceptualized knowledge further supports the validity of intersectionality (Crenshaw, 1991) because intersectionality recognizes the importance of context and the complexity of lived experience. According to De Reus, Few, & Blume (2005), intersectionality referenced the ability of social phenomena such as race, ethnicity, class, gender, nationality, knowledge, and religion to construct peoples' notions of self and others mutually first introduced to CRT through CRF.

Implications for Practice

Underrepresented Minority Students have a variety of barriers and challenges they face day to day suggested by this study. Suppose colleges of agriculture, colleges of natural resources, and STEM-related fields want to change the lack of diversity and inclusion within these areas. In that case, there has to be a critical seriousness and intention of creating holistic strategies regarding recruitment and retention.

The implication of conquering and interrogating white supremacy and the whiteness as property mantra throughout all levels at these colleges and universities is critical. The study findings suggest that many programs and disciplines at colleges and universities create levels of racial microaggressions which creates unwelcoming environments. Ignoring race, gender, and cultural differences creates hostile environments which suggests oppression. Subsequently, when recruitment efforts primarily focus on structural diversity of students while ignoring how racism is prevalent within the culture of colleges and universities, diversity and inclusion efforts become negated.

Culturally responsive programs and training is paramount for faculty and staff understanding how to promote racial equity, promotion, and justice. Leaders within these particular spaces have to seek ways to improve initiatives that support diversity and inclusion. Many participants expressed that the lack of diversity and inclusion within these areas increases feelings of the imposter phenomenon and imposter syndrome. Impostor syndrome aligns with the internalized racism concept, particularly around superfluous questions of one's abilities or merit (Dancy II & Jean-Marie, 2014). According to Dancy II and Jean-Marie (2014), people of color suffering from internalized racism adopt the belief that Whites are superior to people of color. Cokely et al. (2017) suggest that impostor syndrome can lower self-esteem and exacerbate the well-being and mental health that minorities already experience due to discrimination on college campuses. Recommendations of the impostor syndrome are more salient for ethnic minorities because they are aware of the negative stereotypes associated with their intelligence (Petty, 2018).

Colleges of agriculture, colleges of natural resources', STEM-related fields should consider diversity and inclusion programs within their respective colleges. Programs and help

can come within training faculty and staff on how to understand and teach URM students. Faculty and staff must be comfortable serving these underrepresented populations, which could help increase diversity and inclusion efforts within these respective colleges and programs. Other resources should consist of individual advising or mediation for students of color and events that promote diversity and inclusion within these spaces to make students of color feel comfortable. Many of these environments create a mantra of a "Whiteness Is Property" atmosphere which could be intimidating for many URM individuals. Participant 9 expressed to the researcher that based on his experiences working at a large PWI regarding student success, he states,

I think what I've noticed here, at least, is that if the advisor doesn't work or isn't a high-level official in the college, so almost at a dean level, then it's going to be very difficult for your MANRRS chapter to be really, really successful. Especially at a larger school. So, I think a part of the strategy should be to if there are no Black and Latino people who can really lead a chapter in your dean's office, that there should be clear instructions and a focus. Or partnering with whatever academic unit, academic college, the dean's office in whatever school it is to make sure that MANRRS is taken care of and not just seen as another club on campus because it's not just a club.

Colleges of agriculture, colleges of natural resources, and STEM-related fields should create literature regarding the imposter phenomenon and imposter syndrome to understand the term beyond graduate students. The terms imposter phenomenon and imposter syndrome within graduate school environments rather than undergraduate environments. The importance of knowing the phrase within undergraduate students prepares students in understanding what

feelings they are possibly experiencing and allows for further research, coping mechanisms, and suggestions in eliminating those particular feelings.

