

ABSTRACT

Foy, Katlyn R. Diversification in Agricultural Education: Examining the Experiences of Underrepresented Students Enrolled in an Agricultural Education Teacher Preparation Program at a University in North Carolina. (Under the direction of Dr. Wendy J. Warner).

The purpose of this study is to explore the experiences of racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, LGBTQ+, and males enrolled in an agricultural education teacher preparation program at a university in North Carolina. This study also aims to represent and encompass a broader perspective beyond race and ethnicity in agricultural education.

Krumboltz's Social Learning Theory of Career Decision-Making (SLTCDM) serves as the theoretical framework for this study. SLTCDM provides four categories that can be a factor in an individual's career decision-making process. This qualitative phenomenological study used the interviews of seven underrepresented students enrolled in an agricultural education program in North Carolina as the primary method of data collection. Through these interviews, the following four themes emerged: *Agricultural education and FFA background; intrinsic and extrinsic motivations behind becoming an agricultural educator; barriers and challenges of underrepresented students in agricultural education; and positive experiences of underrepresented students in agricultural education.*

The researcher recommends that more funding and scholarships be implemented that are tailored to underrepresented students in agricultural education. Additionally, agricultural education departments should seek out opportunities for agricultural educators, staff, and faculty that will support and foster conversations about diversity, representation, and unique student situations.

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Diversification in Agricultural Education: Examining the Experiences of Underrepresented
Students Enrolled in an Agricultural Education Teacher Preparation Program at a University in
North Carolina.

by
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DEDICATION

This project is dedicated to Jean Allen Judge, better known as Bop Bop, my late grandmother-in-law. You started this adventure with me but were never able to finish it. Thank you for opening my mind and challenging me to see beyond what is at the surface level. Your love of plants, animals, Jesus, and your family will always be a part of my best memories. Your friendship, continuous encouragement, monumental faith, and love for others inspired my passion and drive to finish this research topic. I hope that as a result of your lasting impact on those who loved you the most, the world may be a better and equal place for everyone.

BIOGRAPHY

Katlyn Foy is a native of Duplin County, NC, where she grew up on her family's generational farm. As an active member of the National FFA Organization, Katlyn found her passion for teaching and sharing the story of agriculture. This led her to North Carolina State University, where she completed a degree in Agricultural Education with a concentration in Agronomy. After completing her undergraduate degree in May of 2022, her love of learning and teaching led her back to NC State to pursue a Master of Science in Agricultural and Extension education as a graduate student. She will graduate in May of 2024 and is looking to pursue opportunities that align with her love of teaching and agriculture.

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CHAPTER I

INTRODUCTION

The population of the United States is diversifying at an increasingly high rate with each given census year. It is predicted by the U.S. Census over half of the nation's population will belong to a minority group by the year 2044 (Colby & Ortman, 2015). With a growing diverse nation, this increase can be predominantly seen within today's youth. As of 2019, for the first time in history, more than half of the United States population under the age of sixteen identified as racially or ethnically diverse (Frey, 2020). Due to this statistic, culturally responsive behavior among our youth is more important now than ever. In today's society, the scope of diversity extends beyond just race and ethnicity.

Public education has become increasingly diverse over the decades. As of 2014, public schools in the United States celebrated a massive milestone in which Latino, African-American, and Asian student population numbers have surpassed the number of white students enrolled in public education in the United States (Krogstad & Fry, 2014). Classroom diversity also includes students of different religions, sexual orientations, gender, language, economic status, etc. (Krogstad & Fry, 2014). Consequently, it is now more critical than ever for educators to be more responsive, accepting, and open to these changes in educational settings.

As public education has become more diverse, so has the student population. As of 2014, it was determined that 64% of children enrolled in primary and secondary education will identify with a minority group by 2060 (Colby & Ortman, 2015). This prediction results in a more diverse student population in all public education classrooms, including agricultural education (Milner et al., 2003). With growing diversity in the schools, students will continue to work and

learn with people from a variety of different backgrounds which will allow students to gain a deeper understanding of the world and culture around them. (Krogstad & Fry, 2014).

Students will need educators who share the same backgrounds and experiences due to the increasing nature of classroom diversity. Interactions between students and teachers who share similar race, culture, ethnicity, gender, etc., can help combat common stereotypes and biases in educational settings (Brown et al., 2017; Milner et al., 2003; Rodriguez & Lamm, 2016).

Creating these personal connections and promoting awareness of differences in the classroom can prevent students from developing biases and prejudices against those who are different from themselves in the future (Krogstad & Fry, 2014). Having diverse educators in the classroom is more important now than ever before.

As student and classroom enrollments have increased and changed over the years, teacher populations have also evolved and changed. However, the teacher workforce in the United States does not fully reflect the diverse population of students. In 2012, it was found that 82% of public-school teachers identified as white, 7% as African-American, 8% as Hispanic, and 3% percent as other (U.S. Department of Education, 2016). There is a need for a diverse teacher workforce to support these students in their educational endeavors. There has been an acknowledgment of several benefits associated with a diverse teacher workforce. It has been shown “racially diverse students who were assigned to race-congruent teachers,” may perform better academically (Sharp et al., 2019, p. 282). It has also been shown diverse students who are paired with diverse teachers have decreased disciplinary problems, are held to a higher academic standard, and have greater access to gifted education programs (Sharp et al., 2019). Furthermore, multicultural teachers can offer valuable experiences, motivation, compassion, and empathy to

their multicultural students. Diverse educators are also able to promote and implement culturally responsive behavior within their classrooms.

Diversity in education extends far beyond the aspects of race, ethnicity, and gender. The broader perspective now includes racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, LGBTQ+, and many more areas of underrepresentation. This larger view allows for the addressing of the needs of underrepresented students with a bigger goal in mind.

This broader picture of diversity also takes into account legislature and services needed to help support underrepresented students in education. For the 2021-2022 school year, almost 7.3 million students, or 15% of all students ages 3 to 21, received services under the Disabilities Education Act (IDEA) (National Center for Education Statistics, 2023). The U.S. Department of Education also recognizes Title VI as a resource for underrepresented students in education. Title VI “addresses overrepresentation, underrepresentation, and misrepresentation of students of color as students with disabilities” (U.S. Department of Education, 2024a). Title VI of the Civil Rights Act of 1964 “requires that students of all races, colors, and national origins have equal access to general education interventions and to a timely referral for an evaluation for disability and special education and/or related aids and services under the Individuals with Disabilities Education Act or Section 504 of the Rehabilitation Act of 1973” (U.S. Department of Education, 2024).

Teacher preparation programs also report a need for more diversity amongst their preservice students. This is also known as the educator pipeline. This pipeline provides an essential supply of teachers for public education classrooms and contains several gateways in pre-service educators' academic and professional career paths. These points consist of post-

secondary enrollment, enrollment in education programs, postsecondary completion, entering the workforce, and teacher retention (U.S. Department of Education, 2016). Minority teachers tend to decrease at multiple points along the way along the pipeline. Researchers have noted that during post-secondary enrollment and enrollment in education programs, the challenges of recruiting and retaining heterogeneous students into teacher preparation programs have been an ongoing obstacle. Diverse students leave teacher preparation programs due to “the marginalization of racially diverse preservice teachers and ineffective retention and recruitment practices” (Sharp et al., 2019, p. 282). Due to diminished diversity in pre-service educational preparation programs, efforts to promote, recruit, and retain a racially diverse educator workforce have become a challenge (U.S. Department of Education, 2016).

In the field of agricultural education, educator and student diversity have increased over the last several years. However, there still needs to be more representation from underrepresented groups in the teaching profession as a whole (Smith et al., 2021). In the collection of data from the National Agricultural Education Supply and Demand, ninety-two percent of all licensed agricultural educators were reported as White (Smith et al., 2021). In a study on pre-service agricultural teachers' perceptions of career barriers and support, it was found pre-service teacher cohorts are made up of 93.4% Caucasian, 2.4% Hispanic/Latino, 1.9% Native American, 1.4% African American, and 0.9% Asian students (Rocca & Washburn, 2008). Due to these findings and statistics, there is much concern about over-representation in agricultural education classrooms (Smith et al., 2021).

Most educators and students were considered to be predominantly White and male in the early years of agricultural education. Before 1965, African American male students enrolled in agriculture classes were not allowed to join the national organization (FFA) that represented

agricultural education. African American male students and educators formed and belonged to their organization, the New Farmers of America (NFA) (New Farmers of America Records, 1929-1965). These separate organizations were the result of segregation in public education. This all changed with the passing of the Civil Rights Act of 1964. Before 1969, women were also excluded from taking agricultural education classes in public schools and from joining the national organization (FFA) (National FFA Organization Records, 1928-2008). After 1969, the National FFA Organization allowed females to join and participate in agricultural education classes as well as the FFA (National FFA Organization Records, 1928-2008).

Students with disabilities were also excluded from public and agricultural education classrooms. Before 1975 and the passing of the Education for All Handicapped Children Act (Public Law 94-142), students with disabilities were denied access to education and the opportunity to learn (U.S. Department of Education, 2024b). It was found that only one in five children with disabilities were allowed to attend public school (U.S. Department of Education, 2024b). Many states had laws and policies in place to exclude students who had disabilities such as deafness, blindness, emotional disturbances, and intellectual impairments (U.S. Department of Education, 2024b). These exclusions resulted in the lack of participation from students with disabilities in agricultural education classrooms simply because they could not participate in school at all. Agricultural education classrooms and organizations have severely lacked diversity among the student and teacher populations because of these harsh exclusions over time.

Historical Experiences of Underrepresented Students in Agricultural Education

Agricultural education has predominantly served and supported Caucasian students and educators alike throughout history. In the early 1900s and even before then, Agricultural Education was not always equal for all students and educators. Education was segregated, and

underrepresented students and institutions were limited in resources and outreach efforts. In the early 1950s, changes to education and its traditional operating structure began to be made. With those changes, agricultural education was no exception. In 1954, the Supreme Court decided in the ruling of *Brown v. Board of Education*, which was a turning point for Civil Rights and ordered an end to school segregation. Individual states enacted desegregation legislation, and, as a result, some agricultural education programs throughout the South became unified as one. Due to the passage of the 1964 Civil Rights Act by President Lyndon Johnson, all Agricultural Education programs across the United States became unified under one national organization known as the FFA (an organization that supports agricultural education in public education) (New Farmers of America Records, 1929-1965).

This unification resulted in the loss of many teaching opportunities for underrepresented educators. Many agricultural education programs could no longer support two agricultural educators, and underrepresented teachers began losing their teaching jobs to white teachers (Flatt, 2022). If they did not lose their job, underrepresented teachers were demoted from being vocational agriculture teachers to lower-paying positions with fewer opportunities (Flatt, 2022). Once the underrepresented community began experiencing a decline in underrepresented teachers and leaders, underrepresented students lacked role models in agriculture and were encouraged to choose other career pathways (Flatt, 2022). Underrepresented students who have the financial resources to pursue agriculture are still being advised to choose other career pathways (Alston & Wakefield, 2022). Additionally, underrepresented students need to be made aware of the potential to succeed in the agriculture field of study because they are commonly encouraged to pursue other outlets (Alston & Wakefield, 2022). This unification created new

problems and opportunities for agricultural students and agricultural educators alike. The effects of this unification can still be observed in agricultural education programs today.

Legislation and policies have been approved and passed in recent years to support underrepresented agricultural education teachers and students. The National FFA Organization has made strides to bridge any gaps surrounding diversity and inclusivity in agricultural education classrooms. Public Law 116-7- National FFA Charter Amendment Act updated the charter to state, “Our purpose is to seek and promote inclusion and diversity in its membership, leadership, and staff to reflect the belief of the FFA in the value of all human beings” (Office of the Federal Register, National Archives and Records Administration, 2019, p.3). The 2022-2025 National FFA Strategic Plan also addresses new practices surrounding inclusivity and diversity practices in agricultural education. This strategic plan “addresses three priorities, including engaging communities and partners to expand access and prepare our members for success in diverse and inclusive workplaces” (National FFA Organization, 2023, p.1).

Experiences of Underrepresented Students in Agricultural Education Today

It has been found students who identify as racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, and males face certain barriers when pursuing agricultural education at a post-secondary institution. Pre-service and in-service educators in agricultural education are encouraged to make connections with underrepresented students because of these barriers (Milner et al., 2003). Agricultural education students who are pursuing education and teacher educators are encouraged to bridge the gaps that exist in the agricultural education industry (Bullock et al., 2021). Underrepresented students will feel a sense of belonging, encouragement, and enthusiasm when entering the field of agricultural education once these bridges are gapped

(Bullock et al., 2021). Underrepresented students may face fewer barriers and feel less isolated when pursuing agricultural education as well as when they enter the career field. Additional research could allow for further insights into the barriers underrepresented students face when pursuing agricultural education. From these insights, educators, advisors, and mentors can be better equipped to assist and aid students who come from underrepresented backgrounds.

Over time, research has addressed the barriers underrepresented students face when pursuing agricultural education at a post-secondary level. However, there needs to be more research that looks into the experiences underrepresented students face when pursuing agriculture courses at a post-secondary level. Analyzing this group of students early on in their undergraduate careers can eliminate many of these barriers before the student continues in an agricultural education degree program. By doing this research, educators are setting up future teachers for success. Pre-service educators can feel a sense of belonging and acceptance in the agricultural education community when these identified barriers and negative experiences are eliminated.

Problem Statement

What experiences do underrepresented (racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, LGBTQ+, and male) students face when being enrolled in an agricultural education teacher preparation program at a university in North Carolina?

Purpose of Study and Objectives

The purpose of this study is to explore the experiences of racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, LGBTQ+, and males enrolled in an agricultural education teacher preparation

program at a university in North Carolina. This study also aims to represent and encompass a broader perspective beyond race and ethnicity in agricultural education. More specifically, this study seeks to identify and describe the challenges and positive experiences of underrepresented students enrolled in agricultural education at the post-secondary level. The universities outlined in this study include North Carolina State University (NCSU), North Carolina A&T State University (NCAT), Appalachian State University (ASU), and The University of Mount Olive (UMO). The examination and interpretation of this information are helpful for agriculture teachers, teacher educators, and instructors at the post-secondary level to improve inclusionary practices and to support students who identify as underrepresented. To accomplish this purpose, several research questions were constructed:

1. What are the participants' experiences in FFA or agricultural education at the secondary level?
2. What motivates underrepresented students to pursue an agricultural education teacher preparation program at a university in North Carolina?
3. What challenges do underrepresented students face when pursuing an agricultural education teacher preparation program at a university in North Carolina?
4. What positive experiences do underrepresented students encounter when pursuing an agricultural education teacher preparation program at a university in North Carolina?

Definition of Terms

BIPOC: Black, Indigenous, and People of Color.

Confirmability: The degree to which findings could be confirmed or corroborated by others (Merriam, 2009).

Credibility: Measure of the truth value of qualitative research, or whether the study's findings are correct and accurate (Merriam, 2009).

Dependability: The likeliness of the research study could be repeated by a different researcher and produce the same findings (Merriam, 2009).

Diversity: The practice or quality of including or involving people from a range of different social and ethnic backgrounds.

First-generation college student: A student whose parents did not complete a 4-year college or university degree.

Inclusivity: The practice or policy of providing equal access to opportunities and resources for people who might otherwise be excluded or underrepresented.

LGBTQ+: People who identify as lesbian, gay, bisexual, transgender, queer, plus other sexual and gender identities.

Maximum Variation: Ensures that participants are purposefully different from each other to reach full generalizability (Merriam, 2009).

Racial/Ethnic Minority: A person whose race or ethnicity is a non-dominant race within a group.

Recruitment: The effort to increase the number of students enrolled in an agricultural program at the post-secondary level.

Reliability: The consistency of a measurement (Merriam, 2009).

Researcher Bias: The systematic error that can be introduced into the study and can encourage or sway one outcome or answer (Merriam, 2009).

Retention: The number of students who re-enroll in an agricultural degree program from one year to the next.

Students from lower socioeconomic households: A student that comes from a household that has poor income, low occupation, and or inadequate living conditions.

Students with disabilities: A student with a physical or mental impairment that substantially limits one or more major life activities.

Transferability: The extent to which findings can be applied in other contexts or studies (Merriam, 2009).

Triangulation: The use of multiple methods or data sources in qualitative research to develop a full understanding of the occurring phenomenon (Merriam, 2009).

Underrepresented: Racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, LGBTQ+, and males.

Validity: The accuracy of a measurement (Merriam, 2009).

