Why become an agriculture education teacher?: Applying the theory of planned behavior and the self-determination theory

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Introduction

Teacher recruitment and retention are critical to sustaining and developing school-based agricultural education programs across the country (Lawver & Torres, 2012; Marx et al., 2017; Moser & Mckim, 2020). Understanding individuals' motivation for teaching can provide important implications for teacher recruitment and retention (Sinclair, 2008). Previous research indicated that motivated teachers are more involved in teaching and have greater dedication than less motivated teachers (Abós et al., 2018; Fernet et al., 2008). In addition, teachers' motivation enhance their students' motivation (Abós et al., 2018; Fernet et al., 2008). Several studies have identified factors that influence individuals' choice to teach agriculture (Ingram et al., 2018; Lawver & Torres, 2012; Marx et al., 2017). However, these studies have been mainly used the Ag Ed FIT-Choice model (Lawver & Torres, 2011; Richardson & Watt, 2006), which is based on the expectancy-value theory. Motivation for teaching agricultural education is rarely identified based on self-determination theory (Deci & Ryan, 1985) and the theory of planned behavior (Ajzen, 1991), which can provide a valuable lens to develop a better understanding of what motivated individuals to study agriculture teacher preparation programs and pursue agriculture teachers. To address the knowledge gap, this study investigated the motivation of preservice teacher recruitment program participants to choose a career in teaching agriculture using self-determination theory and the theory of planned behavior.

Theoretical Framework

The theoretical framework for this study was based on self-determination theory (Deci & Ryan, 1985) and the theory of planned behavior (Ajzen, 1991), which provided a valuable lens to understand what motivates individuals to teach. Self-determination theory elaborates motivation using three broad types: intrinsic motivation, extrinsic motivation, and amotivation. Furthermore, the theory of planned behavior describes that attitude toward behavior, subjective norms, and perceived behavioral control are predictors of behavioral intention, leading to a behavior (Ajzen, 1991). In the context of this study, it is hypothesized that if participants think a career in teaching agriculture is worthwhile, their significant others think teaching agriculture is essential, and participants believe they can become agriculture teachers, they are more likely to have the intention to study in agriculture teacher preparation programs to become agriculture teachers.

Methodology

The target population for this study was school-based agricultural education (SBAE) students who participated in the Agricultural Education Institution (AEI) (N = 330), which is a preservice teacher recruitment program within the Department of Agricultural Education and Communication at the University of Florida. The sample for this study was 42 AEI alumni who participated in the program between 2013 and 2020. The instruments included three sections. The first section was comprised of four sub-sections: (a) attitude toward behavior, (b) subjective norms, (c) perceived behavioral control, (d) intention. The second section was devised based on previously validated instruments that measured teachers' motivation for teaching and work tasks (Abós et al., 2018; Fernet et al., 2008). All items of the first and second sections were assessed using a five-point, Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Lastly, respondents were asked to write about their motivation to become an agriculture teacher to obtain more rich and in-depth information. Online Surveys were utilized, and data were analyzed using SPSS. In addition, the constant comparative method (Corbin & Strauss, 2008) was used to identify similarities and differences between cases (Harding, 2019) in the data obtained from the subjective question.

Results

Research objective one sought to identify factors that influence participants to become agriculture teachers based on the theory of planned behavior. The mean scores and standard deviation for each construct were the following: positive attitudes toward behavior (M = 4.53, SD= 0.56), subjective norm (M = 3.40; SD = 0.70), favorable perceived behavioral control (M = 4.44; SD = 0.67), and intention regarding teaching agriculture (M = 3.83; SD = 1.38). A multiple regression indicated that three independent variables statistically significantly predicted participants' intention to teach agriculture, F (3, 38) = 10,562, p < .0005, R^2 = .455.

