

12-1-2018

## Explaining Agriculture Faculty Members' Involvement in Study Abroad: Structural Relationships Among Personal - Dimension Variables

Shelli D. Rampold  
*University of Florida-PIE Center*

Melissa Cater  
*Louisiana State University*

J C. Bunch  
*University of Florida*

*See next page for additional authors*

Follow this and additional works at: <https://newprairiepress.org/jiaee>

---

### Recommended Citation

Rampold, S. D., Cater, M., Bunch, J. C., Blackburn, J. J., & Burnett, M. (2018). Explaining Agriculture Faculty Members' Involvement in Study Abroad: Structural Relationships Among Personal - Dimension Variables. *Journal of International Agricultural and Extension Education*, 25(3), 51-65. DOI: <https://doi.org/10.5191/jiaee.2018.25304>

This Research Article is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in *Journal of International Agricultural and Extension Education* by an authorized administrator of New Prairie Press. For more information, please contact [cads@k-state.edu](mailto:cads@k-state.edu).

---

## Explaining Agriculture Faculty Members' Involvement in Study Abroad: Structural Relationships Among Personal - Dimension Variables

### Abstract

Agriculture faculty members' involvement in study abroad programs can influence students' participation in such. However, faculty members' involvement may be limited by institutional, professional, and personal factors. This study was conducted to explain agriculture teaching faculty members' involvement in study abroad programs by examining the structural relationships between their study abroad involvement and personal dimension variables. Results indicated the personal factors influencing faculty members' involvement in study abroad include their perceptions of the knowledge, skill, and ability (KSA) outcomes of study abroad, awareness of study abroad programs and procedures, and prior international experience (PIE). The effect of faculty members' perceptions of the KSA outcomes of study abroad programs on their involvement was mediated by their perceptions of the importance of those KSA outcomes for professionals in their field. Further, faculty members' perceived importance of KSA outcomes was moderated by PIE. Recommendations for future practice include providing professional development and training to increase faculty members' awareness of study abroad and increase opportunities for faculty members to gain international experiences. Future research should include replication of this study with agriculture faculty members at other institutions and the examination of relationships among professional and institutional dimension factors

### Keywords

agriculture faculty, faculty involvement, personal factors, study abroad

### Authors

Shelli D. Rampold, Melissa Cater, J C. Bunch, J. Joey Blackburn, and Michael Burnett

doi: 10.5191/jiaee.2018.25304

## **Explaining Agriculture Faculty Members' Involvement in Study Abroad: Structural Relationships Among Personal-Dimension Variables**

Shelli D. Rampold  
University of Florida – PIE Center

Melissa Cater  
Louisiana State University

J.C. Bunch  
University of Florida

J. Joey Blackburn  
Michael Burnett  
Louisiana State University

### **Abstract**

*Agriculture faculty members' involvement in study abroad programs can influence students' participation in such. However, faculty members' involvement may be limited by institutional, professional, and personal factors. This study was conducted to explain agriculture teaching faculty members' involvement in study abroad programs by examining the structural relationships between their study abroad involvement and personal dimension variables. Results indicated the personal factors influencing faculty members' involvement in study abroad include their perceptions of the knowledge, skill, and ability (KSA) outcomes of study abroad, awareness of study abroad programs and procedures, and prior international experience (PIE). The effect of faculty members' perceptions of the KSA outcomes of study abroad programs on their involvement was mediated by their perceptions of the importance of those KSA outcomes for professionals in their field. Further, faculty members' perceived importance of KSA outcomes was moderated by PIE. Recommendations for future practice include providing professional development and training to increase faculty members' awareness of study abroad and increase opportunities for faculty members to gain international experiences. Future research should include replication of this study with agriculture faculty members at other institutions and the examination of relationships among professional and institutional dimension factors.*

**Keywords:** agriculture faculty, faculty involvement, personal factors, study abroad

## Introduction

Initiatives to produce globally competent students have transpired across many U.S. institutions over the past decade (American Council on Education [ACE], 2012; Green, 2012). Efforts have been directed to the development and promotion of study abroad opportunities as a means of supplementing on-campus initiatives to internationalize the educational experience of students (ACE, 2012; Childress, 2009). A steady increase in student participation in study abroad programs has been observed in recent years (Institute of International Education [IIE], 2016), much of which can be attributed to the shift from traditional, semester-long programs to short-term, faculty-led programs (Dwyer, 2004; IIE, 2016; McCabe, 2001; Zamastil-Vondrova, 2005). However, room for growth remains in current study abroad participation to meet national study abroad participation goals by 2020 (IIE, 2016).

University faculty can be an influential force behind student behavior (National Survey of Student Engagement [NSSE], 2008; O'Hara, 2009). Although influence of parents and friends has also been found to influence the perceptions and behaviors of students, faculty may be a more assessable population through which study abroad goals can be reached. O'Hara (2009) maintained it is largely inconceivable a student would graduate without having had significant interactions with faculty members. Moreover, Green and Olson (2003) identified faculty members' engagement as a driving force behind successful internationalization and noted this encompassed teaching, research, service, and advising appointments of faculty.

With increased student interest in short-term, faculty-led study abroad

experiences, there exists an even more pressing need to involve agriculture faculty in study abroad efforts. In addition to leading a program, faculty study abroad involvement can be operationalized to include a wider range of activities such as (a) disseminating study abroad information to students, (b) encouraging students to study abroad, and (c) assisting students through the process of studying abroad (Lukosius & Festervand, 2013; O'Hara, 2009; Rampold, Bunch, Cater, Blackburn, & Burnett, 2018; Umbach & Wawrzynski, 2005). However, Rampold et al. (2018) found agriculture faculty members were only minimally involved in these activities. Research is needed to examine factors that may influence faculty involvement. Moreover, this area of research would benefit from a comprehensive framework to better examine relationships between factors and explain faculty members' involvement in study abroad programs.

