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Forecasting College Students' Motivations to Study Abroad: A Pilot Study

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Abstract

To date, agricultural students' motivations regarding study abroad courses using the expectancy-value-cost model of motivation have not been incorporated into study abroad research as potential factors influencing their choices to participate. In this paper, we present agricultural students' conceptualizations of their motivations to participate in short-term, study abroad courses or experiences. We used a descriptive-correlational research design in combination with modified versions of the Self and Task Perceptions Instrument (STPI), Expectancy-Value-Cost Questionnaire, and social cognitive theory items. It was posited that expectation for success, subjective-task value, cost, and self-efficacy would influence students' motivations to enroll in a short-term, study abroad course or experience before graduation. Overall, agricultural students displayed somewhat strong motivation to study abroad. Subjective-task value and expectation for success represented the largest motivational factors. Students indicated outside effort cost and self-efficacy as the least motivational factors. Task effort cost and location lived while growing up correlated lowly and negatively. However, outside effort cost correlated substantially and positively with students' motivations to study abroad.

Keywords: college students; expectancy-value-cost models; expectancy-value theory; motivation; self-efficacy; short-term study abroad courses or experiences

Introduction

As the world population continues to expand and agricultural systems become more globalized (Bobbitt & Akers, 2013), numerous colleges and universities in the United States are emphasizing the importance of diversity education and global learning for students (Kuh, 2008). The same is true for employers in the agricultural and natural resources sectors, as they have expressed the need for employees with interpersonal communication and leadership skills (Crawford, Lang, Fink, Dalton, & Fielitz, 2011; Harder et al., 2015) as well as those with a "good grasp on issues and events that affect things throughout the world" (Irani, Place, & Friedel, 2006, p. 28). A global mindset is a function of an individual, and not socially embedded within the culture of an organization (Begley & Boyd, 2003). In this regard, "an understanding of agriculture's

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history and current economic, social, and environmental significance, both domestically and internationally, is important for all Americans" (Doerfert, 2011, p. 11). To these points, a popular method for helping students learn about cultures and worldviews different from their own is through study abroad courses or experiences (Kuh, 2008).

A comparative analysis of global study abroad data revealed U.S. student participation is considerably lower than in other developed nations (Organization for Economic Co-operation and Development [OECD], 2014). To address this deficiency, the 2005 Abraham Lincoln Study Abroad Commission set a goal of having 1 million U.S. students participate in study abroad by 2017 (Durbin, 2006). As a result, the number of U.S. students studying abroad more than doubled during the last decade (Institute of International Education [IIE], 2014). During the 2013-2014 academic year, 304,467 American students studied abroad, a 5% increase from the year prior (IIE, 2015). Yet, the number of college students with agricultural majors participating in short-term, study abroad courses or experiences remains insufficient in contrast to participation rates of students from other colleges within institutions of higher learning (IIE, 2015).

Review of Literature

Numerous merits exist for students participating in international experiences (Goldstein & Kim, 2006). These include, but are not limited to, gaining cross-cultural skills and global awareness (Harder et al., 2015; Kitsantas, 2004), increasing geopolitical concern (Carlson & Widaman, 1988), and decreasing ethnocentrism (Anderson, Hubbard, & Lawton, 2015). Further, researchers have assessed agricultural students' perceptions of motivators, barriers, and benefits associated with international learning experiences (Bunch, Blackburn, DanJean, Stair, & Blanchard, 2015; Bunch, Lamm, Israel, & Edwards, 2013; Chang et al., 2013; DanJean, Bunch, & Blackburn, 2015; Estes, Hansen, & Edgar, 2016; Place, Irani, Friedel, & Lundy, 2004). Empirical research suggests expected outcomes of international experiences for college students are typified by an impacted career trajectory (Orahood, Kruze, & Pearson, 2004) and perceived impact on employability (Briers, Shinn, & Nguyen, 2010; Harder et al., 2015; Teichler & Janson, 2007).

For changes in cultural competence and global awareness to occur, students need opportunities to explore and learn about the world. The international dimension (ID) courses at Oklahoma State University (OSU) exist to provide experiences in which students can gain international awareness and competence. Each undergraduate student at OSU is required to take an ID course to graduate (OSU Catalog, 2016–2017). One option to satisfy this requirement is to enroll in a short-term, study abroad course or experience; however, students are not required to study abroad to satisfy their ID course requirement.

In November 2015, OSU laid out a 10-point International Strategic Plan that included the goal of doubling student participation in study abroad courses or experiences by 2020 (OSU Annual Report, 2015–2016). This goal equates to at least one-half of all OSU undergraduates participating in a study abroad experience. At the time of this research, the College of Agricultural Sciences and Natural Resources (CASNR) ranked second (an estimated 26% of degree recipients having studied abroad) among OSU's seven colleges in terms of participation rate. Short-term, study abroad courses or experiences range in duration from 10 to 17 days and provide students with high-impact learning opportunities to develop cultural understanding and global awareness (OSU Catalog, 2016–2017). Yet, regardless of the programming in effect, students must be motivated to participate, especially if OSU is to achieve its related target.

