Factors Influencing Students' Decisions to Engage in International Education Opportunities Post-COVID

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Abstract

International education opportunities are vital to students' personal, professional, and educational development. Pre-COVID era research has found that students seek to participate in international education to learn about other cultures, enhance career development, gain world enlightenment, attain personal growth, or for leisure. However, minimal research exists about students' decision-making factors to engage in international education opportunities post-COVID. The purpose of this study was to examine selected students' preferred information sources, cues, and perceived challenges that influenced decisions to engage in international education opportunities post-COVID. Descriptive survey methods with a cross-sectional research design were used to gather data on students' perceptions of international education opportunities. Respondents' most preferred sources to learn more about international education opportunities were social media (university sites), friends, and academic advisors. Messaging cues that most attracted students' attention were affordability, personal growth, and learning about another culture. Financial challenges, foreign language skills, and safety (in-country travel, diet, politics) were perceived as the most difficult challenges when deciding to engage in international education opportunities. Universities should make concentrated efforts to use targeted advertising through strategically identified sources and prioritized messaging cues that attract students' attention and assuage their concerns about engaging in international educational opportunities.

Keywords: Information sources, messaging cues, advertisements

International education opportunities help students develop cultural awareness and competency, communication skills, social skills, and employment skills (Curtis & Ledgerwood, 2018; Rampold et al., 2020; Trower & Lehmann, 2017; Vetter & Wingenbach, 2019). International education experiences often include disorienting dilemmas (Mezirow, 1997), when added information causes one to question what they held as true. These situations help students critically examine their worldviews, leading to changes in behavior and broadened global perspectives (Wingenbach, Graham, & Gomez, 2023). Research has identified benefits of international education experiences, but not much is known about the effects of the COVID-19 pandemic on students' decisions to engage in such opportunities. Santiso and Sanz (2022) found that COVID-19 increased students' hesitancy to engage in international education programs.

Pre-COVID-19 research showed students engaged in international education to learn about other cultures, enhance career development, gain world enlightenment, attain personal growth, or engage in leisure (Lewis, 2016; Santiso & Sanz, 2022; Trower & Lehmann, 2017). Promoting international education opportunities in a post-COVID-19 era is more difficult because students are hesitant to travel, and some countries prohibit international travelers (Santiso & Sanz, 2022). Students' traditional barriers (financial, family, travel discomforts, time) to international education now include health and public safety concerns (Caillouet & Wood, 2019; Cavazos, 2022; Curtis & Ledgerwood, 2018; Santiso & Sanz, 2022). Considering students' post-COVID concerns, it is useful to explore their preferred information sources, messaging cues, and perceived challenges to engaging in international education opportunities. Therefore, we sought to determine factors that influenced Texas A&M

University students' decisions to engage in international education opportunities post-COVID-19.

Theoretical Framework

Determining students' preferred information sources and messaging cues about international education opportunities and using that knowledge to promote such opportunities could lead to increased student engagement abroad. This premise is supported by the Theory of Planned Behavior (TPB) (Ajzen, 1991). According to TPB, our actions (behavior) are determined through three conceptually independent variables; (a) attitude toward the intended behavior, (b) subjective norms surrounding the behavior, and (c) perceived behavioral control of the behavior (Ajzen, 1991). Attitude is the degree of a favorable or unfavorable opinion toward a chosen behavior (Ajzen, 1991). Subjective norms describe the social pressure of the decision to perform or not perform a behavior (Ajzen, 1991). Perceived behavioral control "refers to the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles" (Ajzen, 1991, p. 188). The more favorable the attitude and subjective norm surrounding the behavior, along with greater perceived behavioral control, the greater the intention is to perform the behavior (Ajzen, 1991).

Elaboration Likelihood Model (ELM), a general theory of persuasion, attempts to explain stimuli processing and how such processes may change attitudes and, consequently, behavior (Petty & Cacioppo, 1986). ELM aids in understanding how advertisements affect, through persuasion and influence, attitudinal formation and/or change in behavior, vis-à-vis motivation or ability to interpret visual cues (Filieri et al., 2018; Keshari & Jain, 2016). ELM highlights dual routes of persuasive message processing, central and peripheral, which influence attitudinal and behavioral outcomes (Segev & Fernandez, 2023). Peripheral route processing is a surface-level evaluation of a message (advertisement), requiring minimal cognitive effort (Petty et al., 1983; Segev & Fernandez, 2023).

