

Intent to Teach: Perspectives from Pre-Service Agricultural Education Teachers

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Abstract

Historically, less than two-thirds of all newly certified agricultural education students enter the school-based agricultural education (SBAE) teaching profession. Teacher educators must understand preservice teachers' intention to teach to help fulfill the demand for SBAE teachers. This study examines the motivations to consider a teaching career in SBAE for eight Oklahoma State University pre-service teachers in the early, mid, and late stages of their teacher education coursework. Qualitative methods were employed to describe these individuals' intention to teach SBAE. Interviews and artifacts in the form of participant autobiographies were collected and analyzed. Intent to teach for these pre-service teachers was tied to the following six categories: expectations of the teaching profession, love of the FFA, need for relevant instruction, community, variety of learning environments, and career intent, which were framed according to the theory of planned behavior (Ajzen, 1991). Additional research should investigate what sustains teachers over time once they enter the profession.

Keywords: intent to teach; motivations; teacher preparation

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Introduction and Review of Literature

“Numerous challenges continue to face the agricultural education profession, but none more important than the preparation and provision of qualified teachers” (Eck & Edwards, 2019, p. 12). Weaver (2000) emphasized the need for the agricultural education profession to develop an approach to recruit and retain effective SBAE teachers. Although teacher preparation programs are preparing record numbers of potential SBAE teachers, only 60% tend to enter the profession, based on over 50 years of trend data (Camp, 2000; Foster et al., 2016). As 75% to 90% of newly certified teachers outside of SBAE enter the teaching profession upon graduation (Sutcher et al., 2016), it would seem SBAE teacher candidates are more likely to be deterred from the secondary classroom than other education majors. Miller (1973) recommended further investigation into the following questions: “What factors deter prospective students from entering the [SBAE] profession?” and “Why do those trained in the profession choose not to enter it?” (p. 25).

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Roberts et al. (2009b) found the greatest predictors of intent to teach were the teacher preparation program and students' motivation to teach prior to their student teaching internship. Other studies have indicated an individual's intention to teach was influenced greatly by their previous experience in an SBAE (Ingram et al., 2018; Kasperbauer & Roberts, 2007). However, research should focus on preservice teachers' intent to teach prior to their student teaching internship "to determine when this decision is typically made" (Roberts et al., 2009a, p. 134).

Multiple sources of motivation exist for those entering the teaching profession (Evans, 2011). Gilad and Alkalay (2014) summated the motivational factors as a mixture of altruism and narcissism. That is, teachers enjoy helping students for the personal satisfaction they receive in return. Evans (2011) identified more specific motivators such as interest in subject area, potential for social impact, and a stable working environment. In addition, teachers are motivated by support systems, self-efficacy, and opportunities to impact students (Sylvia & Hutchison, 1985).

Intrinsic motivators also influence intention to teach (Grabski, 2015). Various teachers elect to enter the teaching profession based on their enjoyment of school as a student (Landrum et al., 2017). Ingram et al. (2018) found the majority of SBAE teachers entering the profession had previous personal experience in SBAE. They identified the themes of social influence, values, passion for agriculture, and agricultural education experience as influential factors in the choice to teach SBAE.

The two greatest detractors for candidates desiring to teach, however, generally revolve around "money and status" (Sinclair et al., 2006, p. 1133). Long associated as being gender-specific to females, teaching has been perceived as a profession with a lower social status than careers with similar preparation and certification requirements (Rots et al., 2002). This negative perception can influence new graduates' decision to enter the profession, especially with feedback from family and peers (Griffin, 1997). To combat the obstacle of teaching profession status, Lawver and Torres (2011) identified job security, working with adolescents, and intrinsic career value with a positive attitude toward teaching. Harms and Knobloch (2005) noted public and private industry added competition for the hiring of newly graduated agricultural education majors with the lure of higher salaries and fewer working hours.

Teacher attrition places even more pressure on teacher educators to recruit and train future teachers (Macdonald, 1999) and contributes to the nationwide-wide shortage of SBAE teachers (Haj-Broussard et al., 2016) with upwards of 40% novice teachers leaving the profession within the first two years (Marlow et al., 1997). Various stressors of the job have been shown to lead to SBAE teachers exiting the profession before retirement (Lambert et al., 2011). Roberts and Dyer (2004) related the stressors in education to strict graduation requirements, high-stakes testing, and school grades, all of which "are indicative of an increased emphasis on student and teacher performance" (p. 82). Other studies identified administrative support as a stressor for early career teachers (Boone, 2003). Working with parents (Billingsley & Cross, 1991), having other vocational goals, receiving low pay, laboring long hours, and working with and for difficult administrators have all been found to be additional stressors for teachers which result in their premature exit from the profession prior to retirement (Moore & Camp, 1979). Gilad and Alkalay (2014) suggested teacher educators can temper these stressors by providing realistic expectations of teaching for pre-service teachers.

Attracting and retaining the right kinds of teachers is vital for the profession and "is important for financial and personal reasons" (Sinclair et al., 2006, p. 1133). People are generally motivated in activities they find attractive (Dowson & McInerney, 2003). Teaching is no different. Although numerous studies have focused on reasons teachers choose to remain in or leave the

profession, little work has been done to assess the reasons people choose to teach in the first place. Knowing why pre-service teachers desire to enter the profession may help “teacher education providers and courses to appeal to those motivations” (Sinclair et al., 2006, p. 1134). Further, understanding these intentions may help teacher educators shape philosophies earlier, which may potentially positively impact the longevity of teachers in the profession.

