

Factors Influencing Interest in Post-Secondary Agricultural International Travel Experiences

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Abstract

International travel experiences (ITE) are high-impact practices that allow post-secondary agricultural students the opportunity to engage with production processes and commodities in other countries. In addition to adding tremendous value to their technical knowledge base students are also able to learn about new cultures. Prior research has focused on factors influencing students' decision to participate in ITE programs. This study builds on research using best-worst scaling to quantitatively analyze motivations or obstacles impacting students' intention to participate in an ITE. This approach provides a preference share which can be directly compared to other motivations or obstacles in a manner that Likert scales cannot. Students majoring in agriculture at two comprehensive regional universities were surveyed on their motivations or hesitancy in participating in an ITE. Use of the best-worst scaling method reveals that the opportunity for personal growth and earning academic credit are the two primary reasons generating interest in an ITE while cost and concerns about not earning academic credit are the primary reasons for students' hesitancy in participating. The results of this study can be used by university coordinators in utilization of their limited resources to improve ITE and overcome hesitancy of students.

Keywords: best-worst scaling, student motivations, agriculture, study abroad, student barriers

Study abroad programs and short-term travel studies have long been part of the university experience for students. Given the differences in duration between study abroad and travel studies, Engle and Engle (2003) argue that these terms should not be used interchangeably. The term "international travel experiences" (ITE) is used to encompass a variety of international travel and study opportunities available to university students where academic credit is earned. This includes at least a full-semester abroad experience, short-term travel studies, internships, or research opportunities. According to the Institute of International Education (2022), summer term and one semester international travel experiences are the most popular with U.S. students from the 2011/12 to the 2018/19 academic years. In the 2019/2020 academic year, approximately 0.83% of college students participated in an international travel experience that awarded academic credit down from approximately 1.7% of students in the immediately preceding years (Institute of International Education, 2021b; National Association of Foreign Student Advisers, 2021; National Center for Education Statistics, 2021).

With increased focus on delivering high impact learning activities as parts of courses (Sandeem, 2012; Kilgo et al. 2015; Bampasidou et al., 2016), ITE can be a valuable high impact experience for agricultural students in addition to their traditional course activities, simulation games, and

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Acknowledgments

We thank Lorrie Jackson for helpful comments on an earlier draft of this paper. Gratitude is also expressed to Dr. Ahmad Tootoonchi for the financial support for scholarship incentives to complete the questionnaire. This study was approved by the Institutional Review Board of University of Tennessee at Martin (22-900-E05-4005 on February 2, 2022) and the Institutional Review Board of Murray State University (IRB#22-135 on February 22, 2022).

No conflicts of interest are present.

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student competitions. Agricultural-focused ITE provide students the opportunity to see commonalities in agriculture between the students home country and the country they visit, as well as new commodities and different production processes. This experiential learning leaves lasting impacts on students that traditional lectures cannot. According to the Institute of International Education (2021a), approximately 4,600 U.S. agricultural students annually participated in study abroad programs between the 2000/01 and 2019/20 academic years (roughly 1.7% of total U.S. students participating in study abroad). This data may suggest that students in agricultural disciplines are underrepresented in total study abroad programs relative to other majors. The proportion of U.S. students studying abroad relative to the total number of undergraduates at universities has stayed relatively constant (Institute of International Education, 2021). As noted in Luo and Jamieson-Drake (2015), there are complex reasons for a student to decide to participate in an ITE in addition to the availability of agricultural-focused experiences.

A combination of internal and external factors are present in the decision-process of agricultural students when deciding whether to participate in an ITE as discussed in Irani et al. (2006) and Wingenbach et al (2006). These factors include career-related experiences, career-related contacts, earning credit toward major/minor, location, contributing to the major, faculty program leader, cost, lack of cultural knowledge, cultural bias, lack of opportunities, and family support. Prior research (e.g. Naffziger et al., 2008; Briers et al, 2010; Chan et al., 2013) has used Likert scales to determine the impact of various factors on students' (lack of) interest in ITE. This study can add to the existing literature by forcing students to make a choice among the alternative answers on the survey instrument. The method used in this study presents a direct ranking of preferences that is not provided in Likert scales. This paper continues with a review of existing literature in ITE followed by a description of our survey methods. The survey population included students majoring in agricultural fields at one of two comprehensive regional universities in the mid-South. The results are discussed, a conclusion with the implications of our research are presented, and suggestions for future research are provided.

