Is Study Abroad Still a Privilege? Exploring the Inequality Gap between Intentions and Study Abroad at a Public Midwestern University in the U.S.

Hermann Kurthen¹, Anna Hammersmith¹

Abstract

Although more students study abroad today than in decades prior, participation still lags behind national goals put forth by the Lincoln Commission. Many students plan to study abroad, yet this often does not correspond with actual participation. This gap suggests there are barriers that prevent study abroad intentions from evolving into program enrollment. This study analyzes full population data and a NSSE (National Survey of Student Engagement) subset to distinguish study abroad and non-study abroad student intentions and participation between 2007 and 2017 at Grand Valley State University (GVSU), a public liberal arts university in the U.S. Midwest. The role of demographic, academic, and socioeconomic factors are explored using logistic regression. Findings confirm alignment of study abroad patterns with student characteristics, which represent barriers as well as opportunities for study abroad participation. Interventions at institutional and individual levels could be useful for addressing social group disparities and the participation gap.

¹ GRAND VALLEY STATE UNIVERSITY, ALLENDALE, MI, UNITED STATES OF AMERICA

Corresponding authors: Anna Hammersmith, hammeran@gvsu.edu

Accepted date: December 6th, 2023
Keywords:
Logistic regression, NSSE case study, study abroad disparities, study abroad intentions, study abroad participation

1. Introduction

In recent decades education abroad has become increasingly important at institutions of higher education in the U.S. The goals of study abroad are twofold. The first aim is to improve learning outcomes, retention, and degree attainment (Engel, 2017). Second, study abroad programs promote multicultural understanding and tolerance, internationalize academic programs, and prepare American students for a global marketplace. While available statistics in past decades indicate a significant increase in students who are interested in going abroad (NAFSA, 2018), it appears differences by gender, racial and ethnic background, social class, field of study, GPA, income, and other factors continue to drive student participation (Engel, 2017). Thus, the purpose of this study is to take stock of the gap between study abroad intentions and participation in the recent decade at Grand Valley State University (GVSU), a mid-sized, four-year public liberal arts college in the U.S. Midwest.

Our analysis is unique insofar we examine full institutional population data gathered during four academic years between 2007 and 2017 and, in addition, a National Survey of Student Engagement (NSSE) survey data subset that distinguishes study abroad intentions and participation of the same GVSU population. We consider three main research questions. First, what demographic, academic, and socioeconomic factors are associated with student study abroad participation? Second, how are student’s intentions to study abroad reported in their first year associated with their later study abroad participation, accounting for demographic, academic, and socioeconomic factors? Third, how do students who are misaligned in their study abroad intentions and participation differ from those who are not?

The results from this study will be of interest to national policymakers, funding organizations of education abroad, senior administrators, study abroad professionals, faculty and higher education researchers, parents, and students.
Our findings can be used to inform interventions to remove obstacles to study abroad, facilitate the evolution of students’ study abroad intentions into participation, thereby increasing study abroad rates and promoting more equity, diversity, and inclusion of underrepresented groups.

1.1. Study Abroad Intent versus Participation

According to Institute of International Education data, study abroad has become increasingly popular in the past three decades. Still, in 2018-2019, only about 1.7 percent or 347,099 American students enrolled in U.S. colleges and universities participated in study abroad programs (IIE, 2021). This is far from the 2005 Lincoln Commission goal of one million students. One way to understand this shortfall in study abroad participants is through investigating study abroad intentions relative to participation. Many studies examine study abroad intentions rather than actual participation, overlooking the possible relationship between the two indicators (Heisel & Stableski, 2009). This means some frequently cited studies such as those by Salisbury et al. (2009, 2010, 2011), Stroud (2010), and Luo & Jamieson-Drake (2015) are inadequate to assess long-term participation trends as these studies assess students’ desires to study abroad rather than their eventual program participation.

Nonetheless, researchers have recently questioned the link between study abroad intentions and participation. For example, Pope and colleagues (2014) found that 55% of college-bound students indicated they are certain or fairly certain they will participate in study abroad, with another 26% indicating a strong desire to study abroad. Yet, fewer than 2% of college students study abroad. It is likely that factors such as financial constraints, employment demands, family obligations, and pressures to graduate contribute to a misalignment between study abroad intentions and participation (Marcum, 2001).

1.2. Factors Linked to Study Abroad Intentions and Participation

The propensity to study abroad is not distributed equally across students, which may be one driving force behind whether a student who intends to study abroad eventually enrolls in a program. Students’ intentions and participation behaviors are influenced by academic experiences, including participation in
programs like athletics or honors, as well as their field of study. Disparities are also likely linked to structural barriers including demographics such as gender, racial and ethnic background, and age as well as socioeconomic factors like first-generation status, receipt of merit-based aid, parents’ education, as well as family income.

1.2.1. Demographic Factors

According to prior work, study abroad is characterized by disparities related to gender, racial and ethnic background, academic year, and socioeconomic background (BaileyShea, 2009; Brux & Fry, 2010; Dessoff, 2006; Fischer, 2012; McHan, 2019, Lincoln Commission, 2005; Salisbury et al., 2009; Salisbury et al., 2010; Stallman et al., 2010; Stroud, 2010; Twombly et al., 2012).

Today, more than two thirds of study abroad students are women and this gender gap in study abroad has grown. Some researchers claim this “feminization” of study abroad is disproportionately popular among White female humanities majors due to parental income (Luo & Jamieson-Drake, 2015) or the traditional belief in the “grand tour” experience of wealthy young women (Gore, 2005). Others point out that study abroad participation, like college choice, is influenced by the intersection of sociocultural background, college involvement, institutional factors (BaileyShea, 2009), and gender-specific socialization (Salisbury et al., 2009). For example, gender may be a proxy for specific socialization trends that lead women to be more open-minded and positive about seeking new experiences abroad (Netz et al., 2021). According to Kim and Goldstein (2005), women hold more positive intercultural attitudes, and harbor less ethnocentric prejudice and apprehension toward intercultural communication. Moreover, when they study abroad, they often look for adventure (Schroth & McCormack, 2000), new experiences, and freedom (Sánchez et al., 2006), all of which are linked to individual growth (Pope et al., 2014).