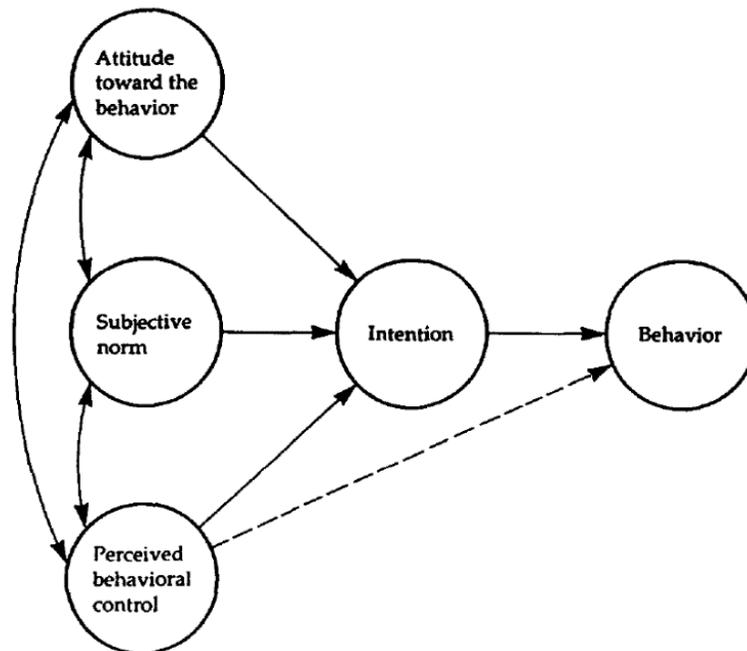
Theoretical/Conceptual Framework

The theory of planned behavior (TPB) framed the study (Ajzen, 1991). TPB focuses on an “. . . individual’s intention to perform a given behavior” (Ajzen, 1991, p. 181). In the context of this study, the behavior is entering the profession as a SBAE teacher. Identifying the intentions related to a career as a SBAE teacher allows the researchers to determine how ideas and theories, ultimately lead to a specific behavior.

Intentions are key factors in motivating the eventual behavior or action (Ajzen, 1991). An individual’s intentions are assumed to encompass the motivating factors leading to the behavior (Ajzen, 1991). Using Ajzen’s (1991) model, we considered three determinants of a student’s intention, i.e., attitude toward the behavior, subjective norm, and perceived behavioral control (see Figure 1). An individual’s attitude toward the behavior can be either favorable or unfavorable depending on the situation being experienced (Ajzen, 1991). The subjective norm relates to social pressure the individual perceives from peers based on his or her intention to perform the behavior (Ajzen, 1991). The perceived behavioral control explains an individual’s perceived level of difficulty related to the behavior in question, assuming past experiences and observations (Ajzen, 1991). All three determinants have the potential to influence intention, ultimately impacting a person’s behavior (Ajzen, 1991).

Figure 1

Ajzen’s (1991) Theory of Planned Behavior Model



Note. From The Theory of Planned Behavior Article (p. 182), by Icek Ajzen 1991, in the *Organizational Behavior and Human Decision Process Journal*, 50, 179-211.

For our study, we posited agricultural education students align their beliefs of attractors and detractors of a SBAE career with their intentions to teach SBAE. These factors potentially play a role in their decision whether or not to remain in the profession until retirement. Although TPB can explain a sufficient amount of variance related to the intention and behavior of individuals' decisions for entering the teaching profession, it fails to provide an exhaustive account of their motives (Armitage & Connor, 2001), which could result in the omission of other factors not identified through previous research (Faulkner et al., 2004). Therefore, a deeper investigation into using TPB to understand teachers' intent to teach is necessary.

Purpose of the Study

The 2017 agricultural education teacher supply and demand study (Smith et al., 2018) identified the continued demand for SBAE teachers, along with the highest ever conversion rate of graduates (75%) entering the teaching profession. Agricultural education teacher preparation programs prepared 740 graduates nationwide in 2017; however, only 556 entered the teaching profession, requiring school districts to employ in excess of 400 alternatively certified or non-licensed teachers to fill vacant positions (Smith et al., 2018). Therefore, the purpose of the study and the overarching research question was to describe Oklahoma State University (OSU) pre-service teachers' intent to teach SBAE.

Methods and Procedures

This exploratory, qualitative inquiry investigated pre-service agricultural education teachers' interests and intentions as they pertain to a future career in SBAE. Qualitative inquiry was used to address Roberts et al. (2009b) recommendation "a qualitative lens [can] provide additional opportunities for understanding the decision making process [to teach]" (p. 143). Therefore, this study sought to provide deep, rich information regarding students' intent to teach.

Students in the agricultural education teacher preparation program at OSU served as the population of interest. A purposive sample was employed with OSU students throughout the program, at each stage of the teacher preparation program. The sampling method included recruiting two students in their first semester of the agricultural education program (Course 1), three students in their final semester prior to student teaching (Course 2), and three students in their student teaching internship (Course 3). Students were sampled from each of these three points within the agricultural education program, as they represented various personal and programmatic characteristics important to the study: a mix of in-state and out-of-state students, a mix of sexes, and a mix of student classifications and years in the major.