Using the ELM, Teng et al. (2015) found it easier to alter students' attitudes toward international education if peripheral cues were used in promotion practices. Furthermore, synchronization of students' preferred education abroad information using peripheral cues would improve effectiveness of international education messaging in social media (Teng et al., 2015). For example, university personnel regularly promote academic and/or job/career competencies (as preferred peripheral cues) gained from participation in education abroad programs (Vetter & Wingenbach, 2019; Wingenbach, Graham, & Gomez, 2023). However, students' preferred messaging is focused on surface-level peripheral cues requiring minimal cognitive effort, such as location and program activities outside the academic realm. Therefore, Teng et al. (2015) recommended university personnel to incorporate persuasive messages attuned to students' peripheral cues (e.g., location, travel reviews) using social media channels (i.e., students' preferred information sources) to help students make simple decisions about participating in education abroad programs.

Messages that support subjective norms and increase perceived behavior control (i.e., mediating variables that aid in explaining relationships between 'message' and 'intention') can effectively shape student intention to engage in international education programs. These conditions may persuade students to make favorable decisions to engage in international education opportunities. TPB and ELM are conceptual theories that guided this study.

Purpose

The purpose was to explore selected students preferred peripheral cues that influenced decisions about engaging in international education opportunities post-COVID. The objectives were to determine students: (a) Preferred information sources to learn about international education opportunities; (b) Preferred messaging cues in international education program advertising; and (c) Perceived challenges (difficulties) that may have negatively influenced decisions to engage in international education opportunities.

Methods

Descriptive survey methods with a cross-sectional research design (Creswell, 2005; Field, 2000) were used to collect students' perceptions of international education opportunities at Texas A&M University. The target population (N = 1,385) was undergraduate and graduate students enrolled in courses with an international or global attribute (i.e., international, or global was a part of course content) during spring 2023. A random sample (Dillman et al., 2009) of 400 students were invited to participate via personalized invitations (Qualtrics emails); this study received Texas A&M University ethics review board approval (IRB2020-1445M).

The research instrument had multiple sections measuring students' interests, motivations, barriers, and information sources for education abroad, which were derived from previous studies (Chang et al., 2012a, 2012b, 2013). Validity and reliability were established previously (Chang et al., 2012a, 2012b) with similar audiences (university-level students), which were consistent with the primary audience and intended purpose for this research. Reliability indices (measures of internal consistency) ranged from 0.68 - 0.99, which were reliable for interpreting the data.

An introduction section (see Appendix for the complete research instrument) comprised questions to encourage participants' responses. Four questions asked (a) student status (yes/no), (b) whether international education was valuable (yes/no/unsure), (c) past international experiences (yes/no), and (d) in which experiences had they engaged (international youth exchange, study abroad, research abroad, work abroad, etc.).

Preferred information sources included 10 options (see Appendix), derived from previous studies (Chang et al., 2012a, 2012b, 2013), that students used to learn about international education opportunities. Students selected the sources used (friends, family, academic advisors, faculty, social media, etc.) and then rated the frequencies of use

(monthly, weekly, daily) for each source.

Preferred messaging cues included 10 options (country of program, affordability, program subject matter, etc.; see Appendix) derived from previous studies (Briers et al., 2010; Chang et al., 2012a, 2012b, 2013). Respondents rated each cue's importance level on a four-point scale (not important…very important), and then they ranked the top three most important cues (1-3) when searching for international education opportunities.

Ten challenges (i.e., barriers; see Appendix) influencing participants' decisions to engage in international education opportunities were derived from previous studies (Briers et al. 2010, Chang et al., 2012a, 2012b, 2013). The challenges to engage in education abroad opportunities, as presented in this study, have been researched in numerous studies across many disciplines (Brown et al., 2016; Curtis & Ledgerwood, 2018; Heirweg et al., 2020; Reardon et al., 2022; Sulejmanov, et al., 2021; Whatley, 2017). Students rated the level of difficulty for each challenge presented (foreign language skills, safety, health concerns, financial, etc.) on a four-point scale (not difficult…very difficult). Once rated, students ranked the top three challenges (1-3) that most influenced their decisions to engage in international education opportunities. The last section prompted students for demographic information (e.g., sex, race, college year, major, college; see Appendix). The questionnaire could be completed in two to three minutes.