Regarding motivation, limited inquiries have sought to measure the role relative cost has on students' motivations for participating in short-term, study abroad courses or experiences. In

2017, Connor and Roberts conducted a qualitative case study that examined how College of Agricultural and Life Sciences (CALS) Leadership participants at the University of Florida navigated stages of cultural adaptation during a short-term, study abroad experience in Costa Rica. Data collected before, during, and after participants returned provided insight into how their attitudes/beliefs, expectancies, and behavioral intentions changed over time. Connor and Roberts (2017) concluded that a discrepancy existed between students' forecasted perceptions of culture shock and what occurred. Their study highlighted the importance of how perceptions changed over time, and the findings held important implications for advanced planning and recruitment. Perhaps the same conditions might hold true for perceived relative cost regarding short-term, study abroad courses or experiences.

Moreover, little is known about how expectation for success, subjective-task value (Eccles & Wigfield, 2002), self-efficacy (Bandura, 1986) *and* relative cost (Flake, Barron, Hulleman, McCoach, & Welsh, 2015) motivated students to participate in such programs. This study, therefore, seeks to investigate how expectancy-value, social cognitive, and expectancy-value-cost factors relate to each other and influenced CASNR students' motivations for participating in short-term, study abroad courses or experiences and to fill a gap in the literature by providing pilot-data that will inform a larger project aiming to validate a scale that can be used to assess this phenomenon.

Theoretical Framework

International experiences, such as short-term, study abroad courses or experiences, offer students high-impact learning opportunities to increase their cultural understanding and global awareness. According to Moriba, Edwards, Robinson, Cartmell, and Henneberry (2012), globally aware individuals form positive attitudes toward other cultures. Providing undergraduate CASNR students with such experiences may help them to form such positive beliefs and attitudes. Several things, however, need to be evinced for these changes to occur: 1) students must be motivated to participate; 2) students must believe they can succeed; and 3) students' perceptions of relative cost regarding their attitudes and beliefs toward study abroad must not exceed the value they place on the activity (Eccles et al., 1983; Flake et al., 2015).

For these reasons, the expectancy-value theory of achievement motivation (Wigfield & Eccles, 2000), the expectancy-value cost model (Barron & Hulleman, 2015), and the social cognitive theory (Bandura, 1986; Eccles & Wigfield, 2002) formed the basis of this study. The first expectancy-value model was developed by John William Atkinson (1957, 1964) to understand different achievement-related choices (Wigfield et al., 2009). Isaac, Zerbe, and Pitt (2001) indicated the model suggests individuals feel motivated when "the personal expenditure of effort will result in an acceptable level of performance, the performance level achieved will result in a specific outcome for the person, and the outcome attained is personally valued" (p. 215).

Within the expectancy-value model, the major outcome component is *achievement-related choices and performance* (Eccles, 2005; Wigfield & Eccles, 2000), which predicates expectation for success, subjective-task value, and previous achievement-related experiences. According to the theory and in the context of this study, it can be assumed that students should be more likely to enroll in short-term, study abroad courses or experiences if they perceived they could succeed, placed high value on the course or experience, and had positive perceptions of previous, similar achievement-related experiences. Expectation for success (domain specific efficacy) depends on individuals' confidence in their intellectual ability and estimation of task difficulty (Eccles, 2005). Subjective-task value, defined broadly, is the motivation behind individuals' actions and should be

conceptualized in terms of four major components: attainment value (importance), intrinsic value (interest), utility value (usefulness), and cost (Eccles & Wigfield, 1995).

> Attainment value [is] representing the importance of doing well on a task in terms of one's self-schema and core personal values, [i]ntrinsic value is the inherent enjoyment or pleasure one gets from engaging in an activity, [u]tility value is the value a task acquires because it is instrumental in reaching a variety of long- and short-term goals, [and] cost is what is lost, given up, or suffered as a consequence of engaging in a particular activity. (Eccles & Wigfield, 1995, p. 216)

These variables influenced subjective-task value and expectation of success directly (Eccles et al., 1983). Such were operationalized as a set of expectancy- and ability-related beliefs and task values (Gao & Xiang, 2008), which included individuals' perceptions of competence, affective reactions and memories; interpretations of experience, goals and self-schema, including social identity; idealized self-image and self-concept of ability, perceptions of a socializer's attitudes, expectations and beliefs, gender roles, task difficulty, and cultural milieu, such as gender role stereotypes and family demographics, to name a few (Eccles, 2005; Wigfield et al., 2009). In college students' motivations to study abroad, subjective-task value affected their achievement-related choices and performance (Sánchez, Fornerino, & Zhang, 2006). Other studies determined that participants' perceived motivations, barriers, interests, and benefits to studying abroad could not be generalized across all college students; therefore, demonstrating these specific aspects of the phenomenon were not universal (Bunch et al., 2013; Hackney, Boggs, & Borozan, 2012).

