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# The Positive Effects of Study Abroad on Education

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## Methodology

For my study, I focused on comparing Western Michigan University students, those that studied abroad and those that did not. The hope being to find a correlation, whether positive or negative, between study abroad and their education.

## **Research Design**

The research I conducted is deductive, meaning I started with a theory and built onto it using the data I collected. Consequently, my study approach is confirmatory rather than exploratory. My study uses both qualitative and quantitative data making it mixed methods methodology.

I used a descriptive research strategy. I did not have any control over the variables and could only analyze the already existing relationships between them. Like I said previously, the data collected is both qualitative and quantitative, giving me a broader understanding of the relationship between the variables. Because the research was conducted in the respondent's natural environment with no possibility for me to control any variables, the data collected is honest and high quality. The time horizon is longitudinal, meaning that the data was collected from multiple points in time.

I received over 50,000 data points for my research. Upon analyzing the data, some changes had to be made. The sampling strategy I used was non-probability due to the fact that not all of my data points were useable and had to be removed from the group.

#### **Data Collection**

In order to collect data for my research, I worked closely with the Western Michigan
University Office of Institutional Research. Originally, my plan was to conduct surveys of WMU
students, but quickly realized I would not receive the data pool that I was hoping for. Upon

working with the Office of Institutional Research, they were able to provide me with data from the Summer II semester of 2011 until now. For my data to be accurate, I filtered out students that enrolled at WMU after the 2017-18 year. This was because I am examining graduation rates and all enrollment years later than 2017-18 would still be in their 4-year undergraduate course. My subject pool consists of every student that enrolled at Western Michigan University as either a transfer or degree seeking individual from Summer II in 2011 through the 2017-18 year. Data points collected about each of my subjects include first registered fiscal year, first term in study abroad, number of terms spent in study abroad, grade point average when student started study abroad, original student type (beginner or transfer), high school grade point average or transfer grade point average, first term graduated, grade point average at graduation, and major.

## **Data Analysis**

I received my data points from the Office of Institutional Research on an Excel spreadsheet and solely used excel for my data analysis. I received data on 55,876 subjects to begin with. However, not all of the data points were usable for me. I factored out all students that enrolled at WMU after the 2017-18 year. This ensured I would have a consistent pool of subjects to use across all of my tests. I am working with 38,011 subjects for my analysis.

#### Test 1

To start, I wanted to compare the grade point averages of individuals before and after they completed study abroad. The total number of individuals that studied abroad at WMU in my timeframe is 2,076. I used the IF logical function to determine the number of individuals that had a higher grade point average after completing study abroad. If the GPA listed after study abroad was higher than before, the number 2 was displayed. If the GPA listed after study abroad was lower than or equal to before, the number 0 was displayed. From there I was able to calculate

that 1,087 individuals displayed the number 2, whereas 806 displayed the number 0. I then wanted to make sure to include the 4.0 students that maintained their GPA throughout their time at WMU. Since there is no way for their GPA to get any higher after studying abroad, I chose to include them with the students that raised their GPA. There were 33 students that maintained the same GPA, making my total number of students that had a higher or equal to pre study abroad GPA 1,120. I then had to subtract 33 subjects from the lower than category due to how my formula was set up. On its own, the test couldn't differentiate between less than or equal to, so I had to manually find the 33 subjects and subtract that from 806, giving me 773.

#### Test 2

The next test I wanted to run was to compare the graduation rate of students that studied abroad versus those that did not. I again used an IF logical function to determine how many students out of the 38,011 graduated. If the subject graduated from WMU, they would have a date listed in the "First Term Graduated" column of my data. If they did not, the column was left blank. Upon running my IF test, a number 2 was listed in a new column if the subject graduated. If they did not graduate, the number 1 was listed. From there, I was able to calculate that 21,893 students graduated and 16,118 did not graduate. I then ran another IF test, this time using the 2,076 individuals that studied abroad. The parameters of the test were the same as the previous. If the subject had a graduation year, the number 2 was placed in a separate column. If they did not have a date listed, the number 1 was listed. From there I calculated that 1,893 students graduated and 183 did not.