Colleges of agriculture, colleges of natural resources, and STEM-related fields should consider keeping a diverse pool of candidates when job postings and openings are available. The administration has to be willing to change the narrative of minimal diversity and inclusion efforts to help better create a comfortable environment for these underserved populations. There has to be more than one person of color within these environments in which URM individuals can feel welcomed and comfortable. According to Russell (2020), understanding experience and feelings of students from all backgrounds in a post-secondary setting could benefit faculty and staff as they prepare campus initiatives and campus climate research.

Recommendations for Further Research

The primary focus of this qualitative phenomenological study is to highlight the issues of URM individuals experiencing challenges and feelings of navigating spaces within predominantly white institutions in which they possibly experienced the imposter phenomenon and imposter syndrome. A researcher would implement this qualitative phenomenological study to understand how students of color feel in their respective major/minor in agriculture, natural resources, or related fields. A researcher would implement this type of study to obtain information regarding the motivation to seek a career or continue their education within agriculture, natural resources, or STEM-related fields.

The experiences of URM individuals of other races need consideration to give a holistic approach to challenging feelings of the imposter phenomenon and imposter syndrome throughout colleges and universities in various regions of the United States. It is essential to

understand URM individuals' emotions in several areas that may affect the overall study because of the racial makeup and demographic in certain regions.

The consideration of making this study a mixed-methods study would possibly further reach the demographic needed for the study. URM students would take a quantitative survey which would create particular sample sizes and see the impact nationwide of URM students that may experience the imposter phenomenon or imposter syndrome at their respective college or university. The consideration of having this particular study within the agricultural, natural resource, or STEM-related workplaces would also determine how often URM individuals within these career workspaces deal with the imposter phenomenon and imposter syndrome.

The suggestion of creating a system of *paper, pedagogy, practice, and policy* is needed to promote successful practices regarding recruitment and retention of URM individuals in agricultural, natural resource, and STEM-related disciplines. The researcher suggests that *paper* adequately would determine a thorough planning process for programs at colleges and universities that helps determine understanding the Imposter Phenomenon and Imposter Syndrome while promoting culturally responsive teaching. *Pedagogy* suggests the proper implementation and teaching of this academic and social phenomenon within these colleges and universities to help with recruitment and retention of URM individuals within these respective disciplines. *Practice* implies the critical action of ensuring the execution of diversity and inclusion initiatives. The support of having financial resources, implementation requirements for experience of diversity and inclusion trainings, and relevant understanding of the imposter phenomenon and imposter syndrome. *Policy* is indicative of these programs and disciplines at these colleges and universities to provide opportunities for URM individuals equity and access. This is critical to help with recruitment and retention of URM individuals in these programs,

majors, and fields that would help create a better perception of agriculture, natural resources, and STEM-related fields.

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APPENDIX A – RECRUITMENT LETTER



COLLEGE OF AGRICULTURE AND LIFE SCIENCES
AGRICULTURAL, LEADERSHIP,
AND COMMUNITY EDUCATION
VIRGINIA TECH.

**Agricultural, Leadership, and
Community Education**
214 Litton Reaves Hall
Blacksburg, Virginia 24061
P: (540) 231- 5717
F: (540) 231-3824

Protocol No: IRB #19-1007

CURRENT UNDERREPRESENTED MINORITY (URM) MASTERS OR DOCTORAL STUDENTS OR RECENTLY GRADUATED FOR INTERVIEW

**Title: Analyzing the Imposter Phenomenon through Recruitment and Retention of Underrepresented
Minorities in Agricultural and Natural Resource Related Fields: The Keys to Diversity and Inclusion**

Dear Participant,

Individuals are needed to take part in a confidential interview for a study about analyzing the imposter phenomenon/imposter syndrome of underrepresented minority students in agriculture or natural resource related majors, fields, or disciplines based on recruitment and retention trends and effects. The imposter phenomenon/imposter syndrome is defined as a motivational disposition in which persons who have achieved some level of success feel like fakes or imposters. The interview process will take approximately 60 minutes via in person, by phone or video conferencing. Participants will receive a \$10 gift card to thank them for their participation.

