Academic Experiences that Impact the Study Abroad Propensity of College Students

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Abstract

Studying abroad is arguably one of higher education's most effective ways of developing students' global competency and preparing them to enter a global workforce. This study explores the relationship between demographic characteristics, college experiences (personal, social, and academic), and study abroad participation among college students. This study first summarizes previous findings on how college students view and make decisions about study abroad opportunities. Next, data from the National Survey of Student Engagement (NSSE) is used to examine how campus engagement impacts a student's propensity to study abroad. Findings reveal that gender, race, major, and SES are important predictors of participation in study abroad. More important, the results of the study also reveal that academic experiences specific to diversity and societal awareness increased propensity to study abroad.

Keywords: Study Abroad, Diversity, Collegiate Experiences, Race, Socioeconomic Status, Gender, Academic Major, Pedagogy, Teaching

There have been several noteworthy initiatives to increase study abroad participation among United States college students. Perhaps the most popular initiative, appropriately titled "Generation Study Abroad," was launched by the Institute of International Education (IIE) in 2014. The aim of this program was to double and diversify the body of U.S. students studying abroad by 2020. In response, colleges and universities across the country implemented strategic international programming plans, developed scholarships, expanded study abroad program portfolios, and strengthened marketing efforts, all with the hope of increasing student mobility.

Clearly, interest in studying abroad among incoming college students is high. Half (50%) of college bound students want to study outside the U.S. (College-bound students' interests in study abroad, 2008). However, as of 2019 only 1.8% of U.S. college students participated in study abroad programming (Trends in U.S. Study Abroad, 2019). And while the number of students who study abroad in a given year increased from 154,168 to 289, 408 over the 15 years between 2001 and 2015, there are still clear disparities between those who decide to study abroad and those who do not (Institute of International Education, 2001-2015).. This study seeks to narrow the gap between students' pre-college desire to study abroad and their fulfillment of this goal. By investigating the role engagement experiences play in student decision-making, the study will provide an understanding of what may assist in turning a student's desire to study abroad into reality.

Literature Review

The literature reveals several important factors that contribute to students' participation in study abroad. Studies about study abroad in higher education have focused on the demographic characteristics of students, personal experiences, social experiences, and academic experiences.

Demographics

A number of researchers have studied the impact that demographics have on study abroad participation among U.S. students (Brown, 2005; Carlson, et al., 1990; Institute of International Education, 2001-2015; Lozano, 2008; Norton, 2008; Schmidt, 2009). There are a number of characteristics that serve as important indicators of students' likelihood to study abroad, including race, gender, academic major, socioeconomic status, and disability.

Not surprisingly, the study abroad student population is generally comprised of white women who come from wealthy families, but it is important to understand, not just describe, the demographics of study abroad participation. Understanding these demographics equips higher education professionals to better advise students from the groups less likely to participate already. In terms of race, students of color have frequently had low study abroad participation numbers. Students of color made up 45.2 percent of the United States undergraduate population in 2016 (Dedman, 2019), but during the 2015-16 academic school year, students of color (Black, Hispanic or Latino, Asian, Native Hawaiian, Multiracial, American Indian or Alaska Native), collectively made up approximately 28 percent of America's study abroad participants (Institute of International Education, 2001-2015).

There is a combination of factors that leads to the racial disparities in study abroad. One factor is students of color generally having the mentality that they need to transition to the job market as quickly as possible (Simon & Ainsworth, 2012). Studying abroad can delay that transition to the workforce. Additional barriers include lack of support from faculty and staff, financial constraints, limited program options, and a lack of familial support (Norton, 2008; Simon & Ainsworth, 2012).

Gender has also been identified as a predictor of study abroad participation. In 2017, the majority of students (57 percent) enrolled in postsecondary education were female (NCES, 2017). In 2015-2016, 66.5% of study abroad participants were women (Institute of International Education, 2017). Women have been shown to be motivated to study abroad by influential authority figures in an educational context (Schmidt, 2009). Women also are expected to perform better in social relationships, which can be enriched through study abroad experiences (Hoffa & Pearson, 1997). Male students, on the other hand, are less likely to study abroad (Brown, 2005; Carlson, et al., 1990; Institute of International Education, 2001-2015; Salisbury et al., 2013). In comparison, males made up 43% percent of the U.S. college population and 33% of the study abroad demographic (NCES, 2017; Institute of International Education, 2017). In 2017, Male students made up one-third of the United States study abroad population (Redden, 2018). The primary factors that contribute to the lack of interest include peer influence and failure to understand how the experience contributes to professional development (Fischer, 2012; Schmidt,

2009). The literature appears to suggest that women seek study abroad as a way to enhance their chances of finding a job post-graduation, while men see limited value.