Each participant was provided a pseudo name to allow proper tracking and triangulation across various data sets. The pseudo names and participant descriptions are identified based on course enrollment (see Table 1). In addition to the information provided in the table below, it is important to know that each participant was involved in agricultural education and FFA as a secondary student.

Table 1
Agricultural Education Students Who Participated in the Study (N = 8)

Pseudo Name	Sex	Course	Home Location	Classification
Clark	Male	Course 1	In-state	Junior
Garrett	Male	Course 1	In-state	Junior
Walker	Male	Course 2	In-state	Senior
Linda	Female	Course 2	In-state	Senior
Kerry	Female	Course 2	Out-of-state	Senior
Clint	Male	Course 3	Out-of-state	Senior ^a
Leonard	Male	Course 3	In-state	Senior ^a
Amanda	Female	Course 3	In-state	Senior ^a

Note. ^aIndicates participants conducting their student teaching internship.

Qualitative studies include multiple forms of data to analyze how an individual chooses to shape his or her own reality (Creswell & Poth, 2018). For our study, personal interviews and student teacher autobiographies served as points of data collection. The face-to-face interviews followed a flexible interview protocol. The protocol utilized six open-ended questions including: 1) How would you explain your ideal agricultural education program?; 2) What attracts you to a career as an agricultural education teacher?; 3) What are the detractors regarding a career as an agricultural education teacher?; 4) Why do you intend to teach agricultural education?; 5) Where do you see yourself five years from now?; and 6) Do you intend to retire as an agricultural education teacher? Why or why not? The interview protocol also included probing questions to help facilitate conversation and was checked for face and content validity (Salkind, 2012) by two faculty members and two graduate students in the agricultural education department. All members had taught agricultural education previously at the secondary level for a minimum of three years and are currently preparing future SBAE teachers to enter the profession. Further, all members have completed coursework in qualitative research methods and have had experience with qualitative research studies. Therefore, each member was deemed competent at providing insight on the interview protocol.

The interviews were recorded using the Temi app on an iPad. The lead researcher compiled detailed interview notes on students' expressions, emotions, and key points captured during the interview. The same interviewer conducted all interviews for consistency and trustworthiness of data collection. All students from Courses 2 and 3 had completed student teaching autobiographies as a previous course assignment. These autobiographies are shared with potential cooperating teachers during the student teacher placement process. They contain demographic information in addition to self-perceived strengths and weaknesses in relation to teaching SBAE. Therefore, all students' autobiographies were used as data sets and analyzed for key themes to triangulate with interview responses. Unfortunately, the autobiographies were not available for the two students in Course 1 and could not be used for triangulation of themes for those students.

The interviews were transcribed using the Temi app software, producing transcriptions in a Microsoft Word document. The three-member research team reviewed the transcriptions against the audio recordings to verify accuracy. Participants were assigned an interview number which connected them to their interview transcription and autobiography artifact. Students' personal identifying information was removed from all data sources (i.e., interview transcriptions, student teaching autobiographies), and a corresponding number linking the data sources for review, analysis, and comparison was used instead.

Privitera (2017) listed four criteria for ensuring trustworthiness of a qualitative study. These criteria include credibility, transferability, dependability, and confirmability. Credibility was addressed through the use of audio recordings, interview transcriptions, and primary interview field notes, allowing the data to reflect the true opinions of the participants (Privitera, 2017). Although the data collection is limited to participants at OSU, the use of purposive sampling and collection of pertinent demographic information allow the data to have potential transferability to students in similar institutions. Using an interview protocol with a range of students (see Table 1) throughout the agricultural education program at OSU provides dependable, consistent data (Privitera, 2017) with students in the program. Confirmability speaks to the need for the results to reflect the perspectives of the participants and not the researchers (Privitera, 2017), in which the participants' voice was reflected throughout the research protocol, while also comparing data with participant-developed autobiographies.

The constant comparative method (Glasser & Strauss, 1967) was implemented for qualitative analysis of the interviews. The method allows the data to speak for themselves, with themes emerging from the analysis (Glasser & Strauss, 1967). The research in this study focused on the process (Creswell & Poth, 2018) of completing an agricultural education degree at OSU and obtaining the required credentials to enter the teaching profession as a certified SBAE teacher in Oklahoma. Therefore, the coding process aimed to determine preservice teachers' intentions to enter the profession using Ajzen's (1991) theory of planned behavior as a framework. Using open-coding sources, themes were allowed to emerge during the first round of data coding (Creswell & Poth, 2018). Second-round coding followed axial coding principles, connecting similarities and identifying relationships between the open codes, resulting in categories (Creswell & Poth, 2018; Glasser & Strauss, 1967). The final round of coding was selective coding, determining the core variables from the emerged data, ultimately being connected to Azjen's (1991) TPB.

In addition to three rounds of coding, student teaching autobiographies were analyzed to provide triangulation of students' intentions, as they relate their intent to pursue a career in SBAE. The autobiographies are included in the agricultural education teacher preparation program curriculum prior to students entering the student teaching internship at OSU and thus were available for six of the eight participants. The purposive sample used in this study is a limitation as the data are not generalizable on a state or national level. Therefore, the findings of this exploratory study are intended only to inform practice at OSU, helping to guide future research, and potentially offer program-wide implications; although, this study has the potential to be transferable to peer institutions with similar characteristics. Readers are cautioned against generalizing the data, but they are encouraged to determine how the data might apply to students at their respective institutions based on comparing their personal characteristics to those represented in this study.