## Literature Review & Conceptual Framework

The Faculty Engagement Model (FEM) by Wade and Demb (2009) was modified by Rampold et al. (2018) to include (a) institutional, (b) professional, and (c) personal dimension factors influencing faculty members' involvement in study abroad learning experiences (see Figure 1).

For the purpose of this study, specific variables within the model's personal dimension were identified from an extensive review of literature and incorporated as an expansion of the original conceptual model to explain faculty members' involvement in study abroad programs (see Figure 2).

**Professional Dimension**

Professional dimension factors may include attributes such as faculty members’ rank/tenure, characteristics of academic department, and field of study.

**Institutional Dimension**

Characteristics of the institution such as international mission statement, study abroad priorities, and communication of priorities across members.



**Personal Dimension Factors**

May include attributes such as faculty members’ attitude/beliefs, knowledge, demographics, and prior international experience.

**Involvement in Study Abroad Programs**

Faculty members’ activities such as informing, encouraging, and promoting programs; assisting with study abroad process; connecting students with international programs.

Figure 1. A conceptual model to assess faculty members’ involvement in study abroad (as cited in Rampold, Bunch, Cater, Blackburn & Burnett, 2018)

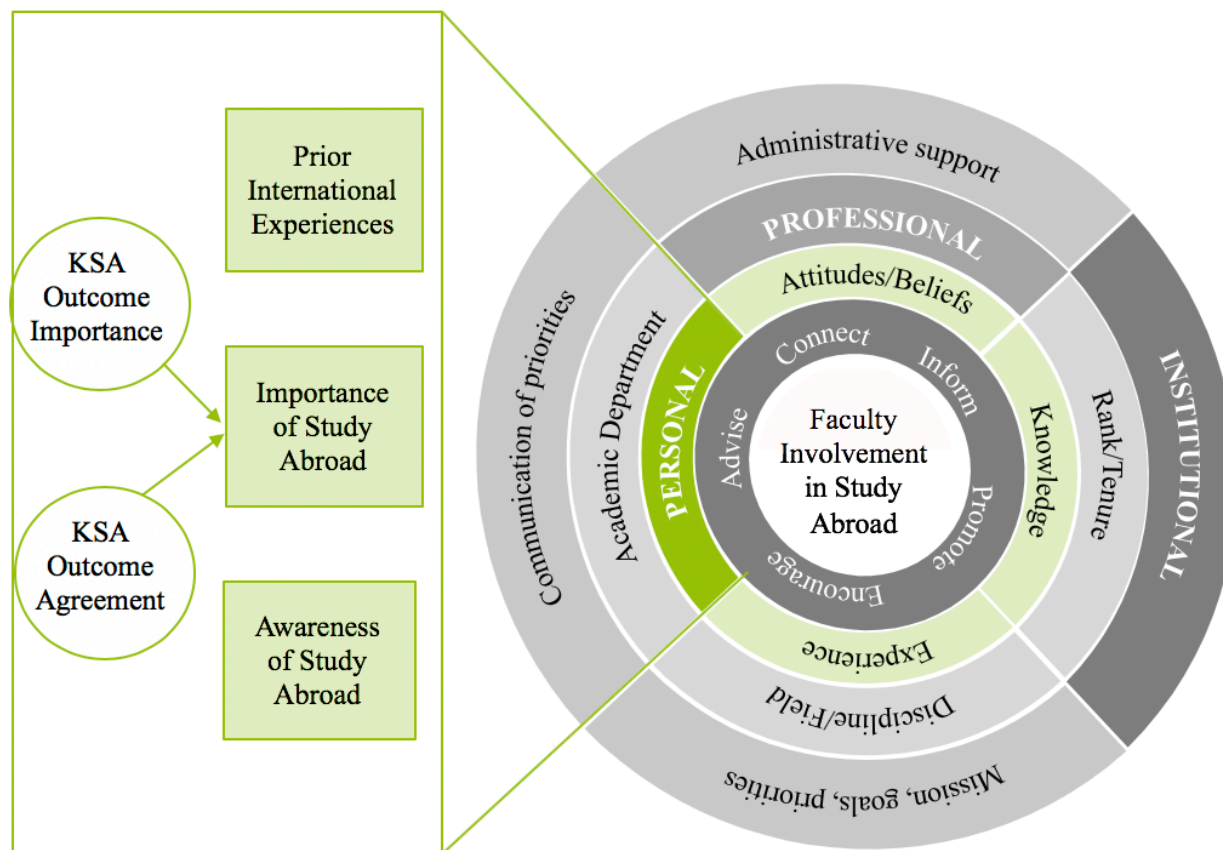


Figure 2. Personal dimension variables to explain faculty members' involvement in study abroad. (adapted from *A Conceptual Model to Assess Faculty Involvement in Study Abroad Programs* in Rampold, Bunch, Cater, Blackburn & Burnett, 2018)

### Personal Dimension

The personal dimension variables hypothesized to influence faculty members' involvement in study abroad programs include their (a) attitudes/beliefs regarding the importance of study abroad (e.g., perceptions of KSA outcomes produced by study abroad experiences and the importance of those KSAs for professionals in their field); (b) knowledge and awareness of study abroad opportunities (e.g., available programs, international programs office through which students study abroad, and study abroad policies and procedures); and (c) prior international experience (e.g.,

personal and professional experiences [see Figure 2]).