You are eligible to participate in the study if you:

- Identify as an Underrepresented Minority (URM). Underrepresented Minorities (URM) in this research are people that are identified as African American/Black, Asian, Hispanic/Latinx, Native American/Alaska Native, Native Hawaiian/Other Pacific Islander, who have historically comprised as a minority of the U.S. population.
- Are 18 years of age or older.
- Are currently enrolled as a graduate student or recently graduated from an Agricultural or Natural Resource program. (Masters or Doctoral)

If you are interested in participating in the study or have questions about the study or eligibility, please contact Mr. Courtney Lawrence at 910-964-0381, or by email at court18@vt.edu. You may also contact Dr. Donna Westfall-Rudd at mooredm@vt.edu regarding participation interest or questions about the study.

Sincerely,

Courtney M. Lawrence
Co-Investigator
Ph.D Candidate & Graduate Teaching Assistant
Agricultural, Leadership & Community Education
228 Litton-Reaves Hall (0323)
175 West Campus Drive
Blacksburg, VA 24061
Email: court18@vt.edu

Donna Westfall-Rudd, Ph.D
Principal Investigator
Program Director & Senior Scholar
CALs Graduate Teaching Scholars Program
Associate Professor
Agricultural, Leadership & Community Education
284 Litton-Reaves Hall (0323)
175 West Campus Drive
Blacksburg, VA 24061
Email: mooredm@vt.edu

APPENDIX B – RECRUITMENT FLYER

CALL FOR RESEARCH PARTICIPANTS

CURRENT UNDERREPRESENTED MINORITY (URM) MASTERS OR DOCTORAL STUDENTS OR RECENTLY GRADUATED FOR INTERVIEW



TITLE: ANALYZING THE IMPOSTER PHENOMENON THROUGH RECRUITMENT AND RETENTION OF UNDERREPRESENTED MINORITIES IN AGRICULTURAL AND NATURAL RESOURCE RELATED FIELDS: THE KEYS TO DIVERSITY AND INCLUSION

INDIVIDUALS ARE NEEDED TO TAKE PART IN A CONFIDENTIAL INTERVIEW FOR A STUDY ABOUT ANALYZING THE IMPOSTER PHENOMENON/IMPOSTER SYNDROME OF UNDERREPRESENTED MINORITY STUDENTS IN AGRICULTURE OR NATURAL RESOURCE RELATED MAJORS, FIELDS, OR DISCIPLINES BASED ON RECRUITMENT AND RETENTION TRENDS, EFFECTS, AND THEIR EXPERIENCES. THE IMPOSTER PHENOMENON/IMPOSTER SYNDROME IS DEFINED AS A MOTIVATIONAL DISPOSITION IN WHICH PERSONS WHO HAVE ACHIEVED SOME LEVEL OF SUCCESS FEEL LIKE FAKES OR IMPOSTERS. THE RESULTS WILL BE USED FOR MY DOCTORAL DISSERTATION AT VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (VIRGINIA TECH).

ELIGIBILITY:

- IDENTIFY AS AN UNDERREPRESENTED MINORITY (URM). URM IN THIS RESEARCH ARE PEOPLE THAT ARE IDENTIFIED AS AFRICAN AMERICAN/BLACK, ASIAN, HISPANIC/LATINX, NATIVE AMERICAN/ALASKA NATIVE, NATIVE HAWAIIAN/OTHER PACIFIC ISLANDER, WHO HAVE HISTORICALLY COMPRISED AS A MINORITY OF THE U.S. POPULATION.
- ARE 18 YEARS OF AGE OR OLDER.
- ARE CURRENTLY ENROLLED AS A GRADUATE STUDENT OR RECENTLY GRADUATED FROM AN AGRICULTURAL OR NATURAL RESOURCE PROGRAM (MASTERS OR DOCTORAL).