Conversely, college-aged men are more interested in investing in experiences in their local college communities, and thus, are less likely to leave these social ties to study abroad relative to women (Fischer, 2012; Shirley, 2006). Race is also associated with study abroad participation. The predominance of
White students in study abroad programs is an ongoing topic of research. This might be partially explained by cost and financial obstacles (Kasravi, 2009; Salisbury et al., 2011; Hembroff & Rusz, 1993; Lopez-McGee et al., 2018; Stroud, 2010), peer influence (Peterson, 2003), and a lack of faculty or family support (Booker, 2001; Gaines, 2012; Lopez-McGee et al., 2018). Also, studies show minority students are more likely to worry about discrimination abroad, especially since other students often report negative stereotyping related to race (Carter, 1991; Kasravi, 2009; 2018; Van Der Meid, 2003).

1.2.2. Academic Factors

Some experts suggest younger students, who are of the more traditional college age (e.g., early twenties), are more likely to participate in personal growth-related activities in college than older students, including study abroad (Athavaley, 2008; Bauer & Liang, 2003; Kim & Goldstein, 2005; Newbold et al., 2010). Moreover, younger students often enjoy greater flexibility, which enables them to study abroad (Netz et al., 2021) whereas older students begin to focus on careers (Chao & Good, 2004; Compton et al., 2006). More specifically, older students are less likely to find personal growth in college activities that are not required, such as study abroad (Newbold et al., 2010).

In addition to honors program participation, which positively correlates with study abroad participation (Stroud, 2015), overall academic performance matters. Academic performance can create a “selection effect” for study abroad participation since most programs require a GPA of 2.5 or higher for participation (Lörz et al., 2016). Unsurprisingly, GPA is one of the strongest predictors for study abroad participation (BaileyShea, 2009; Kasravi, 2009; Miller, 2004). Residence may also link to a student’s study abroad participation. Relative to in-state students, students from out of state may be more tolerant of risk-taking in an unfamiliar environment and have greater financial resources due to higher tuition costs for many out-of-state students. In fact, BaileyShea (2009) and Stroud (2010) found university distance from home was positively correlated with study abroad participation.

Certain extracurriculars may be influential for study abroad participation. Time consuming activities like athletics, music or theater, and
student government are negatively tied to study abroad participation (Luo & Jamieson-Drake, 2015). A student’s field of study may impact study abroad participation. Students in male-dominated fields (e.g., STEM) are less likely to go abroad compared to students in the humanities, arts, and languages (BaileyShea, 2009; Dessoff, 2006; Luo & Jamieson-Drake, 2015, Pope et al., 2014). Curiously, STEM students show similar interest in study abroad as students in other majors (Salisbury et al., 2009). Lower participation among students in STEM fields may be indicative of less flexible organization of coursework, which is usually more sequenced and structured (Gonzalez et al., 2018; Lopez-McGee et al., 2018). This makes it more challenging to study abroad while still fulfilling degree requirements and graduating on time (Carlson et al., 1990; Stroud, 2010).

1.2.3. Socioeconomic Factors

First-generation status, parents’ education, family income, and merit-based aid are considered markers of socioeconomic status. Students in a higher socioeconomic class likely have parents who have completed a college degree, which often is linked to income and prestige. In addition, a growing body of research using Bourdieu’s conceptualizations (Bourdieu, 1984) has found that students who have college-educated parents and come from a higher income family more likely possess additional cultural and social capital. This enables better adjustment to a university environment as they are familiar with academic language, habits, reasoning, and standards (Simon & Ainsworth, 2012).

On the other hand, first-generation students are less likely to participate in high impact educational experiences like study abroad. Although cost can be one barrier for first-generation students’ study abroad participation, others include lack of academic family support, greater work and family responsibilities, as well as knowledge of study abroad processes, access to family networks with travel experience, or previous exposure to international issues and cultures (Lopez-McGee et al., 2018; Tolan & McCullers, 2018). Past research shows that children with college-educated parents tend to benefit from academic parental support and encouragement. Parents may influence everything from a student’s field of study to how they spend their time out of the classroom, including study abroad (Boudarbat & Montmarquette, 2009; Pope et al., 2014; Salisbury et al., 2010). In fact, Miller (2008) found participation in
special college programs such as study abroad is much higher among students whose parents have earned a college degree (Pope et al., 2014; Salisbury et al., 2010).

Study abroad may also be a form of cultural distinction that allows advantaged students to maintain their dominant position within the social structure (Bourdieu, 1984). More specifically, study abroad may serve as a signal of one's privilege and provide an investment in informational capital that promotes the reproduction of social class (Ballatore & Ferede, 2013; DiPietro, 2020; Munk, 2009). Similarly, as participation in university education grows, acquiring international credentials (especially at prestigious institutions) helps students of higher socioeconomic status differentiate themselves from others.

Study abroad participation can also be stifled for students from disadvantaged backgrounds who are less likely to receive financial support from their parents for such experiences (DiPietro, 2020). Thus, merit-based aid is another critical predictor of study abroad participation, enabling students from less advantaged backgrounds to study abroad (BaileyShea, 2009; Booker, 2001; Chieffo, 2000; Desoff, 2006; Miller, 2004; Salisbury et al., 2009). Relatedly, research has established a link between student financial situation and study abroad participation, such that students with fewer socioeconomic resources are less likely to study abroad than peers with more financial stability (Brux & Fry, 2010; Jackson, 2005; Otero, 2008; Salisbury et al., 2011; Sánchez et al., 2006; Lörz, et al., 2016; Twombly et al., 2012).

2. Hypotheses
From the discussion of the literature about factors that influence study abroad participation in the U.S., we derive the following hypotheses.

