(Research Poster)

He Said, She Said: A Gender Analysis of Teaching Deterrents

Erin K. Gorter
Texas A&M University and Texas Tech University Doc @ Distance

Benjamin G. Swan
Cal Poly State University

Bailey K. Riedel
Cal Poly State University

(Research Poster)

He Said, She Said: A Gender Analysis of Teaching Deterrents

Introduction

Increasing the supply of agriculture teachers is a struggle. Roberts, Harlin, and Ricketts (2006) suggested three solutions to increase the supply: (a) increase number of agricultural science graduates, (b) increase the quantity of agricultural science graduates who want to enter the teaching profession, and (c) identify alternative sources to supply teachers of agriculture. The purpose of the study was to determine reasons that deter agricultural science students, based on gender, during their pre-service experience from continuing to pursue a credential in agriculture. This effort will greatly enhance strategies implemented when communicating with and developing all pre-service agriculture teachers while they are making career decisions.

Theoretical Framework

Social Cognitive Career Theory [SCCT] (Lent, Brown, & Hackett, 1994, 2000, 2002) states an individual's personal input (gender) impacts career intentions and recognized aspects of ones environmental influence beliefs, intentions, and actions. "Performance and persistence in educational and occupational pursuits" (Lent et al., 1994, p. 79) are conditions which affect the development of an individual's career choice. Academic development, gender, and career choice diverge with information acquired during school, thus affecting career pursuits.

Methodology

Gorter, Swan, and Ray (2016) identified 23 deterrents to agricultural science students in California, which were used to construct the instrument, utilizing a 5 point Likert (no significance to greatest significance). SurveyMonkey™ was used to distribute the instrument to Cal Poly State University agricultural science graduates (2014-2016).

Tailored Design Method [TDM] (Dillman, 2007) was used to organize and carryout survey distribution. Questions were written to entice interest from participants, as well as capitalize on the interest in education of those who self-selected as having an interest in teaching as a profession. Questions of greater interest were frontloaded on the questionnaire, followed by demographic questions. Trust was gained through a description of potential impacts of the study. Four contacts were made with survey participants over the course of four weeks.

Results

Names and email addresses of alumni were collected through the Cal Poly State University computer system (N=90). A link was distributed via email. Eighteen emails were invalid and 54 alumni responded resulting in a 60% response rate. Respondent opinions do not differ greatly from those whom choose not to respond to alumni surveys (Lambert & Miller, 2014). Of those whom responded, 34 (63 %) considered teaching during their undergraduate experience (28 females and 6 males). Those who responded as having considered teaching agriculture as a career became the target population (n=34). Data was summarized from these responses identifying 20 (59%) as teaching agriculture and 14 (41%) not teaching agriculture.

Participants rated 23 items; all of which will be in the final poster. Table 1 identifies the five items with the greatest strength of relationship (*r*) and effect size (Cohen, 1988). Hopkins (1997) indicated when *r*>.3, a moderate magnitude of relationship exists and when *r*>.5, there is a high magnitude. A t-test for Equality of Means was conducted at an alpha level of .05 *a priori*, indicating statistical significance for 6 of the 23 items. Cohen's *d* ranging between .5-.79 has a medium effect size *d*≥.80 is interpreted as a large effect size (1988).

Table 1

Gender Analysis of Top 5 Deterrents to Pursuing an Agriculture Teaching Credential (n=34)

Reason	Strength of Relationship (*r*)	Effect Size (d)
Perceived there is little time for agriculture teachers to spend with family	.518*	1.211
Did not want to deal with "bad" students	-.490	1.125
Have witnessed other agriculture teachers complain about the profession	.467*	1.057
Pressured by family and/or peers to seek other career options	.386*	.838
Did not want to participate in state credentialing requirements such as PACT or edTPA	-.328	.695

*p<.05

Conclusions

As SCCT suggests, gender appears to play a role in the types of potential deterrents to those interested in teaching agriculture. Females were more likely to identify the perception there is little time for agriculture teachers to spend with family, witnessing other agriculture teachers complain about the profession, and pressure from family and/or peers to seek other careers as deterrents. Whereas, males identified not wanting to deal with "bad" students and not wanting to participate in state credentialing requirements. In addition, the remaining 18 items produced differences in responses based on gender.

Implications

Differences in gender can impact why agricultural science undergraduate students choose not to pursue a teaching credential in agriculture. Strategic efforts must be made within coursework, guided experiences, panel discussions, and counseling when working with either gender. These deliberate actions should assist in increasing the supply of agriculture teachers to the profession in a balanced way that is attractive to both genders.

References

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed., 2007 update with new internet, visual, and mixed-mode guide. ed.). Hoboken, N.J.: Wiley.

Gorter, E. K., Swan, B. G., & Ray, F. N. (2016). *A view from the top: A California agricultural education leadership Delphi perspective.* Poster presented at The American Association for Agricultural Education Western Conference, Tuscon, AZ. Abstract retrieved from http://aaaeonline.org/resources/Documents/Western%20Region/2016%20WRAAE%20CONFERENCE%20PROCEEDINGS.pdf

Hopkins, W. G. (1997). New view of statistics: Effect magnitudes. Retrieved from http://www.sportsci.org/resource/stats/effectmag.html

Lambert, A. D., & Miller, A. L. (2014). Lower response rates on alumni surveys might not mean lower response representativeness. *Educational Research Quarterly, 37*(3), 38-51. Retrieved from Eric database. (EJ1061974)

Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social cognitive career theory (p. 255-311). In D. Brown, L. Brooks, and Associates, *Career choice and development* (4th Ed.). San Francisco, CA: Jossey-Bass.

Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology*, *47*, 36-49.

Lent, R. W., Brown, S. D. & Hackett, G. (1994). Toward a unified social cognitive theory of career/academic interest, choice, and performance. *Journal of Vocational Behavior* [Monograph], *45*, 79-122.

Roberts, T. G., Harlin, J. F., & Ricketts, J. C. (2006). A longitudinal examination of teaching efficacy of agricultural science student teachers. *Journal of Agricultural Education, 47*(2) 81-92. doi:10.5032/jae.2006.02081