

## **Assessing academic performance through study abroad: Benefits of the experience**

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### **Abstract**

This research examines studying abroad and the subsequent effect the experience has on students' grade point average within the John L. Grove College of Business at Shippensburg University. Findings implicate a positive correlation for increased grade point averages with students who study abroad versus those who do not. Descriptive statistics illustrate the increased importance for the John L. Grove College of Business to expand data collection to include more detailed information about subjects that engage in studying abroad as part of their educational experience.

Keywords: Study Abroad, Academic Performance, Assessment

## Framework/ Methods

The John L. Grove College of Business is committed to providing the best possible educational service to students. By way of the continuous improvement process, which includes assessment of learning outcomes, the college tracks the academic progress of students; which in this particular dialogue the focus is on students who undertake an experience studying abroad. Data collection encompasses the last 19 years, tracking students that have traveled to 21 different countries to engage in studies. As of the fall of 2008 the sample size of students that have completed a study abroad program was at 177 (data is one semester “behind” because the integrity of the data collection process would be compromised. Final QPA (cumulative grade point average) and GPA (grade point average) after studying abroad and graduating are integral to this study). Countries most attended are in order as follows: England (57), Denmark (27), Australia (18), and Spain (18) (see appendix 1 p. 8). Data collected and used in analysis includes: the student’s name, major, date(s) attended, school attended, graduation date, country attended, and the student’s GPA and QPA before and after the experience studying abroad. The final QPA upon graduation was also analyzed against the student body of the College of Business as a whole. The primary hypothesis and hope for the study abroad program is that it acts as academic enrichment for students and broadens their understanding of other cultures; this should be reflected in improved GPA and QPA after the experience.

Data collection was accomplished by having the student file the necessary paperwork to be considered for the program. Data has been stored using a spreadsheet to allow for efficient storage and comparison of the subjects that have been or currently are involved in the program. Upon successful completion of the semester(s) abroad and graduation from Shippensburg University the subjects are then able to be used in the pool of data. Discussion will now turn to the findings of the John L. Grove College of Business and a subsequent discussion of the implication these findings display.

## Results

The major piece of information that should be looked at first and foremost pertains to the question, “do students that study abroad raise their GPA and ultimately their QPA?” The answer according to these findings is yes, although the reader will note that after study abroad scores by QPA are mostly decreased. Using GPA and QPA as a measure of academic performance the reader can see in the tables shown after the discussion section that students who engage in study abroad as part of their academic program generally perform better. The average QPA for fall 2008 graduates of the College of Business is 2.886 (n=106) compared to the average final QPA for students that studied abroad 3.103 (n=176). Further adding to the argument that the study abroad experience acts as an important variable in academic improvement, the data pool reflects a steadily increasing final QPA among participants from 2004 to 2008 (from 2.999 in 2004 to 3.206 among spring 2007/fall 2008 participants). The reader will note in the data that follows that 5 out of 8 majors raise their GPA after studying abroad; only 2 out of 8 raise their QPA immediately following their experience. The most significant information is the difference between final QPA of the participants and nonparticipants (see appendices 2-4, pgs. 9-11).

A logical next step in discussion would be examining the differences between the grade point average of study abroad students before and then after the experience. Using two sample t-tests (one tailed) to compare before and after scenarios (which will be explained) the data did not

yield any statistical significance in any comparison made. Even though the results were not statistically significant, there was a positive trend line with study abroad students performing better against their domestic counterparts.

First there was a comparison of “before and after” GPA. The semester’s GPA before the experience and then directly after the experience was compared. This test proved to not even be close to statistically significant at a 90% confidence level ( $t=0.100$ ). The next two sample t-test included looking at the cumulative grade point average before the experience and then after the experience. This yielded a much higher t-value of 0.421; however this value did not exceed the critical value at a 90% confidence interval. Finally the comparison between the cumulative grade point average before studying abroad versus the grade point average upon graduation was calculated. A t-value (one tailed) of 0.206 was calculated; however this value was not large enough to exceed the critical value of 1.282. Although the two sample t-tests did not show significance at a 90% level ( $p<0.1$ ); they allowed for valuable discussion concerning outliers in the data pool, as well as factors that significantly altered student’s performance which will be discussed in the discussion section.