Data were collected online; questionnaires were distributed for three-weeks in April 2023. Three reminders were sent and after three weeks, 136 (34%) students had responded; however, the total response was reduced to 26% (N = 102) because of incomplete responses. We chose to not include partial responses to questions that constituted the primary variables of interest.

According to Dillman et al. (2009), nonresponse error is one of four possible sources of error in survey research. We used Lindner and Wingenbach's (2002) method of comparing early to late respondents, which was derived in part from Dillman et al. (2009). Nonresponse error was addressed (Lindner & Wingenbach, 2002; Sax et al., 2003) by comparing (independent t-tests) early (April 3-8, 2023; n = 70) vs. late (April 9-24, 2023; n = 32) respondents' mean scores for importance of messaging cues and mean scores for challenges (difficulties) that may have influenced decisions to engage in international education opportunities. No statistical differences were found between respondent groups. Therefore, late responders were similar to nonrespondents; thus, these data were assumed to be representative of the target population at Texas A&M University.

Data were coded and examined in Qualtrics' statistical platform (Stats iQ) and SPSS29. Descriptive statistics (i.e., frequencies, percentages, means, and standard deviations) were computed for the variables of interest.

Findings

Participants (N = 102) were characterized as white (70%), female (61%), juniors or seniors (63%), in non-agriculture college majors (52%) during the spring of 2023 (Table 1).

In addition to demographic questions, respondents were asked about their foreign language attributes. A majority (n = 54, ~53%) spoke English only. About 26% (n = 24) spoke Spanish; others spoke French (n = 5), Chinese (n = 3), Arabic (n = 2), or another language not listed (n = 16) (Table 1). Students were asked if they believed their current degree prepared them to be competitive in the global market (Table 1); a majority (n = 69, ~68%) responded "yes." Participants were asked if they believed that participating in international education opportunities improved their competitiveness in the global market. About 85% (n = 87) responded "yes." Although they believed that participating in international education was important, most (n = 74, ~73%) had not participated in any such opportunities (Table 1). Of those who had participated (n = 28), most (n = 19) had participated in a study abroad program (Table 1).

The first objective was to determine students' preferred information sources to learn about international education opportunities. Of the 10 sources (Table 2), students selected social media university sites (f = 55) as their preferred source to learn about international education opportunities. Of those 55, only 9 (16%) reported using it on a daily basis. Friends and academic advisors were tied as the second most preferred source (f = 53). Of the 53 students who selected friends, 10 (19%) used that source daily, and 3 (6%) used academic advisors as a daily source. Faculty not affiliated with the education abroad program were the least selected source (f = 25).

Of the top three sources (social media - university sites, friends, academic advisors), all were used on a predominantly monthly basis. University social media was selected most often for monthly use (n = 27, 49%) followed by friends (n = 27, 51%) and academic advisors (n = 34, 64%). Friends received the most daily use (n = 10, 19%) for all sources.

The second objective was to determine students' preferred messaging cues in international education program advertisements. Participants rated the importance of 10 messaging cues using a four-point scale (Table 3). Students (n = 100) selected affordability as most important, rating it as the only very important cue (M = 3.58, SD = .71). Affordability was ranked in the top three messaging cues by 98% of all respondents (n =100). Learning about another culture (M = 3.22, SD = .78), program subject matter (M = 3.21, SD = .79), opportunity to live in another country or culture (M = 3.14, SD = .86), and personal growth (M = 3.33, SD = .82) received ratings of somewhat important and were ranked in the top three messaging cues (95% - 97%) by most respondents (ns = 93-96).

The three messaging cues with lowest importance ratings were language (foreign) requirements, learning another language, and non-program opportunities (e.g., tourism, leisure). Learning another language received the lowest mean (M = 2.64, SD = .98), though it was considered

FACTORS INFLUENCING STUDENTS' DECISIONS

Table 1

Demographic characteristics (N = 102).