Reflexivity Statement

It is important that qualitative researchers reveal their identify and any inherent bias that may have impacted the study's results (Palaganas et al., 2017). Our research team consisted of two graduate students and a faculty member in agricultural education at OSU. Each of us had taught SBAE previously in three different states. In total, our team had 12 years of SBAE teaching experience. We recognize our bias toward SBAE instruction, and we attempted to harness that bias through field notes and bracketing of the data.

Findings

After three rounds of coding using the constant comparative method (Glasser & Strauss, 1967), three theoretical components emerged: attitudes toward teaching in SBAE, subjective norms

within a SBAE program, and intentions to pursue a career in SBAE. The study's findings emerged from the initial codes derived from the transcriptions, leading to pertinent themes and categories. We developed initial codes from the data, which led to the themes and categories that ultimately tied back to the theory of planned behavior (Ajzen, 1991). The codes, themes, and categories were used to explain agricultural education students' intent to pursue a career as a SBAE teacher. Pseudo names were used to connect students' responses back to their autobiographies for triangulation purposes (see Table 1). Six categories emerged from the findings including: expectations of the teaching profession, love of the FFA, need for relevant instruction, community, variety of learning environments, and career intent.

Category 1: Expectations of the Teaching Profession

The category, Expectations of the Teaching Profession, enabled students to discuss both the positives and negatives related to teaching: the two major themes of Category 1. Overall, pre-service teachers held positive attitudes regarding the teaching profession. Clark stated excitedly, "I'm really looking forward to teaching." He indicated teaching was his dream job. Similarly, Walker also noted that teaching "would be my dream job." Garrett aligned with this thought. He was especially encouraged by the variety of teaching opportunities SBAE offers. He stated, "I love the idea that not every day is the same." The term "passion" was used to describe Amanda's thoughts about teaching. In addition to emotional attitudes related to becoming a teacher, other students took more of a pedagogical outcomes approach to responding to the question. Kerry stated, "I want students to leave my class career or college ready." Linda admitted that education is important and that it should be valued. Leonard spoke to developing students' knowledge of agriculture as the reason he is excited to become a SBAE teacher.

Although students were largely positive about their future as teachers, they recognized the need to temper their excitement and refrain from over-romanticizing their future careers. Linda was perhaps most outspoken about this. She stated flatly, "I've seen educational hardships" and that "education isn't [always] beautiful." When discussing the drawbacks of becoming a teacher, Leonard and Kerry both admitted that they perceive dealing with parents to be a potential stressor, while Leonard and Amanda spoke about the program's ability to become a *monster* that has to be fed constantly. Leonard stated pointedly, "I do not want a program to become my life." Clark resonated with this thought by stating that long hours spent on the job was the biggest potential detractor for him regarding his desire to become a teacher.

Category 2: Love of the FFA

Students spoke highly and at length of the FFA's ability to develop leadership skills within its members. Students recognized FFA as a major attractor of the SBAE program. The major themes emerging from Category 2 were: Leadership and Competition. Kerry admitted that she loved leadership as a SBAE student and FFA member. It was in the FFA that she found her calling to be a teacher. Linda agreed and was more precise by admitting it was the leadership development events (LDEs) that enabled her to flourish in high school. She added that LDEs had the greatest impact on her "personal development" as a youth. Leonard, Amanda, and Clark also recognized that the FFA was a tremendous portal for developing their leadership skills. In addition, they agreed with their counterparts that LDEs were the activities that enabled them to develop their skillsets best. However, each of them recognized a different LDE that made the greatest contribution to their success. For Leonard, it was public speaking. Amanda found her stride with parliamentary procedure. Similarly, Clark noted "Conduct of Chapter Meetings" as the LDE that made the biggest impact on him and his career decision to become a SBAE teacher.

The second major theme emerging from the FFA Category was competition. Each of the students was a proponent of competition. Each admitted to thriving on competition as youth, and all recognized they remain competitive today. Leonard stressed, "I'm really, really competitive." Regarding the role competition would play in his teaching, Clark stated: "I know that I could coach a lot of students" to success. Leonard stated bluntly that his competitive edge would allow him and his students to "win a lot of stuff." Linda also admitted she was very competitive, but she provided a wider view of how competition drives her to become a teacher by advocating that she would be able to provide students with "opportunities to extend beyond FFA." In other words, she would use FFA as a context to teach her students about life beyond high school.

Category 3: Opportunity for Teaching Various and Relevant Information

As students continued explaining their desire to become teachers, it became apparent that each had an affinity for being able to provide relevant instruction. Two themes: Teaching Opportunities and Class Offerings, emerged in their responses. Regarding the importance of teaching opportunities, both Clark and Leonard spoke to the appreciation they have regarding SBAE being an elective offering because it enables them the freedom to teach in such a way that is meaningful, relevant, and retainable to the students. Specifically, each mentioned the importance to facilitate hands-on instruction. Students hinted that SBAE is unique in its ability to teach in such a way that resonates with students. Linda also recognized that due to spending long hours with students both in and out of the classroom allows SBAE teachers to "advocate for students" and build deep, quality relationships with them that other teachers cannot. She also noted that the ability to provide adult education was a major attractor for her considering a SBAE teaching position. She stated that educating adults and investing in youth are vital aspects of earning trust and making meaningful differences in the lives of students and their families.