Moreover, in previous empirical motivation research, the theorized sub-component of cost in expectancy-value models often has been neglected or ignored altogether. However, the relative cost domain has received increased attention in regard to "its importance in capturing motivational dynamics that complement expectancy and value components" (Barron & Hulleman, 2015, p. 1). Barron and Hulleman (2015) proposed making relative cost a major component of expectancy-value models of achievement motivation. The *relative cost*, i.e., *task effort cost*, *outside effort cost*, *loss of valued alternatives* (LOVA), and *emotional cost*, of engaging in an activity influences participant motivation (Barron & Hulleman, 2015; Flake et al., 2015).

For these reasons, we utilized a combined model of expectancy-value of achievement motivation, which included four *relative cost* dimensions. To be viewed as a motivational cost, the task must be perceived negatively by the individual (Barron & Hulleman, 2015). Flake et al. (2015) operationally defined the four sub-dimensions of cost:

> Task effort cost[s] [are] negative appraisals of time, effort, or amount of work put forth to engage in the task, [o]utside effort cost[s] [involved] negative appraisals of time, effort, or amount of work put forth for tasks other than the task of interest, [l]oss of valued alternatives cost [included] a negative appraisal of what is given up as a result of engaging in the task of interest, and [e]motional cost [included] negative appraisals of a psychological state that results from exerting effort for the task. (p. 237)

As noted by Eccles and Wigfield (2002), a need existed to integrate expectancy and competence constructs to create a comprehensive theoretical model. The application of a global theoretical framework, including the expectancy-value theory of achievement motivation, expectancy-value-cost model of motivation, and social cognitive theory in the context of short-term, study abroad courses or experiences, could expand our knowledge of students' perceptions of expectancy, value, cost, and self-efficacy. Taken together, this study examined CASNR

students' personal characteristics as related to their *forecasted motivations*, i.e., expectation for success, subjective-task value, cost, and self-efficacy, for short-term, study abroad courses or experiences as influences on performance and achievement-related choices associated with such. Therefore, regarding these theoretical propositions, what motivates students to voluntarily enroll in a short-term, study abroad course or experience to satisfy their ID course requirement?

Figure 1 is a comprehensive model indicating students' motivations to study abroad. As depicted, the four root constructs of students' motivations are task effort cost, loss of valued alternatives cost, emotional cost, and outside effort cost.

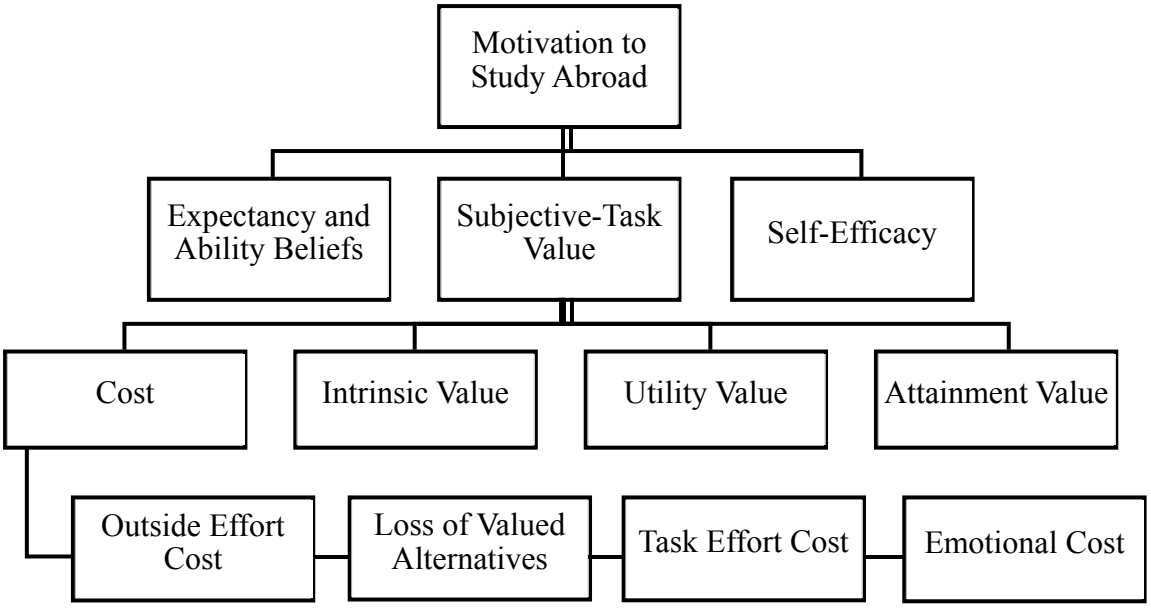

Figure 1. A Proposed Comprehensive Model of Individual Students' Motivations to Study Abroad.