**Hypothesis 1:** For both the full institutional student population dataset and the NSSE subset derived from the full GVSU population data, participation in a study abroad program will be associated with specific characteristics such that women, White students, younger students, Honors students, students with higher GPAs, merit-based aid recipients, students who have at least one parent with a college degree, and students with middle or higher incomes will be more likely to study abroad. We
also expect reporting study abroad intentions in the first year of study will be a strong predictor of participation. On the other hand, students who are from in-state, athletes, have a STEM major, are first-generation, have parents with less than a college education, or report a lower income will be less likely to go abroad (Table 1, Model 1 and 2).

Demographics, student characteristics, and socioeconomic factors likely predict not only study abroad participation but also intentions to study abroad. Thus, our second prediction focuses on how adding intent to study abroad in one’s first year affects those above using the NSSE data subset.

**Hypothesis 2:** We expect that predictors of study abroad intentions will, for many students, mirror those of their eventual study abroad participation. Reporting no/unclear intentions about studying abroad will be negatively associated with participation in a program (Table 2, Model 2). Students who do not report intentions to study abroad will be less likely to participate in study abroad, and include groups of students such as those who are from in-state, athletes, STEM majors, first-generation students, have parents with less than a college education, or report a lower income, and vice versa (Table 2, Model 2).

Although intentions are a crucial predictor of study abroad behaviors, the literature reports that students’ study abroad intentions often do not align with their behaviors (Netz et al., 2021) but it lacks empirical validation how this misalignment is related to demographics, student characteristics, and socioeconomic factors, and how it could be addressed. This leads to our third prediction focusing on whether students who intend to study abroad actualize their plans based on the NSSE survey data subset derived from the full GVSU population data:

**Hypothesis 3:** Compared to students who intend to study abroad and do not matriculate into a program abroad (misalignment), we expect that students whose intentions to study abroad and program entrance align will resemble study abroad students from the full population data, as predicted in Hypothesis 2 (see Table 3, Model 2).
Finally, we add a fourth hypothesis focused on students who do not report intentions to study abroad, drawing on the NSSE subset:

**Hypothesis 4:** Relative to students who experience alignment in their intentions to not study abroad and not enter a program, we predict students who do not intend to enter an abroad program but enter a study abroad program (misalignment) will be more likely to have characteristics that are favorable to study abroad (women, out-of-state, non-STEM fields of study, non-first-generation, college-educated parents with middle/high household incomes). They may also display characteristics that indicate they were able to overcome obstacles to go abroad through like merit-based aid, above average GPA, and honors college membership (see Table 3, Model 3).

Our predictions and subsequent analyses add to the current literature in several ways. First, we explore what demographic, academic, and socioeconomic factors might predict participation in study abroad programs and how this aligns with the literature using full institutional student population data from GVSU. Second, using the NSSE subset, we investigate whether students’ intentions to study abroad predicts their eventual participation in an abroad program and how this corresponds to above factors. Finally, we compare what predicts (mis)alignment between study abroad intentions in the first year and later (non)participation in a study abroad program to better understand reasons for alignment (or lack thereof) between participation and intentions.

**3. Data and Methods**

This study uses full student population data at Grand Valley State University (GVSU) across four academic years (2007/08, 2010/11, 2013/14, and 2016/17). Prior literature has often focused on either small liberal arts colleges or large research universities (Pope et al., 2014). In contrast, GVSU represents a well-endowed regional liberal arts college in the U.S. Midwest with an enrollment of about 25,000 students. This is an often-overlooked university type with substantial involvement in study abroad activities often above national averages, about which information is scarce (IIE, 2020).
In addition to information about study abroad program participation, the dataset contains characteristics measuring demographic, academic, and socioeconomic factors. The dataset includes $n = 99,130$ original student records. For this analysis, international students were excluded ($n = 1,752$). An additional $n = 3$ students under age 16 were also omitted. Therefore, across all four academic years, the full population data analyzed included 97,375 students: 2,598 study abroad students and 94,777 non-study abroad students. For assessing our intention and participation hypotheses, we used a subset of students from GVSU during above four academic years who responded to the National Survey of Student Engagement (NSSE) questions ($N = 5,646$), of whom 245 students studied abroad.

3.1. Dependent Variable (All)
- Study abroad participation. Study abroad participation was a dichotomous indicator of whether the student participated in a study abroad program ($1 = \text{Yes}$, $0 = \text{No}$).

3.2. Dependent Variables (NSSE Data)
- Study abroad intentions. Study abroad intentions were measured using an NSSE indicator of first year study abroad plans. The original categories of the variable include plan to study abroad (reference), have not decided, do not plan to study abroad, and already studied abroad. Given the unlikely event that a student has already studied abroad by their first year ($N = 73$), we recoded the category “already studied abroad” as missing (McHan, 2019).

3.3. Demographic Factors (All)
- Women. Women was a dichotomous indicator measuring whether the student’s gender was described as “woman” ($1 = \text{Yes}$) or not ($0 = \text{No}$).
- Race. Race was originally measured by an eight-category variable. Due to a small number of non-White students at GVSU, we recoded the variable into four categories: White (coded 1); (reference), Black (coded 2), Hispanic (coded 3), and Other (coded 4).
- Age. Student’s age was measured using a continuous variable ranging from 16 to 76.
3.4. Academic Factors (All)

- **Honors.** Honors was a measure that accounted for whether the student was a member of the Honors College at GVSU (1 = Yes, 0 = No).

- **End of semester GPA.** GPA was a continuous measure of the student’s end of semester GPA (ranging from 0.0 to 4.0).

- **Athlete.** Athlete was a dichotomous indicator that accounted for whether the student participated in varsity athletics at GVSU (1 = Yes, 0 = No).

- **STEM field of study.** Field of study originally examined all majors at GVSU. We dichotomized this measure to capture students in a STEM field (1 = Yes) or not (0 = No).

3.5. Socioeconomic Factors (All)

- **First-generation.** First-generation examined whether the student was the first one in their family to attend college (1 = Yes, 0 = No).

- **Merit-based aid.** This is an indicator of whether the student received any merit-based aid during an academic year (1 = Yes, 0 = No).

