

How Does SBAE Influence Students' Decision to Major in Agriculture?

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Introduction and Need for the Study

A recent report predicted between the years 2015 and 2020, there will be more agriculturally related job openings nationwide than can be filled by graduates of agricultural programs (Goeker, Smith, Fernandez, Ali, & Theller, 2015). Priority area three of the 2016-2020 National Research Agenda places emphasis on attracting and developing the next generation of agricultural scientists (Stripling & Ricketts, 2016). These publications emphasize the importance of obtaining individuals to fill these positions as well as creating an educated workforce. With today's evolving workforce, the need to provide a highly educated, skilled workforce capable of providing solutions to 21st century challenges and issues has perhaps never been greater. One way to address these needs is through school-based agricultural education (SBAE). According to Phipps and Osborne (1988), the most important function of SBAE is to prepare youth and adults for careers in agriculture. Therefore, SBAE can be an important means for recruiting and training students for careers in today's agricultural workforce. This study sought to explore the influence of SBAE on students' decision to major in an agricultural field.

Theoretical and Conceptual Framework

The theoretical framework for this study is the Model of Career Choice (Dick & Rallis 1991). This framework is based on three key concepts that influence an individual's career choice which include socializers, past experiences, and self-concept. According to Dick and Rallis (1991), socializers, such as friends, family, or teachers, influence students by their actions, behaviors, and expectations. Past experiences influence students by providing them with opportunity and understanding in specific areas. For this study, the past experiences of interest were from SBAE. Self-concept occurs as a result of past experiences. When students realize they are capable of certain tasks and achievements, they are more apt to select a career that aligns with those self-perceived tasks and skills. We utilized this model as a framework to understand how participation in SBAE influences students' choice to major in agriculture.

Methodology

This qualitative study used a phenomenological research design. As part of a larger study, 12 students were purposefully recruited for this research. From a survey, undergraduate students at Utah State University who indicated a major in agriculture and who had participated in SBAE were selected. Participants were invited to participate in a 60-minute, seven-question semi-structured focus group interview with questions eliciting information about the influences of SBAE on their decision to major in agriculture. Five students participated in the focus group interview. Polkinghorne (1989) suggested that for phenomenology studies, between 5 and 25 subjects is sufficient. One female and four males participated in the study with student majors including agricultural education, veterinary science, plant science, and agricultural business. The focus group interviews were audio-recorded and transcribed verbatim. The data were analyzed and coded for thematic content using open, axial, and selective coding protocols outlined by Auerbach and Silverstein (2003). Two separate researchers performed the coding process with constant checks for accuracy and reliability in coding (Auerbach & Silverstein, 2003). Four themes emerged from the data. To establish trustworthiness (credibility, transferability, dependability, and confirmability) methods such as member checks, a reflective journal, and establishing an audit trail were utilized (Harrison, MacGibbon, & Morton, 2001).

Results/Findings

The purpose of this study was to explore how participation in SBAE influences students' motivations to major and pursue a career in an agricultural field. Participants identified several motivating influences regarding their decision to major in agriculture. Four themes with corresponding sub-themes were developed through the analysis of the data: 1) outside of class experiences, 2) socializers, 3) self-concept, and 4) career values. Theme one, outside of class experiences, was broken down into two sub-themes, which included SAE/experiential learning and away from school FFA experiences. One participant said "It was at national FFA convention... he gave this speech. It was pretty inspirational. And it was there that I knew I was going to go into agriculture." The second theme was socializers. Participants identified friends, family, teachers, and other individuals as key social influences in their decision to major in agriculture. Participants spoke about how these key people encouraged them to pursue a career in agriculture either through explicit conversations about it or just by example. One participant referred to his agriculture teacher as an example: "The impact that he's had on so many lives and on my life as well, it's pretty rewarding for him...so, I want that same experience." The third theme that emerged was self-concept. One student recalled, "I always thought that gaining the knowledge and having to remember it all would always be something that was unattainable for me... The vet science career development event definitely helped open my eyes to see that you don't have to be 4.0 Harvard student to get it done. I can be a veterinarian" The fourth and final theme was career values. This theme was divided into three sub-themes which included time for family/hobbies, job benefits, and making a difference or contribution. Participants spoke about alignment of their career choice with their personal values. Having a career that enabled time for family and hobbies, making a decent income, and making a difference in the world were concepts the participants communicated.

Conclusions

The findings for this study support the framework of the model of career choice (socializers, past experiences, and self-concept; Dick & Rallis 1991). Based on these findings, we suggest the addition of a fourth key concept to the model of career choice entitled personal career values. Quantitative research should be conducted to determine if this theme is generalizable to a broader population and to explore the strength of its influence on career choice. We conclude that socializer influences such as high school agriculture teachers and employers were an influencing factor in career choice. An impact such influencers can have on students is helping them realize their potential (self-concept). FFA events and experiential learning opportunities that occurred away from school were key influencers on participants' career choice and seemed to help students develop a sense of self-concept. We recommend high school agriculture educators continue to provide learning opportunities that occur away from school, such as FFA events, and encourage student participation in these experiences. These findings suggest SBAE does influence students' career choice decisions. Therefore, we recommend colleges of agriculture allocate their resources accordingly to target students from SBAE programs, including attendance at state and national FFA events. Finally, quantitative research is needed to determine how much of an influence these key findings have on career choice so resources can be directed accordingly. As more students recognize the opportunities that exist in agriculture through the influences of SBAE, more will enter the agricultural workforce, providing agriculture with the number of qualified workers it so desperately seeks.

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