Purpose

The purpose of the study was to identify CASNR students' forecasted conceptualizations *prior to a direct experience* of their motivations to enroll in a short-term, study abroad course or experience before graduation. Further, the study sought to determine whether students' personal characteristics were statistically significantly correlated ($p < .05$) with these motivational factors. To these ends, we posited students' perceived motivations, i.e., expectancy, value, cost, and self-efficacy, and their personal characteristics would explain why they chose to participate in short-term, study abroad courses or experiences.

Research Objectives

This study aligned with the American Association for Agricultural Education's Research Agenda, Priority 3 – Sufficient Scientific and Professional Workforce that Addresses the Challenges of the 21st Century (Roberts, Harder, & Brashears, 2016). Four objectives guided the study:

1. Describe the personal characteristics of OSU students who were CASNR majors;

2. Determine the factors that motivate students to enroll in short-term, study abroad courses or experiences;
3. Describe the relationships between students' motivations to participate in short-term, study abroad courses or experiences and their selected personal characteristics; and
4. Describe the relationships between factors that motivate students to consider participating in short-term, study abroad courses or experiences and overall motivation and intent to enroll in such prior to being graduated.

Methods

This descriptive-correlational study included all CASNR students at OSU during the fall semester of 2016 ($N = 2,978$). Students with previous international experience were excluded from the analysis because we were interested only in examining how this specific population interacted with the scale. Our purpose was to generate a profile of students for administrators and facilitators to improve recruitment methods and understand the motivations of students for enrolling in short-term, study abroad courses or experiences without the influence of students with previous international experiences.

Because this was a pilot study, we considered this research to be the field test. The findings of this study will inform a larger study which will seek to validate an instrument hypothesizing an expectancy-value-cost model of students' motivations to study abroad; therefore, the findings reported here hold important implications for subsequent studies.

Instrumentation

The instruments used in this study were the Self and Task Perception Instrument [STPI] (Eccles & Wigfield, 1995), the Expectancy-Value-Cost Questionnaire [EVCQ] (Flake et al., 2015), and items from the social cognitive theory [SCT] (Bandura, 1986; Bobbitt & Akers, 2013). The items in the instruments were modified slightly, i.e., the term *math*, used in the original scale, was changed to *study abroad* for the current study, to measure agricultural students' motivations to enroll in a short-term, study abroad course or experience prior to being graduated.

An expert panel consisting of five faculty members and five graduate students at OSU reviewed the instrument for content and face validity. As a result of their reviews, some items were reworded or omitted altogether. Next, the instrument was pilot-tested to construct an initial picture of its validity and reliability; this study reports the findings from that pilot-test.

Respondents were presented a series of concepts measuring their motivation to potentially enroll in a short-term, study abroad course or experience. All items were presented in random order, and each included a 5-point summated rating scale (1 = *Completely disagree*, 3 = *Neither*, and 5 = *Completely agree*) measuring the constructs used in the study (Warmbrod, 2014). Seven additional items on the instrument allowed respondents to indicate personal characteristics, including gender, educational status, ethnicity, transfer student status, grade point average, fluency in another language, and hometown location. Cost and self-efficacy items were worded negatively on the questionnaire and reverse coded for analyses. The final instrument contained 38 items and measured nine constructs. Cronbach's alpha scores for the STPI ranged from .78 (utility value) to .87 (ability- and expectancy-related beliefs); the EVCQ ranged from .75 (task effort cost) to .89 (outside effort cost); and SCT items at a .64 (Warmbrod, 2014).

Data Collection

The study's instrument was distributed online using Qualtrics Survey Software in accordance with Dillman's, Smyth's, and Christian's (2009) method for Internet surveys. In all, 529 students responded to the questionnaire for a response rate of 18%. To determine whether responses were generalizable to the population, nonresponse error was addressed by comparing respondents' personal characteristics to data from CASNR at OSU. No statistically significant differences ($p > .05$) were found between respondents' personal characteristics and the general student population of CASNR. Researchers also compared *early* ($n = 123$) and *late* ($n = 96$) respondents to assess nonresponse error (Lindner, Murphy, & Briers, 2001; Miller & Smith, 1983). No statistically significant differences were found between these two groups regarding the variables measured by the study. Therefore, we concluded our sample was representative of and generalizable to the population. After the exclusion of incomplete questionnaires and individuals with prior international experience, the usable responses were reduced to 219 (7.0%).