**Beliefs and attitudes.** Faculty members' perceptions of the importance and effectiveness of study abroad programs can influence their involvement in such activities. If faculty members perceive study abroad participation as an effective means of producing important learning outcomes among students, they may be more likely to engage in activities to facilitate study abroad participation by their students (Green & Olsen, 2003; NSSE, 2008; Paus & Robinson, 2008). However, faculty members may be less inclined to engage in

study abroad activities if they do not perceive studying abroad as a valuable or effective endeavor (Green & Olsen, 2003). Navarro and Edwards (2008) examined what skills, competencies, and experiences agriculture teaching faculty members perceived to be priorities for the undergraduate agricultural curriculum. Faculty participants in the study ranked emphasizing international awareness or experience last on the priority list (Navarro & Edwards, 2008). Rampold et al. (2018) found agriculture faculty members agreed learning outcomes of studying abroad were important for agricultural professionals, but they agreed less that study abroad programs generate those outcomes. Research is needed to examine the influence of these beliefs on agriculture faculty members' involvement in study abroad programs.

#### **Prior international experience.**

Faculty members' prior international experiences can influence their perceptions of and involvement in study abroad learning experiences. Akpan and Martin (1996) found that agriculture faculty who had traveled to a foreign country held more positive perceptions of internationalizing the agricultural education curriculum than faculty members who did not have international experiences. In prior studies conducted with non-agriculture faculty, the degree of international experience acquired by faculty members influenced (a) their personal attitudes and beliefs, (b) their attitudes and behaviors in their professional settings, (c) the likelihood they would incorporate international components into their teaching, research and service responsibilities, and (d) the attitudes and behaviors of their students (ACE, 2012; Bond, Qian, & Huang, 2003; Dooley, Dooley, & Carranza, 2008; Finkelstein, Walker, & Chen, 2013; Green & Olsen, 2003; Hulstrand, 2009; O'Hara, 2009; Stanford Research Institute [SRI], 2002).

International experiences can also help faculty members expand their own international knowledge and awareness and motivate them to share that knowledge with their colleagues and students (Hulstrand, 2009). In a study conducted to examine outcomes of the U.S. Fulbright Scholar Program, the majority of faculty participants (a) developed a greater understanding of their host country and shared that information with colleagues, (b) continued to collaborate with host country or institutional colleagues, and (c) incorporated their experiences into their curricula or teaching methods (SRI, 2002). In a follow up study with the Fulbright participants, 80% of the faculty members reported having encouraged their students to study abroad (O'Hara, 2009). Similar to O'Hara (2009), Hulstrand (2009) found faculty members' international experience influenced their degree of involvement in study abroad activities. In turn, students with internationally engaged and experienced professors were more likely to pursue international opportunities themselves.

Experiences abroad can also aid faculty members in leading study abroad programs. Good (2008) examined the informal preparation of faculty study abroad directors and found the international experiences of some faculty members better prepared them to lead students abroad. The types of international experiences acquired by the faculty members included (a) study abroad participation as a student, (b) attending a seminar or international conference abroad, (c) studying a foreign language abroad, (d) working or volunteering in another country, and (e) conducting research abroad. Some faculty members also noted the most helpful experience was their first experience as study abroad directors (Goode, 2008).

To the contrary, Woodruff (2009) concluded increased international

experiences among faculty members did not directly translate into increased efforts by those faculty members to promote study abroad opportunities to their students. Faculty members in the study who had international experiences held positive so than faculty members with fewer international experiences (Woodruff, 2009). The inconclusive findings observed across research in this area warrant further examination of the relationship between faculty members' international experiences and their degrees of involvement in study abroad programs.

**Knowledge and awareness.** The extent to which faculty members are involved in study abroad programs also may be explained by (a) their knowledge and awareness of study abroad opportunities, (b) administrative policies and processes associated with such, and (c) the international programs office on their respective campuses (Bond et al., 2003; Doyle et al. 2010; Lukosius & Festervand, 2013; Woodruff, 2009). Lukosius and Festervand (2013) found faculty members' knowledge of administrative procedures was vital in reducing the likelihood students would drop out of study abroad programs. However, faculty members' lack of knowledge and awareness of study abroad programs and processes has been reported as an inhibiting factor in their involvement (Bond et al., 2003; Doyle et al., 2010). Faculty members' lack of knowledge and awareness may, therefore, counteract factors that would otherwise motivate their involvement in study abroad programs. For example, faculty members' knowledge may explain why Woodruff (2009) found no differences in their involvement based on prior international experiences. Faculty members in the study who had prior international experiences held positive perceptions of study abroad learning experiences, but reported having a lack of

knowledge and awareness of study abroad opportunities available to their students (Woodruff, 2009). An examination of the relationships between factors influencing faculty members' involvement is needed to understand better the complex interactions of these factors and how they may influence their involvement.