Socioeconomic status has long played a significant role in study abroad participation for college students (Lozano, 2008). Forty years ago, study abroad was viewed as being a luxurious opportunity for only those students who had parents with resources to support experiences beyond the campus-bound curriculum (Simon & Ainsworth, 2012). However, in the early 1990s, universities' expansion of their offered international education opportunities resulted in an increase in participation among students from middle SES families (Simon & Ainsworth, 2012).

Students from lower SES families, however, remain severely underrepresented in study abroad (Carlson, et al., 1990; Lozano, 2008; Simon & Ainsworth, 2012). Undoubtedly, finances play a huge role in this underrepresentation. Students from mid- or high-SES families have a much higher likelihood of participating in study abroad. The factors that impact study abroad participation as it relates students from high to mid SES include access to financial resources, social capital, social networks that value study abroad, and targeted recruitment efforts by study abroad professionals (Fordham, 2002; Simon & Ainsworth, 2012).

Another factor influencing study abroad participation is academic major. It has been shown that students with undeclared majors, which generally lack academic rigidity and constraints, tend to study abroad at higher rates than their peers in other majors (Twombly, et al., 2012).

Students who have declared a major show no statistical difference between STEM and non-STEM majors when it comes to intent to study abroad (Salisbury, et al., 2009). And while, historically, participation rates have favored humanities majors, in recent years there has been a marked shift in popularity within STEM fields. STEM majors now participate in study abroad programs in higher numbers than students from other majors. During the 2012-13 academic year, STEM majors represented 23% of the United States' study abroad population. Social Science majors represented 22%, business majors represented 20%, humanities majors represented 10%, fine or applied arts majors represented 8%, foreign language majors represented 5%, education majors represented 4%, and undeclared or "other" majors represented 8% of the study abroad population (Institute of International Education, 2001-2015). This shift may be the result of calls within engineering and science disciplines to differently prepare graduates for a globalized workforce and a need to address issues that have global implication (climate change, global pandemics, and human trafficking).

The last demographic studied as a part of this research was disability. Little research has been conducted on students with disability and study abroad participation. However, in recent years there have been increasing study abroad participation rates among students with disabilities (Institute of International Education, 2001-2015). From 2006 to 2015, participation rates among students with disabilities who participate in study abroad have increased from 2.6% to 5.1% (Institute of International Education, 2001-2015). There may be difficulty in attaining complete and accurate data about this category of participation, however, since a student is not obligated to self-disclose whether or not they have a disability, or the nature of the disability (physical or

cognitive). Nonetheless, the increase in participation could be attributed to university administrators and faculty members becoming more knowledgeable about accommodating students with disabilities on study abroad programs.

Though participation rates among with students with disabilities are increasing, the numbers are still low. Reasons for low participation could be because of a lack of program options. Previous studies have shown that study abroad administrators interested in increasing participation among students with disabilities must develop promotional materials that display people with disabilities studying abroad, have peer mentors or advisors with disabilities who have participated in study abroad programs, and develop a structured advising process for advisors and disability specialists (Belch, 2000).

While student demographics have provided initial indicators for participation, this study seeks to uncover personal, social, and academic experiences that impact the study abroad propensity of students. One set of studies indicates that certain collegiate experiences lead to an increased likelihood to study abroad (College-Bound Students Interests in Study Abroad, 2008; Goldstein & Kim, 2006; Carlson et al, 1990; Opper et al, 1990; Pearce, 1988; Stroud, 2010). However, other researchers argue that there are very few factors that can be used to predict the individual decisions of students to study abroad (Salisbury et al, 2009).

Personal Experiences

There is no clear definition of what makes up a personal collegiate experience. However, research has identified certain personal influences such as family, friends, and values, which, singularly or collectively, can affect how a student engages in college (Astin, 1993; Gardner & Barefoot, 2010; Pascarella & Terenzini, 2005).

Student employment is another personal experience that appears to negatively impact study abroad propensity (Astin, 1993). Working students have less time to engage in campus activities, and therefore, less time to contribute towards studying abroad. Students with familial responsibilities also were less likely to study abroad. Responsibilities such as taking care of siblings, parents, and housework led to less encouragement and support from family and friends for participation in study abroad programming (Astin, 1993).

Distance traveled to attend college is also a personal experience that effected students' decisions to study abroad. Studies have shown that students who attend college more than 100 miles from their home are more likely to study abroad (Stroud, 2010) compared to students who commute to campus daily (Kuh, Gonyea, & Palmer, 2001).

The most noteworthy predictors of study abroad participation as they relate to personal experiences are openness to diversity, engaging in activities that increase diverse interactions, and co-curricular involvement. Co-curricular is defined as an activity at a school or college pursued in addition to the normal course of study (Twombly, et al., 2012). Other personal experiences linked to study abroad propensity include political interest and community influence (Twombly, et al., 2012). America's foreign policy and the perception of the quality of post-secondary education also effects a student's decision to study abroad. Students with a higher

propensity to study abroad are more critical of America's foreign policy and have a more favorable view of the quality of post-secondary education in Western Europe (Twombly, et al., 2012).