Data Analysis

The analysis procedures for research questions one and two involved computing descriptive statistics, i.e., means, standard deviations, and frequencies. Research questions three and four were analyzed using bivariate and point-biserial correlation coefficients (Fraenkel, Wallen, & Hyun, 2012; Kotrlik, Williams, & Jabor, 2011). The following magnitudes of correlations were used to describe the study's correlation coefficients: $.01 \geq r \geq .09$ = *Negligible*, $.10 \geq r \geq .29$ = *Low*, $.30 \geq r \geq .49$ = *Moderate*, $.50 \geq r \geq .69$ = *Substantial*, $r \geq .70$ = *Very Strong* (Davis, 1971).

Findings

Objective one sought to describe the personal characteristics of CASNR majors at OSU. Participants self-reported to be mostly non-Hispanic whites (73.5%), female (70.3%), undergraduate students (see Table 1). Nearly one-third indicated they grew up on a farm or ranch ($f = 72$, 32.9%), with only 19 (8.7%) growing up in a downtown area in the city or town. More than three-fourths indicated they were neither transfer students ($f = 165$, 75.3%) nor fluent in another language ($f = 170$, 77.6%; see Table 1).

Table 1

Personal and Professional Characteristics for CASNR Students at OSU

Variable	*f*	*%*
Gender		
Female	154	70.3
Male	63	28.8
Not reported	2	0.9

Table 1 (continued)

Personal and Professional Characteristics for CASNR Students at OSU

Variable	*f*	%
Educational Status		
Freshman	64	29.2
Sophomore	42	19.2
Junior	39	17.8
Senior	33	15.1
Master's	25	11.4
Doctoral	12	5.5
Not reported	4	1.8
Location where you were raised		
Farm/Ranch	72	32.9
Rural, not farm	56	25.6
Subdivision in or near town or city	69	31.5
Downtown area in the city or town	19	8.7
Not reported	3	1.4
Ethnicity		
Asian American	5	2.3
Black or African American	12	5.5
Native American/Alaskan Native	28	12.8
Non-Hispanic, White	161	73.5
Hawaiian	0	0.0
Hispanic	11	5.0
International Student	20	9.1

Table 1 (continued)

Personal and Professional Characteristics for CASNR Students at OSU

Variable	*f*	%
Grade Point Average		
4.0 or higher	41	18.7
3.99 to 3.50	69	31.5
3.49 to 3.00	48	21.9
2.99 to 2.50	17	7.8
2.49 or less	7	3.2
Not reported	37	16.9
Fluent in another language		
Yes	46	21.0
No	170	77.6
Not reported	3	1.4
Transfer student		
Yes	52	23.7
No	165	75.3
Not reported	2	0.9

Objective two sought to examine the perceived motivators influencing students to enroll in short-term, study abroad courses or experiences. A five-point scale was used to determine their level of agreement associated with items representing each factor. Means were calculated for the items and averaged together to create a composite mean score for each construct (see Table 2). Relative cost, i.e., task effort cost, emotional cost, LOVA, outside effort cost, and self-efficacy items, were worded negatively on the questionnaire. As such, they were reverse coded for analysis. Descriptive statistics results indicated that respondents perceived intrinsic value (M = 4.20, SD = 0.69) and expectancy- and ability-related beliefs (M = 4.10, SD = 0.65) as the largest motivational factors influencing their choices to participate in short-term, study abroad courses or experiences (see Table 2). In addition, respondents expressed a low level of disagreement overall with relative cost factors, and exhibited a neutral perception toward self-efficacy items (M = 2.83, SD = 0.82) regarding such experiences (see Table 2).

Table 2

*Descriptive Statistics for Motivational Constructs Grouped by Instrument to Enroll in Short-Term, Study Abroad Courses or Experiences Prior to Graduating, CASNR Students at OSU (*N = *219)*

Construct	*M*	*SD*
Intrinsic Value[a]	4.20	0.69
Expectancy- and Ability-Related Beliefs[a]	4.10	0.65
Attainment Value[a]	3.65	0.79
Utility Value[a]	3.63	0.72
Emotional Cost[b]	3.82	0.91
Task Effort Cost[b]	3.74	0.91
LOVA[b]	3.51	0.97
Outside Effort Cost[b]	3.25	1.09
Self-Efficacy[b]	2.83	0.82

Note. [a] = items worded positively; [b] = items worded negatively and reverse coded; 1 = *Completely disagree*, 3 = *Neither*, 5 = *Completely agree*; LOVA = Loss of valued alternatives