Limitations of the Study

This study recruited seven underrepresented students from North Carolina State University (NCSU), North Carolina A&T State University (NCAT), Appalachian State University (ASU), and The University of Mount Olive (UMO). Participants of this study self-identified as underrepresented in the field of agricultural education and were contacted to participate in the study. Data was collected from November 10, 2023, through December 30, 2023. The qualitative findings within this study are limited to the responses of this group of underrepresented students from North Carolina State University (NCSU), North Carolina A&T State University (NCAT), Appalachian State University (ASU), and The University of Mount Olive (UMO) and should be considered carefully, lending specific attention to the characteristics of the participants of this study.

Assumptions

It is assumed that perceptions of self-determination status were perceived as fitting into an underrepresented category. It is also assumed that the perceptions and experiences provided by the underrepresented students who were interviewed for this study were representatives of each participant, and all personal examples, experiences, stories, etc. were truthfully and factually recounted to the researcher during the interview process.

Summary

The need for more diverse agricultural educators in public education continues to be a problem in agricultural education today. While some recommend recruiting more diverse individuals into the profession, others believe in reducing the barriers underrepresented students face during their pre-service years. By doing this, educators are setting up future teachers for success and ensuring their completion of an agricultural degree program. Gaining a deeper understanding of these identified barriers may provide the profession with the knowledge to increase the rate at which diverse students choose an agricultural education degree path and complete that program to become successful teachers in an agricultural education classroom.

CHAPTER II

The purpose of this study is to explore the experiences of racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, and males enrolled in an agricultural education teacher preparation program at a university in North Carolina. This study also aims to represent and encompass a broader perspective beyond race and ethnicity in agricultural education. For this study, the theoretical framework will use Krumboltz's (1976) Social Learning Theory of Career Decision-Making.

This theoretical model, as well as its conclusions and implications, is explained in the context of this research during this chapter.

Theoretical Framework

This study was fixed in a transformative view focusing on the need for inclusivity and diversity for specific individuals who are considered underrepresented in teacher preparation. The social learning theory of career decision-making (SLTCDM) was used in the evaluation of the experiences underrepresented students face when enrolling in agricultural education at the post-secondary level (Krumboltz et al., 1976). SLTCDM provides four categories that can be a factor in an individual's career decision-making process (Krumboltz et al., 1976). These categories consist of "1) genetic endowment and special abilities, 2) environmental conditions and events, 3) learning experiences, and 4) task approach skills" (Krumboltz et al., 1976)

The SLTCDM category of genetic endowment and special abilities includes sex, race, physical appearance, disabilities, and proneness to special talents. Environmental conditions and events include factors outside an individual's control, such as school systems, community impact and influence, employment opportunities, training opportunities, natural disasters, etc. Lastly, task approach skills encompass "cognitive and performance abilities and emotional predispositions for coping with the environment" and include "work habits, emotional responses, thought processes, performance standards, and values" (Krumboltz et al., 1976, p. 74). With the SLTCDM in mind, these four categories need to be identified early on in underrepresented groups of students enrolled in agricultural education teacher preparation degree programs at post-secondary institutions.

Figure 1:

Social Learning Theory of Career Decision-making as described by Krumboltz.



Note. From "Social Learning Theory (SLTCDM and LTCC) – Krumboltz & Mitchell," by Marc Truyens, 2019, *Career Marcr*. <https://marcr.net/>. Copyright 2019 by Marc Truyens. Shared with permission from the creator.

LITERATURE REVIEW

Experiences of Underrepresented Students Enrolled in Agricultural Disciplines

A lack of a diverse workforce and applicant pool has been an ongoing challenge in the agriculture industry. Research has examined perceptions of agriculture and barriers to pursuing a degree in an agricultural discipline for several underrepresented groups, including racial/ethnic

minority students, first-generation college students, students with disabilities, low-income students, LGBTQ+ students, and male students.

Experiences of Minority Students Enrolled in Agricultural Disciplines

Despite increasing opportunities and job openings for students enrolled in agricultural disciplines, minority students continue to choose careers outside of agriculture after graduation. This outcome can be linked to numerous factors. The most significant contributing factor is minority students commonly hold negative perceptions about agricultural careers. Due to influence from friends, family, teachers, counselors, etc., students equate agricultural careers with farming, which is often portrayed as hard physical labor, stressful, tedious, and low in pay (Cotton et al., 2009). Other negative perceptions include job location, perceived career status, job availability, and cultural history (Outley, 2008). As a result, students enrolled in agricultural majors do not feel the positives outweigh the negatives when it comes to pursuing a career in an area of agriculture.

Another contributing factor can be linked to a lack of early exposure. A limited viewpoint can allow students to form negative perceptions and attitudes toward an agricultural career (Cotton et al., 2009). Once these perceptions are formed, it is often difficult to convince students careers in agriculture are beneficial and worthwhile. However, research has shown students who have early exposure to opportunities and experiences in agriculture tend to enroll in agricultural programs at the post-secondary level (Cotton et al., 2009). Past research also found that the early introduction and exposure of minority students to agriculture through high school counselors and youth programs such as 4-H increased minority enrollment in agricultural disciplines (Leatherberry & Wellman, 1988). Because of this, enhanced efforts to educate, promote, recruit,

and retain younger students in agricultural disciplines at each level of education (secondary and post-secondary) could foster an interest in agriculturally-related careers.

A third contributing factor surrounds the findings that a lack of racially and ethnically diverse minority professionals and role models in agriculture leads to a lack of minority student enrollment and involvement in agricultural disciplines. In an earlier study, it was found the absence of minority professionals in agricultural industries who can serve as role models was seen as a significant barrier to encouraging minority students to pursue agricultural careers (Wardlow et al., 1995). Today, one of the biggest challenges facing agricultural disciplines lies in recruiting and retaining students who are racially and ethnically diverse (Outley, 2008).

Across agricultural disciplines, it has been found students tend to “match” with educators who share the same skin tone or ethnicity as them (Wardlow et al., 1995). From this student-educator matching, recruitment and retention in agricultural disciplines can happen at a much higher rate (Wardlow et al., 1995). Without the ability for students to parallel with an educator similar to them in the agricultural disciplines, a lack of interest and retention of racially and ethnically diverse students tends to occur on a much larger scale.

Experiences First-Generation College Students Enrolled in Agricultural Disciplines

There is often a need for first-generation students enrolled in post-secondary agricultural majors. This commonly stems from first-generation students not being able to fully transition into post-secondary education due to a lack of knowledge and guidance in the new learning environment (Irlbeck et al., 2014). First-generation college students often do not have guidance from parents, siblings, peers, etc. who have college experience when navigating post-secondary education. Some students lack the support systems needed to reach their goals and succeed (Irlbeck et al., 2014). First-generation college students tend to come from working-class families,

often from various agricultural, cultural, and ethnic backgrounds. Because of this, these students are likely to begin their post-secondary careers at a community college, attend classes part-time, work jobs full-time, or delay entering college after graduation (Irlbeck et al., 2014).

When entering the post-secondary education world, educators need to realize these students are immersing themselves in a completely different cultural, educational, and social environment. In an earlier study, it was found first-generation college students may not fit the mold of a traditional college student by being well-prepared, possessing the self-esteem or self-efficacy to succeed, having familial support from parents or guardians who understands the rigors of post-secondary education, and obtaining the financial aid to dedicate themselves full-time to becoming a well-rounded student (Flury, 2007; Hicks, 2002). As such, first-generation college students are not always set up for success and tend to fall through the cracks without the proper guidance or support from their professors, instructors, advisors, counselors, etc.

Experiences of Students with Disabilities Enrolled in Agricultural Disciplines

The physical demands and hard labor requirements of many agricultural career paths often serve as an obstacle to students with disabilities. Farm work is considered to be one of the most hazardous occupations in the United States. Because of this, there has been an increase in preconceived notions surrounding agricultural workers with disabilities being “less able” and “less dependent” in their agricultural work (Allen et al., 1995). Because agricultural work is so dangerous, students in agricultural disciplines must be trained equally in their profession, whether they have a disability or not. Pense et al. (2012) stated that the agriculture industry potentially faces a shortage of laborers if this generation of students with disabilities is not prepared through agricultural programs.

College-aged individuals with disabilities often experience exclusion and stereotyping that prevents them from enjoying full participation in their agricultural disciplines (Anderson et al., 2021). Students with disabilities may have difficulty with making friends, socializing, and using interpersonal skills to socialize with others (Anderson et al., 2021). Because of this, students with disabilities might struggle with interacting with their peers or those in their cohort. Due to the unique experiences of students with disabilities, educational spaces must be created for students with disabilities so they can practice social and career skills as a way to develop new relationships and connections within the industry (Anderson et al., 2021).

Experiences of Students from Lower Socio-Economic Households Enrolled in Agricultural Disciplines

When considering pursuing an agricultural degree at the post-secondary level, annual family income heavily influences a low-income student's commitment to a career in agriculture (Robotham & Windon, 2023). Students from low-income backgrounds often need help securing funding to attend and pay for a four-year degree program. Because of this, scholarships, financial aid, grants, etc., are vital for low-income students enrolling in an agricultural discipline. When examining best practices and strategies for recruiting students into agricultural degree programs and careers, scholarship and funding opportunities were among the highest provided recommendations (Robotham & Windon, 2023).

Many low-income students could only continue their education at a four-year university, which is required of most agricultural disciplines, with financial assistance and financial opportunities. To support and encourage more low-income students to commit to agricultural disciplines, universities can seek to offer scholarships tailored toward underrepresented students in agricultural degree programs (Robotham & Windon, 2023). Without these incentives, low-income students may be forced to choose other disciplines that require less of a monetary

commitment to pursue. Lastly, “it may also be in the industry’s best interest to encourage more students to pursue agriculture at the university by providing financial assistance through scholarships and grants” (Robotham & Windon, 2023, p. 48).

Experiences of LGBTQ+ Students Enrolled in Agricultural Disciplines

Educational institutions are experiencing a lack of representation from students who identify as LGBTQ+ across agricultural disciplines. Agricultural areas of instruction have struggled to support and teach students who identify as members of the LGBTQ+ community (Murray et al., 2020). These continuous problems and struggles faced by agricultural students have been cited as “one of the biggest challenges facing agriculture and natural resource professionals and educators” today (Outley, 2008, p. 139). LGBTQ+ students enrolling in an agricultural discipline expect to face numerous challenges upon entering the classroom or agricultural industry after graduation. These challenges can range from discrimination, discomfort in educational or workplace settings, negativity, lack of support, biases from peers and or educators, and the list goes on.

LGBTQ+ students enrolled in agricultural disciplines “face significant challenges: educators ill-prepared to meet their needs, a lack of policies to inform decision making, active homophobia from teachers and peers, among others” (Murray et al., 2020, p. 296). Due to these discrepancies, many agricultural disciplines have taken a closer look at their programs to determine what improvements need to be made to better support students who identify as LGBTQ+. Despite these clear intentions and efforts to improve postsecondary agricultural programs, some LGBTQ+ students still do not feel a sense of belonging in their majors and amongst their peers.

Marginalized students, including LGBTQ+, experience agricultural disciplines differently than their peers. Because of that, there is a need for advancement in equity and a push for more inclusive practices to be implemented among all agricultural programs and disciplines (Murray et al., 2020). However, “until educational institutions are reconstructed, queer students cannot be liberated as societal norms of heterosexism are deeply ingrained in the foundations of education” (Moser & Vincent, 2023, p. 38). Without these necessary changes and implementations, post-secondary agricultural disciplines and programs will continue to struggle to recruit and retain students belonging to the LGBTQ+ community.

Experiences of Male Students Enrolled in Agricultural Disciplines

The field of agriculture has historically been a male-dominated industry in the United States. Among postsecondary agricultural disciplines, excluding agricultural education, male students tend to make up most of the student body and are not considered underrepresented. Over time, it has been found most students enrolled in colleges of agriculture across the country are predominantly males who have prior agricultural experience (Dyer et al., 1999). It was also found that female students were less likely than male students to select an occupation in an agricultural industry (35% vs. 65%) as their ideal career path after graduation (Conroy et al., 1998).

When determining the gap between male and female enrollment in colleges of agriculture nationwide, it was found males tend to have a more positive outlook toward agricultural disciplines and careers. When studying male vs. female perceptions of agricultural sciences, male students had positive attitudes toward science, while females were neutral or undecided (Scherer, 2016). Because of this, male students are more likely to enroll in an agricultural discipline surrounding agricultural sciences than their female counterparts.

Experiences of Underrepresented Students in Agricultural Education

There has been limited research on underrepresented populations who identify as ethnic minorities within the field of agricultural education and agricultural sciences (Velez et al., 2018; Warren & Alston, 2007). Much of this research has found students of color are less likely to participate in agricultural-related classes due to the lack of representation among educators. (Brown et al., 2017; Jones & Bowen, 1998; Velez et al., 2018). Bechtold and Hoover (1997) concluded that Hispanic students enrolled in agricultural education had a more negative perception of agriculture due to the lack of representation among their teachers (Bechtold & Hoover, 1997). Hispanic students tend to feel open discrimination from their families, peers, and teachers if they decide to pursue agriculture as a career path (Bechtold & Hoover, 1997).

Experiences of Minority Students Enrolled in Agricultural Education

Many BIPOC students are concerned with possible discrimination from their peers, families, and when seeking employment in agricultural education (Bullock et al., 2021). BIPOC students expressed they have feelings of isolation and a sense of alienation when interacting with their non-minority counterparts (Bullock et al., 2021). Also, due to the lack of representation in agricultural education, minority students tend to suffer from imposter syndrome because they are physically and visibly different from most of their peers and feel they do not belong (Bullock et al., 2021).

Underrepresented students reported multiple barriers when enrolling in an agricultural education program at a post-secondary level. It was reported BIPOC students knew very little about the different skills, knowledge, experience, etc., required by agricultural education professionals when enrolling in a degree program due to a lack of prior influence from BIPOC educators (Leatherberry & Wellman, 1988). These barriers led to a lack of motivation and a need

to push past the identified barriers of minority students pursuing agricultural education (Bullock et al., 2021).

Experiences of First-Generation College Students in Agricultural Education

First-generation college students are considered to be an at-risk population when it comes to recruitment and retention within agricultural education programs. While in their agricultural education programs, first-generation college students are also navigating barriers outside of the obligations of pre-service education programs. First-generation college students are facing challenges surrounding “lack of knowledge of campus culture, class size, academic expectations, and academic rigor” (Schutz, 2003, p. iv). Students with agricultural backgrounds and or agricultural career aspirations often struggle with “limited parental knowledge of higher education, difficulties with social and structural integration at college, potentially low support levels from family members and companions, and a lack of knowledge of post-secondary options” (Schutz, 2003, p. 28). Due to these barriers, first-generation students enrolled in agricultural education programs often struggle to navigate college life and pre-service education requirements at the same time.

Within their pre-service agricultural education programs, first-generation college students are often able to bring valuable insights and experiences into the classroom. First-generation college students who become agricultural educators can share demographic characteristics with underrepresented students in their programs (Marrero et al., 2022). In high-need schools, first-generation college students who become teachers are more likely to persist and be retained within diverse teaching environments (Marrero et al., 2022). Because of this, first-generation college students who become agricultural educators may be able to fill a critical role among diverse students enrolled in agricultural education programs.

Experiences of Students with Disabilities Enrolled in Agricultural Education

The number of students with disabilities within public education has drastically increased since the early 2000's. Since 2007, the number of students with disabilities or receiving modifications or accommodations in public education school systems has increased to approximately 6.7 million (National Center for Educational Statistics, 2008). Several studies have focused on students with diverse needs in agricultural education classrooms. Research has suggested that 15% of students enrolled in public education have a disability (National Center for Education Statistics, 2023). Another study conducted on students with special needs in agricultural education classrooms suggested that opportunities within FFA were more limited for students with diverse needs (Johnson et al., 2012). With such a large number of students being identified as having a disability, organizations such as FFA and 4-H must have policies, strategies, and resources in place to support these individuals (Stair, 2013).

Specific to agricultural education, students with disabilities were reported to have a higher enrollment rate in agricultural classes compared to other academic courses (Giffing & Warnick, 2012). The National Center for Educational Statistics (2008) reported that 11% of all graduates were identified as students with disabilities, compared to 18% of students with disabilities who were enrolled in secondary agricultural education classes. This statistic and higher percentage can be attributed to agricultural educators adopting the idea of inclusivity and diversity in their classrooms and creating a welcoming and positive learning environment for students with disabilities.