Another variable to consider when comparing data within the college is how students with different majors compare to each other; In order to present our results clearly, the majors will be displayed in order allowing the reader to see which majors were affected greatest in order of GPA and QPA performance (number 1 on the list will be the best performer with 8 as the last). Several students in the data pool are of dual majors and have been categorized as “dual majors” for the purposes of the study.

Before study abroad: GPA

1. Dual Majors - 3.249
2. Supply Chain Management (SCM) - 3.211
3. Management Information Systems (MIS) -3.2
4. International Management - 3.05
5. Accounting - 3.02
6. Finance - 3.012
7. Management- 2.923
8. Marketing - 2.909

Before study abroad: QPA

1. Accounting - 3.341
2. Supply Chain Management (SCM) - 3.252
3. Management Information Systems (MIS) - 3.157
4. Dual Majors - 3.155
5. Finance - 3.064
6. International Management - 3.036
7. Marketing - 3.009
8. Management - 2.999

After study abroad: GPA (Parenthesis show change from GPA before studying abroad)

1. Supply Chain Management (SCM) – 3.361 (+ .150)
2. Accounting - 3.319 (+ .299)
3. Dual Majors – 3.307 (+ .058)

4. Management – 3.1 (+ .177)
5. Marketing – 3.071 (+ .162)
6. Management Information Systems (MIS) – 3.046 (- .154)
7. International Management – 3.034 (- .016)
8. Finance – 2.936 (- .076)

After study abroad: QPA (Parenthesis show change from QPA before studying abroad)

1. Accounting – 3.335 (- .006)
2. Supply Chain Management (SCM) – 3.284 (+ .032)
3. Dual Majors – 3.151 (- .004)
4. Management Information Systems (MIS) – 3.142 (- .015)
5. International Management – 3.034 (- .002)
6. Finance – 3.026 (- .038)
7. Marketing – 3.015 (+ .006)
8. Management – 2.986 (- .014)

Final QPA by major (upon graduation)

1. Supply Chain Management (SCM) – 3.408
2. Accounting – 3.343
3. Dual Majors – 3.185
4. Management Information Systems (MIS) – 3.132
5. International Management – 3.092
6. Management – 3.056
7. Marketing – 3.056
8. Finance – 3.047

Students have also been grouped into categories labeled, “countries attended.” The countries measured at least held a sample size of eight (Germany) and continued up to a sample size of 57 (England). No significant difference was found between any countries attended and post study GPA improvement. European countries were also banded together and all others placed into a separate category and no significant difference was discovered in academic performance when these two categories were measured against each other.

### **Discussion/Recommendations for Further Study**

Although our hypothesis of students who engage in a study abroad experience will perform better academically when using GPA/QPA seems to hold some truth using this data; there are some important findings that this study highlighted that merit discussion. First, there should be a declaration that the two sample t-tests conducted on the data found no statistically significant improvements in the GPA or QPA of students due to the experience of studying abroad. Following up on this finding the authors wish to note that there were several outliers that altered the results by earning exceptionally low scores on their semesters abroad. Out of curiosity the data was altered temporarily to see if using the same t test would then give results that would be significant. The t-value was higher after this trial, but the change was minimal due to the degrees of freedom used. Interest should lie in examining other institutions of higher education and to what degree of improvement is found in student’s performance using GPA as a

measuring tool. Speculation for the lack of improvement could be but not limited to: culture shock, temporary loss of social supports, performance anxiety, “homesickness,” or many other variables. Future data collection may not want to only look at clear measureable data pertaining to academic performance, but also utilize methods to gather further information about the students participating. Future research may also want to look at the maturity levels and experiential benefits students gain as a result of a study abroad experience; as well as the success rate these individuals have in the hiring pool with prospective employers.