**Personal interest in leading a study abroad program.** Faculty members' involvement in study abroad learning experiences was operationalized intentionally in this study to include a range of activities in addition to leading study abroad programs. However, increasing student participation in study abroad learning experiences is highly dependent on having faculty members willing to lead such programs (Stohl, 2007). Barriers to faculty members' involvement in leading study abroad programs identified in prior studies have included (a) time constraints, (b) perceived lack of support from administration, and (c) lack of guidance and formal preparation (Dewey & Duff, 2009; Goode, 2008). Dewey and Duff (2009) examined barriers to faculty involvement in leading study abroad programs and reported faculty members emphasized the issue of time required to develop or direct such programs. Moreover, faculty members noted that, considering the amount of time and work required, it was discouraging or even off putting when administrators viewed their participation in leading study abroad programs as merely a fringe benefit (Dewey & Duff, 2009). Faculty members in the study also identified the lack of useful templates or guidelines for initiating a new study abroad program as problematic (Dewey & Duff, 2009). Goode (2008) examined the formal and informal preparation of faculty study abroad directors and found faculty members had little to no formal preparation, nor did they perceive



their academic programs supported their interests in leading a study abroad program.

Further involvement of agriculture faculty members in study abroad programs is needed (Rampold et al., 2018). Research to examine the factors influencing agriculture faculty members' involvement in study abroad learning experiences can help inform future practice and policy to facilitate their participation in such. Moreover, because faculty members' involvement in study abroad programs has been found to influence students' decisions to participate in such programs (Lukosius & Festervand, 2013), research may provide recommendations that help increase study abroad participation rates by agriculture students.

### **Purpose & Objectives**

This study sought to explain agriculture faculty members' involvement in study abroad programs by examining the structural relationships among faculty members' study abroad involvement and personal dimension variables. The objectives of this study were (a) to describe personal dimension factors of agriculture faculty members, including their perceptions of the importance of study abroad programs for students and personal interest in leading such programs; and (b) to develop a model to explain faculty members' involvement in study abroad programs in terms of personal dimension factors.

### **Methodology**

#### **Population**

The targeted population of this study was all faculty members employed in the colleges of agriculture at Louisiana State University (LSU;  $N = 173$ ) and the University of Florida (UF;  $N = 388$ ) who held a formal teaching appointment at the time the study was conducted (combined  $N = 561$ ). Frame error was discovered during

analysis, and a total of 50 faculty were removed due to not meeting the a priori criteria of holding a formal teaching appointment. In addition, one faculty member opted out, which yielded a revised population frame of 510 faculty members. Useable responses were collected from 184 faculty members for a 36% response rate.

Participants were employed in the colleges of agriculture at LSU ( $f = 54$ ; 29%) and UF ( $f = 130$ ; 71%). Regarding professional status, more faculty members held the rank of professor ( $f = 74$ ; 40%) and a majority were tenured ( $f = 109$ ; 59%). Slightly more faculty members were male ( $f = 103$ ; 56%), and a majority were White, Non-Hispanic ( $f = 149$ ; 81%).

#### **Data Collection**

A modified approach to Dillman's, Smyth's and Christian's (2009) Tailored Design Method was employed to collect responses. Electronic mail (email) listservs of agriculture teaching faculty members from LSU and UF were obtained from college administrators and used to distribute an online questionnaire via Qualtrics. The initial email to faculty members included a description of the study and a link to the questionnaire. Follow up reminders were sent weekly for two weeks following initial contact. Due to low response, a fourth and final reminder was sent.

Given the 36% response rate, differences in respondents and non-respondents may exist. Using a university distribution list restricted the ability to compare respondents and non-respondents and was a limitation of this study. However, the following methods were employed during the survey's design and data collection processes to help generate higher response and completion rates: (a) critical attention was given to survey length so that the time needed to complete the instrument would not be a barrier to participation; (b)

progress bars were included in the online questionnaire rather than item numbers; and (c) three follow-up reminder emails were sent to non-respondents encouraging their participation (Couper, Traugott, & Lamias, 2001; Dillman et al., 2009).

### **Instrumentation**

An original instrument was developed by the researchers to assess agriculture teaching faculty members' involvement in and perceptions of study abroad learning experiences for students. To ensure content validity, an extensive review of literature was conducted to identify (a) activities associated with study abroad programs in which faculty members can be involved, (b) the knowledge, skills, and abilities (KSAs) most frequently identified as outcomes of study abroad programs, (c) institutional- and individual-level factors found to influence agriculture faculty members' involvement in and perceptions of study abroad programs, and (d) factors that influence agriculture faculty members' involvement in and perceptions of other components of internationalizing higher education that may be transferrable to study abroad programs. The questionnaire was then reviewed for content validity by an expert panel consisting of faculty members with collective proficiencies in study abroad program development and instrument development. The panel deemed the instrument acceptable. Post hoc reliability estimates for the instrument's constructs, i.e., KSA outcome agreement, KSA outcome importance, and study abroad awareness, were calculated using Cronbach's alpha and reported below.

Seven sections of a larger survey instrument were used for data analysis in this study: (a) involvement in study abroad programs; (b) perceived importance of study abroad for students; (c) agreement with KSAs as outcomes of studying abroad; (d)

perceived importance of KSA outcomes; (e) awareness of study abroad programs and procedures; (f) personal interest in leading study abroad programs for students; and (g) prior international experience.

The first section of the instrument was designed to assess the involvement of faculty members in activities associated with increasing student participation in study abroad programs. To measure involvement, faculty members' responses to check all that apply items were coded (0 = item not selected; 1 = item selected), and a composite score was computed. Participants were asked to indicate by checking all that apply regarding which of the 12 activities they had been engaged. Examples of the activities listed included: "I have encouraged students I teach/advise to study abroad"; "I have used time in class to inform students I teach of study abroad opportunities in the College of Agriculture"; and "I have helped design a study abroad program for students."