Secondary and post-secondary agricultural education programs have provided opportunities for all students alike to create personal, professional, and academic growth and experiences throughout their time in agricultural education. However, agricultural education

classes are especially beneficial for students with disabilities. With agricultural education classes, programs, and activities, students with disabilities can reap the benefits of flexible learning spaces, hands-on learning, and least restrictive learning environments (Holder, 2021). Compared to other academic courses, agricultural education can provide students with skills and knowledge other disciplines cannot. Students with disabilities are provided the opportunity to learn task-based content, life skills, and personal skills in agricultural education classrooms (Elbert & Baggett, 2003).

Experiences of Students from Lower Socio-Economic Households Enrolled in Agricultural Education

Historically, low-income individuals were not considered an underrepresented population. That narrative has now changed for low-income students enrolled in agricultural education. In numerous studies, it was found the financial obligations of attending a post-secondary institution were among the highest-ranking barriers to students pursuing agricultural education at a post-secondary level (Bullock et al., 2021; Velez et al., 2018). The lack of financial stability and being able to participate in certain opportunities has been a challenge for many students enrolled in agricultural education programs (Bullock et al., 2021; Velez et al., 2018). It was also found that many students enrolled in agricultural education programs would only have been able to enroll with the help of scholarships and financial aid (Bullock et al., 2021).

Many low-income students are unable to pursue a degree in agricultural education due to the financial hardship of attending a post-secondary institution. When seeking an agricultural education teaching licensure, agricultural education students must complete a semester-long, unpaid internship known as student teaching. This obligation requires students to relocate schools and or move locations to take on a full-time teaching position without any financial

compensation (Alvarez, 2023). Often, student teachers use personal funds to support travel, teaching materials, activities, and other costs associated with teaching. During student teaching, low-income students may financially struggle due to the time commitment of student teaching and not being able to work another job concurrently (Alvarez, 2023). Due to these barriers and financial hardships, there needs to be more representation from students and educators who come from backgrounds where low income was a factor in their educational plans.

Experiences of LGBTQ+ Students Enrolled in Agricultural Education

LGBTQ+ individuals are often not considered an underrepresented group. However, underrepresented populations are now considered to include students who identify as LGBTQ+ (Bullock et al., 2021). For more than three decades, the field of agricultural education has struggled with how to recruit, support, retain, and teach students who identify as LGBTQ+ (Murray et al., 2020). Students who identify as LGBTQ+ are often underrepresented in many aspects of agricultural education. This lack of representation ranges from research, teaching, agricultural opportunities, and the agricultural education industry as a whole (Murray et al., 2020).

LGBTQ+ students enrolled in agricultural education fear they will be discriminated against or experience active homophobia from teachers and peers (Murray et al., 2020). Individuals who represent this population have been found to experience high rates of discrimination and harassment in educational settings (Alston et al., 2021). The individuals who are harassed and discriminated against are usually not protected by school policies or systems (Alston et al., 2021). Because of these identified barriers, many students who identify as LGBTQ+ often lack representation and participation in agricultural education programs at post-secondary institutions.

Among LGBTQ+ males, there is a lack of support from the agricultural education community and the profession as a whole. Because of this, many LGBTQ+ males in agricultural education feel they need to keep their identity private (Hickman & Vincent, 2023). For LGBTQ+ individuals in rural educational settings, sharing their identity with others may have negative connotations. In rural communities, the “don’t ask, don’t tell” construct leads to the denial of gay behaviors, activities, identities, etc., among male agricultural educators who identify as LGBTQ+ (Hickman & Vincent, 2023). Through this need to constantly deny their identity, many LGBTQ+ male agricultural educators feel incompatible in their profession and struggle with “low self-worth, depression, and anxiety” (Hickman & Vincent, 2023, p. 132). Due to these thoughts and feelings, many individuals who identify as LGBTQ+ within the agricultural education community tend to leave the profession or look for employment opportunities elsewhere.

Experiences of Male Students Enrolled in Agricultural Education

Male educators and students alike have dominated the agricultural education industry throughout history. Before the 1950s, individuals most geared toward agriculture education were males who lived in rural parts of the United States (Martin & Kitchel, 2020). Recently, as of 2020, male students enrolled in agricultural education have become the minority and are now considered underrepresented. Today, females outnumber males in the field of agricultural education. This number correlates to 76% female and 24% male (Smith et al., 2021). According to the National Association of Agricultural Educators(2020), most new agricultural education graduates are predominantly female and make up about 75% of the nation’s agricultural educators. In North Carolina, enrollment in agricultural education correlates to 81% female and 19% male (T. Park, personal communication, March 20, 2024).

This statistic indicates there has been a noticeable decline in male agricultural educators across the profession. This shortage of male agricultural educators can be attributed to many different factors. In a 2007 study, it was found that poor salaries, the social status of teachers, and issues of working with students have led male teachers to leave the profession altogether (Cushman, 2007). There has also been a link to lower achievement among male students in the classroom (Cushman, 2007). This decline can also be seen among agricultural education programs nationwide. Each year, fewer and fewer male students are enrolling in agricultural education degree programs.

Male agricultural educators feel “the agriculture teaching profession can be incredibly challenging and there is a lot of commitment of time and energy to work with students as a high school agriculture teacher” (Williams, 2021, p. 50). Many male agricultural educators are leaving the profession to pursue other opportunities or careers in the agricultural industry (Williams, 2021, p. 50). Because of this recent underrepresentation of male agricultural educators and students alike, identifying the barriers that deter male students and pre-service teachers from becoming educators will aid in developing and improving programs to recruit and retain male teacher candidates within educational fields of study (Cushman, 2007).

Challenges of Underrepresented Students in Teacher Preparation Programs

A recent study found that “a lack of diversity among teachers has demonstrated long-standing issues with how diverse teachers are prepared for teaching” (Sharp et al., 2019, p. 281). Within teacher preparation programs, underrepresented pre-service teachers have recognized and shared the challenges they experienced during their time in a teacher preparation program. Among these challenges, it was found there was a lack of professional learning activities surrounding culturally responsive practices within the teacher preparation program (Sharp et al.,

2019). Pre-service teachers explained having and experiencing culturally responsive pedagogy is essential to promote an inclusive environment for all students (Sharp et al., 2019). Another identified challenge among teacher preparation programs is the lack of support structures set in place for diverse students. It was found that “the infusion of support structures throughout teacher preparation programs for diverse preservice teachers, such as mentoring approaches,” are lacking or non-existent (Sharp et al., 2019, p. 296). Lastly, teacher preparation programs need more initiatives and strategies to support diverse teachers. Through research, it was found that “administrators must implement initiatives and strategic efforts to restructure existing teacher preparation programs” (Sharp et al., 2019, p. 297).

It was concluded that “teacher preparation programs must provide diversity-focused coursework to pre-service teachers to meet the needs of an increasingly diverse student population in secondary education” (Bullock, 2023, p.i). Among teacher preparation programs, underrepresented pre-service teachers have recognized challenges surrounding an absence of culturally responsive courses and coursework. Because of this discrepancy, diverse pre-service teachers explained, “one diversity-based course cannot develop intercultural competence at the level needed to navigate intercultural situations” (Bullock, 2023, p. 84). Another identified challenge among teacher preparation programs is the inadequacy of a diversity-focused curriculum. At the beginning of enrollment, a “diversity-focused curriculum should be embedded early and throughout the teacher preparation degree program to meet university goals and educational needs” (Bullock, 2023, p. 84). Lastly, teacher preparation program instructors are often out of touch with or unfamiliar with culturally competent practices. Due to this identified challenge, it is imperative that “instructors participate in professional development training

opportunities to develop intercultural competence and cultural self-awareness and incorporate inclusive teaching strategies in their pedagogy” (Bullock, 2023, p. 84).

CHAPTER III

METHODOLOGY

A qualitative research approach was utilized to guide this study and gain a better understanding of the experiences that underrepresented students face when pursuing agricultural education at a post-secondary institution. Qualitative research aims to “gain a better understanding of individuals and how they process experiences while also uncovering the meaning of a phenomenon for those involved” (Merriam, 2009, p. 5). This statement captures and embodies the true nature, meaning, and descriptive design of qualitative research.

This study also aimed to explore and navigate the authentic experiences and perspectives of underrepresented students enrolled in agricultural education at a post-secondary institution in North Carolina. The qualitative approach focuses on meaning and how individuals make sense of their reality, worldly surroundings, and experiences (Merriam, 2009). The ultimate goal is to provide an authentic insider perspective rather than from the viewpoint and stance of an observer or outsider looking in (Merriam, 2009). This is accomplished by gathering data representative of the individual participant that integrates quotes, statements from interviews, or direct observations and contributes to the rich, descriptive nature of the findings (Merriam, 2009).

The experiences of racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, and male students enrolled in an agricultural education teacher preparation program in North Carolina were examined through the use of qualitative inquiry. Agricultural education students were recruited from each of the four identified universities in North Carolina, including North Carolina State University, North

Carolina A&T State University, University of Mount Olive, and Appalachian State University. To preserve student confidentiality, identifying characteristics will remain confidential, and students will be identified using an alphabetical coding system.

Researcher Positionality and Reflexivity

It is important to reflect on possible outside influences, personal viewpoints, opinions, and biases when examining one's experiences (Smith, 1999). Being open about our positionality and reflexivity increases the credibility of our research (Smith, 1999). My lived experiences and observations in the fields of agriculture and education alike have helped me realize the importance of giving underrepresented individuals a voice within agricultural education. My background and upbringing can be seen as a hindrance to my teaching and research.

Growing up in a rural, conservative, Christian household, I do have certain biases, viewpoints, and opinions that could skew the way I interview and interpret participants. Also, as a straight, white, female, I am usually an outsider to the general world of marginalization and or underrepresentation. However, I am now considered an underrepresented individual since joining the field of agricultural education. I am underrepresented in the fact I was and still am a first-generation college student who came from a low-income household. Both of these factors are considered underrepresented in agricultural education. I relied heavily on financial aid, scholarships, grants, work-study positions, etc., to get me through each semester. I also found support from mentors, advisors, and friends to help walk me through the first years of college, as I had no prior knowledge. From this lived experience, my eyes have been opened to the fact that marginalized individuals are underrepresented in agricultural education and are not treated equally or the same as their represented counterparts.

Experiencing underrepresentation has given me a new perspective and viewpoint on how to implement an epistemically diverse approach in my classroom and research as well. With my research on the experiences of underrepresented students in agricultural education, the Social Learning Theory of Career Decision Making (SLTCDM) has guided my study and helped give a voice to underrepresented individuals in agricultural education. This theory asserts four categories (genetic endowment and special abilities, environmental conditions, and events, learning experiences, and task approach skills), and their equal interactions can influence an individual's career decision-making process. With this approach, underrepresented individuals in agricultural education can share their authentic experiences to create change and push for a more inclusive and diverse community among agricultural educators.

I have placed myself as an insider in this research study as a member of an underrepresented group in agricultural education. My passion for research and teaching focuses on transforming and changing educational structures, policies, methods, and procedures to impact underrepresented groups and focus on creating a more diverse, equitable, and inclusive learning environment for underrepresented individuals in agricultural education programs. Identifying as underrepresented in agricultural education may influence my interview questions and conversations, data collection, and data analysis; however, to mitigate research subjectivity, I have employed researcher reflexivity to identify my biases, personal opinions, and assumptions regarding potential outcomes. Researcher-participant relationships and conversations were maintained as neutral and impartial as possible to ensure an unbiased approach to data collection and analysis.

Rationale for Phenomenology

Numerous research designs can be utilized when conducting qualitative research. The various forms are all related in some way; however, they each serve a different purpose in the way questions are asked, sample sizes are determined, data is collected, and analysis is conducted (Merriam, 2009). For this research study, a phenomenological approach was deemed most appropriate in examining the specific phenomenon of the experiences of underrepresented students enrolled in an agricultural education teacher preparation program at a post-secondary institution in North Carolina.

As explained by Creswell (2007), “a phenomenological study describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon” (p. 76). When taking a phenomenological stance, the researcher must accurately describe what all participants have in common as they experience the identified phenomenon (Creswell, 2007). Marshall and Rossman (2006) elaborated the purpose of phenomenology is rooted in trying to understand the experience of a set of individuals to create a broader understanding of an identified phenomenon. With phenomenology, the researcher tries to put themselves in the participant’s shoes to gain a deeper understanding through the eyes of those experiencing the phenomenon.

When conducting a phenomenological research study, Moustakas (1994) recommended that data collection occur through a first-person account and a recollection of lived experiences. Also, to ensure researcher subjectivity and reflexivity, the researcher must put all beliefs, opinions, biases, and or preconceived perceptions about the phenomenon aside to not interfere with the natural emergence of phenomenological data (Merriam, 2009). When all preconceived notions are ignored and placed aside, researcher awareness can become more robust, and data

can be examined through a clear lens (Merriam, 2009). In practicing this method of reflection and internalization, the researcher can focus on the scenario, problem, or individual at hand (Moustakas, 1994).

Qualitative Research Design

This study was designed using the conceptual framework of transcendental phenomenology to capture the experiences of underrepresented students in post-secondary agricultural education programs in North Carolina. Transcendental phenomenology sets aside all preconceived ideas to see phenomena as they truly occur, thereby allowing the true meaning of the phenomena to naturally emerge (Moustakas, 1994). This framework requires the researcher to identify the phenomena, set aside all of the researcher's preconceived ideas, and collect data from participants who have experienced the identified phenomena (Moustakas, 1994). Lastly, data is deciphered, evaluated, and combined into different themes. According to the framework of Moustakas (1994), the second stage of transcendental phenomenology is transcendental phenomenological reduction. In this stage, participants' experiences are considered individually and then constructed based on the meaning and essence of the phenomenon (Moustakas, 1994). From this stage, a textural and structural description can be acquired.

The researcher can move into the stage of imaginative variation once transcendental phenomenological reduction has occurred. Through imaginative variation, participants' experiences are analyzed through multiple variations or free variations (Moustakas, 1994). Free variation happens when the phenomenon is imagined in a variety of ways and or contexts to develop a true understanding of the phenomena (Moustakas, 1994). Once this has occurred, the researcher can arrive at a unified synthesis of the phenomenon or themes (Moustakas, 1994).

Lastly, the researcher will combine and synthesize the essence of all the participants included in the study (Moustakas, 1994).

Participant Selection

The participants for this study self-identified and were selected based on the criteria they were underrepresented and enrolled in an undergraduate agricultural education teacher preparation program at a post-secondary institution in North Carolina. When conducting qualitative research, it is not recommended to utilize random or representative sampling due to the concern that the findings will not be generalizable to the intended population or the study (Erlandson et al., 1993). However, when purposive sampling is used, there is no specified number of participants to reach an intended sample size. The sample size is not predetermined due to the need for more quality in participants' experiences rather than quantity. Quality over quantity in this scenario equates to more information for richness rather than volume (Erlandson et al., 1993).

Maximum variation was achieved by ensuring every underrepresented undergraduate student enrolled in agricultural education was provided multiple opportunities to participate in the study. To select participants within the specific criteria needed for the study, the agricultural education faculty at North Carolina State University, North Carolina A&T State University, University of Mount Olive, and Appalachian State University provided the researcher with a list of students who were enrolled in an undergraduate agricultural education degree program at the corresponding university. From there, various faculty members at each university were used to help promote the study and identify students who met the needs of the selection criteria.

All undergraduate agricultural education students at the four different universities were contacted by email, outlining the purpose and value of the study, the significance of their role as

volunteer participants, and the methods to be used in the data collection process. From the recruitment email, eight students agreed to participate in the study. Five participants were female; three were male. However, the eighth participant agreed to participate but was unable to complete the first interview, so they were not included in the study. Therefore, the script was composed of seven participants who agreed to participate and received an informed consent letter to e-sign before the first interview. Interview dates and times were established upon agreeing to participate in the study. Email correspondence can be found in Appendix B.

Data Collection

The researcher used various qualitative methods within the capacity of this study to gather and collect data. Those qualitative methods consisted of interviews conducted via Zoom and document analysis. Zoom interviews were completed at various times throughout the day, ranging between the hours of 8:00 a.m. to 9:00 p.m., depending on the participant's schedule and availability. Zoom interviews were conducted instead of in-person interviews due to the researcher's time limitations in administering the interviews, participant location, accessibility, and time constraints. This method of interviewing was also the most preferred method among each of the participants. An interview was utilized to better understand the experiences and perspectives of underrepresented students enrolled in an agricultural education teacher preparation program at a post-secondary institution in North Carolina.