THE INTERVIEW PROCESS WILL TAKE APPROXIMATELY 60-120 MINUTES VIA PHONE OR ZOOM VIDEO CONFERENCING. PARTICIPANTS WILL RECEIVE A \$10 AMAZON GIFT CARD FOR THEIR INTERVIEW PARTICIPATION.

INTERESTED IN PARTICIPATING OR HAVE FURTHER QUESTIONS?

CONTACT : COURTNEY LAWRENCE, MS.ED, CO-INVESTIGATOR
DOCTORAL CANDIDATE, AGRICULTURAL, LEADERSHIP, AND COMMUNITY EDUCATION
PHONE: 910-964-0381/757-708-6693 | EMAIL: COURTL8@VT.EDU

OR

DONNA WESTFALL-RUDD, PH.D, PRINCIPAL INVESTIGATOR
EMAIL: MOORED@VT.EDU
VIRGINIA TECH PROTOCOL NO: IRB #19-1007

APPENDIX C – CONSENT FORM

RESEARCH SUBJECT CONSENT FORM

Title: Analyzing the Imposter Phenomenon Through Recruitment and Retention of Underrepresented Minorities in Agricultural and Natural Resource Related Fields: The Keys to Diversity and Inclusion.

Protocol No.: IRB #19-1007

Sponsor: None

Co-Investigator: Courtney Lawrence
228 Litton-Reaves Hall
175 West Campus Drive
Blacksburg, VA, 24061
United States

Principal Investigator: Donna Westfall-Rudd
268 Litton-Reaves Hall
175 West Campus Drive
Blacksburg, VA, 24061
United States

Daytime Phone Number: 910-964-0381

You are being invited to take part in a research study. A person who takes part in a research study is called a research subject, or research participant.

APPENDIX D – INTERVIEW PROTOCOL

Interview Protocol

My name is Courtney Lawrence, and I am a PhD candidate at Virginia Tech. I would like to begin by thanking you for participating in this interview today. The purpose of this interview is to collect information about analyzing the imposter phenomenon/imposter syndrome of underrepresented (URM) minorities in agricultural and natural resource related majors and fields. Also, the purpose of this interview is to identify how the phenomenon affects the recruitment and retention trends of URM individuals in agricultural and natural resource related majors and fields. Today, I will to ask you questions regarding your experience in one of these roles.

We will start by talking about your role as a participant in this study and obtaining informed consent. Then, I will ask questions from my discussion guide. My role as the interviewer is to ask questions related to specific topic areas of interests, request additional details on specific responses, and keep track of time. This interview will last approximately one hour in length.

First, will you please read and review the consent form. If you have any related questions, please feel free to ask them throughout. **(Allow time to read)**

What questions do you have?

(Participants read the consent form, collect signed consent forms. Resume interview [~5 minutes]).

Keep in mind during this interview that there are no right or wrong answers. If at any time you feel uncomfortable or unsafe in the interview, please let me know and we can discontinue the interview the recordings will not be utilized and will be destroyed.

For the purpose of this study, we will need to record this discussion. Is it alright with you, if we use a recording device for the interview?

I will begin recording now. (Allow the interviewee to read their assigned participant name to 'record' voice recognition)

Interview (60-120 minutes)

Racial Identity

Proposition #1: Acknowledgement of racial identity is critical when addressing with the imposter phenomenon and imposter syndrome with college students.

1. How do you define racial identity?
2. How do you respond to classroom discussions about race?
3. What college or university do you currently attend or did attend?
 - a. What is/was your major or field of study?
 - b. Where did you attend college for your undergraduate career?

4. Describe the time you have felt like you lacked the confidence in meeting the expectations of being a successful college student.
5. Have you ever considered leaving your colleges program?
6. What were the circumstances that lead you to consider leaving? (optional prompted based on response to #5)

Imposter Phenomenon/Imposter Syndrome

Proposition #2: The imposter phenomenon and imposter syndrome should be acknowledged within agricultural or natural resource related fields.

