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Logan Moss

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**“Blazing the Trail” for the Future:
BIPOC Students’ Experiences with Colleges of Agriculture**

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University of Arkansas

Undergraduate Honors Thesis

November 1st, 2021

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Abstract

Since its founding, the United States has faced a constant turmoil surrounding the equitable treatment of people from non-Caucasian backgrounds, especially regarding education. This study sought to examine BIPOC (Black, Indigenous and People of Color) students experiences prior to entry and during their studies in colleges of agriculture within the State of Arkansas. Research has shown that across the country there are discrepancies between the percentage of BIPOC students in the State, university, and colleges of agriculture. This study used a qualitative interview method to determine the factors influencing minority students to enter and stay within a program of study in college of agriculture. The study used a semi-structured interview guide to question participants about their experiences as minoritized students in their major. Members of the study were selected based on the following criteria: Being enrolled in a college of agriculture in Arkansas and identifying as BIPOC. The most common theme among the participants was the presence of a mentor who guided them into the field. School-based agricultural education and participation in youth-based agriculture organizations also played key roles among the participants' choice of major. The study also found that BIPOC individuals often face many additional barriers and challenges within colleges of agriculture, such as financial restrictions, lack of minority representation in their field, and stereotyping. While the study cannot be generalized, it provides a set of common themes that were experienced by students who were within the target demographic.

Chapter 1: Introduction

Background and Need

One of the most important and debated issues in the current American political climate is diversity, equity, and inclusion (DEI; Mehta et al., 2020). Regarding DEI, the agriculture industry has been slow to react, making this a crucial point that must be addressed going forward. While many industries have embraced cultural diversity, agriculture has lagged behind in welcoming underrepresented individuals (Horst & Marion, 2018).

Entry into the agriculture industry often begins with post-secondary education. This is where future producers, traders and business leaders are created and honed. The lack of racial diversity in colleges of agriculture around the country has been an issue rarely discussed and not easily solved, but it is an issue requiring immediate attention of scholars, researchers and stakeholders from around the world (Stripling & Ricketts, 2016).

Problem Statement

Studies have shown that Black, Indigenous, and People of Color (BIPOC) have been severely underrepresented in agriculture and agricultural education; from high school level to the university level, there is a lack of representation of racial/ethnic minority students in classrooms, clubs and majors related to agriculture (Hartmann & Martin, 2021). This problem begs the question of why BIPOC individuals are less involved with agriculture and what factors contribute to their lowered participation. The idea that minority representation in agriculture can, and should, be increased has been examined for years (Bowen et al., 2002), however, the recent spotlight on DEI has refueled interest in the topic. What is more, few studies have examined minoritized representation in agriculture, and the existing research is almost two decades old.

Thus, a study examining factors contributing to minority (under)representation in agricultural education and industry is warranted.

Purpose Statement

Understanding BIPOC individuals' motivations for choosing to pursue education and careers in agriculture can provide helpful information to universities looking to recruit, retain, and prepare students from underrepresented groups. Therefore, the purpose of this study was to examine the factors contributing to BIPOC minority students' choice to major in agricultural related disciplines.

Research Questions

The following research questions guided the study:

1. What factors motivated BIPOC students to choose a major in agriculture,
2. What barriers have BIPOC students encountered entering post-secondary agriculture programs, and
3. What steps can colleges of agriculture take to better recruit and retain racial/ethnic BIPOC students?

Definitions:

BIPOC: Black, Indigenous and People of Color.

Diversity: The racial/ethnic makeup of a group of people.

Inclusivity: The inclusion of multiple groups of people in an activity.

Minority: A person who does not identify as Caucasian.

Underrepresented: Groups of people who are not as prevalent as another group.

School Based Agricultural Education (SBAE): A program of study focused on agricultural sciences or arts presented in a secondary classroom.

Mentor: Someone who provides guidance in a field that they are already well-versed in.

Chapter 2: Literature Review

Acceptance of Diverse and Inclusive Practices in Agricultural Education

Boser (2014) examined educator demographics for each state and found that 18% of secondary educators in the State of Arkansas identified as BIPOC. Moreover in 2019, only 1% of all agricultural educators in Arkansas identified as BIPOC (National Association of Agricultural Educators; NAAE, 2021). This illustrates the obvious discrepancy between agricultural educators and educators of other subjects within the state and closely mirrors the involvement of students in agricultural education and other subjects. Lack of representation among BIPOC teachers is important, as teachers in secondary agricultural education programs are often key factors in a student's decision to major in an agricultural-related field (Rayfield et al., 2013).