Objective three sought to describe the relationships between students' perceived motivators to participate in short-term, study abroad courses or experiences and their selected personal characteristics. A series of Spearman rank-order correlations, i.e., Spearman's rho, were computed to describe relationships between CASNR students' motivations (composite mean scores) to study abroad before graduation and five selected personal and professional characteristics, including education status, location growing up, median household income, grade point average, and age. Five statistically significant relationships were found (see Table 3). For example, a two-tailed test of significance indicated a statistically significant and negative relationship existed between outside effort cost and education status $r_s(219) = -.21$, $p < .001$ (see Table 3). The effect size of this relationship was low (Davis, 1971). Squaring the correlation coefficients indicated that 4.4% of the variance in outside effort cost was accounted for by education status indicating that the lower a CASNR student's education status, the higher his or her perceived outside effort cost regarding short-term, study abroad participation or a similar experience before graduation.

Three statistically significant relationships were found between motivation factors and hometown location. For example, a statistically significant and negative relationship existed between task effort cost and hometown location $r_s(219) = -.27$, $p < .001$. The effect size of this relationship was low (Davis, 1971). Squaring the correlation coefficients indicated that 7.3% of the variance in task effort cost was accounted for by hometown location indicating that the more rural a CASNR student's hometown location, the higher his or her perceived task effort cost regarding short-term, study abroad participation or similar experience before graduation. Additional relationships between motivation factors and selected personal and professional characteristics are presented in Table 3.

Table 3

*Spearman's Rho Correlations between Students' Implied Personal Characteristics and their Motivational Factors to Enroll in a Short-Term, Study Abroad Course or Experience Prior to being Graduated, CASNR Students at OSU (*N = *219)*

Variable	Education status	Hometown location	Median household income	GPA	Age
Intrinsic Value	.03	-.05	-.02	.00	.10
Expectancy- and Ability-Related Beliefs	.04	-.16*	.02	.04	.07
Attainment Value	-.06	-.10	.02	-.06	.06
Utility Value	-.11	-.03	.11	-.05	-.01
Emotional Cost	.09	-.10	-.02	.07	.08
Task Effort Cost	-.12	-.27**	.06	-.01	-.12
LOVA	.01	-.08	.08	-.01	.00
Outside Effort Cost	-.21**	-.12	.09	-.06	-.17*
Self-Efficacy	.06	-.16*	.09	.01	.04

Note. Magnitude: $.01 \geq r \geq .09$ = *Negligible*, $.10 \geq r \geq .29$ = *Low*, $.30 \geq r \geq .49$ = *Moderate*, $.50 \geq r \geq .69$ = *Substantial*, $r \geq .70$ = *Very Strong* (Davis, 1971).

*$p < .05$; **$p < .001$.

Point-biserial correlation coefficients revealed the top motivational factors by gender, fluency in another language, and transfer student status (see Table 4). Intrinsic value and gender correlated lowly and positively, indicating females were more intrinsically motivated to participate in short-term, study abroad courses or experiences than males $r_{pb}(219) = .14$, $p < .05$. Self-efficacy and gender correlated lowly and negatively, indicating males were more confident in their abilities regarding short-term, study abroad courses or experiences than females $r_{pb}(219) = -.14$, $p < .05$. In addition, task effort cost and fluency in another language correlated lowly and positively, i.e., students not fluent in another language perceived more task effort cost than those who were $r_{pb}(219) = .14$, $p < .05$ (see Table 4). The effect sizes for these three relationships were low (Davis, 1971); each explained less than 2% of the variance.

Table 4

*Point-biserial Correlations between Students' Implied Personal Characteristics and their Motivational Factors to Enroll in a Short-Term, Study Abroad Course or Experience Prior to Being Graduated, CASNR Students at OSU (*N = *219)*

Variable	Gender	Fluency in another language	Transfer student
Intrinsic Value	.14*	-.07	.04
Expectancy- and Ability-Related Beliefs	.10	.01	.02
Attainment Value	.05	.03	-.03
Utility Value	.08	-.09	.00
Emotional Cost	-.08	.00	.07
Task Effort Cost	.00	.14*	.11
LOVA	.01	.00	-.02
Outside Effort Cost	-.07	.01	.04
Self-Efficacy	-.14*	.05	.07

Note. Magnitude: $.01 \geq r \geq .09$ = *Negligible*, $.10 \geq r \geq .29$ = *Low*, $.30 \geq r \geq .49$ = *Moderate*, $.50 \geq r \geq .69$ = *Substantial*, $r \geq .70$ = *Very Strong* (Davis, 1971). Male = 0; Female = 1. Yes = 0; No = 1

*$p < .05$.