Variable	Categories	f	%
Gender	Female	60	61.22
	Male	38	38.78
Class	Freshman	8	8.16
	Sophomore	16	16.33
	Junior	28	28.57
	Senior	34	34.69
	Graduate	12	12.24
College	Agriculture (or Natural Resources)	47	47.96
	Another college[a]	51	52.04
Race/Ethnicity	White or Caucasian	68	66.67
	Hispanic/Latino	19	18.63
	Asian	6	5.88
	Black or African American	3	2.94
	Another race/ethnicity not listed	1	0.98
In addition to English, what other language(s) can you speak? (choose all that apply)	None, just English	54	52.94
	Spanish	24	26.47
	Another language not listed	16	15.69
	French	5	4.90
	Chinese	3	2.94
	Arabic	2	1.96
Do you believe your current degree prepares you to be competitive in the global market?	Yes	69	67.65
	Unsure	27	26.47
	No	6	5.88
Do you believe participating in international education improves your competitiveness in the global market?	Yes	87	85.29
	Unsure	7	6.86
	No	8	7.84
What international education experiences have you participated in? (check all that apply)	Study abroad	19	18.63
	Work abroad	7	6.86
	Research abroad	5	4.90
	Intl. youth exchange (4-H, FFA, etc.)	2	1.96
	Semester or longer at non-U.S. university/college	2	1.96

Note. Frequencies may not equal 100% because of missing data.
[a]Includes Business, Engineering, Liberal Arts, Sciences, and other colleges not listed.

Table 2

Preferred sources and frequency of use to learn about international education opportunities (N = 102).

	Daily		Weekly		Monthly		Total
Sources	**n**	**%**	**n**	**%**	**n**	**%**	**f**
Social media (university sites)	9	16	19	35	27	49	55
Friends	10	19	17	32	27	51	53
Academic advisors	3	6	16	30	34	64	53
Course instructors (program)	4	8	21	41	26	51	51
University websites (non-social media)	4	9	18	39	24	52	46
Education abroad staff	3	8	12	31	24	62	39
Social media (non-university sites)	9	23	17	44	13	33	39
Family members	8	26	8	26	15	48	31
Printed sources (newspapers, fliers)	5	19	7	27	14	54	26
Faculty (non-program affiliated)			11	44	14	56	25

Note. Instructions: 1) Select applicable information sources (multiple response); and 2) Rate the frequency of use for each information source selected (single response).

Table 3

Preferred sources and frequency of use to learn about international education opportunities (N = 102).

Cues	**n**	**M**	**SD**	**Ranked Top 3**
Affordability (program fee, travel expenses, etc.)	100	3.58	.71	98%
Learn about another culture	96	3.22	.78	97%
Program subject matter (course topics)	96	3.21	.79	97%
Opportunity to live in another country or culture	93	3.14	.86	96%
Personal growth	96	3.33	.82	95%
Cultural attractions in program country	93	2.95	.87	94%
Country of program	99	3.18	.90	93%
Non-program opportunities (tourism, leisure)	93	2.87	.87	93%
Learn another language	96	2.64	.98	88%
Language (foreign) requirements	95	2.74	1.00	86%

Note. Instructions: 1) Select the importance level of all messaging cues using a four-point scale (not important … very important); and 2) rank the top three messaging cues.

an important messaging cue by students (*n* = 96). Foreign language requirements received an overall mean rating (*M* = 2.74, *SD* = 1.00) of important, as did non-program opportunities (tourism, leisure) was slightly higher (M = 2.87, SD = .87), although both were ranked in the top three less than 90% (86% - 88%) of the time.

The third objective was to determine students' perceived challenges or barriers that influenced their decisions to engage in international education opportunities (Table 4). Financial challenges (program fee, travel cost, etc.) were rated most difficult (*M* = 3.02, *SD* = 1.08), showing up in the top three challenges for about 88% of all respondents (n = 97). Foreign language skills (*M* = 2.75, *SD* = .95) and safety

(in-country travel, diet, politics, etc.) were rated as difficult (*M* = 2.52, *SD* = 1.02) challenges. They ranked in the top three (82-90%). All other challenges were rated somewhat difficult (*M* = 2.02-2.44) (Table 4).

Least difficult challenges, based on mean ratings, were paperwork required for international education programs, allowability of international participation within my major, difficulty to leave U.S. family or friends, and lost time toward graduation. Paperwork required was a somewhat difficult (*M* = 2.06, *SD* = .84) challenge, followed by allowability of international participation within my major, also rated as somewhat difficult (*M* = 2.11, *SD* = 1.04). Lost time toward graduation (*n* = 95) and difficulty to leave U.S. family or

Table 4

Challenges that influenced decisions about engaging in international education opportunities (n = 97).