With agricultural educators going through at least four years of formal education and several hours of continuing education a year, it would be reasonable to conclude that these educators would have at least some formal trainings in diversity, equity and inclusion. This is not, however, often the case. A survey of secondary agriculture teachers from across the country found that 68.4% of teachers had not received any formal education in diversity and inclusion (LaVergne et al., 2012). Data have shown that agricultural educators have not been prepared to actively engage minority groups, and that this lack of engagement plays a major role in the recruitment of racial/ethnic minority students into the field of agriculture (LaVergne et al, 2011).

In post-secondary agricultural education, several barriers to entry have been commonly encountered by BIPOC students. Barriers such as having no prior family members involved in agriculture or not having an immediate connection in the industry have been common deterrents of BIPOC students wishing to enter this field (Vincent et al., 2012). These barriers create challenges for BIPOC students making it difficult for them to have the same opportunities as majority group members, such as Caucasian students.

Furthermore, research has shown that pre-service agriculture teachers and teaching assistants in agricultural education programs want to better understand inclusive teaching practices (LaVergne, 2016). This is a call for agriculture to begin examining inclusivity, because if the primary stakeholders in agricultural education feel that there is a need for change, it should be addressed.

Impact of Youth Based Agriculture Programs on Diverse Populations

Another common predictor of student enrollment in colleges of agriculture is participation in youth-based agriculture programs such as The National FFA Organization and 4-H. A recent study surveyed students who had chosen to major in an agriculture-related field to determine what influenced them to pursue that secondary education. Over fifty percent of the surveyed population identified that a 4-H professional (either 4-H agent or 4-H leader) influenced their decision to pursue secondary education in agriculture. Forty-seven percent of those surveyed reported that their secondary agriculture instructor influenced their decision (Lawrence et al., 2013). Consequently, it can be inferred that youth-based organizations play an important role in many students' decision-making processes.

Furthermore, these organizations play an important role in the development of future agriculture leaders. However, as is the case with agricultural educators, these youth organizations inequitably have more Caucasian students who participate. For example, a randomly sampled group of FFA programs around the country found an unequal distribution of race. The study reported that 80% of the participants were Caucasian when only 54% of their respective communities identified within that demographic (Lawrence et al., 2013). This shows unequal distribution, accessibility, and recruitment to agricultural education's flagship student development program.

While 4-H programs are more racially diverse than FFA, there are still discrepancies. According to one study, 34% of all youths in 4-H identified as a person of color (POC), however, 44% of all eligible 4-H participants identify as BIPOC (LaVergne, 2015). This program is the flagship youth development program for the United States Department of Agriculture (USDA) and the Cooperative Extension Service (CES). 4-H serves as a primary means for an early introduction to land grant institutions and colleges of agriculture.

Youth-based organizations have been a primary recruitment tool for agricultural educators, both secondary and post-secondary. The discrepancy between minority and non-minority students in these two flagship programs have exacerbated the lack of minority agriculture students pursuing higher education in an agriculturally related degree.

Benefits of Mentorship on Diverse Agriculture Students

According to Talbert et al. (1997), one of the strongest factors in the decision-making process is the presence of an expert or mentor. The incorporation of mentorship programs has been one aspect of retention that has seemed to work well with BIPOC students (Talbert et al., 1997). Mentors are individuals who can answer questions, as well as provide guidance and support to students. Mentorship can come from multiple sources, including teachers and faculty mentors. This has been a common practice in colleges of agriculture and is most commonly seen in undergraduate research and work study programs (Wolfe, 2006).

Conclusion

Many factors influence students' decisions to pursue post-secondary education in agriculture. The literature has shown that participation in youth-based organizations and exposure to secondary agricultural education programs are two of the strongest factors determining the selection of a major in agriculture. I am exploring what factors influence these

decisions within the state of Arkansas. This will help fill the gap in the research regarding representation and participation in agricultural education programs in southern states such as Arkansas. With an ever-diversifying population, both in the state and around the nation, these issues of underrepresentation must be addressed.

Chapter 3: Methodology

The methods used to collect and analyze data are as listed below. The study used a qualitative design centered around collecting data from individual interviews and organizing that data to be easily interpreted. This form of methodology allows for open-ended, candid questions to be asked in an intimate environment that fosters good communication and deep answers.