Literature Review

Interest in international travel experiences provided by U.S. universities has been increasing; especially during the past two decades with the Institute for International Education (IIE) reporting 125% growth from the 2000-01 to the 2018-19 academic years (IIE, 2021). Even with this growth, the total number of U.S. students participating in an ITE is still significantly below the Lincoln's Commission (2015) goal of one million college students participating annually. However, the proportion of students who are studying abroad is staying constant relative to the total number of undergraduates enrolled at U.S. universities (IIE, 2021a). The Covid-19 pandemic also resulted in a significant decline in U.S. students participating in an ITE during the 2019/20 academic year (IIE, 2021a). Long-term

impacts of the global pandemic upon student interest in ITE participation have yet to be determined.

Luo and Jamieson-Drake (2015) state there is a need for the examination of "factors that are likely to promote or impede study abroad in order to identify effective strategies to boost participation rates." Salisbury et al. (2009) analyzed intent to study abroad based on four capital factors: financial, human, social, and cultural. A review of the existing literature revealed that these factors are commonly used to assess students' interest or engagement in an ITE (e.g., Streitwieser et al., 2012; Chang et al., 2013; Kilgo et al., 2015; Ahlgrimm et al., 2018). Naffziger et al. (2008) used factor analysis to determine five contributing factors: curricular/career issues, fear of unknown, financial considerations, incompatibilities, and previous travel experiences and exposure to study abroad. While demographics and/or backgrounds were not explicitly identified, it does not mean those factors are unimportant (Salisbury et al., 2009; Luo and Jamieson-Drake, 2015). Chang et al. (2013) argues that internal barriers such as demographics, background, language barriers, and student's self-motivation can be overcome by advisors that seek to leverage the opportunity to the student's long-term academic and professional pursuits. Irani et al. (2006) and Chang et al (2013) state external barriers include lack of time, financial constraints, and lack of opportunities as a contrast to internal barriers faced by agricultural students who have an interest in ITE.

Netz (2015) and Ahlgrimm et al. (2018) model a student's decision to participate in an ITE based on internal and external factors. These factors reflect the real or perceived obstacles and motivations that influence active consideration of an ITE. This is where a student's relationships with faculty can potentially overcome the perceived obstacles (i.e., the pre-decisional stage discussed in Ahlgrimm et al. [2018]). The desire of females to travel internationally may be more swayed than males by influential university faculty and/or staff. According to Salisbury et al. (2010), Briers et al. (2010), and Ahlgrimm et al. (2018) obstacles that students have often mirror the opposites of their motivational factors. Multiple studies (e.g., Salisbury et al, 2009; Briers et al., 2010; Chang et al, 2013; Netz, 2015; Varela, 2017; Ahlgrimm et al., 2018) document that cost is continually the primary obstacle to ITE participation.

While we anticipate finding similar results, our research expands the existing literature by determining the gap between cost and the next most important factor to agricultural students in their desire for ITE. Increased understanding of the factors that motivate or are obstacles to students can aid in the development of more successful recruitment strategies by university administrators, faculty, and staff interested in improving ITE participation rates. It is entirely possible that once one obstacle is overcome, another may replace it which requires coordinators of the ITE programs to be prepared to address.

Methods

Given the discussion in Ahlgrimm et al. (2018), we present a theory that student's considering participation in an international travel experience depends on the ratio of their motivations relative to the perceived obstacles. The motivational factors and obstacles that we include in this research are based on the findings of Salisbury et al. (2009), Biers et al. (2010), and Chang et al. (2013). This stream of literature had several common factors that we grouped into categories presented in Table 1. While facing some common obstacles to ultimate participation, individuals indicating an interest in participating in ITEs may be motivated by different factors than individuals who do not express an interest in an ITE. Some factors such as cost and/or medical concerns could be common between those who are interested and not interested. We ask respondents an initial question, "I have actively considered participating in an international agricultural travel experience." This allowed us to use the factors presented in Table 1 to identify the most and least important factors motivating that decision using best-worst scaling.