Social Experiences

Collegiate social experiences also impact the study abroad propensity of students. Social integration in college is defined as human interaction, collaboration, and the formation of interpersonal connections between students and other members of the college community including peers, faculty, staff, and administrators (Astin, 1993; Cuseo, 2007; Pascarella & Terenzini, 2005). Social experiences include attending student functions, joining student organizations or government, voting in an election, and having non-classroom interactions with faculty that have an influence on career trajectory (Chamblis & Takacs, 2014; Nora & Wedham, 1991).

Social atmospheres that expose students to international opportunities, develop their social skills in a diverse environment, and strengthen their knowledge of international issues all impact students' decisions to study abroad (McDonough, 1997). Among social activities, the highest predictor of study abroad propensity is interaction with diverse groups. Collegiate students who engage with members of a different cultural or ethnic group and show an understanding of racial differences have a higher likelihood of studying abroad (Twombly, et al., 2012).

There are also social experiences that discourage study abroad propensity among college students. Living off campus reduces the likelihood that students will be exposed to information and recruitment efforts on study abroad (Lee & LaDousa, 2015). Additionally, (Brux & Fry, 2009) explain that being subjected to discrimination on a daily basis makes students of color less likely to participate in study abroad programming (Brux & Fry, 2009).

Academic Experiences

The academic experiences of college students also impact their decision to study abroad. Students who demonstrate a high interest in reading and writing have a higher likelihood of studying abroad (Twombly, et al., 2012). Additionally, frequent interactions with supportive university faculty and staff members increase a student's study abroad propensity (Simon & Ainsworth, 2012). Teaching faculty are the most influential academic element to study abroad participation among students, irrespective of university enrollment size or institutional type (Streitwieser, 2014).

There are also academic experiences that decrease the study abroad propensity of college students. For example, academic rigor and credit transfers can make students less likely to participate in study abroad (Streitwieser, 2014). The more rigorous and rigid a degree program, the less likely faculty members are to approve transfer credit or find substitute courses that can be taken outside of a student's home university (Streitwieser, 2014).

Methods

The purpose of this study was to determine the relationship between demographics, college experiences (personal, social, and academic), and study abroad participation among college students. The demographic variables used in this study were gender, race, major, SES, and disability. The data was pulled from a sample of 2,000 traditional aged, full-time college seniors who were United States citizens and completed the National Survey on Student Engagement (NSSE) in the spring of 2014 (See Table 1).

Table 1Demographic Characteristics of the Sample (N = 824)

	n	%N
Gender		
Males	214	26
Females	610	74
Race		
Majority	722	87
Non Majority	102	12
Major		
STEM	307	37
Non-STEM	517	63
Disability		
Yes	37	4
No	787	96
SES		
Low	199	24
Mid	363	44
High	262	32
Taking All Courses		
Online	_	
Yes	5	1
No	819	99
Majors		
One	705	85
More than One	119	14
Began College		
Started Here	707	86
Started Elsewhere	117	14
Attended a Community or Junior College		
Yes	123	15

No	701	85
Member of a Fraternity or Sorority		
Yes	136	17
No	688	83
Student Athlete		
Yes	61	7
No	763	92

Measurements

The NSSE survey is administered through collaborative efforts between NSSE staff and administrators at over 1,500 colleges and universities in the United States and over 2,000 campuses in Canada. As an ongoing research project conducted by the Indiana University Center for Postsecondary Research, the NSSE is administered to two groups of students: those at the end of their first year of study, and those who are about to receive their baccalaureate degree (NSSE, 2015). There is a question on the NSSE about study abroad propensity, and students' answer to this question was the dependent variable of this study. Item 11 on the NSSE asks "Which of the following have you done or do you plan to do before you graduate from your institution?" Study abroad is listed as a sub-item. Only participants who responded to this sub-item were included in the study.

The NSSE also asks a number of questions on demographics and student engagement, defined as participation in educationally purposeful activities (NSSE, 2015).

For this study, each item on the NSSE was reviewed to determine which could be considered a proxy for demographics or for personal, social, or academic activities. Five NSSE items served as proxies for demographics, five items and 10 sub-items were identified as proxies for personal experiences, six items and 11 sub-items were proxies for social experiences, and 15 items and 55 sub-items were proxies used to identify academic experiences. An example of a demographic proxy would be the item on the NSSE that asked participants "What is your racial or ethnic identification?" The response options were: American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, White, Other, and I prefer not to respond. An example of an item identified as a proxy to represent personal experiences asked, "How much has your experience at this institution contributed to your knowledge skills, and personal development in the following areas?" Developing or clarifying a personal code of values or ethics was listed as a sub-item. The response options were: Very much, Quite a bit, Some, and Very little.