Research Design

A qualitative research design was best suited for this specific study. Due to the nature and complexity of identity and a person's sense of belonging, I chose to use one-on-one interviews using a semi-structured questioning guide. Using these small, intimate environments, each participant was allowed time to answer a series of open-ended questions about their experiences and motivation for pursuing advanced education in agriculture.

Interviews were conducted until data saturation was reached. In qualitative research data saturation occurs when new information presented matches information already gathered (Aldiabat & Le Navenec, 2018). Saturation happened when multiple themes became repetitive across multiple interviews and participants.

Population and Sampling

The target population for this study was BIPOC students enrolled in colleges of agriculture in the State of Arkansas. As participants had to meet very specific criteria, the type of sampling was purposive. Purposeful sampling allowed for the population to be limited and allows for the researcher to know that each member of the population had some similarities that allow them to be compared (Kalu, 2019).

Rigor

To establish rigor, a researcher must ensure that their study is justified and uncorrupted by the researcher's own predispositions and thoughts. The four types of qualitative rigor were addressed through the following steps. (Guba & Lincoln, 1998)

Credibility

To establish that my data was credible, I strived for data saturation. I continued conducting interviews until much of my data was repetitive and there was no need to interview further participants.

Dependability

To establish that my research was dependable, I began a thorough process of reading the literature in my field. A clear explanation of the protocol of my study was given to each participant prior to their agreement to participate.

Transferability

To establish transferability, I provided a thick explanation of all of my procedures and data. This allowed the research to be transferable to other contexts and used as a source for other studies.

Reflexivity Statement

As I identify as a racial/ethnic minority undergraduate student, I understand some of the barriers to entry. I understand that this knowledge leads me to some preconceived notions or biases. I have taken every possible precaution to stay as objective as possible throughout the course of this study.

Instrumentation

The instrument used for this project was a semi-structured interview guide. The semi-structured interview guide was organized to allow the interviewer the opportunity to ask probing questions and guide the flow of the conversation as necessary. The interview guide was composed of overarching questions that the researcher, mentor, and research committee believed would guide the conversation in the direction needed to receive ample data. The semi-structured interview guide is available as Appendix 1.

Data Collection & Analysis

The study was approved by the University of Arkansas Institutional Review Board prior to collecting data. Data were collected throughout a series of virtual interviews during the Fall 2021 semester. The data were collected by the interviewer using Zoom© teleconferencing software. After each interview, the audio transcription was downloaded, checked for accuracy, and used for review. Each participant was assigned a number to protect their anonymity and key themes were identified to allow the commonalities among responses to be more clearly examinable.

Chapter 4: Results

This section presents the findings from the interviews conducted for this study. The findings are reported according to the research questions guiding the study.

The sample for this study consisted of six students who identified as BIPOC and were enrolled in an agriculturally based degree program in Arkansas. Three of the students identified as male and three as female. Two of the participants were seniors, two juniors, one sophomore and one freshman. Three of the students attended the University of Arkansas and three attended Southern Arkansas University. Three of the students were pursuing a degree in animal science, two in agricultural business and one in poultry science.

Primary Reason for Choice of Major

Three sub-themes emerged from the data from the first research question. These sub-themes included: Youth-based Organizations, School Based Agricultural Education and Mentorship.

Youth Based Organizations

To examine the factors that motivated students to major in agriculture, much of the discussion focused on the participants' involvement in youth-based agriculture organizations. Of the six participants, four reported that they had participated a youth-based organization; three had participated in FFA and one in 4-H.

While several of the participants had been members of youth-based agriculture organizations, only one identified their participation as a primary reason as to why they chose to major in agriculture. Participant 2, who identified FFA as their main reason for majoring in agriculture said:

So in high school, I was really involved in FFA and the teachers were just really good to me and they really had a huge influence on what I was going to major in in college. I was on the fence about agriculture or math, but really like the personal relationships that I created with my ag teachers and that just really just defined that I wanted to go into the ag business.

While this participant strongly supported past research that attributes students' choice of major, the others did not. One participant who participated in FFA, however, did not see it as a main guiding point to choosing their major:

So, in high school, I honestly didn't even like that I didn't really know anything about agriculture whatsoever until my senior year... they talked to me about FFA, and I was in it for just my senior year and I was on a floriculture team.