Best-worst scaling can be used to determine the relative importance of factors that influence a student's most and least important reasons when considering an international travel experience. This method improves upon a Likert scale which tells us the importance of a factor to respondents but doesn't address the question of which factors are relatively important in influencing students' interest. Prior research using Likert scales (e.g., Chang et al., 2013) results in concerns about the ability to directly compare the importance of motivations between respondents (Steenkamp and Baumgartner, 1998). Use of best-worst scaling allows measurements of factors influencing (or obstacles preventing) interest in an ITE on a ratio scale and avoids confusion with an ordinal ranking where the numerical ranking may mean different things to respondents (Lusk and Briggeman, 2009). Best-worst scaling has been used in the marketing literature (Finn and Louviere, 1992; Lusk and Briggeman, 2009) to reveal the hierarchical ranking of preferences that consumers have for attributes of a good. This methodological approach has been used to elicit preferences in other areas such as health care (Flynn et al., 2007) and value of publicly provided information (Pruitt et al., 2014). Revealing students' hierarchy of preferences can be used by faculty and directors of international experience centers to target programs that are more suitable for students. This can include potential training offered for faculty and/or academic advisors as well as the way ITE programs are marketed to students.

The use of best-worst scaling enables the respondents to select the factor that provides the most and least utility in each choice set. It also allows for a respondent's choice set to reveal the greatest difference in their utility of the selected factors, which Likert scales do not provide. Given a total of J factors, there are $J(J-1)$ combinations a respondent could select for each best-worst question. A respondent's choice of the most important factor can be represented by λ_j on the utility scale (I) with the latent level of utility determined by $l_{ij} = \lambda_i + \varepsilon_{ij}$ where j represents

the factor chosen by individual i and ε_{ij} is a random error term for the j factor for individual i . More information on the theoretical framework employed can be found in Lusk and Briggeman (2009) and Pruitt et al. (2014). Estimation of best-worst scaling commonly occurs through a multinomial or random parameters logit. The estimated coefficients of the multinomial or random parameters logit have little interpretation beside the magnitude of the coefficients. Even though the coefficients have little economic intuition, they can be used to calculate a preference share of each factor's impact on a student's interest in ITE. This preference share can be calculated as preference share for factor

$$j = \frac{e^{\lambda_j}}{\sum_{k=1}^J e^{\lambda_k}}$$

with the sum of all preference shares being equal to one. The share of preference reflects the probability that a factor motivating (or not motivating) an international travel experience is picked as more important than a different factor.

Respondents were initially asked if they had considered participating in an ITE. This question was included as the motivating factors for participation in an ITE are different from obstacles to ITE participation. Once the factors shown in Table 1 were identified, a full factorial design profile was created using PROC OPTEX in SAS 9.4. Main effects and two-factor interaction effects were estimated using a saturated design. Depending on their answer to this question, they were then shown a series of repeated best-worst questions based on the factors provided in Table 1. For those who had actively considered participation in an ITE, there was one block of five repeated best-worst questions. Each of the questions randomly included three or four of the attributes provided in Table 1. No questions were included that contained less than three or four of the factors to force respondents to make a decision. For those respondents who had not actively considered participating in an ITE, there was one block of seven repeated best-worst questions which randomly included four of the factors shown in Table 1. Figure 1 provides an example best-worst question that was included in the questionnaire.

The questionnaire was distributed to students in agricultural departments at two regional comprehensive universities in the mid-South. A total of 2,344 students received the email that was sent via each department's student listserv. Each student received the initial email notification in early 2022 with two additional reminder emails sent two weeks after the previous email. At one of the universities, the global education center provided a financial incentive for students at that university to fill out the questionnaire. The incentive was in the form of two \$250 scholarships. These awards were only available to students at that university who completed the questionnaire with the awards applied to either an international travel experience through that university or course textbooks.

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Table 1.