## **Methodological limitations**

My hope was to be able to use every single subject given to me in my data.

Unfortunately, that was not possible due to the fact that some of the individuals had not yet completed their 4-year undergraduate program. I was able to exclude those subjects to ensure that the tests showed the most accurate information it could provide.

### **Results**

## Test 1

My first test shows the comparison of WMU Student's GPAs before and after completing study abroad. Upon completion of my first test, I created a Column graph to depict my findings. It can be seen below.

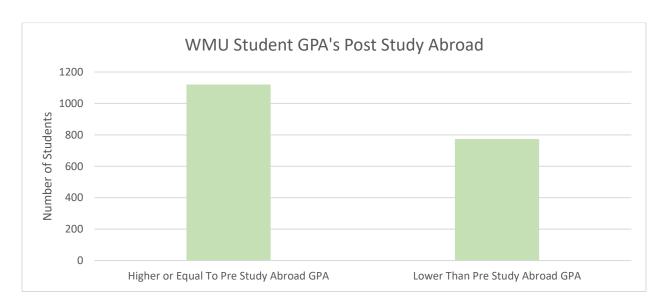


Figure 1 WMU Student GPA's Post Study Abroad

Out of the 1,893 students that studied abroad during my time frame, 1,120 of them had GPAs that were either higher or equal to their pre-study abroad GPA. Only 773 subjects showed a

lower GPA after completing their study abroad trip(s). A pie chart with the percentages of the test can be found below.

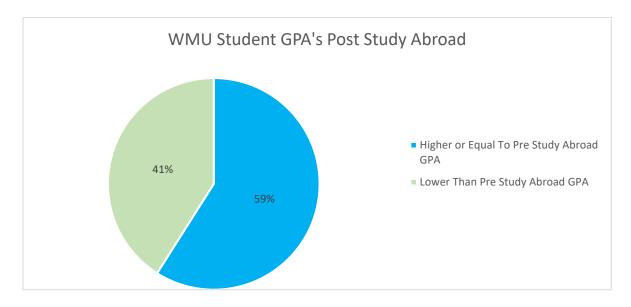


Figure 2 WMU Student GPA's Post Study Abroad in Percentages

59% of the subjects had a higher GPA post study abroad, whereas 41% had a lower GPA post study abroad.

## Test 2

My second test shows the comparison of graduation rates between all WMU students versus the students that studied abroad. Below you will find a column graph depicting the graduation rate of all WMU students from 2011 to 2021.



Figure 3 WMU Graduation Rates from 2011 to 2021

Out of the 38,011 subjects in my study, 21,893 completed their undergraduate degree and 16,118 did not. A pie chart with the percentages can be seen below.

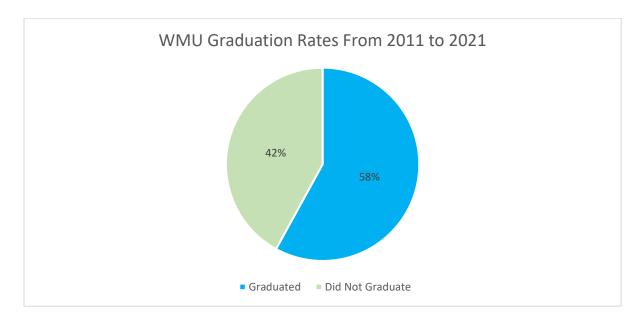


Figure 4 WMU Graduation Rates From 2011 to 2021 in Percentages

58% of the subjects graduated and 42% did not graduate.

Next, we will look at the graduation rate of WMU students that completed study abroad.

A column graph can be seen below.