Challenges	*n*	*M*	*SD*	Ranked Top 3
Financial challenges (program fee, travel cost, etc.)	97	3.02	1.08	88%
Foreign language skills	96	2.75	.95	90%
Safety (in-country travel, diet, politics, etc.)	95	2.52	1.02	82%
Family situation (financial, other issues) makes it difficult	91	2.44	1.11	71%
Applicability of program credits to current degree	94	2.40	.99	79%
Health concerns (vaccinations, diseases, etc.)	91	2.32	1.07	74%
Lost time toward graduation	95	2.12	1.13	60%
Difficulty to leave U.S. family or friends	92	2.12	1.12	69%
Allowability of international participation within my major	88	2.11	1.04	66%
Paperwork required for international education programs	94	2.06	.84	72%

Note. Instructions were, first, to rate the level of difficulty of each challenge using a four-point scale (not difficult … very difficult), and second, rank the top three most difficult challenges.

friends (*n* = 92) were rated as somewhat difficult (*M* = 2.12, *SD* = 1.13; M = 2.12, *SD* = 1.12, respectively). However, all three were ranked in the top 3 by at least 60% of the respondents with "paperwork" ranked in the top three by 72%.

Conclusions

This study identified Texas A&M University students preferred and most used sources to access information about international education opportunities, their preferred messaging cues, and the challenges that influenced their decisions to engage in international education opportunities. The findings support previous studies (Briers et al., 2010; Chang et al., 2012a, 2012b, 2013) and build upon a limited body of knowledge about students' international education decision making processes post-COVID, particularly concerning students' peripheral cues used when deciding to participate in education abroad opportunities. The findings are useful for Texas A&M University's international education staff to improve their program advertising campaigns through peripheral cues associated with affordability, learning about another culture, and personal growth. These messaging cues are communicated well in social media. Caution should be exercised in generalizing our results to other university student populations because of the specific sampling frame (i.e., students enrolled in courses with an international or global attribute) and the re-issuing of questionnaire items as originally presented with four-point scales.

As found in previous studies (Chang et al., 2012a, 2012b, 2013), respondents preferred using social media (university sites), and talking with friends and academic advisors to learn more about international education opportunities. Although these sources were reported as being used monthly, there is uncertainty if they were used concurrently or separately at distinctly separate times of the year. For example, students may talk with friends long before an international opportunity occurs, and then begin using social media university sites just months before the program, and still closer to the application deadline, rely on academic advisors for information—or vice versa. The timing and duration of information source use may depend on the topic (i.e., challenges, messaging cues, etc.). Additional research is needed to investigate students' timing and duration of preferred information sources before making decisions to engage in international education opportunities. The results of such studies would help program developers use their resources appropriately to promote international education opportunities.

We identified students' most used information sources, but questions remain about the role of screenertia (Brinberg et al., 2022); that is, "media stickiness" or the inertia of attention, in decision making processes to engage in international education opportunities. For example, when students seek information about the challenges of international education programs, are they attracted to content with heightened screenertia qualities such as the cues and difficulties uncovered in this study? Do in-person conversations produce similar inertia to attention? What is the interaction effect between screenertia and messaging cues? We believe these questions require study because the outcomes likely affect advertising/personnel efforts and messaging cues during non-recruitment months. We should research the relationships between information source use, timing of use, screenertia, messaging cue, and topic of interest to improve targeted and effective international education advertisement campaigns.

Effective and favorable messaging cues are important in altering behaviors, as noted in the TPB and ELM frameworks.

Supported by previous research (Briers et al., 2010; Lewis, 2016; Santiso & Sanz, 2022; Trower & Lehmann, 2017), this study revealed that affordability, personal growth, and learning about another culture were the most important cues that attracted students' attention when deciding on engagement in international education opportunities. Teng et al. (2015) found that capitalizing on important cues further accelerated the effectiveness of international education program advertising. Therefore, our findings indicate that international education program costs should be clear and upfront in all messaging cues; an emphasis on scholarships, if available, is needed to offset students' concerns about program affordability. Personal growth opportunities, as well as learning about other cultures, should be prominently stated in international education program advertisements. These recommendations will facilitate students' decision-making processes to engage in international education opportunities.