When questioned about the impact of this experience on the participant's future involvement in agriculture, they made the point that the experience seemed rushed and while they enjoyed participating in the event, the FFA experience had no direct impact on her major choice. While the participant eventually chose a major in agriculture, she chose to major in poultry science, which is not related in any direct way to floriculture. Another respondent who had been involved with 4-H made the distinction that their participation was a mandatory requirement of a daycare program in which she had participated. She also made the distinction that their participation was in the formative stages of their life, and while her participation in 4-H was her first direct exposure to agriculture, she stated that it did not affect her choice to major in agriculture later in life.

School Based Agricultural Education (SBAE)

Over half of the participants reported taking courses in SBAE, all of which identified SBAE as a direct influence on their choice of major. Direct instruction in subjects that the student eventually chose to major in played a key role in their choice of major. When questioned about the impact of agriculture classes on the participants choice of major, one student, who is a junior animal science major said:

My school actually offered an animal science class and a year before they started offering it they had a state-of-the-art barn built. And you know, we had a couple hogs in there, a couple goats, a couple rabbits you know they're just trying to instill the love for agriculture in the kids at the school and I really enjoyed that class.

Another stated:

Before I had taken an agriculture class, I thought agriculture was all about farming. I knew that I wanted to major in business, but I didn't know that ag. business was a major. My agriculture teacher talked to us about all the career opportunities within ag. business and from that point on I was hooked.

With both cases, direct education about their chosen subject matter was first presented in a traditional secondary agriculture classroom. All students who identified SBAE as one of their primary reasons for choice of major also stated that their current subject matter was first formally presented to them in a high school agriculture class.

Mentorship

All participants identified at least one mentor who highly influenced their choice of major. Mentors ranged from parents to agricultural educators, and industry professionals, and were identified as a person from whom they received firsthand exposure to agriculture and to

whom they looked for guidance. Two of the participants identified multiple mentors who influenced their decision.

For half of the participants, their mentor was a parent or close family member. One participant identified his father, who is a poultry and cattle farmer as his primary influence for choice of major. He elaborated, “I mean my dad showed hogs ever since he was young, and he just kind of instilled agriculture on me and you know just being around it, I had no choice but to fall in love with it.” A second student, who was an agriculture business major, was mentored by an older cousin who owned a commercial cattle operation. He saw his cousin’s rise to success in the industry and decided that he wanted to follow in his footsteps.

Going out on the farm and working cattle with Courtney was where I first got exposed to agriculture. Seeing the barriers that black people face when starting a farm led me to pursue a degree in agriculture to better educate my people on how to secure minority agriculture loans and begin farms.

While family played a key role in each of the participants’ choice of major, not all of them had parents with a production agriculture background. One participant’s mother and grandmother serve as researchers for the Natural Resources Conservation Service (NRCS), which is a division of the United States Department of Agriculture.

...so, when I was younger my mom worked for NRCS which is on base in Pine Bluff, Arkansas. My grandmother also works there, and I did a science experiment when I was in about third grade. I got to work in the lab out there and I thought it was really cool. Then my grandmother took me to where they keep all the monkeys and all the animals like that, and I was like animal research seems really cool considering, I want to be a doctor and so that's kind of what led me to animal science.

Mentorship among family members was a common theme among these members and seemed to play an especially strong role in their choice of major in agriculture. There however, were other forms of mentorship that were common themes among participants. One of these was mentorship by a secondary agricultural educator. Half of the sample identified a high school agriculture teacher as their primary mentor. One of these students was a freshmen poultry science major, who said that their teacher worked with them over the course of a semester to assist them with their choice of major. She specifically identified her teacher as a mentor saying,

I was looking at all the major options I had in agriculture class in high school and the teacher was like my mentor pretty much. I told him I want to do dentistry and he said that [poultry science] would give me the same requirements I would need for dental school without it being like a typical major like biology or chemistry. And then we spent like a few weeks, looking at all the requirements and then all the benefits of poultry science.

While this student's agriculture teacher directed pointed her in the direction of her major, others had a more general mentorship experience with their agriculture teacher:

My first experience with agricultural education was because of my ag. teacher in school. I had no idea what to do in an ag. class, and he brought me into his office and guided me in the direction that I needed to go.

Another participant described her agriculture teacher as her mentor and as part of her family. When she discussed her agriculture teachers' impact, she was asked if she considered them to be a mentor to her. She elaborated, "Oh yes, 100%, not only a mentor, but close to my senior year they became like family even my parents saw them as like family. You know, they treated them with so much respect because you know they showed so much care and interest in me."