Viewing the rest of the data collection beyond that of the t-test results displays a lack of information that may have proven useful to help determine the significance of the study abroad program in other ways. One example would encourage a simple solution in the future: what gender are the participants? For the last decade the ratio (out of 100%) of males to females that study abroad have been roughly 35% male and 65% female (Open Doors Report, 2008). This would be data that the college could collect and subsequently start to decipher in order to ascertain what the ratio is for the John L. Grove College of Business and why it is that way. A questionnaire designed with some basic background information about the participant coupled with motivational information would aid in providing insight to what students are interested in or involved in the program. This discussion will now turn to the benefits of the study of data the John L. Grove College of Business has accrued as well as ways to improve data collection and other factors that may need to be considered by the school.

Although this study found no significant difference between countries attended and academic performance, this study did discover that studying abroad did have a relationship with improved grade point averages. However, the study can not determine what factors within the act of studying abroad in and of itself encouraged improved academic performance. This study also can not conclude anything about why when students are broken down into majors certain ones perform well and others have no significant improvements, and even perform slightly poorer. This could be due to the trend of student’s QPA to drop as their academic careers progress, it could be due to the rigors of different curricula within the business disciplines; this study can not address that issue. However, research has been conducted by others that holds some weight in considering factors that would influence the decision making process in studying abroad as well as performance. Relyea, Cocchiara, and Studdard have completed research that has found a relationship with students that have a high risk propensity and the decision to study abroad. Perceived career value has also been found to be a moderating factor in the relationship between risk propensity and studying abroad. Such research by others can act as a template for which variables to target within the John L. Grove College of Business; perhaps increasing the data pool to include such information about students who study abroad and those who do not would confirm or deny the findings of Relyea, Cocchiara and Studdard within the college’s student population

One hindrance encountered was the problem of data collection within the University itself; a plethora of data is unavailable mainly because it has been “lost” over the years or is still in hard copy format. Data concerning other colleges/departments in the university would enable the College of Business to examine how they “fit in” with Shippensburg University. According to the Institute of International Education, 17.5% of 191,321 U.S. students that engaged in studying abroad were students of business related disciplines (Open Doors Report, 2005). This number is now up to 241,791 students according to the data collected from the 2006/2007 academic year (Open Doors Report, 2008). Expanding data collection to include the number of

students from non-business related disciplines would allow the College of Business to examine this ratio within Shippensburg University.

Open Doors 2008 has also taken care to highlight the parallel between the number of locations catering to international students and study abroad partnerships; and the increased number of study abroad students. Tracking the ratio between the number of students attending John L. Grove College of Business and the number/variety of options with studying abroad should deliver similar results. This data should prove useful as a measurement tool of the program's effectiveness in the years to come.

As a final note to the reader, this study cannot eliminate the many variables that time has brought to the college. Examples include but are certainly not limited to: changes in faculty/curricula, the expanded opportunities for more recent students versus those of years ago, changing economic conditions and their subsequent effect on students' decision making, and many more. Although the study of this data pool can isolate study abroad students from the population of the entire college, these students have only been compared to the 1,283 students enrolled as of the fall 2008. This was considered a viable option compared to the massive amount of time needed tracking down students final QPA's for as many years as would be on record. The authors hope that future research direction will incorporate many more variables into assessing the study abroad experience; not only as it pertains to GPA and output measurement but also to future post graduation outcomes. A plethora of variables weigh in on the lives of students and there are many that have need to be explored if the study abroad experience can be tapped to further understand future improvement and appreciation of the practice.