1. Please describe how you decided to attend a Predominantly White Institution (PWI).
2. Please describe any barriers or challenges you had to address to attend the PWI.
3. Have you experienced a moment during your undergraduate or graduate college experience which you believed to be bluffing or pretending to be something you are not?
4. Describe if there is any way in which your identity seems to be just like or different from other students in your college (i.e. first generation, gender, ethnicity, race, place of origin).
5. If you do see the differences between your identity and others, how have you responded to the differences?
6. Have you felt the need to change those differences?

Agricultural & Natural Resource Based Organizations and feelings of impostorism

Proposition #3: Participation of Underrepresented Minority (URM) students in agricultural and natural resource student-based organizations has to be thoroughly encouraged which can possibly decrease or eliminate feelings of being an imposter.

1. Are you currently part of any agricultural based student or community organizations. If so, what organizations are they?
2. Were you ever involved in any agricultural education-based organizations during secondary school? If so, how was that experience?
3. Describe your participation in that organization
4. Describe how your participation has affected your undergraduate experience.
5. How does that participation influence the decisions you're currently making as far as your education?

Participation in Agricultural & Natural Resource Based Organizations and Self-Efficacy

Proposition #4: URM students who would be able to participate in 4-H, FFA, MANRRS, or similar organizations would be a start to help to develop a self-efficacy while learning and performing tasks within agricultural and natural resource related programs

1. Have you invited or tried to recruit other underrepresented minority (URM) students to meetings of agricultural organizations you're a member of?
2. Have you had leadership roles in these organizations. If so, what type of roles?
 - a. If so, what type of roles?

- b. If not, have you considered taking a leadership role?
3. How do you see these leadership roles contributing to your self-confidence and success?
4. How have you used your leadership roles to help your fellow students in the organization?
5. What do you see these organizations need to do to improve the college program or visibility of career opportunities?

Role Models

Proposition #5: Faculty and staff of color in agricultural related programs and fields can act as role models and motivate URM students to pursue degrees in agricultural related fields.

1. Did you take any courses under a professor or faculty member of color? How would you describe the experience?
2. Are there any professors of color in your major? If so, have they been helpful guidance while pursuing your degree?
3. Are there other people of color in administration or student services who have been helpful to you while pursuing your degree?

Colleges of Agriculture, Colleges of Natural Resources, and Colleges of Science

Proposition #6: Colleges of Agriculture, Colleges of Natural Resources, and Colleges of Science need to consider the impact that the imposter phenomenon/imposter syndrome has on URM students.

1. Has the student organizations or department help you connect with other professors of color?
2. Has the student organizations or department help you connect with faculty members that are not of color?
3. What programs, services, or other opportunities have you been involved with on campus that have helped you feel like part of the campus community?
4. How did you learn about and become involved in these opportunities?

URM Student Experiences

Proposition #7: First-generation URM college students in agricultural related fields are more likely due to experience the imposter phenomenon/imposter syndrome than students aren't first generation college students.

1. Are you a first-generation college student or the first to attend college in your immediate family?
 - a. If so, how has that experience been for you?
 - b. If not, what type of advice have you received from other family members?
2. Describe the experiences you've possibly felt which you have experienced the imposter phenomenon/imposter syndrome

3. Do you feel that being an Underrepresented Minority (URM) student played a role in that feeling?
4. What advice would you give other URM students who are in an agricultural related major that is possibly experiencing feelings of being an imposter?
5. What recommendations do you have for coping or prevention of the imposter phenomenon/imposter syndrome?

Wrap-Up (Remaining Time): We have reached the end of our preplanned questions. Is there anything else you would like to share with the research team?

Again, thank you for your participation in this interview. I will transcribe this session verbatim. I will then interpret the findings to learn more about URM Student Perspectives of the Imposter Phenomenon & Imposter Syndrome regarding recruitment and retention trends in agricultural/natural resource related programs, majors and fields. We may need to contact you during the data analysis process. I will send a complete transcript of what you said for you to make sure that I have captured your words verbatim, and that you are comfortable with the characterization of your statements. After initial data analysis has occurred I will share the emergent themes with you, and I would like to meet to talk with you to make sure that the themes are congruent with your understanding. If at any time after this process you have any questions or additional comments, please feel free to contact me.