Financial challenges (i.e., program and travel costs) and foreign language skills were respondents' most difficult challenges to engaging in international education opportunities, which were found elsewhere (Briers et al., 2010; Caillouet & Wood, 2019; Cavazos, 2022; Curtis & Ledgerwood, 2018; Santiso & Sanz, 2022). Safety (e.g., host country travel, diet, politics, etc.), which was not evident as a noted difficulty in pre-COVID studies (Briers et al, 2010; Chang et al., 2012a, 2012b, 2013), has become a challenge to education abroad post-COVID (Santiso & Sanz, 2022). Addressing these challenges in international education materials and advertisements could positively influence students perceived behavioral control, resulting in more students engaging in international education opportunities. Advertisements should highlight program affordability, financial assistantship and/or payment options, and foreign language requirements, and they also should address safety concerns to combat participants' perceived challenges or barriers to engagement in international education opportunities.

Previous research shows that international education provides tremendous benefits such as increased cultural awareness and competency, increased communication skills, social skills, and employment skills (Curtis & Ledgerwood, 2018; Rampold et al., 2020; Trower & Lehmann, 2017; Vetter & Wingenbach, 2019). In this study, students were aware of such benefits, but a majority had not participated in such opportunities. Why? Research is needed to investigate the disconnect between belief and action when engaging in international education opportunities. Is the belief vs. action gap widening in the post-COVID era? What can be done to lessen the gap, increase students' inertia to attention, and positively improve their attitudes toward the intended behavior of engaging in international education opportunities?

Practitioners' next steps should include investigating their students' peripheral cues and attitudes toward participating in international education opportunities to learn how they might persuade students to take actions in attaining global perspectives. Given the frequency and pervasiveness of online communications, distance education, and global awareness of events affecting many countries (e.g., COVID-19), it behooves educators to help students learn more deeply about other peoples, places, and situations to lessen their hesitancies about learning abroad. We, like others (Lewis, 2016; Santiso & Sanz, 2022; Trower & Lehmann, 2017; Vetter & Wingenbach, 2019), believe that international education opportunities are paramount to expanding learners' worldviews that lead to changes in behavior and broadened global perspectives (Wingenbach et al., 2023). The U.S. agricultural industry remains highly dependent on foreign trade and requires an informed workforce that actively engages in understanding international partners.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Briers, G. E., Shinn, G. C., & Nguyen, A. N. (2010). Through students' eyes: Perceptions and aspirations of college of agriculture and life science students regarding international educational experiences. *Journal of International Agricultural and Extension Education*, *17*(2), 5-20. doi:10.5191/jiaee.2010.17201. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d0c74fc23fe6e69f7adefbdb-06d6a9051c614b6e

Brinberg, M., Ram, N., Wang, J., Sundar, S. S., Cummings, J. J., Yeykelis, L., & Reeves, B. (2023). Screenertia: Understanding "stickiness" of media through temporal changes in screen use. *Communication Research*, *50*(5), 535-560. https://doi.org/10.1177/00936502211062778

Brown M, Boateng EA, Evans C. 2016. Should I stay or should I go? A systematic review of factors that influence healthcare students' decisions around study abroad programmes. *Nurse Education Today*, *39*, 63–71. https://doi.org/10.1016/j.nedt.2015.12.024

Caillouet, O. C., & Wood, L. S. (2019). Students' perceived barriers, benefits and international programmatic preferences. *Journal of International Agricultural and Extension Education*, *26*(3), 134-146.

Cavazos, A. W. (2022). *HEOP study abroad: Opportunities and barriers.* (Publication No. 29254593) [Doctoral dissertation, Northeastern University] ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/heop-study-abroad-opportunities-barriers/docview/2707585034/se-2

Chang, C. W., Pratt, O., Bielecki, C., Balinas, M., McGucken, A., Rutherford, T., & Wingenbach, G. (2013). Agriculture students' interests, preferences, barriers, and perceived benefits of international educational experiences. *NACTA Journal, 57*(3a), 97-103. https://www.jstor.org/stable/pdf/nactajournal.57.3a.97.pdf

Chang, C. W., Rutherford, T., & Wingenbach, G. (2012a). College of agriculture students' interests and factors affecting their international education experiences. *Journal of International Agricultural and Extension Education*, *19*(2), 158-160.

Chang, C. W., Rutherford, T., & Wingenbach, G. (2012b). College of agriculture students' perceptions of international education experiences. *Journal of International Agricultural and Extension Education*, *19*(2), 95-97.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage Publications.