The demographics of race, major, gender, SES, and disability have been determined by prior research to impact a student's decision to study abroad. Therefore, it was important to control for these variables in the statistical analysis. In order to prepare for this analysis, a number of variables had to be recoded. Race was recoded into the binary majority (white) and minority (American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander). Survey participants who did not respond to this

question or selected "other" as an option were not included in the study, since their race was unable to be identified. Major was recoded into STEM and Non-STEM disciplines (NSF-approved STEM fields, 2014). Questions about SES were not asked on the NSSE survey, but an item on the NSSE asked respondents "What is the highest level of education completed by either of your parents (or those who raised you)?" The response to this question was used as a proxy for the socioeconomic status (SES) of each participant. Research indicates that households with higher levels of education are generally of higher SES (NCES, 2015). The response options "Did not finish high school," "High school diploma or G.E.D.," and "Attended college but did not complete degree" were recoded to represent Low SES. The response options of "Associate's degree" and "Bachelor's degree" were recoded to represent Mid SES. The response options "Master's degree" and "Doctoral or professional degree" were recoded to represent High SES.

There were personal, social, and academic variables on the NSSE that needed reverse coding as well. This form of coding was necessary to ensure that the preferred direction for negatively worded items would be interpreted in the same way as the preferred direction for positively worded items.

A NSSE item which served as a proxy for personal collegiate experiences asked survey respondents "How would you evaluate your entire educational experience at this institution?" The preferred response was "Excellent." Therefore, the response options were recoded to reflect the preferred direction. Poor was recoded to reflect the least desirable response (representing the lowest evaluation for the participant's educational experience), Fair was recoded as 2, Good as 3, and Excellent was recoded as 4 (representing the highest evaluation for the participant's educational experience). This same form of reverse coding was used for social and academic experiences that required it.

The dependent variable representing study abroad participation also needed recoding. The item on the NSSE asked participants "which of the following have you done or do you plan to do before you graduate? Study abroad was listed as a sub-item. The response options were "Done or in progress," "Plan to do," "Do not plan to do," and "Have not decided." The responses were recoded to reflect the level of study abroad propensity for respondents. Do not plan to do was recoded as 1 (representing the lowest level of study abroad propensity), have not done was recoded as 2, plan to do was recoded as 3, and done or in progress was recoded as 4 (representing the highest level of study abroad propensity).

Data Analysis

In order to control for the demographic variables that are known to have an impact on study abroad propensity, an independent *t-test* analysis was used to compare race, gender, academic major, and disability. If the results of the *t*-test revealed that there was a statistically significant difference in study abroad propensity (p < .05) between the dichotomous variables, then they would be included in multiple linear regression analysis.

Socioeconomic status was handled differently because it was not coded into a dichotomous variable; rather, it was handled as a continuous variable. For this reason, a *one-way*

ANOVA was used to determine if there are any significant differences between high, mid, and low SES as it pertains to study abroad propensity. If the results of the *one-way* ANOVA revealed that there are statistically significant differences in study abroad propensity (p < .05) between the continuous variables, then SES would be included in multiple linear regression analysis.

The standard statistical assumptions of normality and homogeneity were evaluated in this research. Normality assumes the scores are normally distributed. Normality was assessed using the Shapiro-Wilks test. If the Shapiro-Wilks test generated a *p value* greater than 0.05, then the data were considered normally distributed. Homogeneity assumes that both groups have equal error variances. This assumption was assessed using the Levene's test for the Equality of Error Variances. If the Levene's generated a *p* value greater than 0.05, the data were assumed to be homogeneous.

Of the demographics studied (gender, race, major, disability, SES), results remained consistent with historical trends, concluding that they all serve as significant predictors of study abroad propensity. However, t-test results of this study divulged that comparisons concerning race and SES have shifted. The results showed that minority students are more likely to study abroad (or at the very least are more strongly considering it) than in previous research. Additionally, results also indicated that students from lower to mid SES have a higher propensity to study abroad in comparison to their counterparts of high SES.

Table 2Results of t-tests by Demographic Characteristic (N = 824)

Outcome			G	roup		95% CI for Mean				Sig Val.
		Male		I	Female		Difference		•	.000
	M	SD	n	M	SD	n	_	t	df	
Study Abroad	2.63	.84	21	2.40	.942	61	00429,	1.904	822	
Participation	2.03	9	4	2.49	.942	0	.28236	*	822	

Results of t-tests and Descriptive Statistics for Study Abroad Participation by Race (n = 824)

Outcome			G	roup			95% CI for Mean			Sig Val.
	M	Iajority	7	Non	Major	ity	Difference			.000
	M	SD	n	M	SD	n		t	df	
Study Abroad Participation	2.48	.90 3	72 2	2.80	.796	10 2	50502, - .12498	3.254 *	822	

Results of t-tests and Descriptive Statistics for Study Abroad Participation by Major (n = 824)

Outcome	Group	95% CI for Mean	Sig Val.