- **Parent education.** Parent education was a categorical indicator of whether the student’s parents were college educated. We coded this variable to include three categories: both parents have high school education or less (coded 1), one parent has a college education (coded 2), and both parents have a college education (coded 3); (reference).

- **Household income.** Household income was a continuous measure that assessed parent’s income to determine student’s reported FAFSA eligibility. We recoded this variable into a three-categories: 0-$40,000 (coded 1), $40,001-$140,000 (coded 2), and $140,001+ (coded 3); (reference).

4. Analytical Strategy

To investigate our hypotheses, we first describe in Table (1) the full student population data using descriptive statistics for the students’ first wave of observation, distinguishing significant differences between students who go
abroad (N=2,598) relative to those who do not (N=94,777). We also present the descriptives for a NSSE data subset derived from above full population. The NSSE subset (N=5,646) allows us to investigate the alignment between study abroad intentions in one's first year with actual study abroad participation upon reaching their final year of study.

Second, employing odds ratios from logistic regression, Model 1 shows demographic, academic, socioeconomic factors, and intentions that predict study abroad participation for the full student population data (N = 97,375). Model 2 investigates the predictors of study abroad participation in the NSSE sample, accounting for reported intentions to study abroad in the first year (N = 5,646).

Third, we use the GVSU NSSE subset to examine whether students actualize their study abroad intentions in Table (3). For these analyses, we combine NSSE responses “has not decided” and “does not plan to” study abroad into one category of “does not plan to study abroad.” In Model 1, we examine students who say they intend to study abroad in their first year (N=2,557) relative to those who do not (3,089), paying attention to key demographic, academic, and socioeconomic factors that predict intending to study abroad versus not. In Model 2, we compare a first type of misaligned students who intend to study abroad and do not enter a program (N = 2,382) versus positively aligned students who intend to study abroad and do matriculate into a program (N = 195). Then, in Model 3, we compare negatively aligned students who do not plan to study abroad and do not participate (N = 3,039) relative to a second misaligned category of students who do not intend to study abroad in their first year but eventually enter a program (N = 50).

All regressions use covariates from the student’s first observed record in the dataset. Missing data range from 0.02% on age to 26.1% on income. All missing data points were imputed using multiple imputation in Stata, which infers missing values based on other variables included in the models. We imputed missing data using ten replicates.
5. Results

Table (1) on the following page shows a descriptive comparison of key variables for students who ever study abroad and those who do not study abroad for the full student population data and the NSSE data subset. Significant differences between study abroad and non-study abroad students are marked. We also note differences between the full population and NSSE subset, finding general alignment between these two sets of respondents.

More women in the full student population data study abroad than men. Most students at GVSU are White. The only significant difference that emerges by race is Black students are less likely to study abroad relative to White students. On average, study abroad students are younger (20.8 years) compared to non-study abroad students (22.6 years). Study abroad students are slightly less likely to be in-state students in the full student population. Regarding academic factors, study abroad students have higher GPAs (3.37 versus 3.15) and are three times as likely to be honors students relative to those who do not study abroad (14.5% relative to 5.2%). Students who do not study abroad are more likely to be athletes (2.4% versus 0.58%) and report a STEM major at two-fifths relative to a little over one quarter of study abroad students. Finally, we examine students’ socioeconomic circumstances. Study abroad students are less likely to be first-generation (about 31% versus 41% of non-study abroad students) but more likely to have merit-based aid with two-thirds reporting aid relative to less than two-fifths among non-study abroad students. Students are more likely to study abroad when both parents are college educated (47.2% versus 40.2% for non-study abroad students). Finally, income matters such that study abroad students are less likely to belong in the lowest income tier and more likely to belong in the highest income tier relative to non-study abroad students.
### Table 1: Means (standard errors) and Proportions for GVSU Full Population and NSSE Survey Subset Data

<table>
<thead>
<tr>
<th>NSSE Study Abroad Plans</th>
<th>Study Abroad</th>
<th>Non-Study Abroad</th>
<th>Study Abroad</th>
<th>Non-Study Abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan to Study Abroad</td>
<td>--</td>
<td>--</td>
<td>79.6</td>
<td>43.7</td>
</tr>
<tr>
<td>Have Not Decided</td>
<td>--</td>
<td>--</td>
<td>14.3</td>
<td>32.0</td>
</tr>
<tr>
<td>Do Not Plan to Study Abroad</td>
<td>--</td>
<td>--</td>
<td>6.1</td>
<td>24.3</td>
</tr>
</tbody>
</table>

### Demographic Factors

<table>
<thead>
<tr>
<th>Women</th>
<th>76.7 (60.1)</th>
<th>83.3</th>
<th>28.6 (33.3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>86.1</td>
<td>85.7</td>
<td>90.9</td>
</tr>
<tr>
<td>African American/Black</td>
<td>3.9</td>
<td>5.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>4.7</td>
<td>4.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Other Race</td>
<td>5.2</td>
<td>5.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Age</td>
<td>20.79 (.06)</td>
<td>22.64 (.02)</td>
<td>19.66 (.05)</td>
</tr>
</tbody>
</table>

### Academic Factors

| Honors                       | 14.5 | 5.2  | 24.5 | 12.2 |
| End of Semester GPA          | 3.37 (.01) | 3.15 (.002) | 3.47 (.02) | 3.18 (.01) |
| Athlete                      | 0.58 | 2.4   | 1.2  | 2.5  |
| Stem Major                   | 28.0 | 37.8  | 26.5 | 46.9 |

### Socioeconomic Factors

| First-Generation             | 31.3 | 40.6  | 27.4 | 38.9 |
| Merit-based Aid              | 63.9 | 39.1  | 75.5 | 61.2 |
| Parent Education             |      |       |      |      |
| Both High School or Less     | 23.9 | 30.0  | 19.3 | 25.5 |
| One College Educated         | 28.8 | 29.8  | 31.2 | 30.8 |
| Both College Educated        | 47.2 | 40.2  | 49.5 | 43.7 |
| Income                       |      |       |      |      |
| 0-40,000K                    | 27.9 | 33.6  | 19.8 | 21.5 |
| 40,001K-140,000K             | 53.7 | 52.6  | 61.5 | 61  |
| 140,001K+                    | 18.4 | 13.8  | 18.7 | 17.1 |