A phenomenological approach was used to conduct in-depth interviews to gain rich, descriptive findings (Moustakas, 1994). When it comes to in-depth interviewing, Merriam (2009) states, "Interviewing is necessary when we cannot observe behavior, feelings, or how people interpret the world around them" (p. 88). The researcher utilized a semi-structured interview protocol to promote this concept to encourage and provide variability in response and detail. This

interview protocol was developed in response to the review of literature and promotes the idea that participants are encouraged to provide long, detailed, and rich answers to the questions at hand. Following IRB approval, found in Appendix C, the interview guide was pilot-tested with two underrepresented students enrolled in agricultural education at a post-secondary institution in North Carolina during the fall semester of 2023. This procedure determined the interview guide provided and asked the most relevant and essential questions related to the purpose of the study.

When preparing the interview guide, interview protocol, and data collection process, a phenomenological approach and interview protocol were found to be the most appropriate method of data collection. A phenomenological data collection approach promotes the idea of using three separate interviews to capture “the meaning of a concept or phenomenon several individuals share” (Marshall & Rossman, 2006, p. 104). This method also allows the researcher and the participant to gain a greater sense of rapport and trust with each additional interview. With each passing interview, each interview builds off the other, providing a greater understanding for the next interview session (Marshall & Rossman, 2006). For this study, three full interviews were conducted to gather in-depth experiences and responses from each participant.

The first interview of the phenomenological process was used to reveal background information, contextualize the phenomenon, and elicit details related to the participants' real-life experiences. During this interview, the researcher sought experiences as an underrepresented student enrolled in an agricultural education teacher preparation program and their motivations behind wanting to pursue agricultural education teacher certification despite their underrepresentation and the challenges it might bring. The second interview extracted details of

the participants' experiences as underrepresented students enrolled in an agricultural education teacher preparation program at the post-secondary level and how it has been a benefit or a challenge they have had to face. During this interview, participants were asked to share specific details about their experiences as underrepresented students enrolled in an agricultural education teacher preparation program, including their backgrounds, motivations, challenges, and positive experiences. The third and final interview was conducted to gain a deeper understanding of the advice that participants would give to other underrepresented students interested in pursuing agricultural education. This interview also elicited further recommendations for universities to better support diverse students in agricultural education teacher preparation programs.

When conducting phenomenological interviews, it is recommended each interview be scheduled at least 90 minutes, with each interview spaced multiple days to a week apart (Marshall & Rossman, 2006). Each interview was scheduled to last approximately one hour, with the flexibility to last longer if the need arose. Each interview in this study lasted an average of 53 minutes and was scheduled multiple days to two weeks apart due to participant availability. Interviews conducted during the first round lasted anywhere from 41 minutes to 63 minutes. Interviews conducted during round two lasted approximately 36 minutes to 51 minutes. Interviews conducted during round three lasted anywhere from 23 minutes to 48 minutes. Through transcript analysis, it was found that interviews conducted during round one elicited the most detail, ranging from 5,215 words to 8,803 words. Interviews conducted during the second round were found to elicit anywhere between 3,56 and 7,607 words. Lastly, the third and final interview elicited the least amount of detail, with a word count ranging from 1,352 words to 3,213 words.

Semi-structured interviews were scheduled and conducted from November 2023 through December 2023. Zoom interviews were recorded and transcribed verbatim. The researcher used a set of predetermined guiding questions during the interview but also incorporated probing questions to elicit further responses and detail. To maintain confidentiality, the researcher assigned a pseudonym for each participant to ensure anonymity. Each interview was transcribed verbatim within 48 hours of the interview being conducted and recorded. As suggested by Merriam (2009), credibility was addressed through member checking and peer debriefing. Member checking was addressed by emailing each participant a copy of the established themes and allowing them to verify for accuracy and generalizability. Upon participant review and validation, transcripts were also sent to and reviewed by an expert panel to review findings. The guiding questions used in this study can be viewed in Appendix A.

Data Analysis

All data was collected and analyzed using commonly accepted qualitative methods and procedures. During the transcription process, the researcher should bracket their thoughts, interpretations, and opinions to the side during the analysis (Hycner, 1985). To ensure all context is taken into account, the researcher should read and listen to the transcription multiple times to gather specific meaning and data (Hycner, 1985). Each interview was conducted with these procedures in mind. While transcribing, the researcher bracketed their thoughts and made notes on the side. These notes aided the researcher in creating and identifying common themes among the participants. During data analysis, this concept can be described as the “very rigorous process of going over every word, phrase, sentence, paragraph and noting significant non-verbal communication in the transcript to elicit the participant’s meanings” (Hycner, 1985, p. 282).

Two applications (Zoom Cloud Storage and Mac iCloud Storage) were utilized to ensure all interview data was collected, stored, and protected from equipment malfunction or operator error. Transcripts were initially generated and cleaned by Zoom transcription services. After the initial transcriptional cleaning by Zoom, the researcher then went back over the recordings to identify and correct any errors missed within the already cleaned transcriptions.

Once all transcriptional cleaning had occurred and transcriptions were deemed error-free, the researcher compiled units of general meaning. From these units, similar or relevant units were grouped based on the emergence of common themes or similarities. Through rigorous examination and copying notes during interviews, common themes or similar meanings will emerge (Hycner, 1985). Common themes were then sorted into categories and organized into groups based on similarity. Direct quotes related to identified themes were then categorized into similar groups and used to directly describe phenomena and experiences faced by underrepresented students enrolled in agricultural education at a post-secondary institution in North Carolina.

The researcher examined all categories to determine the emergence of a central theme among the collected data once categorical units were compared against each other. The data and their meanings were examined for themes and common patterns that exemplified the experiences of underrepresented students enrolled in agricultural education. From there, the researcher was able to make inferences and declare generalizable themes that emerged during the data collection process. These themes were then utilized to explain further certain phenomena experienced by underrepresented students enrolled in agricultural education.

Trustworthiness Criteria

When establishing a trustworthiness criterion within a research study, Merriam (2009) recommends eight key strategies to promote validity and reliability. Validity and reliability revolve around how well a method accurately measures results. Validity refers to the accuracy of a measurement and reliability refers to the consistency of a measurement. The first recommended strategy to promote trustworthiness is credibility (Merriam, 2009). Credibility was established through members checking and emailing participants a list of identified themes for verification, accuracy, and generalizability. To further credibility, the researcher shared tentative findings and emerging themes with an expert panel for review.

The second recommendation made by Merriam (2009) is triangulation. Triangulation refers to the use of multiple methods or data sources in qualitative research to develop a full understanding of the occurring phenomenon (Patton, 1999). To promote and establish triangulation, interview observation documents, research artifacts, and literature, were analyzed to fully understand the phenomenon at hand (Merriam, 2009).

The third recommendation surrounds dependability and the reliability that the research study could be repeated by a different researcher and produce the same findings (Merriam, 2009). Dependability in this study was addressed by keeping an audit trail, detailed records of the data collection process, and analysis procedures. Transcripts were created and cleaned by Zoom services and a copy of the interview transcript was provided to each participant to ensure complete accuracy. All documents, interviews, transcripts, and notes were kept for examination.

The fourth recommendation includes confirmability. Confirmability is the degree to which findings could be confirmed or corroborated by others (Merriam, 2009). Confirmability

was addressed in this study by including exact statements and direct quotes from the interviews that supported interpretations, findings, and conclusions inferred by the researcher.

The fifth recommendation surrounds transferability and the extent to which it can be applied in other contexts or studies (Merriam, 2009). Transferability was achieved by providing thick, rich, and detailed descriptions to allow the audience to determine if the findings match the results of other populations; however, some generalizations can be concluded to similar groups such as other underrepresented groups or populations.

The sixth recommendation includes researcher bias and the systematic error that can be introduced into the study and can encourage or sway one outcome or answer (Merriam, 2009). In this study, researcher bias was controlled by realizing personal biases and acknowledging them throughout the study and analysis of findings.

The seventh recommendation refers to maximum variation which ensures that participants are purposefully different from each other (Merriam, 2009). Maximum variation was established through purposive sampling and selecting participants in agricultural education who share different experiences and backgrounds.

The final recommendation includes peer review and the process of subjecting a researcher's work and ideas to the scrutiny of others who are experts in the field (Merriam, 2009). Peer review was established in this study by sharing draft copies of the report with colleagues for review and feedback regarding the study, data collection, emerging themes, and tentative interpretations.

Chapter Summary

Chapter III described the methodology and techniques that were used to conduct the qualitative research study in examining the experiences and perspectives of underrepresented

students enrolled in an agricultural education program at a post-secondary institution in North Carolina. A qualitative, phenomenological research design was utilized to guide the study. Semi-structured interviews were utilized, and participants were asked open-ended questions that were followed up with probing questions to further their details and responses. Semi-structured interviews served as the primary source of data while document analysis served as the secondary source of data. All data were thoroughly analyzed, and common themes were established based on participants' authentic experiences as underrepresented students enrolled in agricultural education at a post-secondary institution in North Carolina.

CHAPTER IV

RESULTS AND FINDINGS

Diversity and inclusivity in agricultural education classrooms and programs all over the United States have received significant attention as an issue and area for improvement throughout many agricultural education communities. In the field of agricultural education, educator and student diversity have increased over the last several years. However, there still needs to be more representation from underrepresented groups in the agriculture teaching profession.

Several studies have determined some of the experiences underrepresented students face when enrolling in agricultural education programs at the post-secondary level. Positive experiences such as financial support, opportunities, lifelong friendships, and motivating factors have made students feel a sense of belonging in their agricultural education cohorts. These positive experiences have allowed underrepresented students to feel seen and heard in an industry that is not so diverse. Negative experiences and the overall lack of representation from diverse leaders and educators in agricultural education ultimately led to underrepresented

students feeling a sense of isolation. These negative experiences and feelings can lead to challenges surrounding underrepresented preservice agricultural educators being recruited into agriculture teacher preparation programs.

Seven participants were purposefully recruited, volunteered, and self-identified as members of an underrepresented community in the field of agriculture education. To ensure confidentiality and anonymity, each participant was assigned a pseudonym to protect the individual and any identifying information provided to the researcher. Participants are described using demographic information and self-identified underrepresentation status collected throughout the three interview processes. Participants were not asked to disclose any demographic information or identify their underrepresentation status. If any information was disclosed, it was willingly and voluntarily.

Description of Participants

Addison

Addison is a female student enrolled in an undergraduate agricultural education program at a university in North Carolina. Addison is a senior in agricultural education and self-identifies as a low-income student. This participant was exposed to agricultural education at an early age due to having backyard chickens, a seasonal garden, and an older sibling who participated during their high school years. Addison was exposed to over nine agricultural teachers during their time in FFA and attributed their love of agriculture to one advisor with whom they gained a strong relationship. Through this connection, the participant wanted to be this person for other individuals. Due to this, Addison decided to pursue agricultural education to provide a robust support system and stability for students who do not have it in their daily lives and also to spread their love of agriculture to others.

Bailey

Bailey is a female student enrolled in an undergraduate agriculture education program at a university in North Carolina. Bailey is a senior in agricultural education and self-identifies as LGBTQ+. Bailey grew up on a family farm and had no prior FFA background due to attending a secondary institution that did not offer agricultural education classes. Bailey also had an interest in becoming a veterinarian. Before deciding on a college major, she realized she was no longer passionate about veterinary science anymore and wanted to explore other options. While exploring different options, she had a sentiment for sharing the truth about agriculture and knew she could do that by teaching agricultural education.

Callie

Callie is a female student enrolled in an undergraduate agriculture education program at a university in North Carolina. Callie is a sophomore in agricultural education and self-identifies as a racial/ethnic minority and a low-income student. This participant had no prior background in agriculture until enrolling in agricultural education classes at the secondary level. Callie always wanted to be a veterinarian, but agriculture education classes and FFA provided her the opportunity to teach and pursue agricultural education as a future career choice. Through these opportunities, Callie fell in love with teaching agriculture and wanted to share that excitement with others.

Derek

Derek is a male student enrolled in an undergraduate agriculture education program at a university in North Carolina. Derek is a senior in agricultural education and self-identifies as LGBTQ+ and male. Derek grew up in a family that showed cattle and enjoyed working with them throughout their childhood. This participant had no prior agricultural education or FFA

background due to attending a secondary institution that did not offer agricultural education classes. Derek has always loved animals and wanted to pursue a career in veterinary science. When applying to college, the participant initially applied to a Zoology program but was later influenced by a parent to pursue education instead. Agricultural education was the closest program that aligned with their goals and interests.

Ellis

Ellis is a female student enrolled in an undergraduate agriculture education program at a university in North Carolina. Ellis is a sophomore in agricultural education and self-identifies as a first-generation college student, a low-income student, and a student with disabilities. This participant took agricultural education classes during all four years of their secondary education and served as an agricultural education teaching assistant through their advanced studies program. This participant has no background in FFA. Ellis never wanted to take agricultural education classes during high school but was required to do so through the school's transfer entrance lottery program. Through taking agricultural education classes, she fell in love with agriculture classes but never wanted to teach agriculture herself. Ellis always wanted to be a teacher, but she needed clarification on what subject area she wanted to teach. Going into college, Ellis enrolled in an agricultural discipline due to their agricultural background and later transferred into the agricultural education degree program.

Finn

Finn is a female student enrolled in an undergraduate agriculture education program at a university in North Carolina. Finn is a senior in agricultural education and self-identifies as LGBTQ+, a first-generation college student, and a low-income student. Finn was unable to take agricultural classes during their secondary education due to going to an early college high school

that did not offer agricultural education classes. However, this student was introduced to an FFA advisor from a neighboring high school and was able to participate in FFA there. From there, the participant participated in many CDE/LDE events and served as an FFA officer for three years. Finn wanted to be a teacher their whole life due to the impact their teachers had on her throughout their educational career. Once the participant was introduced to agricultural education and the FFA, she knew she wanted to teach the subject in the future. Finn also wanted to serve as an agriculture teacher due to the flexibility of teaching different subject areas and students each semester.

George

George is a male student enrolled in an undergraduate agriculture education program at a university in North Carolina. George is a junior in agricultural education and self-identifies as male. George always had a strong background in agricultural education due to their parent's involvement in an agricultural career. This participant took agricultural education classes throughout all four years of high school and served as an FFA officer for three of those years. George also participated in multiple CDE/LDE events during their time in a secondary education setting. George never wanted to pursue agriculture as a career path due to the challenging experiences of their parents. However, once he got older, he realized agricultural education was a safe option due to the economy, possible opportunities, and the option for relocation if the need arose. George found enjoyment in agricultural education due to networking opportunities all over the United States and options to further a career in agricultural education in the future.

Themes

To accomplish the overall purpose of this study, several research questions were constructed:

1. What are the participant's experiences in FFA or agricultural education at the secondary level?
2. What motivates underrepresented students to pursue an agricultural education teacher preparation program at a university in North Carolina?
3. What challenges do underrepresented students face when pursuing an agricultural education teacher preparation program at a university in North Carolina?
4. What positive experiences do underrepresented students encounter when pursuing an agricultural education teacher preparation program at a university in North Carolina?

Semi-structured interviews were conducted with seven undergraduate students enrolled in agricultural education at a university in North Carolina. Phenomenological data analysis procedures were used in addition to the researcher keeping a detailed, reflexive journal. Transcribed interviews were open-coded and axial-coded. Through this method of coding, themes were identified. The following themes emerged through the analysis of data:

1). The Value or Inhibition of Previous Experience

- a) Agricultural Education Coursework
- b) FFA Involvement
- c) No Agricultural Education or FFA Background

2). Intrinsic and Extrinsic Motivations Behind Becoming an Agricultural Educator

- a) Influence of Agricultural Educators and Advisors
- b) Support System for Other Students
- c) Positive Feelings Towards Teaching Agriculture

3). Identified Barriers and Challenges

- a) Financial Burdens
- b) Discrimination
- c) Isolation
- d) Mental Health
- e) Lack of Agricultural Background

4). The benefit of Positive Experiences

- a) Opportunities and Events
- b) Financial Support
- c) Life-Long Relationships and Friendships
- d) Support from Advisors, Professors, and Faculty

The Value or Inhibition of Previous Experience

Each of the seven participants described various paths that they took throughout their high school educational careers that led them to pursue agricultural education as a future career path. They all described their participation in agricultural education classes, the FFA, or neither of the two at all. During their time in their high school educational careers, or earlier in their lives, agriculture and agricultural education played a significant part in their stories at some point along the way. Due to this influence and background, each of the seven participants shared very similar but different backgrounds in agriculture as a whole.