The same student discussed her identity as a first generation American and how her father's first job was on a farm. She identified him and the farmer who employed him as mentors to her as well. Of this experience she said:

When I was younger my dad initially came over to Texas, he worked making fences for ranchers and so like welding out there and putting up fences. So, when my mom couldn't take care of us because she was working, I would go with my dad and so we'd be out there. We became close friends with one of the ranchers out there, his name was Jim.

Overall, these three sub-themes; participation in youth-based organizations, school-based agricultural education and the presence of a mentor in the agriculture industry primarily guided the students into their choice of major. These themes were present throughout and, in some cases, multiple or all themes were present among participants.

The most commonly cited reason as to why these students chose their major was the presence of a mentor. The second most common theme was participation in SBAE, as most students identified high school agriculture classes as a primary reason of choice of major. The third theme was participation in youth-based organizations, namely FFA and 4-H, which several of the participants mentioned.

Barriers Faced by Diverse Students Entering and In Colleges of Agriculture

Regarding barriers faced by BIPOC students entering a college of agriculture, three sub themes emerged: Stereotyping, Lack of Minority Representation, Financial Barriers.

Stereotyping

A majority of the participants identified have experienced some type of stereotyping. This stereotyping came from multiple outlets; including classmates, potential employers, and family. Overwhelmingly, the participants reported having been exposed to the stereotype that minorities have no place in the agricultural industry. For example, when one participant was

asked why she felt uncomfortable in agriculture classes and if her classmates had any impact on that feeling, she stated, “I think it's sometimes not being taken seriously; just kind of like, why are you here?” Another student had similar sentiments regarding classmates view on minority students: “I would say that there's a lot of white people definitely think that most minorities don't really know what they're talking about and don't really know you know what they're doing.” A third student reported microaggressions relating to her BIPOC status:

I think they [white classmates] don't know they're racist and that tends to be a big thing because, they're like “oh no I'm not racist, my best friend's black,” but it's kind of like, you say weird jokes all the time to me that really aren't funny. Then, it's just kind of like being pressured and having to go through those small jokes that aren't big enough to be of concern. But just knowing and having to deal with that every day, it just kind of builds up until you want to break.

While the previous three participants referenced the presence of stereotyping in the classroom, others identified with have experiencing it elsewhere. One student, who is a senior experienced stereotyping when interviewing for jobs:

I was in an interview with this old, very traditional white man. I said that I had grew up on a cattle farm and he looked at me with shock in his eyes and said, “Really? That's interesting.” I got the sense that he was shocked more that my parents are black farmers than my work experience.

Another student identified stereotyping of her major from family. She discussed how her family was disappointed in her choice of major, because they assumed as a minority, she could not get a job upon graduation. She said,

A lot of times you know you get looked down upon at a family function, because, like oh you're an ag major what are you gonna do with that, become a farmer? It's a stereotype you're going to become a farmer. They don't know that I could be working for like Tyson or things like that at a big-name company and they don't think about that.

Stereotyping was evident from these participants responses about major barriers they faced entering and staying in their major. While the person or entity stereotyping may have changed, the overall stereotype of 'minorities don't enter agriculture careers' was present throughout.

Lack of Minority Representation

All respondents reported a lack of minority representation in their major, which is congruent with the disparity in BIPOC representation across colleges of agriculture. Half of the students attributed lack of representation as leading to a sense of not belonging within their college. One student identified a feeling of isolation, saying: "At first it was just me and [another African American student] in my classes... but there's like two other black girls now in my classes, but for the most part she kind of like looks are like wow you're in animal science."

Another noted that this often leads to being singled out in class:

Being singled out as a minority in a class I had that happen to me last semester in one of my ag classes. I was the only brown girl, and you get like this, like man I stick out like a sore thumb.

This can often be intimidating for the students, creating anxiety and making it less likely for them to speak up in class or make them anxious in class. One participant stated, "Well, it's definitely really intimidating. I'm going to class in a predominantly White, you know, field of study, and it can be it can definitely be really intimidating at times." The student went on to say:

“...in my class there's only me and one other person that's a minority in there and t's different, it feels weird to participate.”

Overall, participants felt a sense of not being welcome in their agricultural courses. One student connected her gender identity along with her BIPOC status, she discussed how these two identities together make her feel like she is less valued:

Like I know that there's going to be trouble. One, given the fact that I'm a woman. But two, given the fact that I'm a minority woman. You women are minorities in production ag, so like it's just like something that I know. I have to know I'm strong enough and I will like go through it. It just sucks that like only like two or three girls that are minorities will ever actually major in ag here because they get that feeling of like ‘this is a white male dominated industry’, you know and so it's like I know I'm going to get shut down.