Curtis, T., & Ledgerwood, J. R. (2018). Students' motivations, perceived benefits and constraints towards study abroad and other international education opportunities. *Journal of International Education in Business*, *11*(1), 63-78. https://doi.org/10.1108/JIEB-01-2017-0002

Dillman, D. A., Phelps, G., Tortora, R., Swift, K., Kohrell, J., Berck, J., & Messer, B. L. (2009). Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the Internet. *Social Science Research*, *38*(1), 1–18. https://doi.org/10.1016/j.ssresearch.2008.03.007

Field, A. (2000). *Discovering statistics using SPSS for Windows: Advanced techniques for the beginner.* Sage Publications.

Filieri, R., Hofacker, C. F., & Alguezaui, S. (2018). What makes information in online consumer reviews diagnostic over time? The role of review relevancy, factuality, currency, source credibility and ranking score. *Computers in Human Behavior*, *80*, 122-131. https://doi.org/10.1016/j.chb.2017.10.039

Heirweg, S., Carette, L., Ascari, A. & Van Hove, G. (2020). Study abroad programmes for all? Barriers to participation in international mobility programmes perceived by students with disabilities. *International Journal of Disability, Development and Education*, *67*(1), 73-91. doi:10.1080/1034912X.2019.1640865

Keshari, P., & Jain, S. (2016). Effect of age and gender on consumer response to advertising appeals. *Paradigm*, *20*(1), 69-82. https://doi.org/10.1177/0971890716637702

Lewis, W. (2016). Study abroad influencing factors: An investigation of socio-economic status, social, cultural, and personal factors. Ursidae: The Undergraduate Research *Journal at the University of Northern Colorado*, *5*(3), 6. https://digscholarship.unco.edu/urj/vol5/iss3/6

Lindner, J., & Wingenbach, G. (2002). Communicating the handling of nonresponse error in Journal of Extension research in brief articles. *Journal of Extension, 40*(6), 6RIB1. https://archives.joe.org/joe/2002december/rb1.php

Mezirow, J. D. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, *74*, 5–12. https://www.ecolas.eu/eng/wp-content/uploads/2015/10/Mezirow-Transformative-Learning.pdf

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, *19*, 123–205. https://doi.org/10.1016/S0065-2601(08)60214-2

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, *10*(2), 135–146. https://doi.org/10.1086/208954

Rampold, S., Coleman, B., Bunch, J., & Roberts, R. (2020). Exploring students' cultural competence development during a short-term international experience: A Q-sort study. *Advancements in Agricultural Development*, *1*(2), 65–78. https://doi.org/10.37433/aad.v1i2.45

Reardon, J., Miller, C. and McCorkle, D. (2022). The effect of student perceived benefits and obstacles to determine if and where to study abroad. *Journal of International Education in Business*, *15*(2), 351-372. https://doi.org/10.1108/JIEB-05-2021-0060

Santiso, G. B., & Sanz, C. (2022). Study abroad and student decision-making in times of COVID: A mixed methods study. *Frontiers: The Interdisciplinary Journal of Study Abroad, 34*(1), 45-60. https://doi.org/10.36366/frontiers.v34i1.649

Sax, L., Gilmartin, S., & Bryant, A. (2003). Assessing response rates and nonresponse bias in web and paper surveys. *Research in higher education*, *44*(4), 409-432. doi:10.1023/A:1024232915870

Segev S., & Fernandes J. (2023) The anatomy of viral advertising: A content analysis of viral advertising from the elaboration likelihood model perspective. *Journal of Promotion Management*, *29*(1), 125–154, https://doi.org/10.1080/10496491.2022.2108189

Sulejmanov, F., Seitlová, K., Seitl, M. & Kasalová, B. (2021). To study or not to study abroad? students' decision in perspective of motivations, barriers and attachment. *Human Affairs*, *31*(2), 175-193. https://doi.org/10.1515/humaff-2021-0015

Teng, S., Khong, K. W., & Chong, A. Y. L. (2015) Study abroad information in the new media. *Journal of Marketing for Higher Education*, *25*(2), 263–286. http://dx.doi.org/10.1080/08841241.2015.1079086

Trower, H., & Lehmann, W. (2017). Strategic escapes: Negotiating motivations of personal growth and instrumental benefits in the decision to study abroad. *British Educational Research Journal*, *43*(2), 275-289. https://doi.org/10.1002/berj.3258

Whatley, M. (2017). Financing study abroad: An exploration of the influence of financial factors on student study abroad patterns. *Journal of Studies in International Education*, *21*(5), 431-449. https://doi.org/10.1177/1028315317697798

Vetter, A., & Wingenbach, G. (2019). Self-perceived employability skills from agricultural study abroad experiences. *NACTA Journal, 63*(1a), 164-172.