Factors Impacting Interest in International Travel Experiences and Descriptions

Factors Impacting Active Consideration in International Travel Experiences	Factors Impacting Lack of Active Consideration in International Travel Experiences
Personal Growth (enjoy adventure, learn a language, experience another culture)	Cost (inability to fundraise, scholarships, inability to take time from job, length of trip)
Cost (ability of scholarships, fundraising opportunities, graduation present)	Work Experiences (relatively more important than travel, desired employer doesn't see benefits of international travel)
Medical Concerns (access to health care, risk of injury/illness, preexisting conditions)	Medical Concerns (access to health care, risk of injury/illness, preexisting conditions)
Social Aspects (travel with friends, make new friends at my university, family encouragement/tradition)	Social Factors (family opposes, no friends going)
Academic Pursuits (helps with graduate school admissions, college credit, learn more about my academic major/minor)	Academic Pursuits (unaware can earn credit, programs not in major, credit not applied to degree program)
Job Opportunities (increased networking, resume builder, demonstrates awareness to employers, opportunity to work in the country)	Lack of Awareness (programs aren't countries of interest) Cultural Differences (language barriers, cultural sensitivity to my beliefs)

Figure 1.

Example Best-Worst Question

Which of the following factors is the most important reason and which is the least important reason to you for considering participation in an international travel experience? (Check only one issue as the most important and one as the least important)

Most Important		Least Important
<input type="radio"/>	Job Opportunities (increased networking, resume builder, demonstrates awareness to employers, opportunity to work in the country)	<input type="radio"/>
<input type="radio"/>	Personal Growth (enjoy adventure, learn a language, experience another culture)	<input type="radio"/>
<input type="radio"/>	Cost (ability of scholarships, fundraising opportunities, graduation present)	<input type="radio"/>
<input type="radio"/>	Medical Concerns (access to health care, risk of injury/illness, preexisting conditions)	<input type="radio"/>

Results

A total of 2,334 students received the email with 182 responses returned (7.7% response rate). The non-trivial financial incentive is hypothesized to have contributed to the differing responses rates between the universities (n=121 to n=61). No financial incentive was offered at the second university for its students to complete the questionnaire.

Demographic information for respondents is shown in Table 2. Total responses did vary by question and is denoted in Table 2. Respondents were not required to answer every question and may explain why total responses varied by question. For each demographic question, a t-test for difference in means was calculated for the two institutions. Significant differences in means at the 5% level were found between the universities for juniors, graduate/post-baccalaureate students, other majors, being involved in one to three extracurricular organizations, having a grade point average (GPA) of between 2.50 and 2.99, and a GPA of 4.0. A difference in means at the 1% level was found in students majoring in natural resources management and planning on participating in a travel study in the 2021-22 academic year. The difference in students majoring in natural resource management is due to one university not offering this major. There were reduced opportunities at one university to participate in international travel experiences in the 2021-22 academic year which helps explain the difference between the two universities in students who planned on participating in a travel study. Given the literature is clear that females are more likely to participate in an ITE, we conducted a t-test for two means based on gender for those who had actively considered participation compared to those who had not actively considered participation. We failed to reject there were differences based on gender to whether the respondent had actively considered participating in an ITE.

Due to the hypothesis that students interested in participating in an international travel experience have different motivational factors than those who are not interested, we estimated a model for those interested in international travel experiences and those not interested. For each of these two models, we hypothesized there was no difference among responses between the two universities which would allow us to pool responses. We fail to reject the null hypothesis of no differences between the universities for both those who had considered participating in an ITE and those who had not¹.

Interest in ITE

As mentioned previously, we hypothesized the motivating factors that are most and least important for student interest in international travel experiences vary based on whether they had actively considered ITE participation. Respondents that said “yes” to having actively considered participating in an international travel experience were then directed to a series of questions that forced them to choose the most important and least important factors impacting

their interest in an ITE. Multinomial (MNL) and uncorrelated random parameters logit (RPL) models were estimated. Likelihood ratio test favored the use of an uncorrelated RPL with additional likelihood ratio tests failing to reject a pooled model relative to estimation of separate models for each of the two universities included in this study. Results from the pooled model of students who had actively considered participating in an international travel experience are shown in Table 3.