Participants were also quick to recognize that the classes and age groups of students they could ultimately teach was an appealing part of the job. Interestingly, each student shared a different class he or she was excited to teach. Both Walker and Garret were most excited to teach the younger students. Walker stated, "Having a freshman class would be outstanding!" while Garret advocated for teaching an eighth-grade class. Amanda, Kerry, and Clark were most interested in some of the advanced science offerings. Amanda hinted that she would "maybe [like teaching] a food science class. Her rationale for wanting to teach such a class stems from the general public's lack of understanding of where their food comes from and how it gets to their dinner table. Kerry mentioned horticulture is the class she is most excited about teaching. Her love of plants and the greenhouse led to her excitement to teach the curriculum and content related to the horticultural industry. Clark mentioned Natural Resources as the class he is most interested in teaching. As an outdoorsman, he loves hunting and fishing. Being able to teach those skills to his future students is appealing to him. Interestingly, Linda recognized the opportunity she would have as a SBAE teacher to instruct adults. This notion of adult education is intriguing to her. She mentioned her desire to offer a "weekend adult workshop" on the topic of "agricultural literacy."

Category 4: Living in a Tight-Knit Community

Working and living in a close, tight-knit community was appealing to students regarding their intent to teach. Linda, Walker, and Leonard discussed their desire to teach in a small, rural community. The appeal of such places to these students resides in the community support (Linda, Amanda, and Kerry), the volunteerism (Leonard), and fundraising capabilities (Clark) where the entire community rallies behind the school and its needs.

Advocacy also emerged as a theme under the community category. Leonard stated that in small, rural towns the “community perceives the FFA chapter to be above and beyond” other disciplines and school-related activities. The opportunity to work extensively with students (Amanda) and facilitate agricultural literacy and education (Linda and Walker) with various members of the community are enticing aspects of teaching SBAE in small, rural communities.

Category 5: Ability to Use a Variety of Educational Learning Environments

Students discussed the various learning environments of SBAE programs are unique aspects when compared to other disciplines. Two themes: facilities and educational opportunities emerged in Category 5. Regarding facilities, Amanda appreciated how “facilities are all right on campus.” In her opinion, although there are a variety of learning environments in SBAE programs, the fact that they are all together in one location makes using them fun and exciting. Other students spoke directly to the specific facilities they are most excited to use. The greenhouse (Clint and Kerry), school pickup (Clark), and classroom (Garret) were all referenced as positives when considering students’ intent to teach.

The educational opportunities that SBAE offers students also was deemed a value-add for participants. Garret discussed his appreciation for being able to leave the school premises and take students on a field trip to solidify the content he was teaching. Although not against taking field trips, Amanda advocated that “learning can be wherever we are at.” Perhaps Linda said it best when she stated, “My program will be shaped by [my] kids’ interest.”

Category 6: Career Intent

When asked about their long-term plans as teachers, seven of the eight admitted they intend to teach. Walker plans to teach in Oklahoma, and Clark is open to teaching anywhere. Amanda stated excitedly that she “definitely intends to be in an ag classroom” somewhere. Leonard followed suit by stating, “I don’t know where, but I will be teaching ag.” Linda added, “I see raising my kids in the back of an ag truck.” Clint was the sole pre-service teacher who replied, “I don’t think so,” when asked if he intends to teach SBAE.

Of the seven who intend to begin their professional careers as teachers, only three intend to make it a lifelong endeavor. Clark admitted, “I don’t think it’s (teaching SBAE) something I would want to do the rest of my life.” Leonard also admitted that he is “not seeing it” when asked if he intended to teach through retirement. Kerry offered that, in time, she might be interested in pursuing a different degree and making a career change. In contrast, Linda and Amanda articulated their desire to retire as teachers. Linda stated pointedly, “I don’t want to leave this profession.” Amanda said simply, “I really see my career here (in SBAE).”

In addition to the interviews, student teaching autobiographies available were analyzed and depicted past experiences in SBAE, intentions related to entering the profession, and beliefs about education, SBAE, and the FFA. Amanda stated poignantly: “I believe the education system is the backbone of the United States. Without educators we would have no jobs, business, or literacy.” In addition, her closing statement was, “I was inspired by a great teacher to be an educator. I only hope to do the same for my future students.” Clint wrote: “[A]lthough agricultural education is only a small portion of the educational system, it is one of the most important things a person could learn.” Kerry concluded, “teaching agricultural education is both a privilege and honor. We get to be the ones influencing the future of agriculture every single day giving us a chance to shape and mold minds.” Walker identified agricultural education as “something that should be a part of a high school student’s educational career because agriculture affects everybody in more ways than one.”

He concluded his autobiography with the statement, "I am an agricultural education instructor with a passion to help students find their passion in agricultural education and in the FFA organization." Clark stated, "I believe school-based agricultural education programs can be an instrumental part of every kids' [sic.] life." He followed his thought with, "I know that due to my time in SBAE I became a better person through exposure to new topics."