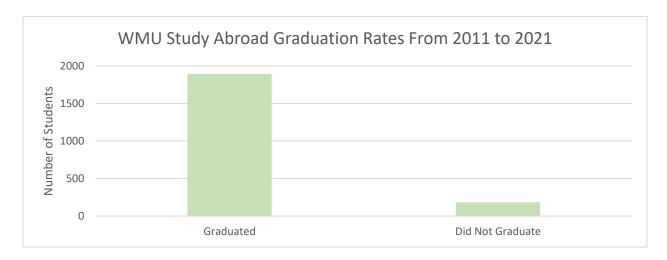
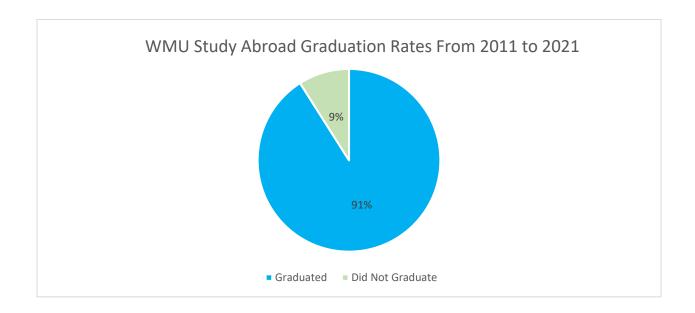


Figure 5 WMU Study Abroad Graduation Rates from 2011 to 2021

From 2011 to 2021, 2076 subjects chose to study abroad. Of that 2,076, 1,893 students graduated whereas 183 did not complete their undergraduate degree. A pie chart with the percentages can be found below.



91% of the students that studied abroad graduated and only 9% did not.

#### Discussion

Upon analyzing the data, the findings were consistent with my hypothesis. Study abroad does have a positive effect on education. Looking at Figure 2, 59% of students show a higher or equal GPA after completing study abroad than before. This indicates that there is a strong correlation between students who studied abroad and educational success. When comparing Figure 4 and Figure 6, it clearly shows that study abroad students have a higher graduation rate than students who didn't study abroad. This correlation is a great point to examine to prove my hypothesis.

Due to the nature of my study, I am not able to prove any causation between study abroad and education; however, analyzing my data has proven multiple pieces of evidence of correlation between the two. In order to prove causation, I would need to be able to conduct a study in a lab or another controlled environment, manipulating one variable at a time. My study, with the data being collected in natural environments, does not allow for such testing. There is very strong evidence of correlation between the two, so if causational study was conducted, one might expect to see cause and effect between studying abroad and education. It is still a fair assumption that in the future, researchers could see the same trends I am seeing between the two variables if my study was replicated.

While there is correlational evidence, there is no possible way to tell that it is solely due to the variables tested in my study. When looking at figure 2, once could argue that students typically will study abroad within the first few years of college. Typically, students will not start

completing classes suited to their major until their junior year. Therefore, their GPA's increase after studying abroad because they are now taking the classes they are excited about that pertain to their major. While this might be the case at other universities, WMU starts some of their students in major focused courses from freshman year on, myself included. Looking at figures 4 and 6, it could be stated that some universities require at least a 3.0 GPA in order to study abroad in the first place, meaning that only the more educationally dedicated students can study abroad, giving them a far better chance to have a higher graduation rate. Again, this is not the case at Western Michigan University. While some of our programs do have a 3.0 requirement, others have 2.0 or 2.5. Another argument could be made that only wealthy students can afford to study abroad, giving the correlation that wealth leads to a higher GPA or higher graduation rate. While there are scholarships offered to help combat the costs of studying abroad, it is a costly endeavor. More research would need to be conducted to find a possible correlation between wealth and GPA/graduation rate.

My study is not the first of its kind. In 2008, Jodi Malmgren, from the University of Minnesota, and James Galvin, from the University of California, wrote a paper titled *Effects of Study Abroad Participation on Student Graduation Rates*. They also found that graduation rates varied greatly between students that studied abroad and students that didn't. The students that studied abroad for more than 3 weeks had higher overall graduation rates and study abroad participation did not delay graduation (Malmgren and Galvin, 2008).