APPENDIX E – IRB APPROVAL LETTER



Division of Scholarly Integrity and Research Compliance

Institutional Review Board

North End Center, Suite 4120 (MC 0497)

300 Turner Street NW

Blacksburg, Virginia 24061

540/231-3732

irb@vt.edu

<http://www.research.vt.edu/sirc/hrpp>

MEMORANDUM

DATE: January 24, 2020

TO: Donna Marie Westfall-Rudd, Courtney McIvor Lawrence

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires October 29, 2024)

PROTOCOL TITLE: Analyzing the Imposter Phenomenon Through Recruitment and Retention of Underrepresented Minorities in Agricultural and Natural Resource Related Fields: The Keys to Diversity and Inclusion.

IRB NUMBER: 19-1007

Effective January 24, 2020, the Virginia Tech Human Research Protection Program (HRPP) and Institutional Review Board (IRB) determined that this protocol meets the criteria for exemption from IRB review under 45 CFR 46.104(d) category(ies) 2(ii).

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

This exempt determination does not apply to any collaborating institution(s). The Virginia Tech HRPP and IRB cannot provide an exemption that overrides the jurisdiction of a local IRB or other institutional mechanism for determining exemptions.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<https://secure.research.vt.edu/external/irb/responsibilities.htm>

(Please review responsibilities before beginning your research.)

PROTOCOL INFORMATION:

Determined As: **Exempt, under 45 CFR 46.104(d) category(ies) 2(ii)**

Protocol Determination Date: **January 24, 2020**

ASSOCIATED FUNDING:

The table on the following page indicates whether grant proposals are related to this protocol, and which of the listed proposals, if any, have been compared to this protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

APPENDIX F – A PRIORI TABLE

Proposition	Supporting Literature	Research Questions	Interview Questions
Acknowledgement of racial identity is critical when addressing with the imposter phenomenon and imposter syndrome with college students.	<p>Lee (2018) states for a student from a historically disenfranchised or racially marginalized community, college matriculation difficulties can be exacerbated because of issues of oppression, experiences with isolation (Harper & Hurtado, 2007), and struggles with a sense of belonging (Strayhorn, 2012).</p> <p>Racially minoritized students in the United States, who primarily attend PWIs, face the challenge of considering and resolving questions of identity in environments that are generally unprepared to support them effectively (Feagin et al. 1996; Fleming, 1984; McEwen, Roper,</p>	RQ 1: How do the imposter phenomenon and imposter syndrome create a barrier to underrepresented minority student enrollment and retention in College of Agriculture and College of Natural Resource Programs at Land Grant Universities?	<ol style="list-style-type: none"> 1. How do you define racial identity? 2. How do you respond to classroom discussions about race? 3. What college or university do you currently attend? <ol style="list-style-type: none"> a. What is your major or field of study? b. Where did you attend college for your undergraduate career? 4. Describe the time you have felt like you lacked the confidence in meeting the expectations of being a successful college student. 5. Have you ever considered leaving your colleges program? 6. What were the circumstances that lead you to consider leaving? (optional prompted based on response to #4)