Agricultural Education Coursework

Each participant who participated in high school agricultural education classes spoke passionately about their experiences as agricultural education students and their time in an agricultural education program. They spoke highly of their classes and that they learned so much during their time enrolled in agricultural education classes at the secondary level. One of the seven participants was solely involved in agricultural education classes. This participant did not participate in the FFA during their high school educational career.

Ellis took agricultural education classes during all four years of their secondary education and served as an agricultural education teaching assistant through their advanced studies program. However, this participant has no prior background in FFA. Ellis commented that they “took agricultural education classes all four years of high school due to the requirement of being accepted through the lottery system at their high school. They also ‘never wanted to take agricultural education classes but fell in love with agricultural classes.” Ellis also explained that “they never participated in the FFA due to them not wanting to ever teach agricultural education.”

FFA Involvement

Each of the seven participants described various paths they took throughout their high school educational careers that influenced them to pursue agricultural education as a future career path. Participants were able to choose a pathway into an agricultural education teacher program regardless of agricultural education or FFA background. However, they all described their participation and or background in agricultural education classes, the FFA, or neither of the two as potential influences in choosing a career in agricultural education. During their time in their high school educational careers or earlier in their lives, agriculture and agricultural

education played a significant part in their stories at some point along the way. Due to this influence and background, each of the seven participants shared very similar but different backgrounds in agriculture as a whole.

Agricultural Education Coursework

Each participant who participated in high school agricultural education classes spoke about their experiences as agricultural education students and their time in an agricultural education program. They spoke highly of their classes and that they learned so much during their time enrolled in agricultural education classes at the secondary level. One of the seven participants was solely involved in agricultural education classes. This participant did not participate in the FFA during their high school educational career.

Ellis took agricultural education classes during all four years of her secondary education and was a teaching assistant through the school's advanced studies program. However, this participant has no prior background in FFA. Ellis commented that she had taken agricultural education classes all four years of high school due to the requirement of being accepted through the lottery system at her high school. She also 'never wanted to take agricultural education classes but fell in love with agricultural classes.' Ellis also explained that she had never participated in the FFA because she did not want to teach agricultural education.

FFA Involvement

Each participant who was involved in the FFA spoke thoroughly about their experiences as members and their time serving in officer roles. They spoke fondly about the impact agricultural education and the FFA had on their decision to become an agricultural educator themselves. Four of the seven participants were involved in both agricultural education classes and the FFA as well.

Addison was exposed to agricultural education at an early age due to having backyard chickens and a seasonal garden throughout her entire childhood. This participant was exposed to agricultural education and the FFA through an older sibling who also participated during their high school years. Addison mentioned her older sibling joined FFA, and she decided she wanted to do that too, only better than him. During her time in the high school agricultural education program, Addison shared that she joined the FFA in her freshman year, and in her sophomore year, she started showing livestock animals and competed in all the competitions she could. Going into her sophomore year and through her senior year, Addison explained she “served as a Secretary, Vice President, President, and also a Federation Officer” during her time in the FFA. Also, during her time in high school FFA, Addison was able to secure a “first-place win in the state for my SAE project.” Due to the influences of agricultural education classes and the FFA, Addison has continued her FFA career by participating in Collegiate FFA at her corresponding university.

Callie had no prior background in agriculture until enrolling in agricultural education classes at the secondary level. Callie always wanted to be a veterinarian, but agriculture education classes and the FFA provided her with the opportunity to teach and pursue agricultural education as a future career choice. Callie explained she had no prior agriculture experience before enrolling in agricultural education classes at her high school, and from that experience, she fell in love with agriculture. Ellis also shared she participated in “Animal Science, Sustainable Agriculture I, and Sustainable Agriculture II” classes during her time in the agricultural education program. Ellis went on to explain through her experiences in agricultural education classes, she went on to serve as an FFA officer (Vice President of Leadership) in her senior year of high school.

Finn could not take agricultural classes during her secondary education because she went to an early college high school that did not offer those courses. However, this student was introduced to an FFA advisor from a neighboring high school and was able to participate in the FFA there. The participant went on to participate in many CDE/LDE events. Finn declared, “As a middle school student, I was able to compete on the Enviro-thon team in Soils and went on to win at the regional and state level.” From there, Finn went on to attend an early college program where agricultural education or FFA was not offered. Finn explained her “Enviro-thon coach introduced her to the FFA advisor at the neighboring high school, and she was told she needed to participate in the FFA.” Through this invitation, Finn went on to maintain active involvement in the FFA. Finn shared she “competed on the Novice Parliamentary Procedure and Senior Parliamentary Procedure national teams, Land Judging, Parliamentary Procedure, Enviro-thon, Introduction to Horticulture, Quiz Bowl, Extemporaneous Speaking, and Farm Business Management teams.” Finn also went on to serve as an FFA officer for her chapter for three years, become a DWL Scholar, and also receive a scholarship to attend FFA Camp.

George always had a background in agricultural education due to his parent's involvement in an agricultural career. This participant took agricultural education classes throughout all four years of high school. George exclaimed ‘due to my dad’s involvement in agriculture, I was exposed to agricultural education at a very early age.’ George went on to take agricultural education classes, serve as a chapter/regional officer, and compete in a Career Development Event each year during his high school educational career.

No Agricultural Education and FFA Background

Two participants who did not participate in high school agricultural education classes and or in an FFA program spoke about their experiences as nontraditional agricultural education

students and their time serving as pre-service agricultural educators with little to no prior background in agriculture. Each of these participants shared their nontraditional agricultural education backgrounds have not stopped them from pursuing a future career in agricultural education.

Bailey grew up on a family farm and had an interest in becoming a veterinarian. Bailey did not participate in the FFA or agricultural education classes. Before deciding on a college major, she realized she was no longer passionate about veterinary science anymore and wanted to explore other options. Bailey noted she ‘grew up on a family farm but had no agricultural education or FFA experience before coming to college.” Bailey also shared she found agricultural education after pursuing other options after deciding not to enroll in veterinary science when choosing her college major.

Derek grew up in a family that showed cattle and enjoyed working with them throughout their childhood. This participant had no prior agricultural education or FFA background due to attending a secondary institution that did not offer these courses. Derek has always loved animals and wanted to pursue a career in veterinary science. Derek proclaimed, “I always loved animals and wanted to pursue a career in veterinary science or something similar but was persuaded against it.”

Intrinsic and Extrinsic Motivations Behind Becoming an Agricultural Educator

Each participant spoke passionately about their motivations behind pursuing and becoming a preservice agricultural educator. They all shared how they enjoy agricultural education and are excited about pursuing a career in the field. Each of the participants had specific reasons for being motivated to pursue agricultural education as a career path. However, they all shared one common motivation, and that is their love for teaching.

Influence of Agricultural Educators and FFA Advisors

Multiple participants described the influence of their agricultural teachers and FFA advisors as an important motivation for pursuing agricultural education as a future career choice. They felt as if these individuals served as more than just their teachers and advisors. These individuals were motivators, coaches, supporters, counselors, and often a part of their families. Similarly, participants seek similar opportunities to serve as role models for their future students.

Addison expanded on the lasting influence of her agriculture teacher to pursue teacher preparation. Addison exclaimed, ‘Throughout my time taking agricultural classes and participating in the FFA, I had nine different agriculture teachers. However, she had one advisor she gained a strong relationship with, and she impacted her so much.’ Addison went on to share, “This agricultural teacher offered so many opportunities to me and encouraged me to do anything I set my mind to.”

Callie also noted the importance of mentors and stated, “Agricultural education classes and her agriculture teachers opened up the agricultural education career to me and provided opportunities to teach others about agriculture.” From that point on, Callie fell in love with teaching agriculture and knew she wanted to “have an impact on students who share diverse education experiences.” Callie’s agricultural teachers and FFA advisors served as “role models” for her and her future endeavors.

Finn was very close with her agriculture teacher and said she “did not have the most supportive parents, and she got close to my FFA advisor and realized she wanted to be like him.” Finn also mentioned she was able to establish a relationship with her agriculture teacher that she could not have with other teachers due to the confinement of a regular classroom. Due to this

strong relationship, Finn's agriculture teacher and FFA advisor became a solid parental figure for her. Through this support and relationship, Finn knew she wanted to be an agriculture teacher "due to the flexibility to constantly teach different classes and different students."

Support System for Other Students

Multiple participants recognized another motivation for pursuing agricultural education as a future career choice was the desire to provide a supportive atmosphere for others. To these participants, many educators and people along the way shaped them into the aspiring teachers they are today. Due to a robust support system during their educational careers and through their personal lives, these participants felt supported and motivated during the hardest of times.

During her agricultural education journey, Addison discussed that her "advisor provided a great support system and encouraged me to do anything I set my mind to." Addison "knew she wanted to be that for someone else." At the end of the day, Addison wanted to provide a "sense of stability for students who do not have that in their everyday lives."

For Callie, a strong educational network is very important to her and others who have experienced diverse situations in their educational careers. On a personal level, Callie shared, "I do everything for my sibling, who has a disability, and I want to be a safe place for students like her." Callie is passionate about serving as a support system for students who may have diverse or different experiences in education. Callie also shared, "Agricultural education is my safe place, and I look forward to my agricultural education classes after a long day of other classes." Agricultural education is a comfortable place for Callie, and she wants to provide that type of atmosphere for all of her future students.

For Finn, growing up with a diverse educational experience in FFA motivated her to become a teacher in the future. Finn commented, "I always wanted to be an educator due to the

relationships I built with my teachers... it was all I have ever known.” For Finn, providing a strong support system and being able to “watch students be successful” is a substantial motivating factor in working towards a future in education. Finn explained her strong relationships with her educators are what motivated her to keep going and become the educator she is today.

Positive Feeling Towards Teaching Agriculture

All seven participants shared that a primary reason for pursuing the profession was their positive feelings toward teaching agriculture. They explained that they find true joy in teaching and promoting agricultural literacy to a broader audience. They noted a strong desire to share agriculture with others and promote opportunities throughout the agricultural industry.

Addison expanded "When times get tough, I remember why I wanted to be an agricultural teacher in the first place...seeing students grow and excel gives me the spark to get my mind back in the right place." Bailey shared a similar sentiment "I realized I had an excitement for sharing the truth about agriculture and knew I could do that by teaching agricultural education."

Derek explained his "main motivation in pursuing agricultural education is having the desire to teach agriculture and seeing others grow along the way." Similarly, Ellis shared almost the same motivation for pursuing agricultural education. Derek proclaimed, "We all have a love for agriculture, and that is what drives us to stay in agricultural education." Finn always knew she would be a teacher in some form, just not in agricultural education. Through different opportunities and experiences in FFA, Finn fell in love with agriculture and the ability "to teach different classes and different students and knew it would keep her interest over time."

These positive feelings toward teaching agriculture helped convince a few participants to pursue a specific path in agricultural education. Ellis declared, "I always wanted to be a teacher, but never wanted to teach agricultural education." Through different opportunities and an agricultural background in a two-year agricultural degree program, Ellis decided to transfer to a four-year agricultural education degree program because of her "existing credits and previous desire of wanting to be a teacher." However, Ellis truly loves agriculture and animals and loves to teach others about her hobbies and interests. Similarly, George never wanted a career in teaching or agricultural education. George shared, "At first, I was not interested in education because of the experiences of my parents." However, over time, George realized he could be very successful in agricultural education through student and networking opportunities all over the United States.

Identified Barriers and Challenges

All participants shared several different barriers or challenges they have faced during their time in an undergraduate agricultural education degree program. Each of the participants described how their experiences have been challenging and are tailored to their underrepresentation. These participants also conveyed how these barriers have affected them in their educational endeavors. While each participant agreed these challenges have been hard to navigate, at the end of the day, they could not imagine leaving their programs.

Financial Burdens

One of the biggest challenges expressed by participants was the financial burdens associated with pursuing post-secondary education. Five out of the seven participants shared they have struggled financially and have had to worry about finances throughout each academic

semester since starting at their respective universities. This anxiety surrounding finances is one they continually have to navigate with each coming semester.

Addison disclosed, "Financial situations are hard to navigate when trying to find scholarships, grants, and finding money to go and finish college." Addison further explained she has missed out on opportunities and events so her parents would not have to pay for travel. At times, Addison felt she must decline opportunities so she "does not feel like a burden" when asking for funding from her parents, families, and/or school system. Due to the inability to travel and go to certain events, Addison worried she would not "form the right connections and networks to provide financial support" in future semesters. Addison continued, "Most students in my situation are motivated to prove themselves to others due to getting scholarships, help from family, and outside funds and need to show they care about their education and the help they receive." Addison revealed a vicious cycle of never-ending worry, scrounging to pay tuition each semester and overcompensating to show appreciation for the help she receives.

For Callie, the financial burden of attending a post-secondary institution is an "obligational worry I have, and others do not." Throughout her time in an agricultural education degree program, Callie has held two jobs just to help pay for her education. Callie remarked, "Working two jobs has hindered me from doing better academically." Due to work demands and precarious finances, Callie also shared "it is hard to attend events and travel due to the financial obligations which come along with doing so." Callie felt she was missing out on valuable events and networking opportunities due to the financial hardships of enrolling in an agricultural education degree program.

For Derek, the decision to pursue a degree in agricultural education rather than a degree in another agricultural discipline surrounded finances and the monetary opportunities that come

from pursuing an educational degree. Initially, Derek applied for admission to another major at his respective university. However, a parent suggested an educational degree due to the ability to find support in educational loan forgiveness after a certain number of years served in the classroom after graduation. Due to this, Derek noted, "Agricultural education was the closest major that aligned with my goals and interests that applied to [loan forgiveness program]." Since enrolling in agricultural education, Derek has sought out other financial opportunities to help combat the costs of post-secondary education. Currently, Derek serves as a [job title] on campus. Derek shared: "Without my on-campus job, I would not be able to afford an apartment off-campus."

Ellis also expressed the challenges of the financial burdens associated with pursuing a four-year degree. To start her post-secondary educational career, Ellis enrolled in a two-year program and later transferred into a four-year program due to incoming credit hours, available disciplines, and less of a monetary commitment. Once enrolled in the four-year program, Ellis began struggling with finances and finding ways to pay for her tuition. Ellis shared she had to take semesters off of school to help pay for her tuition for the upcoming term."

Finn has always had to worry about budgeting and staying on top of her finances throughout the year. Finn has had to solely support herself and try to find funding in any way possible. For Finn, financial assistance for her education is provided through scholarships, financial aid, and on-campus employment opportunities. However, Finn shared that even though "financial assistance is provided, however, some months like December and the Summer are a struggle due to no funding." These circumstances required Finn to "budget and stick to a strict plan" to ensure she had enough money to survive when assistance was unavailable. Finn also

shared that she often has “car troubles, and having to figure out how to pay for those” adds to the stress of budgeting and trying to save enough money for unexpected expenses.

Discrimination

Another barrier or challenge discussed by participants is discrimination. Currently, agricultural education is predominantly for white females. Due to this, some participants explained they often feel out of place when participating in agricultural education events or settings. Six out of the seven participants shared they have faced discrimination in some capacity or have had to worry about possible discrimination during their time at their respective universities.

Bailey has experienced her fair share of discrimination during her time enrolled in agricultural education. Bailey elaborated, "Professors often share personal opinions and spark conversations about controversial topics in class to elicit debate" without knowing the backgrounds or identities of the students enrolled in their classes. In one specific class, Bailey shared that a professor “made inappropriate comments about the LGBTQ+ community even when he knew students in the class identified as LGBTQ+.” Because of these negative interactions, Bailey has experienced stress and anxiety surrounding certain professors and classes. Bailey proclaimed, “ I now have panic attacks and anxiety when I have to attend the professor’s class because I am constantly worried about what he is going to say about the LGBTQ+ community.” Regarding peers in my cohort, Bailey voiced, "When I started at [university name], students were accepting and open about my identity; however, as time went on, friend groups and relationships fizzled out when true feelings were addressed surrounding me identifying as LGBTQ+.”

Callie shared that discrimination or the feeling of being discriminated against has been a primary concern since being enrolled in an agricultural education degree program. Callie explained, "I am always the only [racial/ethnic identification] woman at agricultural education events and or classes." Because of this, Callie also expressed, "Sometimes I feel a sense of avoidance from peers and others in the profession due to my visual differences." When deciding on a post-secondary major, Callie was often encouraged by others to choose a career path different from agricultural education. Callie explained, "I was told I shouldn't be in a teaching or agricultural career because of the color of my skin" by friends, family, and educators outside of agricultural education. Due to negativity and strong feelings of others, Callie shared I "sometimes have negative opinions about teaching agriculture due to how I look."