The second section of the instrument included a single Likert-type response item to assess faculty members' level of agreement with this statement: "I believe study abroad is important for students." Responses were collected using 6-point Likert-type response options: 1 = *disagree strongly*, 2 = *disagree*, 3 = *disagree slightly*, 4 = *agree slightly*, 5 = *agree*, and 6 = *agree strongly*. Real limits were set for the interpretation of the responses: 1.00 to 1.50 = *disagree strongly*; 1.51 to 2.50 = *disagree*; 2.51 to 3.50 = *disagree slightly*; 3.51 to 4.50 = *agree slightly*; 4.51 to 5.50 = *agree*; and 5.51 to 6.00 = *agree strongly*.

The third section of the instrument measured faculty members' perceptions of the KSAs students may develop as a result of studying abroad. This construct included seven items. These items were the KSAs reported most frequently across the relevant body of literature as being student outcomes of studying abroad. Participants were asked

to indicate their agreement with statements such as “studying abroad increases students’ acceptance of other cultures” and “studying abroad increases students’ knowledge of global issues.” Responses were collected using the previously mentioned 6-point Likert-type scale of agreement, and the same real limits were used for the interpretation of responses. An overall mean was calculated to represent faculty agreement with KSAs as student outcomes of studying abroad. The internal reliability estimate for this scale was  $\alpha = .92$ .

The fourth section of the instrument measured faculty members’ perceptions of the importance of select KSAs for professionals in their field. The KSA outcome importance construct comprised 10 items intended to mirror the items in the KSA agreement construct. Faculty members were asked to indicate their agreement with statements such as “being accepting of other cultures is important for professionals in my field” and “having knowledge of global issues is important for professionals in my field.” Responses were collected using the same 6-point Likert-type scale of agreement. The same real limits described above were used for the interpretation of responses. An overall mean was calculated to represent agriculture faculty members’ perceptions of KSA importance. The internal reliability estimate for this scale was  $\alpha = .94$ .

The fifth section of the instrument assessed faculty members’ knowledge and awareness of study abroad programs and associated policies and procedures. The study abroad awareness construct included five items representative of the areas in which faculty need to be familiar to facilitate student participation in study abroad programs. Faculty were asked to indicate their agreement with statements such as “I am aware of study abroad opportunities for my students” and “I am familiar with the process of transferring

study abroad credits to students’ degree plans at home.” Responses were collected using the previously mentioned 6-point Likert-type scale of agreement, and the same real limits were used for the interpretation of responses. An overall mean was calculated to represent agriculture faculty members’ awareness of study abroad programs, policies, and practices. The internal reliability estimate for this scale was  $\alpha = .87$ .

The sixth section of the instrument assessed the prior international experience (PIE) of agriculture faculty members. Faculty members’ responses to check all that apply items were coded (0 = item not selected; 1 = item selected), and a composite score was computed. Participants were asked to indicate by checking all that apply regarding which of the 13 experiences they had acquired. Examples of the activities listed included: “I have participated in international activities on campus”; “I have worked in a country other than the U.S.”; and “I have participated in a study abroad program for faculty.”

Faculty members were also asked to indicate their personal interest in leading a study abroad program for students. Responses were collected using a 4-point Likert-type scale: 1 = *definitely no*, 2 = *probably no*, 3 = *probably yes*, and 4 = *definitely yes*. Real limits were set for the interpretation of responses: 1.00 to 1.50 = *definitely no*; 1.51 to 2.50 = *probably no*; 2.51 to 3.50 = *probably yes*; and 3.51 to 4.00 = *definitely yes*.

### Data Analysis

Findings for objective one were reported through means and standard deviations. For objective two, structural equation modeling (SEM) was employed to examine structural relationships between variables predicted to influence faculty involvement in study abroad programs. SEM

was selected due to its predictive ability, as well as the capacity to examine the mediating effect of variables for which direct effects may not have been observed. SEM procedures were conducted using the MPlus 7.31 software package. Indices of absolute fit included the standardized root mean square residual (SRMR) and Steiger's (1999) root mean square error of approximation (RMSEA), with smaller values indicating a better fit to the data. SRMR values range from 0 to 1, with values less than .08 indicating a good fit (Hu & Bentler, 1999). RMSEA values below .10 indicate a good fit, and values below .05 indicate a very good fit (Steiger, 1990). Indices of comparative fit included the comparative fit index (CFI) and the Tucker-Lewis Index (TLI). The CFI ranges from 0 to 1, with values exceeding .95 indicative of a good fit (Hu & Bentler, 1999). The TLI, or non-normed fit index, is a measure of incremental fit that attempts to (a) capture the percentage improvement of a hypothesized model over the null model, and (b) adjust this improvement for the number of parameters in the hypothesized model. Values exceeding .95 indicate a good fit (Hu & Bentler, 1999).

## Findings

### Objective One

Objective one sought to describe agriculture teaching faculty members' perceptions of the importance of studying abroad for students, as well as their personal interests in leading a study abroad program. Descriptive information for other variables examined in this study were reported previously in Rampold et al. (2018) and not reported in this article. Agriculture faculty members agreed that studying abroad was important for students ( $M = 5.17$ ;  $SD = .86$ ), and they indicated probable interest ( $M = 2.71$ ;  $SD = .94$ ) in leading a study abroad

program for students lead a study abroad program for students.