Conclusions

Aligning the findings with Ajzen's (1991) TPB model (see Figure 1), provides a lens in which to consider the attitudes, subjective norms, and behavioral controls associated with agricultural education students' intention to enter the SBAE profession, ultimately predicting their behavior. The majority of participants ($f = 7$, 88%) intend to enter the SBAE teaching profession, providing an overwhelmingly favorable attitude toward teaching SBAE (Ajzen, 1991). Although this study provided a small sample ($n = 8$), its findings in this regard align with the ongoing trend over the past 50 years with the majority of the students prepared to teach actually entering the profession (Eck & Edwards, 2019). Participants are attracted to a career in SBAE because there is always something new and they are passionate about developing students for college and career readiness and to become agriculturally literate citizens. These responses align with goal three of the national research agenda, providing a sufficient scientific and professional workforce that address the challenges of the 21st century (Roberts et al., 2016), as well as findings by Roberts and Ball (2009). In addition, participants in this study reported their involvement in SBAE as high school students led them to their intent to teach, which aligns with Ingram et al.'s (2018) study that positive previous involvement in SBAE can lead to an interest in becoming a SBAE teacher.

The subjective norms encompass the social pressure from peers regarding their intention toward the behavior (Ajzen, 1991). The participants who expressed a desire to retire as teachers were not only part of the same agricultural education teacher preparation program, but they were also part of cohorts within the program that will student teach together. In the main, these pre-service teachers desire to remain in the profession for their entire career, as teaching SBAE is their passion. For those who stated they have no intention of retiring in the profession and are considering other options after initiating their teaching career, their reasoning was not due to dissatisfaction with SBAE, which parallels findings from Solomonson and Retallick (2018). In fact, these participants could not describe what may provoke them to leave the profession but alluded to the curiosity of potentially wanting to explore what else may be available for them.

Regarding the perceived behavioral control, (Ajzen, 1991), much of the difficulty impacting a person's intention can be related to past experiences or observations related to the behavior (Ajzen, 1991). Since all participants were involved in SBAE as students and have had additional opportunities for SBAE observation throughout their teacher preparation program, they noted three stressors that might potentially serve as detractors to them entering the teaching ranks. Parents were identified as the first major potential stressor of an SBAE career. This finding aligns with research by Billingsley and Cross (1991). In addition, long hours and programs becoming monstrous in scope and size were concerns for these participants. Such findings align with Moore and Camp (1979), suggesting not much has changed in limiting these detractors to teaching SBAE in the previous forty years. When asked about an ideal SBAE program and work environment, the community and the learning environment for students were the two greatest concerns. Students desire to be in a community where the SBAE program is valued and there are community members who support the cause. In addition, having access to facilities such as a quality classroom, greenhouse, laboratory, and school vehicle to support student learning are all important components to potential SBAE teachers as they consider accepting a position in the profession. With continual emphasis on student and teacher performance (Roberts & Dyer, 2004), the need for a supportive

community and facilities conducive to a quality learning environment are of great importance. Overall, determining SBAE students' intentions related to a career in the profession is obtainable, as this study determined the alignment of their attitudes and beliefs with their intentions, which corresponds well with Ajzen's (1991) TPB.

Recommendations

The findings from the study can inform the SBAE teacher preparation program at OSU on what initially attracts and detracts pre-service teachers to the profession. Although this study was university and program specific, multiple aspects present potential implications for future practice of peer institutions with similar populations. Employing similar interview questions may assist faculty advisors in engaging their advisees as well as tailoring class schedules to best fit individual interests. Inservice SBAE teachers with positive experiences in work-life balance, interactions with parents, and community support could serve as guest speakers and models for preservice agricultural education students. Knowledge of student factors should be carefully considered when designing and implementing instruction (Darling-Hammond & Bransford, 2005).

It is recommended that the study be replicated with a larger pool of pre-service teachers at OSU and elsewhere. Additional interviews should be conducted to attempt to reach content saturation related to students' intent to enter and remain in the SBAE profession at OSU. Peer institutions should consider replicating this study to determine the intent of their potential SBAE teachers and how they compare to those found in this study. Conducting this additional research can help to determine if the findings of this study represent a phenomenon within Oklahoma or if similar perceptions exist regionally, or even nationally. Further, research should investigate the impacts of these attractors and detractors of the profession incrementally throughout these pre-service teachers' careers, i.e., after the first year, during year three, after year five, during year 10, and after year 20. Following these pre-service teachers throughout their academic career and into their teaching career, longitudinally, would allow teacher educators and state staff to determine the factors that sustain teachers in the profession over time.

Discussion

Highly qualified teacher candidates are needed to fill the SBAE teacher shortage pervasive across the nation. Yet, historically, four of every ten graduates choose employment outside the SBAE classroom (Camp, 2000; Foster et al., 2016). Understanding the motivations of this significant portion will better equip teacher educators to recruit and prepare future teachers (Darling-Hammond & Bransford, 2005). Pre-service teachers listed numerous examples of motivators for becoming a SBAE teacher. A healthy portion of these motivators were more intrinsic in nature and focused on community (i.e., building relationships with students and parents and offering community workshops for adults). As such, these motivators may be more sustainable over time and lead to a longer tenure in the teaching profession (McInerney, 2006). In contrast, a few examples of what motivated pre-service teachers to enter the teaching ranks dealt with more extrinsic desires (i.e., driving a school vehicle, teaching in a greenhouse, and coaching winning LDE teams). These motivators are not as sustainable and could lead to burn out and early migration out of the profession for these participants (McInerney, 2006).