	S	STEM		No	n-STE	M	Difference	=	_	.000
	M	SD	n	M	SD	n	-	t	df	
Study Abroad	2.67	.82	30	2.44	061	51	.10921,	3.622	922	
Participation	2.67	6	7	2.44	.961	7	.36769	*	822	

Results of t-tests and Descriptive Statistics for Study Abroad Participation by Disability (n = 824)

Outcome			G	roup			95% CI for			Sig Val.
	Dis	sability		No	Disabili	ty	Mean			.016
	M	SD	n	M	SD	n	Difference	t	df	_
Study Abroad Participation	2.45	1.10	3 7	2.53	.912	78 7	37576, .23242	- .463 *	822	_

p<.05

Table 3 *Results for One Way ANOVA on SES and Study Abroad Propensity* (N = 824)

Demographics	Mean Score	Standard Deviation	F Statistic	Sig Value	Tukey's HSD
			0.027	000	
SES			8.827	.000	
Low	2.66	.825			1, 2 < 3
Mid	2.60	.888			1, 2 < 3
High	2.34	1.00			3 > 2, 1
p<.05					

The primary goal of this research was to determine whether or not personal, social and academic collegiate experiences contribute to study abroad propensity among United States' college students. To address this question, an exploratory factor analysis was run using the varimax rotation procedure (George & Mallery, 2003). An acceptable factor for personal, social, and academic experiences was comprised of three or more NSSE survey items that generated a loading score of .60 or higher (George & Mallery, 2003). If factors emerged from the analysis, a Cronbach's alpha was run to ensure the internal consistency of each factor. A Cronbach's alpha score of .70 was used as the baseline to consider a factor reliable (George & Mallery, 2003).

For any factor that emerged, a composite score was created to group the NSSE survey items that represented the collegiate experiences associated with that factor. A composite score representing any factor for the experiences was determined by calculating the sum of participant's responses to the items that comprised the factor. The factor analysis determined two factors that represented personal experiences. I labeled those factors "Openness to Working with

Others," and "Personal Care." There were three NSSE items reflecting Openness to Working with Others. The items garnered data about perceived gains in understanding people of different backgrounds, the development of values and ethics, and working effectively with others.

The factor analysis for social experiences yielded one factor consisting of four NSSE items. The items were affiliated with institutional emphasis on attending events concerning important social, financial, and political issues, institutional emphasis on providing social opportunities, and institutional emphasis on attending campus activities and events, and institutional emphasis on encouraging contact among students from different backgrounds. I labeled this factor Social Event Attendance. This factor had an eigenvalue of 2.903, explained 26.39% of the variance, and had a Cronbach Alpha value of .777. This factor was included in the linear regression model.

The factor analysis for academic experiences yielded seven factors. The first factor was comprised of six items that collected data on examining strengths and weaknesses of one's own views, diverse perspectives in course assignments, trying to understand others' perspective, connecting learning to societal issues, learning something that changed one's understanding of an issue, and connecting course ideas to prior experiences. I labeled this factor "Societal Awareness and Diversity." This factor had an eigenvalue of 12.186, explained 22.92% of the variance, and had a Cronbach Alpha value of .885.

The second academic factor included five items that revolved around the organization of courses by instructors, prompt feedback from instructors, clearly explained course goals, feedback on works in progress, and effective examples used by instructors. This factor was identified as "Faculty Relationships." Faculty Relationships had an eigenvalue of 3.461, explained 6.53% of the variance, and had a Cronbach Alpha value of .844.

The remaining five factors were labeled "Perceived Academic Improvements," "Math Skills," "Communication with Faculty," "Academic Collaborations with Students," and "Academic Rigor." Perceived Academic Improvements was comprised of three items that elicited data on perceived improvements with writing skills, speaking skills, and critical thinking skills. The factor labeled Communication with Faculty was formed by items that collected data pertaining to discussing future career plans, course topics, and academic performance with faculty members.

After determining the significant factors for each experience, a linear regression analysis was then conducted using the enter method to determine whether there was a significant relationship between factors representing personal, social, and academic experiences and study abroad propensity (See Tables 7 – 11). Linear regression was used because the dependent variable (study abroad propensity) was continuous (George & Mallery, 2003). The significant demographics of race, gender, academic major, disability, and SES were the first variables entered into the linear regression model. It was important to compare our data to historical trends of the demographics and study abroad propensity. This allowed us to control for these variables as we continued to build the linear regression model.