Derek has felt discrimination as a male and a member of the LGBTQ+ community. Derek expressed, "Being a male student in agricultural education, sometimes I feel like a little fish in a big pond." He also shared he sometimes struggles because "it is hard not having others around who are like me." Being one of the few male students in their cohort, Derek feels his path in agricultural education is different 'because females and males have different experiences' when teaching and leading in the classroom.' For Derek, identifying as LGBTQ+ has also incurred discrimination by others. Derek disclosed, "Being LGBTQ+ I sometimes get dirty looks and side-eyes from others." When it comes to agricultural education, Derek discussed, "Some people assume I won't last due to my identity."

Ellis explained their disability sometimes hinders her from doing the things her peers or others in her cohort are doing. Because of this, Ellis "did not feel a sense of belonging" for a long time in her post-secondary endeavors. Ellis disclosed, "Due to my genetic disability, I sometimes feel and look different than others." Throughout their post-secondary coursework,

Ellis stated, "I have had challenges with certain professors not working with my disabilities, which has resulted in failing grades because of non-cooperation." Ellis sometimes feels her disability hinders her or sets her aside from others in agricultural education.

Finn has experienced discrimination throughout her time and involvement in agricultural education. Starting in her high school agricultural education program, Finn remarked, "I was ostracized early on in high school due to people assuming I was LGBTQ+ and would not join the FFA due to that assumption and their refusal to be led by a gay FFA chapter officer." When Finn was enrolled in agricultural education at the post-secondary level, the discrimination only grew from there. Finn explained 'in my agricultural education classes, I often feel ostracized by other students, and for a long time I felt shunned in my head. However, it was recently confirmed some students do not like me due to my personality, characteristics, and the assumption I am LGBTQ+." Finn has also shared, "comments have been made about me being the trashy lesbian." Overall, this discrimination has caused Finn a lot of extra stress and anxiety and has led to mental health issues during her educational pursuits.

George has experienced bias in a female-dominated field of study. However, George did recognize a "sense of belonging amongst other guys in my cohort." George also shared, "[Male agricultural education professor] is a wonderful role model." George has often felt the negative perceptions directed at male agricultural educators. George commented, "White male agriculture teachers get a stigma around them about being narrow-minded and set in their ways." George also expressed, "Male agriculture teachers are often associated with a lack of diversity in their personal lives and no push to recruit or retain students with diverse backgrounds into their programs or classrooms." For George, these thoughts and feelings often arise when there is a "big event where there are a lot of female agriculture educators or students" around.

Isolation

Isolation was recognized as an additional barrier or challenge. Four out of the seven participants shared that they felt a sense of isolation in some form or capacity during their time at their respective universities, and this can lead to feeling out of place at agricultural education events or settings.

Callie often felt a sense of isolation amongst her peers and teaching cohort as a student who joined the agricultural education program in the spring semester rather than the fall semester. Callie explained, "Missing the fall semester has put me back track-wise, and being deferred has put me behind on my academic track as well." Because of this, Callie often feels she is behind in the program and not on the same level of progress as her peers. Callie clarified, "Being a semester behind has also caused issues with parking, academic standing, and other educational considerations like financial aid and student teaching." Due to these issues, Callie feels isolated because many of her agricultural education peers do not share some of these similar obstacles and cannot sympathize with the problems she is currently facing.

Derek often feels a sense of isolation amongst his peers due to his unique circumstances as someone who is constantly juggling unexpected challenges and barriers. Derek declared, "balancing school, career opportunities, social life, and family" is often challenging and sometimes people do not understand, "I don't want to say no to plans but I know I need to." At times, all the various demands can become overwhelming, and not all people recognize what it is like to be a working student. Derek often feels a sense of isolation due to the "high expectations I have in place for myself and the worry that I will not be enough for my students." Derek also shared he "worries he is doing this all for nothing and he will fail as an agriculture teacher." Additionally, Derek often feels a sense of isolation as a male teacher navigating certain scenarios

in the classroom. Derek remarked, “I often think about students and their behaviors and how I will navigate those as a male teacher.” Overall, Derek feels secluded amongst his cohort because he has to manage and worry about things his peers in agricultural education do not.

Ellis feels a sense of isolation in the fact she cannot share her true self with her peers. Before joining agricultural education, Ellis stated, “When I was in [name of degree program], the students were super conservative, and I could not be myself around them.” Ellis always felt alone and had no one on her side when attending classes for said program. Because Ellis has a genetic disability, there are times she feels like an outlier in her agricultural education program. Ellis explained, “I always feel I have to be less involved when doing certain activities.” Because she is not allowed to participate in certain activities, Ellis also said, “because of potential injuries or medical problems relating to my disability, I often have to miss out on certain activities or opportunities.”

Finn expressed that she often does not feel she belongs amongst her peers in agricultural education. Finn described, “People have made it clear I talk too much in class and tend to act like a know-it-all.” During her time in agricultural education, Finn also shared she recently “found out people roll their eyes at me and also say mean things about me behind my back.” Due to this feeling of isolation, Finn disclosed, “I never went to any club gatherings, agricultural education events, or organizational meetings due to subjectivity and judgments from peers that were associated with those programs.” Because of the continuous bullying and judgmental comments from her peers, Finn feels a sense of isolation amongst her cohort and that she will miss out on opportunities allowing her to connect with any individual classmates.

Mental Health

An additional barrier or challenge recognized by participants was related to mental health and or concerns with disabilities. Most of the participants discussed these concerns, and they can be related to the stresses of navigating post-secondary education and becoming an agricultural education professional.

Addison has experienced her fair share of mental health concerns during and after the COVID-19 pandemic. Addison commented, "Covid was hard mentally and physically." Addison also shared the pandemic was mentally draining because she went from "being social in the FFA and then not being able to socialize in college because of Covid restrictions." Also, during this time, professors and industry professionals were experiencing the unknown with the COVID-19 pandemic. Addison mentioned, "Advisors had a lot going on, and I felt I was not getting the help I needed to be successful." Due to this, Addison "felt a lot of discouragement and lack of motivation to continue in an agricultural education career path." In response to being a low-income student, Addison shared that "spending time on scholarships and not being rewarded for the time and effort you put in" can harm mental health when trying to obtain funds for the upcoming semester. Addison also verbalized, "discouragement also comes from not being awarded opportunities" after working so hard to receive them.

Bailey entered into her agricultural education program without any background in FFA or agricultural education. Because of this, Bailey has had mixed feelings over the past couple of years. Bailey explained, "At times, I was overwhelmed and scared I had chosen the wrong major." She also shared, "Sometimes I wonder if I will fit in with other agricultural educators due to my background, identity, personal beliefs, etc." Also, during her time at her university and in the agricultural education program, Bailey experienced multiple forms of discrimination that provided her with a lot of anxiety and stress over time. Bailey shared that "experiences with

certain biases and opinions from agricultural educators within the department” have affected her mental health and have led her to feel like she does not belong in the world of agricultural education.

Callie noted stress and the mental toll of starting a semester behind her agricultural education cohort. As Callie elaborated, she has experienced a lot of “mental health concerns due to having to play catch up with my peers.” Callie said, "Trying to overcompensate for being behind and trying to catch up has taken a toll on my mental health.”

For Finn, mental health concerns have always been an obstacle for her, and she has had to navigate her mental health for a good part of her life. Growing up, Finn expressed she “did not have the most supportive parents, and their business was talked about in town, and it has affected me greatly.” Due to this and other worries, Finn shared her “mental health has been a struggle for her for a long time.” During difficult times, Finn tends to lean on her significant other; however, “he does not live close, and sometimes that is a challenge for me to navigate.” Especially when times get hard, Finn said, “It is not easy having him gone.” For Finn, stress and mental health concerns are harder to navigate because “due to certain health issues, stress is a contributing factor to health concerns, and being a teacher might trigger those issues.” Finn often worries stress will be a contributing factor to her mental health when entering the classroom. Finn also stated, "The current state of the world and the education system is really hard to navigate. It is very intimidating to knowingly sign yourself up for a flawed education system and be constantly reminded teachers do not get paid enough and a lot of programs are underfunded, and agriculture teachers are pushing themselves to the max.” Due to these concerns, agricultural teachers are often set up for environments that are ruled by stress and worry and can be a concern for mental health issues.

Lack of Prior Knowledge

Another challenge noted by participants related to limited experience in agriculture or the FFA. This lack of prior knowledge in the subject area caused a few of the participants to question their preparedness to teach agricultural education. These participants also shared their struggles with catching up and understanding course content they felt their peers had already learned in their high school agricultural education programs.

Bailey attended an early college high school and was therefore unable to participate in agricultural education classes and or an FFA program. When beginning the undergraduate program, Bailey remarked, "Coming into the agricultural education program, it felt like a different world I had never been a part of, and it was very daunting to be in a new place, with no knowledge." Due to this, Bailey shared that "having no background knowledge in FFA" made her feel "no sense of belonging" amongst her peers and cohort. Regarding classroom instruction and prior knowledge of agricultural content, Bailey proclaimed, "I was stressed about having no FFA background and having to catch up to others who had FFA and agricultural education backgrounds." Noting obstacles to learning the agricultural education curriculum, Bailey shared that "topics such as animal science came as a challenge at first." When it comes to teaching or cooperation outside of the agricultural education program, Bailey explained, "Participating in teaching events or workshops outside of [name of university] and having to prove to others I know what I am doing without the FFA background has been challenging." When considering her future endeavors, Bailey shared, "I am not passionate about the FFA component of agricultural education and wonder if teaching in an agricultural education classroom in a public school is right for me." Overall, due to the lack of an FFA or agricultural education background, Bailey has some concerns about effectively teaching curriculum components such as FFA.

Derek was never offered the opportunity to take agricultural education classes or participate in an FFA program due to the school not having an agricultural education program or educator. Despite this obstacle, Derek always loved animals and knew he wanted to pursue a career in veterinary science. After a change of events, Derek decided to enroll in an agricultural education degree program at the post-secondary level. After this change of plans, Derek explained, "Not having a background in FFA or agricultural education put me at a disadvantage because I did not come in as someone with a lot of FFA knowledge." Because of this, Derek was very concerned about his future in an agricultural education degree program. Derek vocalized, "I questioned if I could be successful as an agricultural education teacher due to me not having any background in FFA or agricultural education."

Ellis's high school experience in agricultural education was a little different than most. Ellis was required to take agricultural education classes due to the requirements set in place by the school and the lottery acceptance system. During her time in high school, Ellis participated in agricultural education classes such as agriscience, animal science, and vet assisting. However, she did not participate in the FFA program that was associated with the agricultural education classes. Ellis expressed, "I do feel a sense of belonging in the agricultural education program, but I wish I had an FFA background as a relationship builder." Before transferring into the agricultural education program, Ellis was enrolled in another agricultural discipline at her respective university. During this experience, Ellis explained, "In [program name], I did not feel a sense of belonging because I was not from a small town and had no background in farming or the farming industry." Due to this, Ellis sometimes feels a sense of missing out due to the lack of background in FFA or other agricultural industries.

The Benefit of Positive Experiences

Participants shared multiple positive experiences and interactions they have had during their time in an undergraduate agricultural education program. Several of the experiences were shared amongst participants, and they agreed they were rewarding and exciting to navigate. Participants noted that their positive experiences and interactions have outweighed the negatives.

Opportunities and Events

Numerous participants shared that their most memorable, positive experiences revolved around opportunities and events provided by their respective agricultural education programs. These opportunities have involved teaching younger students about agriculture, attending conferences, traveling to national conventions, networking within other agricultural industries, completing educational training, participating in professional development, etc. Participants shared that they thoroughly enjoyed the opportunities and events promoted or provided by their university's agricultural education department and that they think they were valuable experiences that pushed them further in their future endeavors as agricultural educators.

Addison shared that impactful experiences were provided by the university or agricultural education department and included opportunities, events, and networking moments.” Fortunately, Addison’s respective university provided everything that was needed, and no funds were needed on behalf of the students attending the event. Addison said, “some opportunities are paid for by different sponsors and there was no financial stress associated with attending or participating.” Because of this, Addison could participate in the event and not have to worry about whether she could attend the event due to finances or whether she would be able to come up with the money in time. Lastly, Addison shared, "Through good experiences, I have been able to meet the right people and participate in other great opportunities and experiences.”

Callie is usually the only person in an agricultural education setting who looks like her. Because of that, Callie described "going to events and finding people who share the same experience as me" as very important. Since joining the agricultural education program at her respective university, Callie has experienced many positives through opportunities and events in agricultural education and those provided by her university's agricultural education department. Callie eluded "Going to different clubs and organizations which are created for minority students in agricultural education is important to identify others like me and also promote diversity within agricultural education." Overall, Callie has enjoyed the many events that have been provided to her through her agricultural education program. With these positive experiences, Callie shared "opportunities to meet other people like me through events, conferences, and other agricultural programs" have been a highlight of her agricultural education career.

Finn shared the importance of agricultural education programs offering outlets for underrepresented students to have and create positive experiences. Finn explained, "A positive experience she has encountered at [university name] and in agricultural education is professors are creating events and opportunities specifically for underrepresented students." Finn also mentioned that some of the classes she took in the agricultural education department offered great opportunities. Finn mentioned, "Taking [name of class] was an opportunity to have hard conversations with others in the class about putting biases aside and helping students who are LGBTQ+." Finn also noted the importance of professional training and development sessions in different areas of concern. Finn explained, "A great opportunity was provided to pre-service teachers in agricultural education was mental health and first-aid training." Finn shared this training was very informational, and she learned so much about mental health and how to navigate mental health concerns in youth.

Financial Support

A few participants recognized the benefits of financial support. This assistance has been in the form of scholarships, grants, financial aid, teaching assistant positions, and or research assistant positions. Three out of the seven participants shared that without financial support, they would not be able to enjoy their program or learn as much as they have thus far. Financial assistance has allowed these participants to experience a sense of freedom regarding their education and minimized the stress they would have encountered without some level of support.

Addison explained that having financial support each semester allows her to worry less about how she will find funding for her education and focus more on her classes and teaching. Addison furthered, "Students who share the same underrepresentation of being low-income share the same sense of trying to save, find funds, apply for scholarships, and make money to further their education; while always worrying about paying for the semester." However, when funds were secured to cover the cost of the semester, Addison explained "it felt like a weight had been lifted off my shoulders" Throughout the semester, Addison could focus on her academics, agricultural education program, and teacher preparation, without having the constant fear she would not be able to keep up with her bill for the semester.

Callie explained being able to obtain financial aid and scholarship opportunities tailored to her underrepresentation has been helpful when paying for her classes each semester. Callie often worried about funding and trying to figure out a financial plan to help pay her university bill each month. Callie illustrated having "financial aid and scholarships for being a minority student is a rewarding experience and it does help defer some frustration and worry when it comes to paying tuition." She also noted the importance of "resources such as scholarships,

housing, transportation, and asking what students need to be successful” in retaining underrepresented students in agricultural education programs.

Finn has had to financially support herself throughout college, and it has been a challenging experience. However, through her hard work and dedication throughout the year, Finn has obtained financial assistance to help pay for her college education. Finn said, “I have worked with my academic advisor to make sure all requirements are met for scholarships, financial aid, and staying on track financially throughout the school year.” At times, navigating finances and budgeting for the entire school year can be hard to deal with. However, Finn demonstrated that she “feels first-generation and low-income students are supported at [university name] and I have been given the help I need to be successful through agricultural education professors and staff.” Financial assistance has allowed Finn to experience a sense of relief when it comes to paying for her education and has reduced the stress that comes with budgeting and securing funds for each semester.

Lifelong Relationships and Friendships

When reflecting on positive experiences, several participants described forming life-long relationships, friendships, and lasting memories through agricultural education. These relationships have been found and fostered through classes, organizations, research, conferences, conventions, jobs, etc. Without these relationships and friendships, many participants shared they would not have been able to make it through their respective programs without the support and guidance from these connections.

Addison shared, “Having a great support system and knowing I have family and friends to lean on” has gotten her through tough times and helped her overcome obstacles in her life. During times of discouragement, stress, and worry during her early educational pursuits,

Addison explained her “freshman year roommate was the only reason she stayed in agricultural education because of the continuous support she provided her.” Addison also shared, “Valuable relationships and having a sense of belonging amongst her cohort has helped push her along the way during hard times.” For Addison, meaningful relationships have been the glue that keeps her together. During times of doubt, Addison vocalized her “family and friends pushed her to continue in agricultural education and told her they were proud of her and she could do it.” When it comes to relationships, Addison shared it is important to “make relationships so you can be comfortable talking about problems and hardships whenever they do arise in your life.”