Fortunately, the pre-service teachers alluded to numerous positive aspects of their intent to teach. Although each participant listed some drawbacks to the job (i.e., working with parents and building a program that is unsustainable), they did not appear to be overly demotivated by negative aspects of their future profession. Perhaps teacher educators should focus on the intrinsic

motivators that will lead to sustained performance in the profession and downplay the extrinsic motivators that initially attract candidates.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Allen, M. B. (2005). *Eight questions on teacher recruitment and retention: What does the research say?* Education Commission of the States.
- Armitage, C. J., & Connor, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, 40, 471–499.
- Billingsley, B. S., & Cross, L. H. (1991). Teacher's decision to transfer from special to general education. *The Journal of Special Education*, 24, 1–6. <https://doi.org/10.1177/002246699102400408>
- Boone, H. (2003). *Problems of agricultural education teachers: Beginning and current*. <http://teacherinduction.cfans.umn.edu/pdfs/resources/boone%20jr.%202003.pdf>.
- Camp, W. G. (2000). *A national study of the supply and demand for teachers of agricultural education in 1996–1998*. Blacksburg: Virginia Tech University, College of Agriculture and Life Sciences. <https://www.naae.org/teachag/supplyanddemand.cfm#sd>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage.
- Darling-Hammond, L., & Bransford, J. D. (Eds.) (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. Jossey-Bass.
- Dowson, M., & McInerney, D. M. (2003). What do students say about their motivational goals? Towards a more complex and dynamic perspective on student motivation. *Contemporary Educational Psychology*, 28(1), 91–113. [https://doi.org/10.1016/S0361-476X\(02\)000103](https://doi.org/10.1016/S0361-476X(02)000103)
- Eck, C. J., & Edwards, M. C. (2019). Teacher shortage in school-based, agricultural education (SBAE): A historical review. *Journal of Agricultural Education*, 60(4), 223–239. <https://doi.org/10.5032/jae.2019.04223>
- Evans, L. (2011). The motivations to enter teaching by age related career stage and certification path. *Sociological Spectrum*, 31, 606–633. <https://doi.org/1080/02732173.2011.589786>
- Faulkner, G., Reeves, C., & Chedzoy, S. (2004). Nonspecialist, preservice primary-school teachers: Predicting intentions to teach physical education. *Journal of Teaching in Physical Education*, 23, 200–215.
- Foster, D. D., Lawver, R. G., & Smith, A. R. (2016). *National agricultural education supply & demand study: 2015 executive summary*. <https://www.naae.org/teachag/supplyanddemand.cfm#sd>
- Gilad, E., & Alkalay, A. (2014). The gap between role expectations of new teachers and school

- reality. *International Journal of Education and Research*, 2(12), 473–486.
- Glasser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
- Grabski, J. (2015). *Teachers' intrinsic motivation for teaching in the context of high-stakes education reform* (Doctoral dissertation, Alfred University).
http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:3722965
- Griffin, G. (1997). Teaching as a gendered experience. *Journal of Teacher Education*, 48(1), 7–18. <https://journals.sagepub.com/doi/pdf/10.1177/0022487197048001003>
- Haj-Broussard, M., Hall, T., Allen, S., Stephens, C. Person, V., & Johnson, T. (2016). Alternative certification teacher and candidate retention: Measures of educator preparation, certification, and school staffing effectiveness. *Journal of the National Association for Alternative Certification*, 11(2), 4–13. <https://eric.ed.gov/?id=EJ1122591>
- Harms, B. M., & Knobloch, N. A. (2005). Preservice teachers' motivation and leadership behaviors related to career choice. *Career and Technical Education Research*, 30(2), 99–122. <https://doi.org/10.5328/CTER30.2.101>
- Ingram, M. L., Sorensen, T. J., Warnick, B. K., & Lawver, R. G. (2018). The influence of school-based agricultural education on preservice agriculture teachers' choice to teach. *Journal of Agricultural Education*, 59(2), 64–78. <https://doi.org/10.5032/jae.2018.02064>
- Kantrovich, A. J. (2007). *A national study of the supply and demand for teachers of agricultural education from 2004–2006*. <https://www.naae.org/teachag/supplyanddemand.cfm#sd>
- Kasperbauer, H. J., & Roberts, T. G. (2007). Influence of the relationship between the student teacher and cooperating teacher on student teacher's decision to enter teaching. *Journal of Agricultural Education*, 48(1), 8–19. <https://doi.org/10.5032/jae.2007.01008>
- Kitchel, T., Smith, A. R., Henry, A. L., Robinson, J. S., Lawver, R. G., Park, T. D., Schell, A. (2012). Teacher job satisfaction and burnout viewed through social comparisons. *Journal of Agricultural Education*, 53(1), 31–44. <https://doi.org/10.5032/jae.2012.01031>
- Lambert, M. D., Ball, A. L., & Tummons, J. D. (2011). How do early career agriculture teachers talk about their time? *Journal of Agricultural Education*, 52(3), 50–63. <https://doi.org/10.5032/jae.2011.03050>
- Landrum, B., Guilbeau, C., & Garza, G. (2017). Why teach? A project-ive life-world approach to understanding what teaching means for teachers. *Qualitative Research in Education*, 6(3), 327–351. <https://doi.org/10.17583/qre.2017.2947>
- Lawver, R. G., & Torres, R. M. (2011). Determinants of pre-service students' choice to teach secondary agricultural education. *Journal of Agricultural Education*, 52(1), 61–71. <https://doi.org/10.5032/jae.2011.01061>
- Macdonald, D. (1999). Teacher attrition: A review of literature. *Teaching and Teacher Education*, 15, 835–848. [https://doi.org/10.1016/S0742-051X\(99\)00031-1](https://doi.org/10.1016/S0742-051X(99)00031-1)