Furthermore, research objective two addressed the types of motivation of those who pursue a career in teaching agriculture based on self-determination theory. The identified regulations mean (M = 4.57; SD = 0.45) was the highest rated motivation on the choice of a teaching career, followed by intrinsic motivation (M = 4.34; SD = 0.61), introjected regulations (M = 2.63; SD = 0.89), external regulations (M = 1.80; SD = 59), and amotivation (M = 1.45; SD = 0.68). Lastly, regarding factors that motivated participants to teach, six themes were emerged from the data which included, (a) influence from an agriculture teacher that being a role model, (b) helping students reach their full potential, (c) passion for agriculture, (d) experience with agricultural education programs, (d) FFA experiences, and (e) passion for teaching.

Conclusions and Recommendations

This study provides a deeper understanding of agriculture teacher candidates' motivation for teaching and beliefs regarding a career in teaching agriculture. The results indicated perceived behavioral control was relatively crucial to their intention to become agriculture teachers. Thus, agricultural education stakeholders such as agriculture teacher educators should offer students opportunities to develop their teacher self-efficacy by engaging them in hands-on experiences in teaching agriculture. In addition, the study revealed that overall, participants had more self-determined forms of motivation rather than less self-determined forms of motivation, aligned with previous studies (Abós et al., 2018; Bergmark et al., 2018; Sinclair, 2008). Furthermore, participants' positive experience with agriculture teachers, SBAE programs, FFA experience, and passion for agriculture and teaching were the main factors that encouraged them to pursue agriculture teachers, congruent with the study of Ingram et al. (2018). This study found that participants have various motivations to teach rather than a single motivation to become agriculture teachers. Stakeholders of agricultural education should target the different motivations and utilize multiple recruitment strategies to attract preservice teacher candidates. In addition, this study focused on the motivation of individuals with SBAE program experiences. Individuals without SBAE experience may have different types of motivations to pursue a career in teaching agriculture (Marx et al., 2017). Thus, it is recommended to investigate factors that influence non-traditional students without SBAE experience to develop strategies to recruit more diverse SBAE teacher candidates.

References

Abós, Á., Sevil, J., Martín-Albo, J., Aibar, A., & García-González, L. (2018). Validation evidence of the Motivation for Teaching Scale in Secondary Education. *Spanish Journal of Psychology*, *2018*, 1–12. https://doi.org/10.1017/sjp.2018.11

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179–211. https://doi.org/10.1080/10410236.2018.1493416

Bergmark, U., Lundström, S., Manderstedt, L., & Palo, A. (2018). Why become a teacher? Student teachers' perceptions of the teaching profession and motives for career choice. *European Journal of Teacher Education*, *41*(3), 266–281. https://doi.org/10.1080/02619768.2018.1448784

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). SAGE Publications.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.

Fernet, C., Sencal, C., Guay, F., Marsh, H., & Dowson, M. (2008). The Work Tasks Motivation Scale for Teachers (WTMST). *Journal of Career Assessment, 16*(2), 256–279. https://doi.org/10.1177/1069072707305764

Harding, J. (2019). *Qualitative data analysis: From start to finish*. SAGE Publications.

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

Lawver, R. G., & Torres, R. M. (2012). An analysis of post–secondary agricultural education students' choice to teach. *Journal of Agricultural Education*, *53*(2), 28–42. https://doi.org/10.5032/jae.2012.02028

Lawver, R., & Torres, R. (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

Marx, A., Smith, A., Smalley, S., & Miller, C. (2017). Previous experience not required: Contextualizing the choice to teach school-based agricultural education. *Journal of Agricultural Education*, *58*(4), 126–142. https://doi.org/10.5032/jae.2017.04126

Moser, E. M., & Mckim, A. J. (2020). Teacher retention: A relational perspective. *Journal of Agricultural Education*, *61*(2), 263–275. https://doi.org/10.5032/jae.2020.02263

Richardson, P. W., & Watt, H. M. G. (2006). Who chooses teaching and why? Profiling characteristics and motivations across three Australian universities. *Asia-Pacific Journal of Teacher Education*, *34*(1), 27–56. https://doi.org/10.1080/13598660500480290

Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, *36*(2), 79–104. https://doi.org/10.1080/13598660801971658