This sense of not being welcome and lack of representation was present across the board. It created a barrier in entering and staying in an agriculture major and pursuing agriculture as a career. Many of the students identified with the feeling of imposter syndrome, the feeling that no matter how much knowledge or experience they have in the industry, they may never feel welcome.

Financial Barriers

A majority of participants reported financial barriers, such as the lack of generational wealth as a barrier to entry that minorities face at a higher rate than Caucasian people. One student said:

In my specific case my family, my minority family, we were forced to build everything that we own. You know, we started from the very bottom, like I said we started off showing hogs and we got two or three cows and you know, eight years later, we have 55

so you know it's just a real gradual slow build but I'm not gonna say all white families are born into it, but a lot more, you know a lot of them are as soon as they're born they're loaded you know they have plenty of land, plenty of livestock and they're set.

While not every participant specifically identified generational wealth in as bold of a manner as this student, many pointed to the lack of financial support as a primary barrier to entering college. One student talked about how the presence of scholarships could easily be the deciding factor for a student choosing to major in agriculture, more so than somebody from a more privileged background:

...[a scholarship] could be the difference between a kid kind of wanting to dabble in the field. They're offered a scholarship and boom they're interested in ag, you know it could be just a flip of a switch just like that.

Further, one student identified financial responsibility being more important to minority students than their white counterparts:

I've been working since I started college, it's a must. I look at my white classmates on [social media] going out and partying on Friday nights and I'm bussing tables to pay my rent. They always ask why I'm working 30-hour weeks like it's a choice. I feel like it's a obligation that most black students face. I can think of a few white classmates that work but almost all of my black friends do.

Exposure to Production Agriculture

Half of the sample reported a lack of exposure to production agriculture as a barrier they have overcome. These students had no experience with organized farming prior to college. They see this as a barrier primarily because most of their white friends had exposure to a farm and

industry knowledge that they lack. Multiple participants talked about how this lack of practical knowledge impacts their performance in class:

Personally, I feel like being a minority in that class kind of lowers my confidence and basically everything relating to it just because I feel like there's questions that I might want to ask that everybody else just notices as like common sense. So, I definitely kind of refrained from asking them questions, sometimes and just kind of like lay back and listen.

One student mentioned specifically that he feels as if “all his white classmates grew up farming.” He specifically mentioned that he had never even heard of an African-American goat and sheep farmer, but had several Caucasian classmates who farmed them. When questioned about whether or not he felt like that was a disadvantage he said:

Some challenges that I faced relate to that. I have to be learning about stuff that I'm not really familiar with, like, for example, in my nutrition class learning about us or goats and sheep and I haven't had the opportunity to be around those [species].

Participant six identified feeling as if his lack of exposure to production agriculture has negatively impacted his grades in class before:

So, I took this animal production class and you could tell the room was filled with cowboys, the professor would even say things like ‘y’all already know this so I’ll just skip over it’ this information was still on the test and I had absolutely no idea what he was talking about. I got a ‘C’ in the class.

These were the most common barriers faced by the interview participants. The most common barrier faced was lack of BIPOC representation among classmates, which led to a feeling of unwelcomeness. Every participant related to this experience and feeling. Four students related to finances as a barrier and the same amount have experienced stereotyping of their

BIPOC status and believe it was a major barrier. Three students reported feeling like their lack of exposure to production agriculture created a barrier that disproportionately effects BIPOC students.

Chapter 5: Conclusions and Discussion

The purpose of qualitative research is not to generalize findings to a larger population, but instead to deeply examine the lived experience of the sample. Therefore, the findings of this study only represent the experiences of the study participants and should not be generalized to all BIPOC students.

The results of this study showed that BIPOC students face many challenges entering and remaining in colleges of agriculture. All the participants reported facing additional challenges relating directly to their BIPOC status that hindered their entrance to and participation in colleges of agriculture. While each participant's experience in their respective colleges were different, all felt that achieving an agriculture degree was more difficult as a minority student.

These students all faced challenges related to a lack of minority representation in their major or their college. The feeling of imposter syndrome was common among participants, which is not uncommon of college students in general (Chrousos, 2020). However, these students identified that their feeling of imposter syndrome was directly related to their BIPOC status in relation to the general population of their respective college.

