

**What Factors Influence Undergraduate Agricultural Education Students'  
Perceptions of their Academic Major?**

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## **Introduction and Theoretical Framework**

The American agriculture teacher shortage is a topic that has been of much concern. Recruitment and retention are key components in mitigating this shortage (Sorensen et al., 2016); thus, plentiful research has been conducted regarding the recruitment and retention of agriculture teachers. There has also been research conducted regarding the practices used to recruit pre-service agriculture teachers (Hur et al., 2023) as well as the struggles they face during their student teaching experiences (Sorenson et al., 2018). Previous research on pre-service teachers shows a big shift in attitudes and concerns during student teaching (Sorenson et al., 2018). Research has indicated that pre-service teachers typically perceive low levels of career barriers and high levels of support (Rocca & Washburn, 2008).

Literature related to retention of college majors is plentiful. In a nationally-representative study conducted with students beginning college during the 2011-2012 academic year, 37% of students majoring in education-related subjects changed their academic major at least once while 40% of students studying natural science-related subjects (including agriculture) changed their major at least once (Leu, 2017). Lower academic performance and lacking a sense of belonging are predictors of academic major change (Denice, 2021). We used a qualitative approach to gain insight into how various factors (e.g., perceptions of familial support, etc.) affect the retention of undergraduate Agricultural Education students at our institution.

Our study was underpinned by the theory of planned behavior (TPB). The TPB indicates that a person's behavioral, normative, and control beliefs determine their intentions and therefore their decisions and actions (Bosnjak et al., 2020), such as electing whether to remain in the Agricultural Education academic major at Murray State University (MSU).

### **Purpose**

The purpose of our study was to describe the factors that influence undergraduate Agricultural Education students' perceptions of their academic major at MSU.

### **Methods**

Our study is an ongoing undergraduate honors thesis research project. Consequently, our data set will expand over time. We used semi-structured interviews to collect our data. Due to their flexibility, semi-structured interviews are excellent for collecting in-depth, qualitative data about research participants (Mashuri et al., 2022). Our interview protocol consisted of 12 questions that addressed: (1) student demographics information, (2) student perceptions of field experiences and instructors, and (3) the struggles that students have faced within the Agricultural Education academic major thus far. After receiving Institutional Review Board (IRB) approval, we solicited our prospective research participants ( $n = 44$ ) via email. These 44 students were enrolled in the undergraduate Agricultural Education program at MSU during the Spring 2023 semester.

Within the e-mail, we described the purpose of our study and asked our prospective participants to select an interview date and time that best fit their schedule. To help control for any potential power dynamics, the lead author (an undergraduate student) conducted and recorded each one-on-one interview. Five students participated in our study. We recorded all the interviews for transcription. After transcription, we used the data management program QDA Miner Lite to code our data. The lead author manually coded all transcripts to help prevent any errors. The lead author subsequently reviewed each coded transcript one week after the original coding to verify the accuracy of the codes.

## **Results**

Several preliminary results and themes emerged throughout the coding process. Of our five participants, four are still majoring in Agricultural Education while one participant had changed their academic major. The following themes emerged as the lenses through which our participants viewed their academic major: (1) family factors, (2) high school agricultural education experiences, (3) career concerns, (4) university-specific factors, (5) positive outlooks, and (6) academic major change.

Within these larger factors, several distinct sub-themes emerged. The specific factors that our participants most frequently discussed were: (1) college faculty/staff ( $f = 18$ ), (2) support from other Agricultural Education students ( $f = 11$ ), (3) family support of student but disapproval of major ( $f = 8$  and  $f = 2$ , respectively), (4) former agriculture teacher / FFA advisor ( $f = 9$ ), (5) early field experiences ( $f = 8$ ), (6) connection with future students ( $f = 8$ ), and (7) FFA office / high school agricultural education courses ( $f = 8$ ). Many participants described the importance of the positivity of staff and faculty, which indicates that students' relationships with their instructors were very important for these students. This importance of relationships also applies to connections with other Agricultural Education students. Each participant mentioned this as a key factor in their confidence in, and perceptions of, their potential future career. Many participants expressed that the support of their peers was a determining factor in their retention. One of our participants said, "And having you know... my peers, ... we were all kind of able to keep that together. So, I feel like even though that was a challenge, it wasn't as bad as it could have been."

## **Conclusion, Implications, and Recommendations**

As we continue to explore this topic, we noted the importance of both faculty cultivating relationships with Agricultural Education students and undergraduate students reporting serving as positive influences on their peers. Based on our findings, it is important that these Agricultural Education students find meaningful connections with and support each other to help them remain in the academic program. Under the TPB (Bosnjak et al., 2020), students' belief that they are supported by faculty and peers may determine their intention to retain the Agricultural Education academic major and thus drive their actions. We plan to continue collecting data in the coming semesters to further explore this phenomenon. We recommend the faculty at MSU prioritize relationship-building with Agricultural Education students and create opportunities for them to strengthen their professional bonds. Doing so may very well help students to continue crafting a sense of community within their academic major and their future profession.

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