Next, the factors representing personal experiences were entered into the regression model to determine if these factors revealed a relationship with study abroad propensity. The same was then done for the factors representing social and academic experiences. Once we determined which demographics and experiences exhibited a significant correlation to study abroad participation, all significant items were entered into the final regression model.

Results

The results of the four demographic characteristics analyzed via the t-test determined that men (M=2.63) reported a significantly higher mean score than women (M=2.49) as it pertains to study abroad propensity. In terms of race, non-majority respondents (M=2.80) had a significantly higher mean score than the majority population (M=2.49). STEM majors (M=2.67) also proved to have a higher study abroad propensity than non-STEM majors (M=2.44). Lastly, students with disabilities M=2.53) had a higher mean score than students without disabilities (M=2.45) (See Table 2).

Socioeconomic status consisted of three groups (high, mid, and low) so an ANOVA was used to analyze this data. There was a significant effect on study abroad propensity by SES at the p < .05 (F (2, 821) = 8.827, p = .000). Post hoc comparisons using the Tukey HSD test indicated that the mean score for Low SES (M = 2.66, SD = .825) was not significantly different than the mean score for Mid SES (M = 2.60, SD = .888). The High SES group (M = 2.34, SD = 1) significantly differed from both the Low and Mid SES respondents (See Table 3). Collectively, these results suggest that SES has an impact on a student's decision to study abroad where students from a high SES have a lower study abroad propensity than students from a low or midrange SES.

Next, the questions pertaining to personal, social, and academic experiences related to study abroad propensity were addressed. A factor analysis was run to determine if items from the NSSE represented personal, social, or academic factors. Of the 10 items believed to be representative of personal experiences, two factors emerged as particularly relevant: I have called these "Openness to working with Others" and "Personal Care." The Openness to Working with Others factor had an eigenvalue of 2.999, explained 27.62% of the variance, and had a Cronbach Alpha value of .769. This factor was included in the linear regression. The Personal Care factor had an eigenvalue of 1.188, explained 10.79% of the variance, and had a Cronbach Alpha value of .547 which was lower than the .7 score needed to demonstrate internal consistency of the grouped items. Therefore, the Personal Care factor was not used in the linear regression analysis.

Next, an exploratory factor analysis was run for 11 items identified as representations of social experiences. One relevant factor emerged which was labeled "Event Attendance." This factor had and eigenvalue of 2.903, explained 29.39% of variance, and had a Cronbach Alpha value of .777. Therefore, it was included in the linear regression analysis.

The final exploratory analysis run on the 55 items reflecting academic experiences produced seven relevant factors. These factors were labeled "Diversity and Societal Awareness,"

"Faculty Relationships," "Perceived Academic Improvements," "Math Skills," "Communication with Faculty," "Academic Collaborations with Students," and "Academic Rigor." All had Cronabach Alpha values exceeding .7, and were included in the linear regression analysis.

The assumptions of multiple regression include linearity (the idea that there is a linear relationship between the independent and dependent variables), homoscedasticity (a condition of the variance around the regression line being the same for all values of the independent variable(George & Mallery, 2003), and the absence of multicollinearity (meaning that the independent variables of the regression model are not more correlated with any other independent variable than they are the dependent variable). A scatter plot was used to assess the assumptions of linearity and homoscedasticity; multicollinearity was tested using Variance Inflation Factors (VIF). VIF values that exceeded 10 suggest multicollinearity (George & Mallery, 2003), so its absence is assumed from lower values.

Interestingly, the results of the linear regression analysis indicated that when it came to collegiate experiences (personal, academic, social) that impacted the study abroad propensity of students, there were no personal or social experiences that had a significant correlation. The only experiences that impacted a collegiate student's likelihood of studying abroad were academic.

The academic experiences representing Societal and Diversity Awareness and their significant correlation coefficients to study abroad propensity are as follows. Academic experiences that encouraged students to "examine the strengths and weaknesses of their own views on a topic or issue had the highest level of correlation (.783) to study abroad propensity, while academic experiences that "connect ideas from coursework to prior experiences and knowledge had the lowest significant correlations (.678) to study abroad propensity.

Linear Regression Results with correlation coefficients:

- 1. Connect learning to societal problems or issues (.746)
- 2. Examine the strengths and weakness of their own views on a topic or issue (.783)
- 3. Learn something that changes the way they understand an issue or concept (.686)
- 4. Try to better understand someone else's views by imagining how an issue looks from his or her perspective (.763)
- 5. Include diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments (.778)
- 6. Connect ideas from your course to their prior experiences and knowledge (.678)

Discussion

Preparing students to enter a global economy is an important educational outcome in American higher education. A number of students enter the college years with aspirations to study abroad. For their part, universities of all types have developed wide-ranging experiences that facilitate global knowledge and awareness. Universities are pressured by student interest, act in response to external stakeholders, and operate in their own self-interest to compete for talented students and faculty. The idea of a "global university" has proliferated chiefly among large

American research universities as they jockey for positions in ranking tables and seek geographic domination across the globe. However, despite every effort to grow study abroad programs, the hoped-for high numbers of students in such programs have yet to materialize. In order to tip the scales, it is important to understand deeper dimensions of the student decision-making process and the precursor experiences of students that influence participation.