Our study uses *Job Opportunities* as the base factor with results indicating that *Personal Growth* is the most important factor explaining agricultural students' interest in participating in an ITE. *Academic Pursuits* and *Job Opportunities* were the next most important factors to students with *Medical Concerns* and *Social Aspects* the least important. The relatively large deviations in the uncorrelated RPL suggest there is preference heterogeneity present in our results. Econometric results presented in Table 3 have no meaning other than the magnitude of the coefficient which are used to calculate preference shares using equation 1. Preference shares provide the forecasted probability that each factor is picked as the most important. The preference shares for the RPL model were generated using 1,000 random draws using the coefficient and standard deviation from the regression. In general, factors that could be considered building of human capital or goal-oriented in nature (*Academic Pursuits*, *Personal Growth*, and *Job Opportunities*) garnered the largest preference shares. The preference shares between the MNL and RPL models were consistent with only *Personal Growth* exhibiting a greater than $\pm 7\%$ change between the two models. Note that magnitude and ranking between the models are consistent. To the extent that academic advisors and directors of international experiences can identify these students who are motivated to grow, they are more likely to be receptive to participation in an ITE.

Table 4 shows Pearson correlation coefficients that were generated from individual-specific uncorrelated RPL estimates. Only two factors had a correlation that was ± 0.3 . The inverse relationship between Cost and Social Aspects as well as Cost and *Academic Pursuits* are interesting to note. This suggests that students do weigh the costs of an ITE relative to benefits from the social (capital) benefits and academic pursuits (i.e., human capital). Given ITEs are often not included in tuition for most students, this is not a surprising result as some other growth opportunities may provide a greater benefit relative to the cost often associated with an ITE, especially if it's a shorter international experience. There is an inverse relationship between *Social Aspects* and *Growth Opportunities* as well as *Social Aspects* and *Academic Pursuits*. Students could be more focused on what they receive individually (i.e., *Growth Opportunities* and *Academic Pursuits*) than the social capital gained by traveling in a group and the shared experience with classmates.

¹ The likelihood ratio statistics for those interested in an ITE are: -383.84 (-377.86) for Murray State, -757.49 (-751.88) for UTM, and -1148 (-1138) for the pooled sample multinomial logit model (numbers in parentheses are for an uncorrelated random parameter logit). The likelihood ratio statistics for those not interested in an ITE are: -275.23 (-272.30) for Murray State, -372.27 (-370.46) for UTM, and -648.54 (-645.18) for the pooled sample multinomial logit model (numbers in parentheses are for an uncorrelated random parameter logit).

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Table 2.

Demographic Information

Variable	Mean	Standard Deviation
Female (n=182)	79.33%	0.41
Ethnicity (n=181)		
Caucasian	93.37%	0.25
African-American	2.21%	0.15
Hispanic	1.10%	0.10
Asian	1.10%	0.10
Multi-Racial	1.66%	0.13
Other Race/Prefer Not to Say	0.55%	0.07
Class (n=181)		
Freshman	21.55%	0.41
Sophomore	18.78%	0.39
Junior	32.60% ^b	0.47
Senior	22.10%	0.42
Post-baccalaureate/Graduate Student	4.97% ^b	0.22
Major (n=181)		
Agribusiness	20.44%	0.40
Animal/Equine Science	9.94%	0.30
Plant Science/Agronomy/Horticulture	6.63%	0.25
Agricultural Engineering Technology/AgriSystems Technology	2.76%	0.16
Agricultural Education	7.73%	0.27
Pre-Veterinary Medicine/Veterinary Technology	29.83%	0.46
Natural Resources Management	9.94% ^a	0.30
Geosciences	2.21%	0.15
Other Major	10.50% ^b	0.31
Transfer Student (n=181)	14.36%	0.35
Earned Dual Credit in High School (n=181)	73.48%	0.44
Have a Minor (n=177)	18.08%	0.39
On-Campus Residence (n=179)	48.60%	0.50
Number of Extracurricular Organizations (n=179)		
None	18.99%	0.39
One to Three	66.48% ^b	0.47
Four to Five	10.06%	0.30
Five or More	4.47%	0.21

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Table 2 Cont.