<p>The imposter phenomenon and imposter syndrome should be acknowledged within agricultural or natural resource related fields.</p>	<p>One factor that may influence the IP perceptions in college students is whether they are a first-generation college student, or the first in their family to attend to college (Peteet, Montgomery, & Weekes, 2015).</p> <p>Minority students have historically been underrepresented within STEM careers due to several factors, including societal expectations for different ethnic groups, historical laws and regulations that barred the entry of minorities into education and employment, and discriminatory policies and practices (Tsui, 2007).</p>	<p>RQ 1: How do the imposter phenomenon and imposter syndrome create a barrier to underrepresented minority student enrollment and retention in College of Agriculture and College of Natural Resource Programs at Land Grant Universities?</p>	<ol style="list-style-type: none"> 1. Please describe how you decided to attend a Predominantly White Institution (PWI). 2. Please describe any barriers or challenges you had to address to attend the PWI. 3. Have you experienced a moment during your undergraduate or graduate college experience which you believed to be bluffing or pretending to be something you are not? 4. Describe if there is any way in which your identity seems to be just like or different from other students in your college (i.e. first generation, gender, ethnicity, race, place of origin). 5. If you do see differences between your identity and others, how have you responded to the differences? 6. Have you felt the need to change those differences?
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<p>Participation of Underrepresented Minority (URM) students in agricultural and natural resource student-based organizations has to be thoroughly encouraged which can possibly decrease or eliminate feelings of being an imposter.</p>	<p>According to Dyer et al. (2002), students who have experience in agriculture, completed high school agriculture courses, were members of the FFA and/or 4-H, and lived in a rural setting are more likely to complete a degree in a college of agriculture than are freshmen who have not had those experiences.</p> <p>The discussion on motivation, student engagement and student achievement is prevalent in current studies in a variety of educational disciplines worldwide; however, a review of literature on agricultural education yielded no such trend (Anderson, 2013).</p>	<p>RQ 2: In what ways do agricultural based collegiate organizations support underrepresented minority students in conquering the barriers imposed from the imposter phenomenon/imposter syndrome?</p>	<ol style="list-style-type: none"> 1. Are you currently part of any agricultural or natural resource-based student or community organizations? <ol style="list-style-type: none"> a. If so, what organizations are they? b. If not, are you considering joining any? 2. Were you ever involved in any agricultural education-based organizations during secondary school? If so, how was that experience? 3. Describe your participation in that organization 4. Describe how your participation has affected your undergraduate experience. 5. How does that participation influence the decisions you're currently making as far as your education?
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<p>URM students who would be able to participate in 4-H, FFA, or MANRRS would be a start to help to develop a self-efficacy while learning and performing tasks within agricultural and natural resource related programs.</p>	<p>According to Sutphin and Newsom-Stewart (1995), students' interest in Agricultural Education courses may be affected by their perception of agriculture, including course content, pedagogical strategies, and career potential.</p> <p>Modern recruiting methods should be developed that capitalize on the favorable impression created by the FFA organization's image (Croom & Flowers, 2001).</p>	<p>RQ 2: How do agricultural and natural resource-based collegiate organizations support underrepresented minority students in conquering the barriers imposed from the imposter phenomenon and imposter syndrome?</p>	<ol style="list-style-type: none"> 1. Have you invited or tried to recruit other underrepresented minority (URM) students to meetings of agricultural organizations you're a member of? 2. Have you had leadership roles in these organizations? <ol style="list-style-type: none"> a. If so, what type of roles? b. If not, have you considered taking a leadership role? 3. How do you see these leadership roles contributing to your self-confidence and success? 4. How have you used your leadership roles to help your fellow students in the organization? 5. What do you see these organizations need to do to improve the college program or visibility of career opportunities?