Another common challenge faced by a majority of participants was financial barriers. Often times BIPOC individuals are less economically privileged than their white counterparts, and this is not only a barrier within colleges of agriculture but of college in general (Brady, 2020). Financial barriers, including a lack of funding, being a first-generation college student, and having to work to survive during college all played a role in the participants' choice of major.

During the interviews, it became evident that most of the participants were first generation college students and were also from economically stricken areas and backgrounds.

Only one identified that he had grown up on a farm owned by his parents. This study illustrated a picture of the wealth discrepancy between Caucasian and BIPOC students in colleges of agriculture and provides a glimpse into the financial burdens placed on BIPOC students and their families, particularly those who are first-generation college students.

The last common barrier among students found in this study is the absolute lack of similar (BIPOC) students in colleges of agriculture. The data showed that in many of the participants' classes, the vast majority of classmates were Caucasian students and the classroom was an unwelcoming environment.

The most common reason for BIPOC students to enter colleges of agriculture was the presence of a mentor in their life who was well versed in the field and instilled their love for the industry into the student at a young age. Every interview participant could identify at least one person who could be credited with providing guidance that eventually led them to their major. Mentorship was an extremely strong force present throughout each of the interviews and was without question the most influential force guiding these students into their agriculture major.

Another major impact on these students was active participation in school-based agricultural education, otherwise known as high school agriculture classes. For most of the students, high school agricultural education was their first formal instruction in agriculture. These experiences turned out to be paramount in a student's final decision to major in agriculture. Agricultural education has a strong presence in Arkansas, but BIPOC students do not typically have a strong presence in agriculture classes in Arkansas, and this must change to better serve the historically underserved populations in the state.

There were other forms of agricultural education that the participants discussed, namely youth-based organizations like FFA and 4-H. These programs tend to be the flagship programs to

develop agriculturally interested youth. While four of the participants participated in either of these organizations, only one attributed it as their primary reason for choice of major. Lawrence et al. (2013) reported that many students attributed their interest and choice of majoring in agriculture to a youth-based organization, which begs the question of why these BIPOC students did not become engaged as a result of FFA or 4-H.

The students who choose to “blaze the trail”, as said by participant 5, face many challenges and are doing so for many reasons; most are looking for well-paying jobs after college, others for the opportunity to help others, and some because they were told that they couldn’t succeed. Minority students in predominately White universities, specifically in colleges of agriculture, must embody many qualities such as, intelligence, communication skills, and adaptability, but moreover these BIPOC students must possess grit.

Chapter 6: Recommendations

Diversity and inclusion are two ideas that cannot properly exist without each other. Agriculturalists must work to improve diversity in terms of the rate of BIPOC individuals entering the industry. There is a common stereotype among out-groups about agriculture: that the only people who participate in it are white farmers. However, beyond diversity, we must also create a welcoming environment free from the extra barriers and limitations that disproportionately impact these groups--in other words, agriculture must become more inclusive.

Recommendations for Practice

Several of the students identified with having originated from small, economically disadvantaged communities. Two students discussed how colleges, and especially colleges of agriculture, did not make attempts to recruit within their communities. Colleges should make a better effort to be present in all communities, not just those common among their student bodies. To help alleviate the burden of financial obligations, BIPOC students should be better educated about existing scholarship opportunities specifically targeting their demographic. There are programs already in place to help minoritized students gain meaningful education, but they are often overlooked or not discussed. Colleges need to promote not only scholarship specifically for agriculture students, but those for BIPOC students in general.

The level of stereotyping and microaggressions prevalent in colleges of agriculture is a major issue. To combat these unwelcoming instances, college should increase the amount of cultural competence training for students, faculty, and staff within the college. The ability to understand, connect with, and advocate for BIPOC students must be created and seen at all levels. Lastly, colleges of agriculture must prioritize programming and incentives targeted towards BIPOC students. Many of the students reported a sense of unwelcomeness within their colleges. This led to a feeling of imposter syndrome. Making these students feel welcome is something that is easy enough to accomplish, colleges just have to make doing so a priority.

Recommendations for Future Research

The research into BIPOC students' interest in agriculture is either extremely outdated or new. Given the differences in the political climate in the 1990s and today, one can see the need for increased levels of research and discovery into BIPOC students experiences in college. One area of research that should be expanded upon is completing similar studies within other contexts. For example, this study concluded that SBAE played a key role in a student's choice of major. Future studies should be conducted to examine why students chose to participate in SBAE.