N and relative %

|                | 2,598 (2.74%) | 94,777 (97.24%) | 245 (4.34%) | 5,401 (95.66%) |

* Covariates are taken from first wave of observation if student is observed multiple times

Note: significant differences at p < .10 between "Full Population" and "NSSE Subset" for study abroad and non-study abroad students are in bold

+ p < .10; * p < .05; ** p < .01; *** p < .001; due to small sample size, p < .10 to denote significant results
Although the NSSE subset (N=5,646) has larger share of study abroad students (N=4.34%) compared to the GVSU population (N=2.74%), the general trends in the NSSE subset mirror those of the entire GVSU population. NSSE study abroad students are twice as likely to say they intend to study abroad relative to non-study abroad students. Study abroad students are also less likely to say they have not decided their study abroad plans or do not intend to study abroad (14.3% and 6.1% for study abroad students relative to 32.0% and 24.3% for non-study abroad students). Significantly more women study abroad (83.3%) than men (28.6%) in the NSSE subset. Several significant differences emerge by race – White students are more like to go abroad while Black and Hispanics are less likely to go abroad. Different than the full student population, in both NSSE subsets, students are overall younger, although study abroad students are slightly older (19.7 years) compared to non-study abroad students (19.4 years on average). In the NSSE subset, study abroad students are more likely to have higher GPAs (3.47 versus 3.18), are twice as likely honors students, and less likely to be STEM majors (26.5%) compared to non-study abroad NSSE students (46.9%). As for socioeconomics, in the NSSE subset, study abroad students are more likely to receive merit-based aid (75.5% versus 61.2%), are less likely to identify as first-generation (27.4% versus 38.9%) or have two parents with less than a high school degree (19.3% versus 21.5%).

The full population data and NSSE subset differ in a few ways (significant differences bolded). First, the NSSE subset contains more women and respondents are younger, on average. The NSSE subset also includes significantly fewer Black and Hispanic students, but more students who identify as another race/ethnicity. Additionally, students in the NSSE subset are less likely to be from in-state. The NSSE subset participants are also more likely to be honors students, report higher GPAs, have a STEM major, are more likely to receive merit-based aid, and are less likely to be first-generation students. The NSSE subset members are more likely to have one or both parents with a college education but are less likely to report their parents only have a high school degree, relative to the full student population data. Finally, the NSSE subset members are also less likely to belong in the lowest income tier, while they are significantly more likely to be in the middle- or top-income group, relative to the full student population data.

Table (2) on the following page uses GVSU’s full population data (Model 1) and the NSSE subset (Model 2) combining all study and non-study abroad
students together to examine predictors of study abroad participation. As the literature predicts, for the full population data women have 89% greater odds of studying abroad relative to men. Interestingly, Hispanic students’ odds of studying abroad are 22% higher than their White counterparts. On the other hand, each additional year of age is associated with a 9% reduction in study abroad participation in the full student population data. As for academic factors, honors students (55%) as well as students with above average end of semester GPAs (68%) have greater odds of study abroad program participation relative to non-honors students and students who have a below average GPA. Involvement in athletics or reporting a STEM major reduces the odds of study abroad participation by 81% and 46%, respectively. First-generation status reduces odds of study abroad by 23%, but merit-based aid increases the odds of participation by over 100%. And, relative to those at a highest income tier, those in the middle-income tier have 15% lower odds of study abroad participation.

<table>
<thead>
<tr>
<th><strong>Table (2): Odds Ratios and Standard Errors from Logistic Regression of Study Abroad Participation on Key Predictors using GVSU Full Population and NSSE Survey Subset Data</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NSSE Plans</strong></td>
</tr>
<tr>
<td>Plan to study abroad (ref)</td>
</tr>
<tr>
<td>Have not decided</td>
</tr>
<tr>
<td>Do not plan to study abroad</td>
</tr>
<tr>
<td><strong>Demographic Factors</strong></td>
</tr>
<tr>
<td>Women</td>
</tr>
<tr>
<td><strong>Race</strong></td>
</tr>
<tr>
<td>White (ref)</td>
</tr>
<tr>
<td>African American/Black</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
</tr>
<tr>
<td>Other Race</td>
</tr>
<tr>
<td>Nonwhite</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>In State Student</td>
</tr>
<tr>
<td><strong>Academic Factors</strong></td>
</tr>
<tr>
<td>Honors</td>
</tr>
<tr>
<td>End of Semester GPA</td>
</tr>
<tr>
<td>Athlete</td>
</tr>
<tr>
<td>Stem Major</td>
</tr>
<tr>
<td><strong>Socioeconomic Factors</strong></td>
</tr>
<tr>
<td>First-Generation</td>
</tr>
<tr>
<td>Merit-based Aid</td>
</tr>
<tr>
<td>Parent Education</td>
</tr>
<tr>
<td>Both High School or Less</td>
</tr>
<tr>
<td>One College Educated</td>
</tr>
<tr>
<td>Income Range</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>0-40,000K</td>
</tr>
<tr>
<td>40,001K-140,000K</td>
</tr>
<tr>
<td>140,001K+ (ref)</td>
</tr>
</tbody>
</table>

Constant: 0.001 (.00) ***

**N (Full Population)**: 97375

These findings lend support for Hypothesis 1. Specifically, women, younger students, honors students, students reporting higher GPAs, and merit-based aid receipt increase participation odds. Moreover, first-generation status, involvement in athletics, or being a STEM major reduces the odds of study abroad participation.

The second column in Table (2, Model 2) uses the NSSE subset, reporting odds ratios from the logistic regression of student’s study abroad participation on NSSE study abroad intentions as well as all other covariates. Study abroad plans during the first-year matter when considering later participation. Students who report they intend to study abroad are more likely to eventually participate in a program relative to students who have not decided or do not intend to study abroad (72% and 85% lower odds, respectively). As in the full student population data (Model 1), women have 48% higher odds of participating in an abroad program. In contrast, Hispanic students are less likely to participate in a study abroad program (85% lower odds) and each additional year of age increases participation odds (15% greater odds per each year of age). As in the full student population data, GPA is linked to greater odds of participation in an abroad program while a STEM major reduces these odds. Finally, as in the full student population data, merit-based aid recipients are more likely to study abroad (32% higher odds).