### Objective Two

Objective two sought to develop a model to explain agriculture teaching faculty members' involvement in study abroad programs in regard to personal factors. The dependent variable was faculty members' involvement in study abroad. Independent variables included (a) their agreement with KSAs as student learning outcomes of study abroad participation, (b) their study abroad awareness, and (c) PIE. Possible mediating variables included perceptions of the importance of KSA outcomes and perceived importance of studying abroad.

The chi-square statistic for the full mediation model (see Table 1, Model 2[M2]) was statistically significant at the .001 level. The absolute fit index for SRMR (.092) was borderline, and RMSEA (.093) was within Steiger's recommended range of values for good fit of the data. Further, the comparative fit indices CFI and TLI did not meet the recommended cutoff value of .95 (Hu & Bentler, 1999; see Table 1, M2). As such, this model was not considered a good fit and a partial mediation model was examined. The chi-square statistic was significant at the .001 level for the first partial mediation model (see Table 1, M3). The absolute and comparative indices showed mixed results with slight improvements to SRMR and TLI; however, the overall model did not suggest a good fit for the data (see Table 1, M3). As such, two exploratory partial mediation models were examined (see Table 1, M4, M5). The chi-square statistic was significant at the .001 level for both models. Again, neither absolute nor comparative indices for either model suggested a well-fitted model. The absolute index SRMR as well as the comparative indices CFI and TLI were slightly better for the second exploratory

partial mediation model (see Table 1, M5). As such, this model was deemed the best fit of the four models examined (see Figure 3).

Table 1  
*Full and Partial Mediation Exploratory Model Fit*

Model	X <sup>2</sup>	df	RMSEA <sup>a</sup>	CFI	TLI	SRMR
Null (M1)	69.01	19	.092	.908	.869	.143
Full (M2)	764.80***	272	.093	.843	.827	.092
Partial 1 (M3)	742.56***	269	.091	.849	.832	.080
Partial 2 Exploratory (M4)	751.64***	270	.092	.847	.830	.089
Partial 3 Exploratory (M5)	738.53***	270	.091	.851	.834	.083

Note: RMSEA, Root-Mean-Square Error of Approximation; CFI, Comparative Fit Index; TLI, Tucker-Lewis Index; SRMR, Standardized Root-Mean-Square Residual.

<sup>a</sup>90% confidence interval

\*\*\* $p < 0.001$

All factors in the model contributed to faculty members' involvement in study abroad programs to varying degrees (see Figure 3). Faculty members' awareness of study abroad had a direct effect on their involvement. The effect of faculty members' agreement with KSAs as student learning outcomes of studying abroad on their involvement in study abroad programs was partially mediated by faculty members' perceptions of the importance of KSA outcomes for professionals in their field, as well as by perceptions of the overall importance of students studying abroad. In addition, faculty members' perceptions of the importance of KSA outcomes for professionals in their field were partially moderated by the PIE they had acquired.

### Conclusions & Recommendations

Although none of the models met the criteria for a well-fitted model, all of the models exhibited elements of close fit in some areas with marginal fit in others. Per the accepted model, the personal dimension factors that predicted agriculture teaching

faculty members' involvement in study abroad programs include their (a) agreement with KSAs as student learning outcomes of studying abroad, (b) perceived importance of those KSA outcomes for professionals in their fields, (c) perceived overall importance of studying abroad, (d) awareness of study abroad programs and procedures, and (e) PIE.

'The effect of faculty members' agreement with KSAs as being student outcomes of study abroad programs on their involvement in such learning experiences was partially mediated by their perceptions of the importance of those outcomes and the overall importance of study abroad experiences for students. As indicated by the relationships observed in the accepted model (see Figure 3), faculty members who perceived studying abroad produces KSA outcomes among students will perceive studying abroad as more important and are more likely to be involved if they also view such outcomes as important for professionals in their field.