- Marlow, L., Inman, D., & Betancourt-Smith, M. (1997). Beginning teachers: Are they still leaving the profession. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 70(4), 211–214. <https://doi.org/10.1080/00098655/1997.10544200>
- McInerney, P. (2006). 'Blame the student, blame the school or blame the system?' *Educational policy and the dilemmas of student engagement and school retention – A Freirean perspective*. Paper presented to the Annual meeting of the Australian Association for Research in Education. AARE.
- Miller, L. E. (1973). A five-year follow up of agricultural education graduates with implications for improving recruitment and retention efforts. *Journal of the American Association of Teacher Educators in Agriculture*, 14(3), 23–25. <https://doi.org/10.5032/jaatea.1973.03023>
- Moore, G. E., & Camp, W. G. (1979). Why vocational agriculture teachers leave the profession: A comparison of perceptions. *Journal of Agricultural Education*, 20(3), 11–18. <https://doi.org/10.5032/jaatea.1979.03011>
- Moseley, C., Desjean-Perrotta, B., & Utley, J. (2010). The draw-an-environment test rubric (DAET-R): Exploring pre-service teachers' mental models of the environment. *Environmental Education Research*, 16(2), 189–208. <https://doi.org/10.1080/13504620903548674>
- Myers, B. E., & Washburn, S. G. (2008). Integrating science in the agriculture curriculum: Agriculture teacher perceptions of the opportunities, barriers, and impact on student enrollment. *Journal of Agricultural Education*, 49(2), 27–37. <https://doi.org/10.5032/jae.2008.02027>
- Palaganas, E. C., Sanchez, M. C., Molintas, M. P., & Caricativo, R. D. (2017). Reflexivity in qualitative research: A journey of learning. *The Qualitative Report*, 22(2), 426–438. <https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=2552&context=tqr>
- Privitera, G. J. (2017). *Research methods for the behavioral sciences* (2nd Ed.). Sage.
- Roberts, T. G., & Ball, A. L. (2009). Secondary agricultural sciences as content and context for teaching. *Journal of Agricultural Education*, 50(1), 81–91. <https://doi.org/10.5032/jae2009.01081>
- Roberts, T. G., & Dyer, J. E. (2004). Characteristics of effective agriculture teachers. *Journal of Agricultural Education*, 45(4), 82–95. <https://doi.org/10.5032/jae.2004.04082>
- Roberts, T. G., Greiman, B. C., Murphy, T. H., Ricketts, J. C., Harlin, J. F., & Briers, G. E. (2009a). Changes in student teachers' intention to teach during student teaching. *Journal of Agricultural Education*, 50(4), 134–145. <https://doi.org/10.5032/jae.2009.04134>
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds.). (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication.

- Roberts, T. G., Harlin, J. F., & Briers, G. E. (2009b). Predicting agricultural education student teachers' intention to enter teaching. *Journal of Agricultural Education*, 50(2), 56–68. <https://doi.org/10.5032/jae.2009.03056>
- Rots, I., Sabbe, E., & Aelterman, A. (2002, September 11-14). *The feminization and the social status of the teaching profession* [Paper presentation]. European Conference on Educational Research, Lisbon, Portugal. <https://files.eric.ed.gov/fulltext/ED473250.pdf>
- Salkind, N. J. (2012). *Exploring research* (8th ed.). Prentice Hall.
- Sinclair, C., Dowson, M., & McInerney, D. M. (2006). Motivations to teach: Psychometric perspectives across the first semester of teacher education. *Teachers College Record*, 108(6), 1132–1154. <https://doi.org/10.1111/j.1467-9620.2006.00688.x>
- Solomonson, J. K., & Retallick, M. S. (2018). Over the edge: Factors nudging mid-career, school-based agriculture teachers out of the profession. *Journal of Agricultural Education*, 59(4), 1–19. <https://doi.org/10.5032/jae.2018.04001>
- Smith, A. R., Lawver, R. G., & Foster, D. D. (2018). *National agricultural education supply and demand study, 2017 executive summary*. <http://aaaeonline.org/Teacher-Supply-and-Demand>
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Learning Policy Institute. <https://learningpolicyinstitute.org/product/coming-crisis-teaching>
- Sylvia, R. D., & Hutchison, T. (1985). What makes Ms. Johnson teach? A study of teacher motivation. *Human Relations*, 38(9), 841–856. <https://doi.org/10.1177/001872678503800902>
- Walker, W. D., Garton, B. L., & Kitchel, T. J. (2004). Job satisfaction and retention of secondary agriculture teachers. *Journal of Agricultural Education*, 45(2), 28–38. <https://doi.org/10.5032/jae.2004.02028>
- Weaver, R. (2000). Responding to the agriculture teacher shortage. *The Agricultural Education Magazine*, 72(5), 14–15. https://www.naae.org/profdevelopment/magazine/archive_issues/index.cfm