The findings from the NSSE subset (Model 2) mirrors those in the full student population data (Model 1) and lend further support for Hypothesis 1.
Women, honors students, those with higher GPAs, and merit-based aid recipients have greater participation odds. Moreover, as expected, a STEM major reduces the odds of study abroad participation. And the NSSE subset is less diverse and younger than the full student population data. The analyses support Hypothesis 1; even when controlling for other covariates, study abroad intentions are strong predictors of participation.

Table (3) below shows the odds ratios from logistic regressions from NSSE survey data exploring student intentions relative to study abroad participation. Model 1 shows predictors of students reporting they intend to study abroad relative to not intending to study abroad (N = 5,646). Eventual study abroad participation remains a strong predictor of one's intentions to study abroad in their first year (347% greater odds), which mirrors findings from Table (2). Women, African American/Black, and Hispanic students all report higher odds of intending to study abroad (82%, 71%, and 82% higher odds, respectively). Honors students are also more likely to intend to study abroad, at 101% higher odds. On the other hand, in state students are less likely to intend to study abroad (28% lower odds). Lower GPA at the end of the semester is also linked to negative odds of intending to study abroad. Athletes, STEM majors, and first-generation students also report lower odds of intending to go abroad (51%, 31%, and 25% lower odds, respectively). These results offer some support for Hypothesis 3.

<table>
<thead>
<tr>
<th>NSSE Plans</th>
<th>Model 1: Intends to Study Abroad vs. Does Not Intend</th>
<th>Model 2: Plans to Study Abroad and Does Not vs. Plans to Study Abroad</th>
<th>Model 3: Does not Plan to Study Abroad and Goes vs. Does not Plan to Study Abroad and Does Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan to study abroad (ref)</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Have not decided</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Do not plan to study abroad</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ever Abroad</td>
<td>4.47 (.74) ***</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Demographic Factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>1.82 (.12) ***</td>
<td>0.81 (.16)</td>
<td>3.17 (1.3) **</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (ref)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>1.71 (.24) ***</td>
<td>1.60 (.79)</td>
<td>--</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1.82 (.27) ***</td>
<td>6.57 (6.0)</td>
<td>*</td>
</tr>
</tbody>
</table>
More specifically, characteristics that tend to predict study abroad participation, like gender and academics, predict study abroad intentions, while factors disfavorable to study abroad participation—like being from in-state, identifying as first-generation, reporting a STEM major, or having a lower GPA—predict lower odds of intending to go abroad. However, some findings were in contrast to Hypothesis 3. In particular, relative to White students, African American/Black and Hispanic students both report higher odds of intending to study abroad.

Model 2 examines students who report that they plan to study abroad, focusing on those who do not end up studying abroad (misaligned) versus those
who go abroad (aligned), \((N = 2,557)\). Even when they report intentions to study abroad, Hispanic students report 557% higher odds of not matriculating into a program. Moreover, STEM majors who plan to study abroad also report higher odds of not entering a study abroad program (116% greater odds). Each additional year of age and higher end of semester GPAs reduce the odds of not actualizing study abroad participation when a student reports intentions to study abroad. Finally, receiving merit-based aid reduces the likelihood of matriculating into a study abroad program among those who plan to study abroad (35% lower odds). These results reveal that some factors traditionally associated with study abroad participation (e.g., GPA and merit-based aid) facilitate study abroad participation amongst students who plan to study abroad. Yet, the results also suggest that structural barriers may exist for some groups of students in their pursuit of study abroad participation. For instance, Hispanic students, who reported higher odds of intending to study abroad relative to their White counterparts in Table (3, Model 1) are less likely to actualize their study abroad plans. Moreover, although students with STEM majors have lower odds of intending to study abroad (Table 3, Model 1), among those who intend to study abroad (Table 3, Model 2), their odds of matriculating into a program are lower than non-STEM students.

Model 3 explores students who report no intentions to study abroad, disaggregating students who do not participate (aligned) relative to those who eventually end up enrolling in study abroad regardless of their original lack of intent (misaligned), \((N = 3,089)\). Identifying as a woman, being an Honors student, as well as having a higher end of semester GPA all increase the odds of participating in a study abroad program after reporting no intentions of study abroad participation. Conversely, having a STEM major reduces the odds of eventually studying abroad after reporting no intentions to matriculate into a program (65% lower odds). These results yield several interesting conclusions. First, factors traditionally associated with study abroad participation, such as identifying as a woman, as well as having a high GPA or being an Honors student seemingly “push” students to study abroad who did not report intentions of studying abroad in their first year. Conversely, although STEM majors are less likely to intend to go abroad, they still have lower odds of matriculating into a program when they report no intentions of studying abroad, perhaps suggesting rigid study structures and factors preventing STEM majors to change their intentions and consider study abroad.
6. Discussion

Study abroad programs are an important learning tool for students in the United States. Thus, in 2005, the Lincoln Commission promoted the goal of increasing study abroad participation to one million students within a decade. Although study abroad participation has increased in the USA between 2007 and 2017 from 1.46% to 1.65% of all students, this goal has been far from met with only 347,099 recorded study abroad participants in 2018-2019 (IIE, 2021). This trend is echoed at GVSU where there was an increase from 1.70% in 2007 to 2.84% of all students participating in a study abroad program in 2017. According to NSSE data from GVSU, out of 5,464 students interviewed, 59.2% reported they intend to study abroad, yet intentions for the majority did not evolve into action with only 4.5% of those students following through on their plans to participate in study abroad. This leads to the central question of what factors shape student’s study abroad participation.