Wingenbach, G., Graham, T., & Gomez, N. (2023). Becoming a global citizen: Belief vs. action. *Advancements in Agricultural Development, 4*(1), 32–47. https://doi.org/10.37433/aad.v4i1.247

Appendix

International Education Opportunities

Are you currently enrolled in an undergraduate or graduate education program?
__ Yes
__ No

Do you believe **your current degree** prepares you to be competitive in the global market?
__ Yes
__ Unsure
__ No

Do you believe **participating in international education** improves your competitiveness in the global market?
__ Yes
__ Unsure
__ No

Have you participated in an international education experience?
__ Yes
__ No

What international education experiences have you participated in? (check all that apply)
__ International youth exchange (4-H, FFA, etc.)
__ Study abroad
__ Research abroad
__ Work abroad
__ Semester or longer study abroad at a non-U.S. university/college
__ Virtual study abroad (participant at a U.S. campus location)

What **messaging sources do you use** to learn about international education opportunities? **How often do you use those sources?**

Directions:
    First, select all sources that apply to you.
    Second, select the level of frequency for each of your selected sources.

Sources	Sources	Frequency		
	Select applicable	Daily	Weekly	Monthly
Friends				
Family members				
Academic advisors				
Course instructors (program affiliated)				
Faculty (non-program affiliated)				
Education abroad staff				
University websites (not social media)				
Social media (university sites)				
Social media (non-university sites)				
Printed sources (newspapers, fliers)				

FACTORS INFLUENCING STUDENTS' DECISIONS

What **messaging cues attract your attention** when searching for international education opportunities? **Which messaging cues are most important** to you?

Directions:
   First, rate the importance levels for all messaging cues listed below.
   Second, rank the top three cues (1-2-3) that attract your attention when searching for international education opportunities.

Cues	Importance Levels				Cues
	Not Important	Somewhat Important	Important	Very Important	Rank Top 3
Country of program					
Language (foreign) requirements					
Program subject matter (course topics)					
Affordability (program fee, travel expenses, etc.)					
Learn about another culture					
Opportunity to live in another country or culture					
Learn another language					
Cultural attractions in program country					
Non-program opportunities (tourism, leisure)					
Personal growth					

FACTORS INFLUENCING STUDENTS' DECISIONS

What **challenges (difficulties)** influence your decisions to engage in international education opportunities? **Which challenges are most important** to you?

Directions:
> **First, rate the difficulty levels for all challenges** listed below.
> **Second, rank the top three difficulties** (1-2-3) that influence your decision to engage in an international education opportunity.

Challenges	Difficulty				Challenges
	Not Difficult	Somewhat Difficult	Difficult	Very Difficult	Rank Top 3
Foreign language skills					
Safety (in-country travel, diet, political, etc.)					
Health concerns (vaccinations, diseases, etc.)					
Financial challenges (program fee, travel cost, etc.)					
Paperwork required for international education programs					
Applicability of program credits to current degree					
Allowability of international participation within my major					
Difficulty to leave U.S. family or friends					
Family situation (financial, other issues) makes it difficult					
Lost time toward graduation					

FACTORS INFLUENCING STUDENTS' DECISIONS

Demographics: This information helps us describe all respondents as a group while maintaining individuals' confidentiality and anonymity.

What is your four-letter ACADEMIC MAJOR? _____

What is your sex?
__ Male
__ Female
__ Another choice

With what racial or ethnic group do you identify?
__ White or Caucasian
__ Black or African American
__ Hispanic/Latino
__ Asian
__ Another group

What is your current year in college?
__ Freshman
__ Sophomore
__ Junior
__ Senior
__ Graduate

In what type of college do you study?
__ Agriculture
__ Business
__ Engineering
__ Liberal Arts
__ Sciences
__ Another college

In addition to English, what other language(s) can you speak, at least conversationally? (choose all that apply)
__ None, just English
__ Spanish
__ French
__ Arabic
__ Chinese
__ Another language not listed