Demographic Information

Variable	Mean	Standard Deviation
Grade Point Average (n=179)		
Less than 2.0	1.12%	0.11
2.0 to 2.49	3.91%	0.19
2.50 to 2.99	12.85% ^b	0.34
3.0 to 3.49	29.05%	0.46
3.50 to 3.99	46.93%	0.50
4.0	6.15% ^b	0.24
Number of Languages Spoken/Read in Addition to English (n=179)		
None	77.65%	0.42
One	16.20%	0.37
Two	3.35%	0.18
Three	2.23%	0.15
Four	0.00%	0.00
Five or More	0.56%	0.07
Student Has Previously Traveled Internationally (n=178)	34.27%	0.48
Student Has a Family Member Who Has Traveled Internationally (n=179)	68.16%	0.47
Planning on Participating in International Travel Experience: (n=179)		
2021-22 Academic Year	13.41% ^a	0.34
2022-23 Academic Year	25.14%	0.44
2023-24 Academic Year	19.55%	0.40
Not Planning on Participating While in College	41.90%	0.49
University 1 Student	32.60%	0.47
University 2 Student	67.40%	0.47

Note. ^a Denotes significant difference in the mean between the universities at the 1% level

^b Denotes significant difference in the mean between the universities at the 5% level

Non-Interest in ITE

Respondents who said they had not actively considered an ITE were shown a different block of questions with different factors reflecting their lack of interest. A multinomial logit model was preferred to an uncorrelated RPL using a likelihood ratio test and failed to reject the pooled model. Results from the MNL model are shown in Table 5². *Academic Pursuits* was used the base factor for those who had not considered an ITE. *Cost* and *Academic Pursuits* were the factors most impacting lack of interest (econometric estimates and preference shares). Discussing these factors with students may help reduce obstacles students can have. It is possible that students who have not considered an ITE

are unaware that scholarships, fundraising, and other types of financial aid can be available to help lessen their financial burden. Academic advisors may not be aware of these opportunities for students, either, which might increase the need for international education centers and faculty that have led ITE in the past to provide mentoring and/or training. This training can also help faculty understand how program content or experiences can be related to curriculum or other opportunities within a major or minor. Our findings are consistent with prior research (Briers et al, 2010; Chang et al., 2015; Jamieson-Duke, 2015) regarding cost and concerns about the program fulfilling existing degree program requirements. Use of best-worst scaling enhances understanding of the relative importance of obstacles to

² Results from the RPL model and Pearson correlation coefficients derived from this model are available from the authors upon request.

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Table 3.

Relative Importance of Factors Impacting Active Consideration in Participating in International Travel Experiences

	Economic Estimates		Shares of Preference	
	MNL	RPL	MNL	RPL
Personal Growth	0.757** (0.118) ^a [0.000] ^b	1.121** (0.221) [1.081]	0.341 [0.000]	0.415 [0.014]
Cost	-0.234* (0.098) [0.000]	-0.344* (0.161) [1.410]	0.127 [0.000]	0.096 [0.003]
Medical Concerns	-1.911** (90.135) [0.000]	-3.203** (0.567) [1.724]	0.024 [0.000]	0.006 [0.002]
Social Aspects	-0.529** (0.101) [0.000]	-0.811** (0.204) [0.783]	0.094 [0.000]	0.060 [0.001]
Academic Pursuits	0.464** (0.134) [0.000]	0.745** (0.232) [1.512]	0.254 [0.000]	0.285 [0.013]
Job Opportunities (Base Factor)	0.000	0.000	0.160 [0.000]	0.137 [0.013]
Log Likelihood	-1148.000	-1138.000		
McFadden's LRI	0.218	0.225		
Number of Respondents	133	133		

Note. Two asterisks (**) and one asterisk (*) denote significantly different from job opportunities at the 1% and 5% level, respectively.

^a Numbers in parentheses are standard errors.

^b Numbers in brackets are standard deviations.

Table 4.

Pearson Correlations Between Attributes from Individual-Specific RPL Estimates for Those Active Consideration in Participating in an International Travel Experience

	Growth	Cost	Medical	Social	Academic
Growth	1.000				
Cost	-0.260	1.000			
Medical	-0.167	-0.140	1.000		
Social	-0.285	-0.340	-0.267	1.000	
Academic	0.147	-0.355	0.032	-0.255	1.000

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consideration in participating in an ITE not found in prior research. To the extent that respondents were concerned about delays in graduating in *Academic Pursuits*, Bhatt et al. (2022) state these concerns are allayed as ITE promote college completion.

The limited sample size of respondents who were not interested in ITE prevents more in-depth analysis. The opportunity for financial incentives at one university likely contributed to a higher response rate between universities in this research, but the opportunity for a financial incentive does not seem to be a strong motivator for those individuals who have an existing barrier to participation in an ITE. It is encouraging for those who work in ITE that potential factors such as work experiences, social factors, and cultural differences are not larger factors limiting interest in ITE. To the extent that the cost of an international travel experience can be lowered, the relative importance of other obstacles may change.