Our study’s first hypothesis considers what demographic, academic, and socioeconomic factors predict study abroad behavior in the full GVSU student population data and — similar— in the NSSE subset (Table 2). In support of our predictions derived from the literature, women, honors students, students with higher GPAs, and merit-based aid recipients are more likely to study abroad. On the other hand, young students, athletes, STEM majors, and first-generation students have lower odds of studying abroad. Our findings for gender fit with myriad studies that suggest women are more likely to study abroad relative to men (BaileyShea, 2009; Luo & Jamieson-Drake, 2015; Salisbury, 2009). Students’ academic record is often a crucial predictor of study abroad such that high performing students (e.g., honors or students with high GPAs) are more likely to study abroad relative to their peers (BaileyShea, 2009; Kasravi, 2009; Miller, 2004). Yet, some academic activities such as a STEM major or athletics can create obstacles to entering study abroad programs for students. First-generation students often struggle with accessing high impact educational experiences like study abroad (Lopez-McGee et al., 2018; Tolan & McCullers, 2018). Although first-generation status reduces likelihood of study abroad participation, our results reveal merit-based aid may remove barriers for students who wish to study abroad but may not be able to afford it without assistance. Moreover, in addition to demographic, academic, and socioeconomic factors discussed in the literature, the NSSE subset findings illustrate that students’ study abroad intentions are strong predictors of whether they eventually go on a study abroad program.
Contrary to our predictions in Hypothesis 2, we find Hispanic students at GVSU have higher odds of study abroad participation in the full population while younger students have lower odds of participation. Most literature that examines the association between race and study abroad participation focuses on non-white students as a monolithic category, or focus exclusively on Black students (Carter, 1991; Gaines, 2003; Hembroff & Rusz, 1993; Kasravi, 2009; Lopez-McGee et al., 2018). Future research should investigate more fully how the participation of Hispanic students has evolved in the USA relative to their peers of other race/ethnic backgrounds. As for age, future research will likely benefit from disentangling how student’s age might be dependent on other factors like their academic standing, major, or program, as well as personal life constraints.

This study also considers the link between students’ study abroad intentions in their first year and their study abroad behaviors. Students who traditionally are strongly represented in study abroad programs—such as women and honors students—are likely to plan to study abroad in their first year, particularly if these characteristics and conditions intersect, as reported in the literature (BaileyShea, 2009; Luo & Jamieson-Drake, 2015; Stroud, 2015). Our findings support these conclusions (Table 3, Model 1). Our results also indicate that Hispanic and African American students at GVSU enter college with greater study abroad intentions than their White counterparts. On the other hand, there are many students entering college without any intention to study abroad who also will never participate in a study abroad program. In the NSSE subset, they represent 55.6% of students. We hypothesize these students would resemble those groups with lower odds to plan to participate in study abroad programs. Our findings support those expectations (Table 3, Model 1). In-state students, athletes, STEM majors, first-generation students, and students with lower GPAs are less likely to report intentions to study abroad at the outset of their college career. Again, the literature provides explanations pointing out that these students may either lack interest or information about going abroad or believe it is not worth overcoming potential social and academic obstacles, including scheduling barriers as well as socioeconomics and personal reasons. All those factors may diminish their intentions for study abroad participation.

Some students also experience misalignment between study abroad intentions and behaviors (Hypothesis 3). There are some students who plan to study abroad, but never enter a study abroad program (Table 3, Model 2),
representing 43.2% of all surveyed NSSE students at GVSU. Our results reveal that Hispanic students and STEM majors are more likely to say they plan to study abroad but never enter a program, while students who are older, have lower GPAs, and do not receive merit-based aid are less likely to experience this misalignment between intentions and participation. Our findings lend support to the idea that students belonging to the group who entertain study abroad expectations when entering college but then do not follow through may confront demographic, academic, socioeconomic, and personal challenges convincing them to drop their plans during their studies. For instance, Hispanic students report a greater likelihood of intending to study abroad in their first year (Table 3, Model 1), yet have lower odds of matriculating into a program (Table 3, Model 2), suggesting the presence of unmeasured barriers. To state differently, Hispanic students’ lower odds of studying abroad in the NSSE sample are not due to a lack of exposure to the idea of study abroad. In fact, Hispanic students (and African American students) express greater interest in study abroad than their White counterparts. Yet, for many, study abroad intentions are not actualized into participation. This raises many questions about the causes of this misalignment, the barriers that discourage those groups from studying abroad, and how to address those issues. For example, some students may face a lack of familial and economic support (Kasravi, 2018; Netz et al., 2021; Pope, 2014), or have concerns about harassment, discrimination, or other risks that could occur in a study abroad program (Carter, 1991; Kasravi, 2009; Van Der Meid, 2003). All this remains to be explored in future research.

Another group that deserves attention are STEM majors. Although they report lower odds of planning to study abroad in their first year (Table 3, Model 1), even if they report intentions to study abroad, they are less likely to go abroad (Table 3, Model 2). While STEM majors might be aware of program/timing constraints upon entering college that may hinder their study abroad participation, they may still aspire to enter a program but face structural barriers along the way and resign not to go abroad. Interestingly, older students, students with merit-based aid and higher GPAs are less likely to belong to the misaligned group planning to go abroad, suggesting the existence of demographic, academic, and socioeconomic resources that may eventually help them to achieve their first-year study abroad intentions (Table 3, Model 2).

Finally, an almost negligible group, less than 1 percent of NSSE respondents at GVSU, do not plan to study abroad, but eventually enter a study
abroad program (Table 3, Model 3). In Hypothesis 4, we predicted that students experiencing such misalignment in intentions and participation are originally disinclined to go abroad as they face socioeconomic barriers, come from low-income households, do not receive sufficient financial aid, lack information, perceive disadvantages to study abroad, or buy into negative opinions about study abroad (Li et al., 2013). However, when incentives are provided through academic advising or peer influence, these students may be able to overcome existing barriers and eventually matriculate into a study abroad program.