Mostly, prior studies in this area have focused on the demographic characteristics of students who choose to study aboard. This is hardly useful beyond confirming common sense or to bolster marketing campaigns. Instead, increasing our understanding of the factors that lead to improving the likelihood of participation is of paramount concern. The main purpose of this study was to understand the measurable common predictors of students' propensity to study aboard.

We find three major takeaways from this study. First, minority students are more likely to have a desire to study abroad than their counterparts. Second, students from a lower SES are more likely to study abroad than their counterparts. Third, engaging academic experiences increase the likelihood that a collegiate student will study abroad. Two of these findings are surprising and point to a dramatic shift in the types of students seeking study abroad experiences.

First, the demographic variables used to predict study abroad propensity divulged some interesting results. This study revealed that minority students are more likely to have a higher interest and desire to participate in study abroad experiences than the majority population. This is surprising because other studies have revealed just the opposite (Institute of International Education, 2001-2015; Norton, 2008). Secondly, it was also surprising that study results indicated students from lower to mid SES were more likely to want to engage in study abroad programming despite perceived financial barriers to access.

Affordability has historically been identified as a barrier to study abroad participation (Simon & Ainsworth, 2012). It would be hard to argue that finances do not play into the decision-making process of students seeking to study abroad. Likely, the efforts of federal and state governments, private lenders, more affordable study abroad initiatives, and provision of financial assistance is helping to shift a broader range of students to view study abroad as more attainable (Myths and Realities of Financing Study Abroad, 2006).

Affordability has always been a roadblock to many opportunities for students of color when it comes to higher education. As this concern pertains to African Americans, 42% have student loans, in comparison to 28% of white students (Quinton, 2015). Hispanic and Latino students and their families also incur student loan debt at higher rates than white families (Douglas-Gabriel, 2015). So, historically, the idea of studying abroad may have been considered financially out of reach for minority students. However, recent trends that enable students to transfer financial aid to international experiences may contribute to the increased likelihood of participating in study abroad programming.

Other considerations could include study abroad professionals recognizing the financial barriers for minority students and structuring programs that offset some of the additional costs of studying abroad. Study abroad administrators can structure programs that help by arranging

group rates for discounted flights, traveling during the non-tourist season, offering shorter programs (winter/spring break), and establishing programs in more affordable locations. Such efforts may place study abroad within reach for more students of color.

Perhaps more importantly, students of color may be seeking experiences to differently prepare for the workforce and differentiate themselves in the marketplace. Recognition of the importance of global competency in today's workforce may be one way to do this. Minority students recognize they will be more competitive on the job market if they have international experiences.

Surprisingly, this study also revealed that students from high SES were *less* likely to study abroad in comparison to their counterparts. This finding is inconsistent with historical trends (Carlson, et al., 1990; Lozano, 2008; Simon & Ainsworth, 2012) so it is quite interesting. It is likely that students from higher SES have had more exposure to international opportunities prior to entering college than students from other backgrounds, and therefore possible that the allure of studying abroad is not as strong. The parents of students from high SES backgrounds may also have networks that allow them to structure international internships and visits on their own rather than relying on a college or university. While this would help students from high SES avoid the added expenses of study abroad programs offered by universities, it is more likely that these families prefer tailored experiences or ones that are perceived as more prestigious.

Arguably the most interesting finding from this study had to do with the types of collegiate experiences that impacted study abroad propensity. It would seem logical that personal and social collegiate experiences would impact a student's decision to study abroad, but this study indicated otherwise. It could be deduced that since the impact of individual's personal experiences cannot be standardized, the decision to study abroad will differ among student populations based on these experiences. The same can be said for social experiences.

Academic Experiences that Impact the Study Abroad Propensity of College Students

As the linear regression analysis developed, collegiate academic experiences, coupled with the key demographic factors measured, demonstrated a significant relationship with study abroad propensity.

These six academic experiences speak to students seeking to increase their cultural awareness, understand the diverse viewpoints of others, consider the pros and cons of their own thought process, and be open to changing their assumptions or world view. The first academic experience is *Connecting learning to societal problems or issues*. A wide array of subject matters ranging from climate change to managing epidemics, economic disparities, and government relations can all assist students in connecting learning to societal problems. Every discipline within the academy has an opportunity to connect student learning to current events and societal problems, thereby increasing its students' study abroad propensity. Such connectivity increases the student's knowledge base of environmental, social, or political issues and how their coursework has the potential to extend beyond the classroom, a development of academic thought will dovetail into other components of the pedagogy.