Bailey learned the true value of creating close relationships at her respective institutions. Bailey expressed, “Friendships and personal relationships helped motivate me and encourage me to keep learning and growing in agricultural education.” During hard times, Bailey also relied heavily on these connections to get her through the problem at hand. Bailey commented, “When faced with barriers or negative experiences, I overcame these challenges by reaching out to friends and those closest to me.” Bailey also shared, “I overcome obstacles by talking it out with friends, family, fiancé, and agricultural education professionals.” By reaching out to the people closest to her, Bailey has remained motivated to continue her educational pursuits in an agricultural education degree program.

Small enrollment in many agricultural education programs helps create familial relationships and personal connections. Derek stated, “With agricultural education being a small enough major, I experience close-knit relationships with others that feel like family.” During times of discouragement, Derek shared, “My peers are helpful and are there to lean on during times of trouble.” With these types of relationships, it is easy to rely on these connections to get through tough times. For Derek, leaning on these friendships has been a great way to combat

negativity and challenges in his life. Derek affirmed, "Before responding to negativity, lean on friendships and ask for advice from others before taking any action." Lastly, Derek stressed the importance of "creating meaningful connections" throughout the agricultural education industry and other disciplines as well. Derek proclaimed the importance of "finding high-quality friends and latching on to them... they can provide opportunities and support." When reflecting on the most positive experience while enrolled in agricultural education, Derek said, "I will come out of agricultural education with a big family I can rely on in my future endeavors." With Derek, this means the most to him as he ventures out into his new position as an agricultural educator.

Finn has found value in friendships as an agricultural education student who has sometimes experienced struggles, discouragement, and a lack of motivation. When negative experiences occur, Finn has found comfort in "venting and ranting to friends" about the experience and talking through it rather than being upset. Finn has felt the negativity and hurt from those in her cohort as well as from those closest to her. Finn disclosed "In my relationships and friendships, I try to make sure people know the true me, so they don't judge me or make assumptions about me behind my back." Finn also shared the importance of "being able to understand and recognize the people to whom you can disclose certain things." Finn said "Being able to talk through things with friends and agricultural education professionals" helps tremendously during times of both negativity and positivity.

Support from Advisors, Professors, and Faculty

Participants shared valuable experiences revolving around supportive interactions with agricultural education advisors, professors, and faculty. These relationships have been developed through interactions such as classes, advising, professional development, educational opportunities, etc.

Addison expressed, "Very good professors and advisors who truly care about me and my mental health got me through those hard times and motivated me to keep going." When addressing certain barriers, Addison said, "It is important to form relationships with advisors, faculty, financial aid counselors, and professors" and "utilize those resources and seek help when it is needed." Through these experiences, Addison has created lifelong relationships and memories with individuals in the department and can now "share the news and positive experiences with them and feel proud of my accomplishments."

Bailey found comfort and support through her advisor and agricultural education professors. Bailey expressed, "When I got engaged to my girlfriend, professors congratulated me when I announced my engagement to others." After getting engaged, Bailey wanted to be close to her significant other during student teaching but was unsure if it was possible since they live in [name of state]. Bailey verbalized that her "advisor was super helpful in securing a student teaching placement near my fiancé in [name of state] and never made a comment or expression about me being gay." For Bailey, this meant a lot that her advisor would go out of the way to support her and make her request a reality. Bailey also shared, "My advisor took additional time to make sure my student teaching placement was set to ensure housing, travel accommodations, etc." By reaching out to professors and individuals in the department, Bailey has been fully supported in her identity and future endeavors in agricultural education.

Derek has always felt a sense of respect and acceptance among peers and educators alike. Derek professed "Professors have been very supportive and pushed me to do great things." Within agricultural education, Derek shared "Professors are very motivational, keep it real with their students, share hard times, and how to navigate certain scenarios." Derek also stated, "Professors are great motivators and encourage students to keep pushing through when times get

hard.” Besides agricultural education, Derek has also found support from other faculty members. Derek exclaimed, “My [organization name] coordinator pushed me to take bad experiences in educational settings and learn what not to do in the classroom.” Overall, Derek is thankful he was able to “really get to know professors and advisors.”

Finn leaned on teachers, educators, advisors, professionals, etc. for support and a safe place to visit. Within agricultural education, Finn expressed “I feel I am supported and seen by agricultural education staff, and I have always been given the help I need through all the agricultural education professors.” Finn mentioned multiple examples of agricultural educators being accommodating to their students. Finn explained, “For example, [professor name] asked us to put our pronouns on our name tents to be inclusive of other students.” For Finn, this was a pivotal moment in her agricultural education career. Finn shared “Educators and professors shared in her underrepresentation and were not ashamed to share their experiences.” Due to this, Finn felt supported and seen by others in her agricultural education program.

George has not always felt supported amongst the many females within his cohort. However, strong, male, agriculture teachers have supported and made him feel at home in agricultural education. Through the influences of male role models, George articulated “I feel I can be an example for other male students who want to pursue agricultural education.” George also shared “Strong, male mentors have pushed me along the way, and I have been able to build lifelong relationships and worthwhile connections through these individuals.” George continued “[Professor] is a true mentor and example of what we male agricultural teachers need to strive to teach, think, and act like in our classrooms.” Overall, the influences of strong agricultural educators have impacted and influenced the lives of agricultural education students and how they will perform in their agricultural education classrooms.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This study sought to examine the experiences of underrepresented students enrolled in an agricultural education teacher preparation program at a university in North Carolina. The participants in this study self-identified as underrepresented individuals in at least one area of underrepresentation in agricultural education. Using the research objectives as a lens through which to view the data, it is evident these participants have experienced both negative and positive experiences alike while being enrolled in a post-secondary agricultural education degree program.

This study aims to explore the experiences of racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, and males enrolled in an agricultural education teacher preparation program at a university in North Carolina. This study also intended to represent and encompass a broader perspective beyond race and ethnicity in agricultural education. Several research questions guided this study:

1. What are the participant's experiences in FFA or agricultural education at the secondary level?
2. What motivates underrepresented students to pursue an agricultural education teacher preparation program at a university in North Carolina?
3. What challenges do underrepresented students face when pursuing an agricultural education teacher preparation program at a university in North Carolina?
4. What positive experiences do underrepresented students encounter when pursuing an agricultural education teacher preparation program at a university in North Carolina?

Summary of Procedures

Phenomenological methods and techniques were used to conduct this qualitative research study. While this study cannot be generalized to other populations, it can provide valuable insight into the experiences of underrepresented students enrolled in agricultural education at the post-secondary level. Insight from this study may also help the agricultural education profession and teacher education faculty develop innovative strategies to help meet the needs of underrepresented individuals enrolled in agriculture teacher preparation programs.

Interview questions were written and pilot-tested with two underrepresented students enrolled in agricultural education at a university in North Carolina during the fall of 2023. Data collection and analysis during the pilot study suggested changes in the questions used in the interview guide's final draft. Originally, eight students agreed to participate in the study. Five participants were female; three were male. However, the eighth participant agreed to participate but was unable to complete the first interview, so they were not included in the study. Outside of this, seven participants agreed to participate. A foundation of Moustakas's (1994) phenomenological interview approach was used to construct three interview sessions with each of the participants. Semi-structured and unstructured interviews were the primary data sources, while document analysis of qualitative surveys and literature served as secondary data sources. Interviews were recorded and transcribed verbatim, and transcripts were sent to participants as part of the member checking and trustworthiness criteria required for qualitative research. Data were coded and analyzed looking for common themes in the experiences of underrepresented students enrolled in an agricultural education teacher preparation program at the post-secondary level.

Summary of Findings

Research Question 1: What are the participant's experiences in FFA or agricultural education at the secondary level?

Participants come from an array of different FFA chapters, have agricultural education experiences, and or have no background in FFA or agricultural education at all. Four out of the seven participants had experience in both FFA and agricultural education classes. All four of these participants noted the impact agricultural education and the FFA had on their decision to become an agricultural educator. Addison's background in agricultural education and the FFA stemmed from the experiences of an older sibling and wanting to be better than him. Callie always wanted to be a veterinarian and knew agricultural education classes and the FFA would provide valuable opportunities in animal science. Finn was introduced to agricultural education and the FFA at the middle school level and fell in love with the program. Lastly, George has a strong background in agricultural education and the FFA due to his parent's involvement in agricultural education. From these experiences, George knew it was a stable career choice.

One of the seven participants was solely involved in agricultural education classes. This participant did not participate in the FFA during their high school educational career. Ellis took agricultural education classes during all four years of their secondary education and served as an agricultural education teaching assistant through their advanced studies program. However, this participant has no prior background in FFA.

Two of the seven participants were not involved in agricultural education classes or a high school FFA program. Bailey grew up on a family farm and had no FFA background due to attending a secondary institution that did not offer agricultural education classes. Bailey had an interest in becoming a veterinarian. Derek grew up in a family that showed cattle and enjoyed working with them throughout his childhood. This participant had no agricultural education or

FFA background due to attending a secondary institution that did not offer agricultural education classes. Derek has always loved animals and wanted to pursue a career in veterinary science.

Research Question 2: What motivates underrepresented students to pursue an agricultural education teacher preparation program at a university in North Carolina?

All seven participants conveyed positive feelings when asked about their biggest motivation behind pursuing a career in agricultural education. Addison revealed that seeing students grow and excel ignited a spark to continue her educational pursuits. Bailey conveyed she had a strong devotion to disseminating the truth about agriculture and knew she could do that by teaching agricultural education. Callie disclosed that her main motivation in pursuing agricultural education is her fondness for teaching agriculture and seeing others grow. Derek knew he had an infatuation with agriculture, which drove him to stay in agricultural education. Finn fell in love with agriculture and the ability to teach different classes and different students and knew it would keep her interest over time. Ellis truly loved agriculture and animals and loved to teach others about her practice. Lastly, George realized he could be very successful in agricultural education through student and networking opportunities all over the United States.

It can be concluded underrepresented students have varying motivations for continuing in the agriculture teacher preparation program. Each of the seven participants shared similar and unique experiences throughout their time in agricultural education. Multiple participants shared that a primary motivation for pursuing agricultural education as a future career choice was the influence of their agriculture teachers. Addison was inspired by her FFA advisor to pursue a career in agricultural education. Callie's agriculture teachers served as role models and trusted mentors. Similarly, Callie wanted to promote a safe space for her future students. Finn was motivated to become an agricultural educator due to the relationships she built with teachers during her educational career and wanting to provide the same atmosphere for others.

Multiple participants communicated about their desire to provide a supportive atmosphere for others. For these participants, many educators and people along the way shaped them into the aspiring teachers they are today. Three out of the seven participants were motivated to pursue a career in agricultural education to provide a support system for others. Addison's advisor provided guidance and encouraged her to do anything she set her mind to. Because of this support, Addison wanted to be that for someone else. For Callie, an encouraging educational system is very important to her and others who have experienced diverse situations in their educational careers. On a personal level, Callie shared she does everything for her sibling, who has a disability, and she wants to be a refuge for students like her. For Finn, watching students be successful is a huge motivating factor in working towards a future in education. Callie explained that her strong relationships with other educators motivated her to keep going and become the educator she is today.

Research Question 3: What challenges do underrepresented students face when pursuing an agricultural education teacher preparation program at a university in North Carolina?

It can be concluded that underrepresented students in agricultural education face certain barriers or challenges that other students may not experience. Many participants shared that their biggest challenge is the financial burden of pursuing a post-secondary education. Five out of the seven participants shared they have struggled financially and have had to worry about money throughout each academic semester since starting at their respective universities. Coming from a single-income home, Addison shared financial situations are hard to navigate when trying to find scholarships, grants, and money to support college expenses. For Callie, the financial burden of attending a post-secondary institution is a worry she has, while others do not. For Derek, the decision to pursue a degree in agricultural education rather than a degree in another agricultural discipline surrounded finances and monetary opportunities. Ellis shared that she has had to take

semesters off to help pay for her tuition. Finn has struggled financially and has always had to worry about budgeting and staying on top of her financial situation throughout each semester.

Several participants shared about bias issues that occurred during their time in an agricultural education degree program. Six out of the seven participants shared that they had faced discrimination in some capacity or had to worry about possible discrimination during their time at their respective universities. Bailey has experienced her fair share of discrimination. Callie shared that discrimination or the feeling of being discriminated against has been at the top of the list since being enrolled in an agricultural education degree program. Derek has felt a sense of discrimination from a multitude of different outlets since pursuing agricultural education at the post-secondary level. Ellis shared she has a disability that sometimes hinders her from doing the things her peers or others in her cohort are doing. Finn has felt discrimination throughout her time and involvement in agricultural education as someone who identifies with the LGBTQ+ community. George has experienced bias in a female-dominated field of study as a male student.

Among the identified challenges, four out of the seven participants disclosed feeling isolated in some form or capacity. Being a student who joined the agricultural education program in the spring semester rather than the fall semester, Callie often feels confined amongst her peers and teaching cohort. Derek is often segregated from his peers due to his unique circumstances. Ellis feels secluded in the fact she cannot always be herself around her peers. Being a student who is often physically isolated from her peers because of her underrepresentation and identification, Finn feels she often does not belong amongst her peers in agricultural education.

Many participants voiced they have struggled with mental health and or disability concerns due to the stress of navigating post-secondary education and becoming an agricultural

education professional. Five out of the seven participants shared they have battled mental health issues and or disability concerns since being enrolled in an agricultural education degree program. Being enrolled in an agricultural education degree program during and after the COVID-19 pandemic, Addison has experienced her fair share of health concerns over the last several years. For Bailey, feelings of worry affected her during her time enrolled in an agricultural education program. Joining her agricultural education program during the spring semester rather than the fall semester, Callie has felt the stress of being a semester behind her agricultural education cohort. For Finn, mental health has always been an obstacle for her, and she has had to navigate for a good part of her educational career.

A few individuals vocalized the challenges of not having a traditional background in agricultural education or the FFA. Three out of the seven participants shared they have struggled with catching up with and understanding information that was introduced to their peers during their participation in their high school agricultural education programs. During her high school educational career, Bailey attended an early college high school and was therefore unable to participate in agricultural education classes and or an FFA program. While attending a traditional, public high school, Derek was never offered the opportunity to take agricultural education classes and/or participate in an FFA program because the school did not have an agricultural education program or educator. Ellis's high school experience in agricultural education was a little different than most. Ellis was required to take agricultural education classes due to the requirements set in place by the school and the lottery acceptance system.

Research Question 4: What positive experiences do underrepresented students encounter when pursuing an agricultural education teacher preparation program at a university in North Carolina?

Participants noted numerous positive experiences and interactions during their time in an undergraduate agricultural education degree program. Three out of the seven participants shared that they thoroughly enjoyed the opportunities and events promoted or provided by their university's agricultural education department and considered them valuable experiences that would support their future endeavors as agricultural educators. Addison shared her most memorable experiences surrounded by offerings that were provided by the university or agricultural education department. Callie is usually the only person in an agricultural education setting who looks like her. Because of this, Callie shared that going to events and finding people with the same experience as her is very important. Finn shares the importance of agricultural education programs creating outlets for underrepresented students to have and create positive experiences in their agricultural education degree program.

Several participants recognized the valuable opportunities specific to financial aid or support. These include scholarships, grants, financial aid, teaching assistant positions, and/or research assistant positions. Three out of the seven participants shared that without financial support, they would not be able to enjoy their program or learn as much as they have thus far. Addison explained that having financial support each semester has been a positive experience and has allowed her to worry less about securing funding for her education and focus more on her classes and teaching. Callie explained being able to obtain financial aid and scholarship opportunities tailored to her underrepresentation has been helpful when paying for her classes each semester. Being a first-generation and low-income college student who has fully supported themselves financially, has been a challenging experience for Finn, and funding helped relieve the financial burden of paying for college.

Participants in the group stated their most valuable experiences have revolved around gaining life-long relationships and friendships through agricultural education. These relationships have been developed through classes, organizations, research, conferences, conventions, jobs, etc. Addison shared that having a great support system and knowing she has family and friends to lean on have gotten her through tough times and helped her overcome obstacles in her life. According to Derek, the small enrollment of many agricultural education programs creates an atmosphere promoting familial relationships and personal connections. As an agricultural education student who has experienced struggles, discouragement, and a lack of motivation at times, Finn has found value in friendships and close relationships.