From the literature, we know that personal college experience, academic achievements, incentives, and personal growth motives may change attitudes and prospects to consider going abroad (Naffziger et al., 2010). Thus, even though these students enter university not planning to go abroad, they alter their college plans to study abroad because of institutional incentives, peer influence, familial support, and newly perceived opportunities (Lopez-McGee et al., 2018; Pérez-Juez & Eisenberg, 2018). This applies particularly to students with characteristics like identifying as a woman, an honors student, as well as reporting a higher GPA (Table 3, Model 3).

Again, STEM majors are an important group of interest. They report lower odds of intending to study abroad at the outset of their college career (Table 3, Model 1). Moreover, STEM majors have lower odds of matriculating into a study abroad program, even if they have intentions to do so (Table 3, Model 3). Even when they express intentions to study abroad, they may not be able to find solutions to these barriers (Table 3, Model 2). STEM majors often require structured sequences of coursework, including summer courses or research (Gonzalez et al., 2018; Lopez-McGee et al., 2018). Thus, even study abroad options that are shorter in duration may remain incompatible with STEM majors’ schedules. In sum, these findings reveal that several types of barriers exist when students consider whether they will study abroad. Socioeconomic barriers (e.g., finances and other types of support) may require different solutions than academic barriers (e.g., degree or course-related obstacles in balancing schedules, timing of major and extracurriculars) when promoting study abroad on university campuses (Leask & Green, 2021).
6.1. Limitations

Despite the contributions of this study, there are several limitations. First, our empirical findings refer to a single institution, so they are not representative or generalizable to the entire population of students in the United States. Nevertheless, our work can be considered a case study that sheds light on alignment between study abroad intentions and participation in the specific context of GVSU. Future studies should replicate such work with NSSE data at other institutions (e.g., smaller, larger, private, and public) in other regions of the United States. Third, our NSSE subset included two types of misalignment between intent and study abroad participation, either plan but not go ($N = 2,362$), (Table 3, Model 2) or no plan but eventually participate in a program ($N = 50$), (Table 3, Model 3). Future quantitative, qualitative, or mixed methods studies should further disaggregate and research the factors that influence a student's intent and participation abroad. Finally, additional individual-level information would be useful to better understand students’ study abroad intentions and behaviors. For example, it would be useful to know more about the effect of students’ religion (Barclay-Hamir & Gozik 2018), language proficiency (Jackson, 2018), extracurriculars (Gozik & Oguro, 2021; Lucas, 2018) as well as aspirational, motivational and personality factors (Li et al., 2013; Lörz et al., 2016; Luo & Jamieson-Drake, 2015). As Lesjak et al. (2015: 3) wrote “despite conceptualizing (e.g., Daly, 2011) and identifying personal characteristics as key factors in students’ mobility decisions, few studies offer empirical evidence about the link between students’ personal characteristics and their mobility motives.” For that reason, it makes sense to analyze quantitative data in combination with qualitative interviews to fully understand the intersection of personal motives with social characteristics and their respective influences on the trajectory of study abroad participation. Finally, another important finding resulting from our NSSE analysis is that Hispanic and African American students have greater odds to plan to go abroad, but eventually abstain (Table 3). Thus, some minorities face significant barriers that prevent them from going abroad relative to other student groups (McHan, 2019).

7. Conclusion

Study abroad participation at GVSU and in the United States has increased over the last decade. However, this increase does not conform with the Lincoln Commission’s goal of one million student participants. We find that the demographic, academic, and socioeconomic study abroad disparities often
mentioned in the literature persist. In addition, using NSSE data from the GVSU population, we illustrate a gap between study abroad intentions and participation (Barclay Hamir & Gozik, 2018; Tolan & McCullers, 2018), which helps to explain the comparative low interest in study abroad in the U.S., ranking only #15 globally in 2020 (IIE, 2021). Our detailed analysis of the intention-participation misalignment reveals demographic, academic, and socioeconomic challenges faced by students who wish to study abroad. The larger number of misaligned students of the first type represents first year students who plan to study abroad, but do not follow through with their intentions later during their academic career. This compares with an exceedingly small second type of misaligned students who do not plan to go abroad at the beginning of their college career but eventually will go abroad.

Therefore, we distinguish two strategies to cope with this misalignment. First, universities should identify and then work to remove barriers and challenges that prevent specific groups as identified, for example in this study, so that more students can align their intentions with actual study abroad participation. This could occur through offering additional support to students through early advising on study abroad opportunities as well as ensuring financial support, such as funding for students with economic obstacles hindering study abroad participation (Luo & Jamieson-Drake, 2015; Petzold & Moog, 2018; Whatley, 2019). Second, universities may consider increasing academic incentives when possible. This could include promoting and funding popular short-term faculty-led or university-sponsored programs and partnerships with universities abroad (Kasravi, 2009). This may ease access to and enrollment in study abroad programs or creation of new programs compatible with curricula, such as in STEM fields with rigid requirements (Gonzalez et al., 2018). Further analysis of comprehensive and comparative longitudinal institutional data at local and regional levels in combination with surveys, like the NSSE subset, and additional qualitative instruments, will help to uncover study abroad participation gaps at the micro- and meso-level. This could provide university administrations and other stakeholders an understanding not only of which groups need better inclusion policies but also how underrepresentation in study abroad can be remedied in a more targeted and customized way (Barclay Hamir & Gozik, 2018; Van Mol et al., 2021).
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Author Biography

**Hermann Kurthen** (June 10th, 1952 - October 11th, 2023) was a Professor of Sociology at Grand Valley State University in Michigan. He previously taught at Stony Brook University in New York, the University of North Carolina at Chapel Hill, and Freie Universität Berlin in Germany. His research interests spanned transatlantic relations, comparative migration and minority relations, ethnocentrism, classroom interaction, transnational, hybrid online teaching, academic exchange, and study abroad. He is survived by his wife, Professor Kay Losey, and daughter, Angelika.

**Anna Hammersmith** is an Associate Professor of Sociology at Grand Valley State University. She earned her PhD in Sociology at Bowling Green State University in 2018. Her primary research interests focus on intergenerational relationships, late-life relationship formation and dissolution, family caregiving, health and well-being, and quantitative methodologies although she also has expanded her scholarship to examine high impact educational practices, like study abroad.