Objective four sought to investigate the relationships between perceived motivational factors and overall motivation to study abroad. A series of Spearman rank-order correlations were conducted to describe relationships between motivation constructs and overall motivation to study abroad prior to being graduated (see Table 5). Two-tailed tests of significance indicated a statistically significant and positive relationship existed between each motivation construct and overall motivation. For example, a two-tailed test indicated a statistically significant and positive relationship between outside effort cost and overall motivation to enroll in a short-term, study abroad course or similar experience before graduating $r_s(219) = .60$, $p < .001$. The effect size of this relationship was substantial (Davis, 1971). Squaring the correlation coefficient indicated that 36.0% of the variance in outside effort cost was accounted for by *overall motivation* indicating that the lower the perceived outside effort cost, the higher a student's motivation to study abroad. Additional results are presented in Table 5.

Table 5

*Spearman's Rho Correlations between Students' Motivational Factors and their Overall Motivation to Enroll in Short-Term, Study Abroad Courses or Experiences Prior to Graduating, CASNR Students at OSU (*N = *219)*

Variable	r_s	*p*	Effect size interpretation
Intrinsic Value	.54	<.001	Substantial
Expectancy- and Ability-Related Beliefs	.51	<.001	Substantial
Attainment Value	.44	<.001	Moderate
Utility Value	.56	<.001	Substantial
Emotional Cost	.38	<.001	Moderate
Task Effort Cost	.46	<.001	Moderate
Loss of Valued Alternatives Cost	.51	<.001	Substantial
Outside Effort Cost	.60	<.001	Substantial
Self-Efficacy	.15	<.05	Low

Note. Magnitude: .01 ≥ *r* ≥ .09 = *Negligible*, .10 ≥ *r* ≥ .29 = *Low*, .30 ≥ *r* ≥ .49 = *Moderate*, .50 ≥ *r* ≥ .69 = *Substantial*, *r* ≥ .70 = *Very Strong* (Davis, 1971).

Conclusions

This study determined the perceived conceptualizations concerning the motivations of CASNR students at OSU to enroll in short-term, study abroad courses or experiences. In particular, we assessed forecasted motivational factors that correlated with personal characteristics and overall motivation and intent to enroll in such prior to being graduated. It is important to note forecasted appraisals potentially could be different from retrospective and real-time appraisals, and caution should be taken when generalizing the study's findings. The study yielded evidence that students' forecasted conceptualizations of expectancy, value, and cost did affect their overall motivation to participate in short-term, study abroad courses or experiences. The findings indicated that nearly three-quarters of the sample identified as White, female, undergraduate students. Approximately one-third of the participants grew up on a ranch or farm, with less than one-tenth growing up downtown or near a city or town. The largest proportions of participants were undergraduates, although distributions existed among all classification levels, including graduate students.

Although students generally reported positive motivations toward the idea of participating in short-term, study abroad courses or experiences, the findings showed the largest appraisals were intrinsic value (*M* = 4.20, *SD* = 0.69) and expectancy- and ability-related beliefs (*M* = 4.10, *SD* = 0.65; see Table 2). Self-efficacy (*M* = 2.83, *SD* = 0.82) and outside effort cost (*M* = 3.25, *SD* = 1.09) were the least motivational factors (see Table 2). This finding contradicts the notion that individuals tend to overestimate their abilities prior to performing a task (Bandura, 1986).

Moreover, students perceived outside effort cost to be the next lowest motivational factor, i.e., perceived appraisals of time and effort put forth for tasks other than enrolling in a short-term study abroad course or experience was the lowest motivational cost factor. In all, students appeared to be motivated to study abroad. However, the perceptions of students were that such learning experiences competed with their outside influences, i.e., personal time, effort, and work, making such less of a realistic option for participation.

When analyzing the relationships between students' motivations and personal characteristics, the strongest, although negligible, correlation existed between task effort cost and hometown location (r_s = -.27; see Table 3). The type of home environment in which students were raised, i.e., farm versus city, appeared to have an impact on whether students were motivated to study abroad. A Spearman's rho correlation indicated a negligible, negative, and statistically significant ($p < .01$) relationship between the variables. Where a student lived while growing up negatively influenced the perceived time, effort, and amount of work necessary to enroll in a short-term, study abroad course or experience prior to being graduated. More research is needed to determine how these perceptions can be understood and overcome.

We observed outside effort cost was more related to students' motivations to study abroad (r_s = .60; see Table 5) than to any other motivational factor. This raises the question of how external demands influence students' forecasted perceptions of their motivations to study abroad. Further, of the motivational constructs studied, self-efficacy was least related to students' motivations to study abroad (r_s = .15; see Table 5). This research is consistent with the IIE's (2015) findings of comparatively lower enrollment among agriculture students in study abroad courses. If employers are seeking graduates with global competence and awareness (Irani et al., 2006), it is important for administrators and faculty to focus on new ways of encouraging and recruiting students to participate in such learning experiences (Bunch et al., 2013). Measures of expectancy and value correlated moderately, substantially, and positively to students' forecasted motivations to enroll in short-term, study abroad courses or similar experiences before graduation.