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<p>Faculty and staff of color in agricultural related programs and fields can act as role models and motivate URM students to pursue degrees in agricultural related fields.</p>	<p>Teachers can function as role models and additionally as coaches to develop high quality learning environments and challenge their students to develop their full abilities (Warren & Alston, 2007).</p> <p>The purpose of a role model or mentor is to establish contacts, develop networks and uncover career opportunities</p>	<p>RQ 3: What contributions of support such as professors, industry professionals, or mentors have in the mentorship of underrepresented minority students in agricultural and natural resource-related majors and fields?</p>	<ol style="list-style-type: none"> 1. Are there any professors, faculty or staff that you consider a role model or mentor in your agricultural or natural resource related classes? <ol style="list-style-type: none"> a. If so, describe how they have been a role model or mentor. b. If not, have you considered to make them a mentor or role model? c. Are any of them underrepresented individuals themselves? 2. Have you had any opportunity to have faculty members that are not of color to be a mentor? 3. How would you describe that relationship?
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<p>Role models for URM students in agricultural related fields can help trends of recruitment of retention.</p>	<p>Much research has focused on the presence and importance of faculty role models in the major of choice decision for students. (Griffith, 2010).</p> <p>According to Griffith (2010), the fraction of female and/or minority faculty in STEM departments is very low, so if role models of the same gender or race are important factors in major choice, this could play an important role in the under-representation of women and minorities in STEM field majors.</p> <p>Westbrook & Alston (2007) emphasizes that African-American students who are surrounded by African-American professors are more likely to remain in the agricultural field</p>	<p>RQ 3: What contributions of support such as professors, industry professionals, or mentors have in the mentorship of underrepresented minority students in agricultural and natural resource-related majors and fields?</p>	<ol style="list-style-type: none"> 1. Did you take any courses under a professor or faculty member of color? How would you describe the experience? 2. Are there any professors of color in your major? If so, have they been helpful guidance while pursuing your degree? 3. Are there other people of color in administration or student services who have been helpful to you while pursuing your degree?
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<p>Colleges of Agriculture and Colleges of Natural Resources need to consider the impact that the imposter phenomenon/imposter syndrome has on URM students.</p>	<p>The lack of teachers representing diverse cultures exists within agricultural education, natural resources, and STEM as well (Silas, 2016).</p> <p>While impostors fear that others will detect their inadequacies, they openly derogate themselves, externalize successes, dismiss positive affirmations of others, and report feeling fraudulent. (Ferrari & Thompson, 2006).</p>	<p>RQ 4: How can Colleges of Agriculture or College of Natural Resource programs recognize the Imposter Phenomenon/Imposter Syndrome?</p> <p>RQ 5: In what ways does it affect recruitment and retention trends of underrepresented minority students?</p>	<ol style="list-style-type: none"> 1. Has the student organizations or department within your college help you connect with other professors of color? 2. Has the student organizations or department within your college help you connect with faculty members that are not of color? 3. What programs, services, or other opportunities have you been involved with on campus that have helped you feel like part of the campus community? 4. How did you learn about and become involved in these opportunities? 5. Are there ways in which you have hoped the campus administrators, faculty, or other community members would have helped you with your college experience?
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<p>First-generation URM college students in agricultural related fields are more likely due to experience the imposter phenomenon/imposter syndrome than students aren't first generation college students.</p>	<p>One factor that may influence the IP perceptions in college students is whether they are a first-generation college student, or the first in their family to attend to college (Peteet, Montgomery, & Weekes, 2015).</p> <p>Diversity within colleges and universities could possibly weaken racist perspectives that are prevalent in society; college may be a student's first-time engaging individuals from different racial and ethnic backgrounds (Saenz, 2010).</p>	<p>RQ 4: How can Colleges of Agriculture or Colleges of Natural Resource programs recognize the Imposter Phenomenon/Imposter Syndrome?</p> <p>RQ 5: In what ways does it affect recruitment and retention trends of underrepresented minority students?</p>	<ol style="list-style-type: none"> 1. Are you a first-generation college student or the first to attend college in your immediate family? <ol style="list-style-type: none"> a. If so, how has that experience been for you? b. If not, what type of advice have you received from other family members? 2. Describe the experiences you've possibly felt which you have experienced the imposter phenomenon/imposter syndrome. 3. Do you feel that being an Underrepresented Minority (URM) student played a role in that feeling? 4. What advice would you give other URM students who are in an agricultural or natural resource related major/program that is possibly experiencing feelings of being an imposter? 5. What recommendations do you have for coping or prevention of the imposter phenomenon/imposter syndrome?
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