Another area needing expanded upon is more in-depth studies relating to BIPOC individuals' experiences in colleges of agriculture. There is very little research that either confirms or refutes the barriers found in this study. Looking further into the reasons why BIPOC students don't typically major in agriculture is paramount in alleviating the problem.

Examining the best practices that colleges of agriculture are using to recruit BIPOC students must also be explored more moving forward. This study found several methods that the students attributed to having help get them to a college of agriculture. However, this small sample does not represent the entire population. Further studies should be conducted identifying common strategies that work to better recruit BIPOC students. These students faced extensive barriers entering and within their major. The fact that they are still pushing through goes to show great resilience. Studies should be conducted looking into the amount of resilience and how it impacts BIPOC students' performance in and entrance to their majors.

This study only included participants from two races/ethnicities. To truly identify the similarities among all BIPOC groups, more than two groups must be studied. For example, this study only included African American and Hispanic participants. Therefore, it cannot generalize

the experiences of Asian or Native American students. This makes a more in-depth study about other ethnic groups warranted.

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Appendix 1: Interview Guide

Demographic Questions

1. Name
2. Hometown
3. College
4. Major
5. Classification
 - a. Age?
6. Do you identify as BIPOC?
 - a. What is your race/ethnicity?

Discussion Questions

1. What made you choose to major in an agricultural degree program?
 - a. What is your family's involvement in agriculture? (if any)
 - b. What was your participation in youth based agriculture programs such as 4-H or FFA? (if any)
 - c. What was your perception of the agriculture industry before beginning your college education, has it changed?
2. What are some barriers/challenges that you have experienced in your college or department of agriculture?
 - a. What other barriers/challenges have other minority students experienced within your college/department?
 - b. What do you think are the biggest barriers/challenges that minority students face in colleges or departments of agriculture?
3. What could colleges of agriculture change to better recruit and retain minority students?
 - a. What made you decide to stay within an agriculture program?

Appendix 2: Informed Consent

Understanding the Factors that Influence Racial/Ethnic Minority Students to Pursue a Degree in an Agriculture Related Field

Principal Researcher: Logan Moss

Research Mentor: Dr. Christopher Estep

Dear Student,

You have been selected as possible participant in a study relating minority students choice of major. The results of this study will be used to better recruit and retain minority students in colleges and departments of agriculture in Arkansas.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the Principal Researcher?

- Logan Moss, Senior, AECT, lgmoss@uark.edu; 870-397-2900

Who is the Research Mentor?

- Dr. Chris Estep, Associate Professor, AECT, estep@uark.edu; 479-575-2037

What is the purpose of this research study?

- The purpose of this study is to examine experiences of racial/ethnic minority students who choose to major in agriculture in college, within the State of Arkansas.

Who will participate in this study?

- Selected students who identify as a racial/ethnic minority and chose to major in agriculture.

What is my part in this study?

- You are being asked to participate in an interview about your perceptions of barriers related to minorities entering the agriculture fields, your personal experiences majoring in agriculture, and demographic information. This information will be gathered using online meeting software such as Zoom or Microsoft Teams.

What are the possible risks or discomforts?

- There are no risks associated with this study.

What are the possible benefits to this study?

- There are no benefits associated with this study.

How long will the study last?

- The study consists of one interview, it will take approximately 1 hour.

Will I receive compensation for my time and inconvenience if I choose to participate in this study?

- No compensation will be given for participation in the study.

Will I have to pay for anything?

- No, participants will not be required to pay for anything regarding this study.

What are the options if I do not want to be in the study?

- If you do not want your data to be used in this study, you may refuse consent. Please note, your grade and your relationship with the instructor, department, and university will not be affected in any way if you refuse to allow your data to be included.

How will my confidentiality be protected?

- All information will be kept confidential to the extent allowed by law and University policy. All information will be locked in a secure office while being collected and analyzed. No identifying information will be given at any future presentation or published in any future publication.

Will I know the results of the study?

- You will have the right to request feedback about the results. You may contact the principal researcher, Logan Moss (lgmoss@uark.edu). You will receive a copy of this form for your files.

How many students will be in each interview?

- Each interview will consist of 1 student.

Who do I contact if I have questions about the research study?

- Principal Researcher: Logan Moss (lgmoss@uark.edu)

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research:

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Compliance
109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with the participant.

By agreeing to participate in the focus group, you grant consent for your data to be used.