Using the second academic experience, examining the strengths and weaknesses of their own views on a topic or issue, instructors could engage students in simple classroom discussions or question-and-answer segments during a lecture series, or could assign academic work that requires them to delve into why they agree or disagree with a particular issue. By expressing their views and having the opportunity to support or defend their perspectives, students will develop an understanding of not only why they may be so strong in their particular views, but also why others may oppose them. Students will become more deliberate about taking the vantage point of others into consideration when developing their views on an issue. This form of openness builds into the next components.

The third and fourth components work in conjunction with each other. The third component, *learning something that changes the way they (students) understand an issue or concept*, and the fourth component, *trying to better understand someone else's views by imagining how an issue looks from his or her perspective*, both assist in developing the willingness of students to recognize and be more accepting of other individuals and the way they view the world. This fosters the kind of thinking about diversity that is necessary for the fifth component.

The fifth academic experience is *including diverse perspectives in course discussion or assignments*. Domestic and international scholarship alike have documented several different methods of solving very similar problems. By instructors including literature, narratives, and experiences that are diverse in their course discussions or assignments, students are given opportunity broaden their perspective and be exposed to different ways of approaching topics or issues.

The final component, *connecting ideas from coursework to prior experience and knowledge*, may be the most difficult to implement, especially in large classroom settings. This is because it may be hard to gauge a student's prior experiences and knowledge. However, offering assignments that encourage students to draw from their experience and prior knowledge is an effective approach to the sixth component. The ideal approach would be for the instructor to introduce the subject matter, and the student to make the connection through academic activities such as classroom presentations, group assignments, and writing projects.

Taking classes in a foreign country and engaging with students from different backgrounds and nationalities only intensifies this type of academic experience. Study abroad offers students opportunities to interact with diverse populations and learn about societal issues through various outlets. Therefore, it is reasonable to conclude that students who have a desire to communicate and engage with diverse populations would also have an increased interest in studying abroad.

There may be several reasons why personal and social experiences showed no correlation in this study. Unlike personal and social experiences, academic experiences are simpler to standardize. Instructional faculty generally operate in a controlled environment with defined learning outcomes. Also, the academic experiences in higher education are compulsory, and successful completion is mandatory for graduation. This is not the case for personal and social

experiences. Consequently, the frequency with which students engage academically and the requirement to understand course material could explain the relationship between academics and study abroad propensity. Though personal and social experiences showed no relevancy, it is important for researchers to try and gain a better understanding as to why.

Ultimately, this research led to the following key findings: some demographic characteristics can predict propensity to study abroad; personal and social factors are not predictors; and, the academic factor of societal and diversity awareness, when coupled with demographic factors, has a large effect size when predicting the likelihood of study abroad participation. The findings pertaining to the demographic characteristics around race and SES deviate starkly from past research findings. This conclusion calls for additional research with a larger sample size and more precise instrument. Perhaps this is an anomaly produced by the NSSE, or perhaps it is the sign of a new trend. Only further inquiry will tell.

The findings focused on academic factors highlight the importance of including societal and diversity awareness as components of collegiate pedagogy. The opportunity to experience learning from different perspectives (and a globalized curriculum) further heightens a college students' likelihood of participating in study abroad programming.

Limitations

Of course, as with most studies, some methodological issues arose. First was the proxy used to measure SES. The NSSE asked question about the highest level of education attained by the participant's parents. The answer to this question served as a measure of the student's SES. A level of education does not necessarily equate to a particular level of SES. As the findings are a vast deviation from prior research conclusions, additional research with a larger sample size or different instrument may produce different results. Then there was the categorizing of race. In this study, race was separated into two categories, majority and non-majority. The sample size was not large enough to separate out into specific races. Thirdly, a factor analysis was used after assigning personal, social, and academic experiences to their respective categories. Assigning the experiences and analyzing the results of a factor analysis have the potential for personal interpretation. Lastly, the NSSE itself posed concerns. Most items on the NSSE fell under the academic experience category; not as many fell under the personal and social categories.

Conclusion

Increasing study abroad participation rates in a frequent topic in higher education circles. As the workforce is demanding more globally competent students, the academy is being tasked with meeting that demand. As previously mentioned, there have been several administrative strategies implemented with the goal of increasing participation. This research allows teaching faculty a seat at the table to discuss these strategies and options for their implementation by providing actionable teaching methods. This study suggested what demographic characteristics and academic experiences increase the study abroad propensity of college students. The

pedagogical practices by this research can help highlight the importance of diverse academic approaches and promote the development of global competency for tomorrow's workforce.

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