Table 5.

Relative Importance of Factors Impacting Lack of Active Consideration in Participating in International Travel Experiences

	MNL Estimate	Preference Share
Cost	0.856** (0.167) ^a	0.448
Work Experiences	-0.597** (0.159)	0.105
Medical Concerns	-1.408** (0.165)	0.047
Social Factors	-0.807** (0.157)	0.085
Cultural Differences	-1.102** (0.163)	0.063
Lack of Awareness	-1.107** (0.162)	0.063
Academics (Base Factor)	0.000	0.190
Log Likelihood	-648.537	
McFadden's LRI	0.172	
Number of Respondents	45	

Note. Two asterisks (**) and one asterisk (*) denote significantly different from academics at the 1% and 5% level, respectively.

^a Numbers in parentheses are standard errors.

Conclusions

The use of ITE has been and will continue to be an important benefit of a post-secondary education in the U.S., whether it is short-term or long-term in its nature. While there is still more work to be done to increase the rate of ITE participation in agricultural students, this research is an important step in removing the uncertainty in motivations or obstacles students have. For those students who have actively considered participating in an ITE, university administrators, faculty, and staff should continue to stress the capital building aspects of these experiences. This can help increase pre-existing motivation(s). Identification of these students by faculty and/or academic advisors early in their academic career can help them find an appropriate ITE to plan accordingly. It is still possible that students may choose to not participate in an ITE (even if giving active consideration) because the available programs don't match up with their (academic) interests. From our own experience, agricultural-focused ITEs are time intensive to develop and feature more constraints than an ITE for other disciplines. This reflects agricultural-focused ITEs often include excursions to agribusinesses that are sole proprietorships or partnerships that are not well-advertised in non-urban areas which require additional travel time to and from the point of interest and added concerns about ensuring students maintain proper biosecurity precautions. Agribusinesses can be in various parts of the supply chain which require coordination to limit possible sanitary and phyto-sanitary concerns. Specialized knowledge and contacts are needed to develop relationships to visit the agribusiness that larger, more well-known companies or points of interest do not. Additionally, considerations of the agribusiness' ability to handle visitors in terms of restrooms and near restaurants or rest areas add to the complexity of agricultural-focused ITEs. Regardless of if students enter college already having an interest in ITE, steps to help them better understand the benefit to cost ratio as well as lowering the explicit financial cost can remove obstacles and/or increase interest.

Limitations of our study include a small sample size that limits the generalizability of our research. This is especially reflected in the lack of respondents who hadn't actively considered participating in an ITE. It is possible that more students have actively considered participating in an ITE than university personnel realize, but it could be a reflection that those who haven't considered participation are less likely to engage in any type of electronic questionnaire. We found no difference in the sample means between the two universities who stated they were not interested in an ITE. Increasing the incentive relative to those received by individuals who have actively considered an ITE may increase the response rate among this portion of a sample. However, the nature of best-worst scaling with its repeated questions may serve as a greater barrier to completing the questionnaire for someone who was not interested in the survey topic regardless of the financial incentive at the end.

Future research should focus on expanding this approach to non-agriculture majors. This will provide the opportunity to compare results across majors, especially as there may be relatively more ITEs for non-agricultural

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majors. This may help increase the sample size of those who have not actively considered participating in an ITE. More meaningful results may be found for those who have not actively considered ITE participation which can then be used to infer how to lessen obstacles for agricultural majors from the general student population. Even then, we are aware of Heisel and Stableski's (2009) comment that a gap can still exist between the intent and engagement as "robust interest did not result in study abroad participation." Our findings indicate that medical concerns are not a strong obstacle to consideration of an ITE. While the description of medical concerns within this questionnaire did not specifically reference Covid-19, the survey occurred at time when these vaccinations, boosters, and negative Covid tests were required to enter a foreign country. This information about the pandemic landscape was regularly discussed in society which could impact student interest. Different phrasings of our initial question may also have resulted in a different response. As students continue through the different phases of a decision discussed in Ahlgrimm, Westphal, and Heck (2018), the factors that influence a final decision may change and warrant additional study.

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