From the perspective of the participants, some of their most valuable experiences have revolved around supportive interactions with agricultural education advisors, professors, and faculty. These relationships have been facilitated through classes, advising, professional development, educational opportunities, etc. Five out of the seven participants shared they have felt supported by professionals in agricultural education and have created lifelong connections through these positive interactions. When addressing certain barriers, hardships, and or positive experiences, Addison has found the importance of leaning on advisors and professors throughout the agricultural education department. As an LGBTQ+ student in agricultural education, Bailey has found comfort and support through her advisor and agricultural education professors. While pursuing agricultural education at his respective university, Derek has always felt a sense of respect and acceptance among peers and educators alike. Early in her educational career, Finn leaned on teachers, educators, advisors, professionals, etc. for support and a safe place to visit. Being a male student enrolled in agricultural education, George has not always felt supported

amongst the many females within her cohort. However, strong, male, agricultural educators have supported and made him feel at home in his teacher preparation program.

Conclusion and Implications

Krumboltz's social learning theory of career decision-making (SLTCDM) served as the framework for this study. According to this theory, an individual's career decision-making process can be influenced by four categories: genetic endowment and special abilities, environmental conditions and events, learning experiences, and task approach skills. These unpredictable events and experiences are important influences on individuals' lives and decision-making processes when choosing a future career path.

The findings of this study supported the claims addressed by Krumboltz's social learning theory of career decision-making. Krumboltz's social learning theory outlines four categories: genetic endowment and special abilities, environmental conditions, and events, learning experiences, and task approach skills that influence a student's decision-making process in choosing a future career path. Each of these categories suggests an event that cannot be altered or changed throughout a student's life. All categories of Krumboltz's social learning theory were recognized by the participant group. However, not all categories were perceived across all participants.

Participants of this study self-identified as underrepresented in the field of agricultural education and were contacted to participate in the study. Participants indicated varying, yet similar background experiences, abilities, and skills that influenced them to choose agricultural education as their future career choice. Overall, participants indicated positive experiences, challenges, and barriers to pursuing an agricultural education teacher preparation program at the post-secondary level. With the SLTCDM in mind, many participants attributed the decision to

pursue a career in agricultural education to the four categories outlined in Krumboltz's social learning theory of career decision-making. Among these categories, participants identified their motivation for choosing a career in agricultural education surrounding their backgrounds, learning experiences, and abilities surrounding agriculture. However, participants also noted some challenges and barriers have arisen in their agricultural education programs due to their underrepresentation, familial backgrounds, past learning experiences, and special abilities. Overall, the combination of these factors contributed to the individual's career decision-making process and selection of a future career in agricultural education.

Recommendations for Practice

While most participants had experience in agricultural education and FFA while in high school, a couple did not. Therefore, it is important to promote a career in agricultural education both in agriculture classrooms and to a broader audience both within agriculture disciplines and beyond. Currently, most teacher preparation courses are specific to majors, so a new course could be offered to students in other majors who may be considering the idea of teaching. Better strides can be made in education departments to promote agricultural education and create more involvement between the two colleges. Within this study, participants were willing to self-disclose as underrepresented. However, not all students in agricultural education may be comfortable doing so or do not consider themselves underrepresented. Due to this, an additional recommendation can include featuring individuals' diverse talents and positive experiences in the agriculture teacher preparation program to serve as a recruitment tool. Most teacher preparation faculty are products of agricultural education programs, and familiarity can be a barrier when they assume their students have been previously involved in agriculture and FFA and use terms and acronyms that may be confusing.

Participants spoke of the influence of their prior agriculture teachers on their decision to pursue teacher preparation. Ingram et al., (2018) also noted the importance of socializer influencers, which included both verbal and non-verbal encouragement. Allowing former students to share about the influence on others they witnessed by their agriculture teachers could be a good recruitment tool for students considering agricultural education. A passion for agriculture was also a theme in the study by Ingram et al. (2018), so promoting the teaching profession to various audiences that are agriculturally related is important. These could include 4-H clubs, Young Farmers and Ranchers, and other clubs throughout colleges of agriculture.

The profession needs to seek opportunities to provide more funding and scholarship opportunities tailored to students in agricultural education who are underrepresented. At NC State, an excellent starting point is encouraging students to apply for scholarships offered by the College of Agriculture and Life Sciences. Another potential funding source could be the North Carolina Teaching Fellows program.

To combat feelings of discrimination or bias, it is important that underrepresented students feel welcome, comfortable, and safe, and know there are resources available to them. An environment should be created for underrepresented students to be seen and heard. Lastly, underrepresented students should continue to be supported, provided equal opportunities, and ensure resources are provided to succeed in their endeavors.

It can also be recommended experienced and successful mentors from the agricultural education profession serve as educational advisors and provide students with key details surrounding their class loads each semester. Advisors can give students a better heads-up about their upcoming classes and what some of them entail. To better prepare students for a successful and stress-free semester, academic advisors can provide more detail about harder classes and

classes that require additional obligations outside of a normal lecture or lab setting. Also, advisors and or professors can take additional time to work with students one-on-one to ensure underrepresented individuals feel supported, heard, and comfortable at their respective institutions.

As a final recommendation, agricultural education departments seek out opportunities for agricultural educators, staff, and faculty that will support and foster conversations about diversity, representation, and unique student situations. In classrooms, agricultural educators need to push hard conversations so pre-service teachers are not surprised, unprepared, or uncomfortable when students bring up certain topics or questions. Pre-service teachers must also be better prepared and supported in navigating hard situations before entering their classrooms. Additionally, educators and students must be more considerate when asking personal questions or about experiences because they do not know others' history or background. Some assignments and questions can be triggering to individuals who are underrepresented or have experienced certain phenomena.

Recommendations for Future Research

There are several recommendations for future research. Additional qualitative research with former underrepresented students in agricultural education may help deepen and expand the knowledge base regarding the experiences of underrepresented individuals pursuing agricultural education at the post-secondary level. Given the limitation of time and the geographical nature of this study, follow-up interviews may prove beneficial to further clarify their thoughts, feelings, and experiences surrounding their time in an agricultural education degree program. Further research may also investigate if there is a connection between the experiences of

underrepresented agricultural education students, general education students, and education students enrolled in other disciplines of career and technical education.

The primary recommendation for additional research is the replication of the study to include multiple viewpoints of others who may have influenced the lives of underrepresented students enrolled in agricultural education degree programs. Case study research could provide unique perspectives from those who have worked closely with underrepresented individuals in agricultural education. These could include but are not limited to advisors, professors, mentor teachers, cooperating teachers, administrations, etc. The perspective of underrepresented individuals who are currently teaching agricultural education should also be considered an important viewpoint to identify ways they are overcoming barriers and challenges identified by underrepresented students enrolled in an agricultural education degree program. Supplementary research may also investigate if there is a connection between the barriers that underrepresented students in agricultural education face and the recruitment and retention of diverse individuals into the agricultural education profession. Quantitative or mixed methods research could also deepen and strengthen the knowledge base concerning the experiences of underrepresented individuals in agricultural education.

Research should also be conducted using current underrepresented agricultural educators and their experiences in their classrooms and agricultural education settings since graduating from an agricultural education degree program. This may provide insight into decreasing the teacher shortage facing the agricultural education profession. This might also provide insight into the reasons why there is an increasing shortage of diverse teachers and students in agricultural education programs at all levels of instruction. The replication of this study with underrepresented agricultural educators at the secondary and post-secondary levels should be

considered. Findings should be compared between the two groups, those who teach the secondary level and post-secondary level, to determine any differences.

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APPENDICES

Appendix A: Interview Protocol

Interview #1 Questions

1. What was your background in FFA and agricultural education before you started classes at the post-secondary level?
2. What led you to pursue agricultural education at the post-secondary level?
3. While pursuing agricultural education at this university, do you feel a sense of belonging amongst your peers?
4. As an underrepresented student, what negative experiences have you encountered while pursuing agricultural education at this university?
5. As an underrepresented student, what positive experiences have you encountered while pursuing agricultural education at this university?
6. What are some challenges that you have faced thus far that have shaped your experiences majoring in agricultural education?
7. Looking back on your experiences at this university, identify the barriers that you have faced that may have hindered you from continuing to pursue agricultural education.
8. Looking back on your experiences at this university, identify the motivations that you have encountered that may have pushed you to continue pursuing agricultural education.

Interview #2 Questions

1. What are some strategies or supports that you have found helpful in addressing certain barriers as an underrepresented student pursuing agricultural education?
2. What are some strategies or supports that you have found helpful in addressing certain positives as an underrepresented student pursuing agricultural education?
3. In your opinion, are these identified barriers faced by all underrepresented students pursuing agricultural education or just by specific students?
4. In your opinion, are these identified motivations faced by all underrepresented students pursuing agricultural education or just by specific students?
5. When faced with barriers or negative experiences, what do you do to overcome these challenges?
6. As an underrepresented student, what qualities or traits do you feel are required to overcome certain barriers?
7. When faced with negative experiences, how do you navigate or process certain phenomena?
8. When faced with positive experiences, how do you navigate or process certain phenomena?

Interview #3 Questions

1. What advice could you provide to other underrepresented students encountering similar situations?
2. What recommendations would you provide for this university to improve the retention of underrepresented students pursuing agricultural education?
3. What suggestions can you provide to the university to better support future underrepresented students pursuing agricultural education?

4. Were there any challenges that you expected to encounter that you did not experience while pursuing agricultural education at this university?
5. Were there any positive experiences that you encountered that you did not expect to experience during your time in agricultural education?
6. Based on your positive and negative experiences combined, do you feel a sense of belonging in the world of agricultural education?
7. Are there any other experiences that you would like to discuss about your time in agricultural education?
8. Do you have any questions for me now that I have finished asking all of my questions?

Thank you for your time and the invaluable information you gave me for my study. Please reach out with any questions or concerns if any may arise!

Appendix B: Email to Perspective Interviewees

Dear _____,

I am Katlyn Foy and I am a second-year master's student in Agricultural and Extension Education at North Carolina State University. I am writing to invite you to participate in a research study related to your experiences as an underrepresented student pursuing Agricultural Education at a University in North Carolina. This study consists of three interviews that will be less than one hour in length. The main purpose of this study is to determine the experiences that underrepresented students face when pursuing agricultural education at a university in North Carolina. More specifically, this study seeks to identify and describe the challenges and positive experiences of underrepresented students enrolled in agricultural education at the post-secondary level. For this study, underrepresented is defined as racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, LGBTQ+, and males.

You were selected because you are enrolled in Agricultural Education at a post-secondary university in North Carolina. In this study, you will self-identify as an underrepresented student in Agricultural Education and information will not be disclosed as to what you self-identified as. I understand that this is a busy time of year, but I am willing to work with you to pick a time that would be most convenient for your schedule. Your participation in this study is voluntary, however, I hope you will consider participating.

Information obtained during this study that could identify you will be kept confidential and will be used for tracking purposes only. You can ensure that your responses will be protected as any identifiable data collected, including your name, will be changed to not identify you in any way.

Please review the materials provided to gain further insight into the study and your role as a participant in the study. If you are interested, please fill out the Google Form included below. Additionally, please reach out with any questions or concerns. If you complete the Google Form, I will send you a Doodle Poll to select the best time to conduct your first interview.

Thank you for your contributions to agricultural education in North Carolina and thank you for your help with this project! I look forward to the potential of working with you.

Best regards,

Katlyn R. Foy
Graduate Teaching & Research Assistant
Department of Agricultural and Human Sciences
North Carolina State University

Google Form: <https://forms.gle/E3z1KgnNjvW84jHT8>

Appendix C: IRB Exempt Consent Form

NC STATE UNIVERSITY

Exempt Consent Form Interviews, Focus Groups, and Benign Behavioral Interventions

Title of Study: Diversification in Agricultural Education: Examining the Experiences of Underrepresented Students Enrolled in Agricultural Education at a NC University
IRB Protocol: 26357

Principal Investigator(s): Katlyn Foy, krfoy@ncsu.edu, 910-441-7865

Funding Source: None

NC State Faculty Point of Contact: Wendy Warner, wjwarner@ncsu.edu , 352-283-1711

You are being asked to participate in a research study that aims to determine the experiences that racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, and males face when pursuing agricultural education at a university in North Carolina. More specifically, this study seeks to identify and describe the challenges and positive experiences of underrepresented students enrolled in agricultural education at the post-secondary level. The universities outlined in this study include North Carolina State University (NCSU), North Carolina A&T State University (NCAT), Appalachian State University (ASU), and The University of Mount Olive (UMO). The examination and interpretation of this information are useful for agriculture teachers, teacher educators, and instructors at the secondary level to improve inclusionary practices and to better aid students who identify as underrepresented. Participation is strictly voluntary. You must be 18 years of age or older, reside in the United States, and potential participants should self-identify as an underrepresented individual. This includes racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, and males pursuing agricultural education at a university in North Carolina to participate in this study.

If you participate in this study, you will be asked about your experiences as an underrepresented student pursuing agricultural education at a university in North Carolina. More specifically, you will be asked to identify and describe the challenges and positive experiences that you have experienced while being enrolled in agricultural education at the post-secondary level. In this study, you will self-identify as an underrepresented student in Agricultural Education and information will not be disclosed as to what you self-identified as. Underrepresented is defined as racial/ethnic minorities, first-generation college students, students with disabilities, students from lower socio-economic households, and males. All interview sessions will be conducted in a virtual setting via Zoom. Video recordings over Zoom will be taken for terms of transcription. Pseudonyms will be given to each participant to ensure confidentiality. Videos will be stored on a secure server under a locked folder. The researcher will only have access to recordings. Recordings will not be used in publications or data reporting. Images will not be used in any way. The recordings will be transcribed by only the researcher. If you feel uncomfortable with being recorded, you should not volunteer to participate.

You can choose to not participate in the study or stop participating at any time by emailing me or letting me know during the interview sessions. Participants can opt out of a question or stop participating at any time without penalty or loss. Participants can revoke consent at any time.

Updated 5/15/2023

NC STATE UNIVERSITY

There are minimal risks associated with your participation in this research. There are no direct benefits to you from participating in this research.

You will not receive any payment for participating in this research.

If you have any questions about the research or how it is implemented, please contact the researcher, Katlyn Foy, at krfoy@ncsu.edu and 910-441-7865. You can also contact the faculty advisor for this research, Wendy Warner, at wjwarner@ncsu.edu and 352-283-1711. Please reference study number 26357 when contacting anyone about this project.

If you have questions about your rights as a participant or are concerned with your treatment throughout the research process, please contact the NC State University IRB Director at IRB-Director@ncsu.edu, 919-515-8754, or fill out a confidential form online at <https://research.ncsu.edu/administration/compliance/research-compliance/irb/irb-forms-and-templates/participant-concern-and-complaint-form/>

If you consent to participate in this research study, please send an email to Katlyn at krfoy@ncsu.edu. to let me know if you are interested in participating and complete the attached Google Form to show your consent for participation. Additionally, please reach out with any questions or concerns. If you complete the form and respond to this email, I will send you a Doodle Poll to select the best time to conduct your first interview.

Updated 5/15/2023

Appendix D: Member Checking Memo

To: Interview Participants

From: Katlyn Foy

Subject: Themes and Findings

Date: 12/28/23

Dear interviewee,

The purpose of this memo is to inform you of the themes that have emerged from the interviews you participated in. Please take a look over the emerging themes to see if you can agree with the findings thus far.

Synthesis of Interview Content

Within the 7 interviews that I have completed thus far, experiences are varied. Some participants shared similar experiences to others while some were completely different in certain aspects. In terms of themes, similar trends have emerged and are discussed in the “Emerging Themes” category below.

Emerging Themes

1). The Value or Inhibition of Previous Experience

- d) Agricultural Education Coursework
- e) FFA Involvement
- f) No Agricultural Education or FFA Background

2). Intrinsic and Extrinsic Motivations Behind Becoming an Agricultural Educator

- d) Influence of Agricultural Educators and Advisors
- e) Support System for Other Students
- f) Positive Feelings Towards Teaching Agriculture

3). Identified Barriers and Challenges

f) Financial Burdens

g) Discrimination

h) Isolation

i) Mental Health

j) Lack of Agricultural Background

4). The benefit of Positive Experiences

e) Opportunities and Events

f) Financial Support

g) Life-Long Relationships and Friendships

h) Support from Advisors, Professors, and Faculty