Finally, this study sought to generate a body of knowledge that documents the role cost, e.g., outside effort cost, has on CASNR students' forecasted motivations, and it highlighted the importance of developing mechanisms for understanding how negative appraisals of both external and internal influences affect students' motivations to enroll in short-term, study abroad courses or experiences. The empirical structure of expectancy, value, cost, and self-efficacy remained relatively consistent with previous research (Bobbitt & Akers, 2013; Eccles & Wigfield, 1995; Flake et al., 2015). We observed differential relationships between expectancy, value, cost, and self-efficacy items and students' overall motivation to engage in a task. As such, insight was gained into how cost manifests itself in different situations and how it interacts with expectancy, value, and self-efficacy among a new population (Flake et al., 2015).

Implications

As mentioned above, this study is part of a larger project seeking to confirm and validate a reliable instrument that administrators and faculty members can use to assess the perceived motivators students may have regarding their decisions to enroll in short-term, study abroad courses or experiences. The findings of this study revealed several moderate and substantial relationships between CASNR students' motivations to enroll in short-term, study abroad courses or experiences prior to being graduated, four of which, including outside effort cost, loss of valued alternatives cost, emotional cost, and task effort cost, were not reported previously in the study abroad literature in agricultural education (Bunch et al., 2013; Bunch et al., 2015; Chang et al., 2013; DanJean et al., 2015; Estes et al., 2016; Place et al., 2004).

At OSU and other land-grant institutions, the mission is to provide experiences for students that improve attitudes regarding cultural and global differences (Moriba et al., 2012), a demand coming directly from various employers in the food, fiber, and natural resources sectors (Crawford et al., 2011; Irani et al., 2006). To meet this demand, faculty and administrators need up-to-date psychometric tools to inform practices and recruitment strategies related to international experiences. To these points, the value of this research is not limited to short-term, study abroad courses or experiences. Of larger significance are the implications of how relative cost affects the way people make achievement-related choices. Our goal, therefore, is to inspire the inclusion of these variables into other domains and provide the impetus for researchers to apply these variables in their own contexts. Above all, we wish to communicate the value of incorporating relative cost dimensions into other domains within the agricultural education sphere to understand better students' decision-making processes.

The findings of the current study hold important implications for administrators and faculty regarding advanced planning and recruitment. The results emphasize designing short-term, study abroad courses or experiences and advance planning and recruitment methods that appeal to students' expectancy- and ability-related beliefs and subjective-task values, with special consideration for conceptions about distinct types of relative cost. We argue that administrators and faculty can affect change by sharing the results of this study with students when presenting the notion of studying abroad to incoming students without prior international experience. Adopting this approach will result in knowledge that can deepen understanding and insight into how perceptions of distinct types of cost influence task engagement and achievement and performance-related choices, e.g., the effects outside effort cost may have on students' motivations to study abroad (Minkler & Wallerstein, 2008).

Recommendations and Limitations

In previous studies, students were asked about *cost* relative to when they were engaged in a task (Flake et al., 2015). In this study, students were asked to *anticipate* cost *prior to* engaging in a task. These findings are theoretically and conceptually distinct from students' retrospective and real-time appraisals of their motivations to study abroad, which includes implications for how motivation to study abroad changes through different stages of task engagement, i.e., before, during, and after *concrete experiences*. Therefore, rich, in-depth qualitative investigations are needed to identify the themes and understand more fully the differences students acquire throughout their stages of engagement (Connor & Roberts, 2017; Flake et al., 2015). Connor and Roberts (2017) took this approach and discovered differences existed between students' forecasted conceptualizations and observed experiences. Perhaps the same is true for students' perceptions of relative cost.

The modest post hoc Cronbach's alpha score for the self-efficacy measure used in this study suggests additional work is needed to further develop and refine a valid and reliable scale for use in the context of short-term, study abroad courses or experiences. Afterward, students' perceptions of self-efficacy and relative cost ought to be reexamined in the context of their short-term, study abroad courses or experiences as such relates to geographic setting, distances, and language.

Finally, OSU undergraduate students are required to take an international dimension (ID) course during their degree program to graduate (Moriba et al., 2012). Students can achieve their ID credit in different ways, either through enrolling in various 16-week, on-campus courses, or through enrolling voluntarily in one of several short-term, study abroad courses or experiences. Further research, therefore, should be conducted to identify and describe the ID requirement at

OSU and how they relate to similar expectations at other institutions. Thereafter, triangulating these findings with stakeholders' motivations, including the fact that an ID course is required for graduation in the case of OSU undergraduates, and the role of relative cost in students' decision making regarding their selections of international experiences may be informative and useful for practitioners and researchers.

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