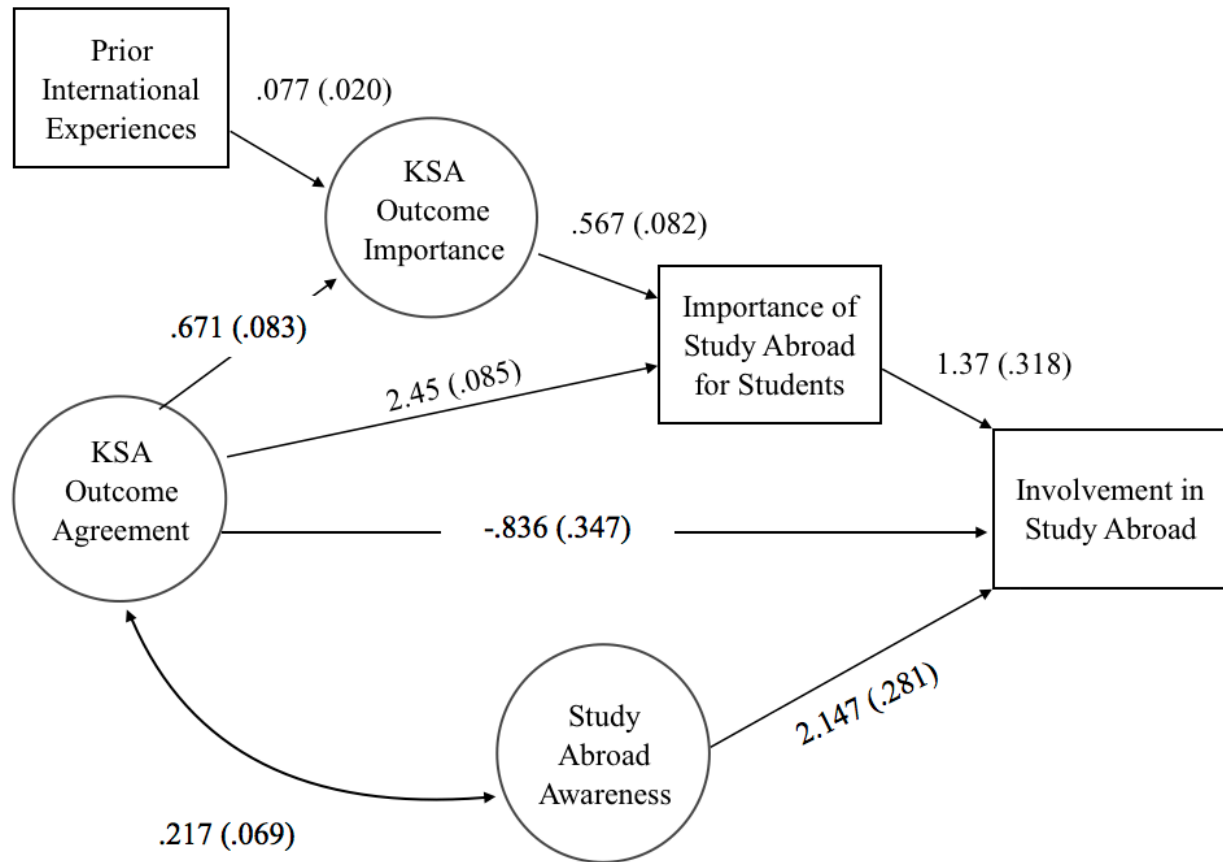


Figure 3. Partial mediation model for personal dimension factors influencing faculty members' involvement in study abroad programs

The findings of this study and prior research support the notion that convincing faculty of the value of study abroad programs can positively influence their involvement in such (Green & Olsen, 2003; Paus & Robinson, 2008). Therefore, future research should examine why agriculture faculty members perceive some KSAs are outcomes of studying abroad, and why they view those KSAs as important for professionals in their field. Some academic disciplines tend to be more global in nature and have more obvious international relevance than others, which may influence faculty members' perceptions depending on their discipline (Bond et al., 2003; Ellingboe, 1988). As such, it may be beneficial to include academic discipline as a variable in future

models to explain faculty members' perceptions of the importance of such KSA outcomes.

Faculty members' perceived importance of KSA outcomes was moderated by their PIE. Consistent with prior research, faculty members in this study were more likely to perceive KSA outcomes of studying abroad as important for professionals in their field if they had acquired international experiences themselves (ACE, 2012; Akpan & Martin, 1996; O'Hara, 2009). Therefore, efforts should be directed toward increasing international opportunities for faculty members. Gaining international experience has been identified frequently as influencing faculty members' perceptions of

involvement in internationally-focused educational activities, such as study abroad programs (ACE, 2012; Akpan & Martin, 1996; Bond, 2003; Dewey & Duff, 2009; Dooley et al., 2008; Green & Olsen, 2003). However, less research exists regarding which types of international experiences best influence faculty members' involvement in or perceptions of study abroad learning experiences. Qualitative inquiries to explore how specific international experiences have impacted faculty members' beliefs regarding study abroad programs may aid in determining the types of opportunities that should be offered to faculty.

Faculty members' awareness of study abroad programs and procedures had a direct effect on their involvement. Faculty members were more likely to be involved in study abroad programs if they were aware of such opportunities and associated processes (Bond et al., 2003; Doyle et al., 2010; Woodruff, 2009). Therefore, future efforts should be directed toward faculty professional development and training regarding study abroad programming. Such efforts may include informational sessions or seminars designed to inform faculty members of upcoming study abroad programs within their departments and communicate to faculty how those programs may benefit their students, especially in regard to their future graduates' careers.

The complexity of the model employed in this study posed limitations regarding its power to explain fully the influence of personal dimension factors on agriculture faculty members' involvement in study abroad programs. As such, it would be beneficial to explore separate, more simplified models in future research to explain better the personal dimension factors influencing faculty members' involvement in study abroad programs. Considering the small number of respondents in this study,

this research should be replicated to include more agriculture faculty members from other institutions. Future research should also examine relationships between professional- and institutional-dimension variables and their impact on faculty members' involvement in study abroad programs. Inclusion of such variables in future models may help provide institutions and their departments of agriculture practical recommendations for involving their faculty in study abroad programs.

### References

- Akpan, M., & Martin, R. A. (1996). Perceptions and activities of agricultural education professors in U.S. institutions of higher education regarding internationalization of the agricultural education curriculum. *Journal of International Agricultural and Extension Education*, 3(2), 63–71. doi:10.5191/jiaee.1996.03208
- American Council on Education (ACE). (2012). *Mapping internationalization on U.S. campuses: 2012 edition*. Washington, DC: Author. Retrieved from <http://www.acenet.edu/news-room/Documents/Mapping-Internationalization-on-US-Campuses-2012-full.pdf>
- Bond, S. L., Qian, J., & Huang, J. (2003). The role of faculty in internationalizing the undergraduate curriculum and classroom experience. *Canadian Bureau for International Education*, 8, 1–20. Retrieved from <http://files.eric.ed.gov/fulltext/ED549872.pdf>
- Couper, M. P., Traugott, M., & Lamias, M. (2001). Web survey design and administration. *Public Opinion Quarterly*, 65, 230–253. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/d>

- ownload?doi=10.1.1.463.5473&rep=rep1&type=pdf
- Dewey, P., & Duff, S. (2009). Reason before passion: Faculty views on internationalization in higher education. *Higher Education, 58*(4), 491–504. doi:10.1007/s10734-009-9207-z
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: John Wiley & Sons, Inc.
- Dooley, K. E., Dooley, L. M., & Carranza, G. (2008). Beliefs, barriers, and benefits of a faculty abroad experience in Mexico. *Journal of International Agricultural and Extension Education, 15*(3), 29–38. doi:10.5191/jiaee.2008.1503
- Doyle, S., Gendall, P., Meyer, L. H., Hoek, J., Trait, C., McKenzie, L., & Looiparg, A. (2010). An investigation of factors associated with student participation in study abroad. *Journal of Studies in International Education, 14*(5), 471–490. doi:10.1177/1028315309336032
- Dwyer, M. M. (2004). More is better: The impact of study abroad program duration. *Interdisciplinary Journal of Study Abroad, 10*, 151–163. Retrieved from <https://www.iesabroad.org/system/files/More%20is%20better%20%28Dwyer%2C%202004%29.pdf>
- Finkelstein, M. J., Walker, E., & Chen, R. (2013). The American faculty in an age of globalization: Predictors of internationalization of research content and professional networks. *Higher Education, 66*(3), 325–340. doi:10.1007/s10734-012-9607-3
- Green, M. F., & Olsen, C. L. (2003). *Internationalizing the campus: A user's guide*. Washington, DC: American Council on Education. Retrieved from <http://www.d.umn.edu/vcaa/intz/users%20guide.pdf>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1–55. doi:10.1080/10705519909540118
- Hulstrand, J. (2009). Attracting faculty to education abroad. *International Educator, 18*(5), 48–51. Retrieved from [https://www.nafsa.org/\\_/File/\\_/sepoc\\_t09\\_edabroad.pdf](https://www.nafsa.org/_/File/_/sepoc_t09_edabroad.pdf)
- Institute of International Education (IIE). (2016). *Open doors report*. Retrieved from <https://www.iie.org/Research-and-Insights/Open-Doors>
- Lukosius, V., & Festervand, T. A. (2013). Marketing study abroad programs: A student recruitment model. *American Journal of Business Education, 6*(5), 483–494. doi:10.19030/ajbe.v6i5.8038
- McCabe, L. T. (2001). Globalization and internationalization: The impact on education abroad programs. *Journal of Studies in International Education, 5*(2), 138–145. doi:10.1177/102831530152004
- National Survey of Student Engagement (NSSE). (2008). *Promoting engagement for all students: The imperative to look within*. Bloomington: Indiana University Center for Postsecondary Research. Retrieved from



- [http://nsse.indiana.edu/NSSE\\_2008\\_Results/docs/withhold/NSSE2008\\_Results\\_revised\\_11-14-2008.pdf](http://nsse.indiana.edu/NSSE_2008_Results/docs/withhold/NSSE2008_Results_revised_11-14-2008.pdf)
- Navarro, M., & Edwards, M. C. (2008). Priorities for undergraduate education and the inclusion of internationalized curriculum in colleges of agriculture: Interpreting the comparison dilemma. *Journal of Agricultural Education, 49*(4), 72–82. doi:10.5032/jae.2008.0472
- O'Hara, S. (2009). *Vital and overlooked: The role of faculty in internationalizing U.S. campuses* (White Paper Issue No. 6). Retrieved from Institute of International Education website: <http://www.iie.org/en/Research-and-Publications/Publications-and-Reports/IIE->
- Paus, E., & Robinson, M. (2008). Increasing study abroad participation: The faculty makes the difference. *The Interdisciplinary Journal of Study Abroad, 17*, 33–49. Retrieved from <http://files.eric.ed.gov/fulltext/EJ899295.pdf>
- Rampold, S. D., Bunch, J. C., Cater, M., Blackburn, J. J., & Burnett, M. (2018). Examining study abroad involvement: A descriptive and comparative analysis of agriculture teaching faculty. *Journal of Agricultural Education, 59*(2), 233–254. doi:10.5032/jae.2018.02233
- Stanford Research Institute (SRI). 2002. *U.S. Fulbright scholar program outcome assessment*. Stanford, CA: SRI. Retrieved from <https://eca.state.gov/files/bureau/fulbright-us-scholar-one-pager-aug-2002.pdf>
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research, 25*(2), 173–180. doi:10.1207/s15327906mbr2502\_4
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education, 46*(2), 153–183. doi:10.1007/s11162-004-1598-1
- Wade, A., & Demb, A. (2009). A conceptual model to explore faculty community engagement. *Michigan Journal of Community Service Learning, 15*(2), 5–16. Retrieved from <https://u.osu.edu/demb.1/files/2008/09/Wade-Demb-MJCLS-vz7pf0.pdf>
- Woodruff, G. A. (2009). *Internationalizing the curriculum and campus paper series*. Minneapolis: University of Minnesota Office of International Programs. Retrieved from [https://global.umn.edu/icc/document/s/woodruff\\_curriculum\\_integration.pdf](https://global.umn.edu/icc/document/s/woodruff_curriculum_integration.pdf)
- Zamastil-Vondrova, K. (2005). Good faith or hard data? Justifying short-term programs. *International Educator, 14*(1), 44–49. Retrieved from [https://www.nafsa.org/\\_/File/\\_/educationabroadjan\\_feb05.pdf](https://www.nafsa.org/_/File/_/educationabroadjan_feb05.pdf)