## REFERENCES

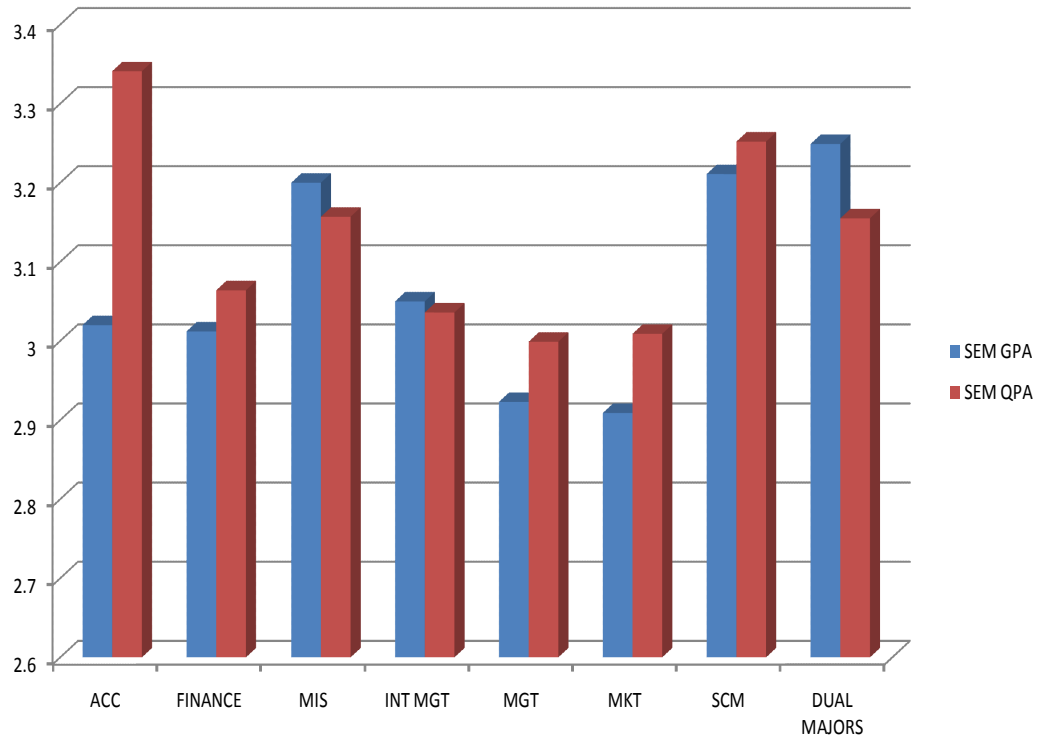
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**Appendix 1. Countries Attended**

		Countries attended		Valid Percent	Cumulative Percent
		Frequency	Percent		
Valid	England	57	31.8435754	32.20338983	32.20338983
	Denmark	27	15.0837989	15.25423729	47.45762712
	Ireland	11	6.1452514	6.214689266	53.67231638
	Germany	8	4.46927374	4.519774011	58.1920904
	S. Korea	3	1.67597765	1.694915254	59.88700565
	Russia	2	1.11731844	1.129943503	61.01694915
	UAE	2	1.11731844	1.129943503	62.14689266
	China	1	0.55865922	0.564971751	62.71186441
	Dominican Republic	1	0.55865922	0.564971751	63.27683616
	Costa Rica	4	2.23463687	2.259887006	65.53672316
	Italy	7	3.91061453	3.95480226	69.49152542
	Australia	18	10.0558659	10.16949153	79.66101695
	Spain	18	10.0558659	10.16949153	89.83050847
	New Zealand	5	2.79329609	2.824858757	92.65536723
	France	5	2.79329609	2.824858757	95.48022599
	Egypt	1	0.55865922	0.564971751	96.04519774
	Argentina	1	0.55865922	0.564971751	96.61016949
	South Africa	1	0.55865922	0.564971751	97.17514124
	Scotland	1	0.55865922	0.564971751	97.74011299
	USA	3	1.67597765	1.694915254	99.43502825
Canada	1	0.55865922	0.564971751	100	
	Total	177	98.8826816	100	
Missing	System	2	1.11731844		
Total		179	100		

**Appendix 2. Before Study Abroad**

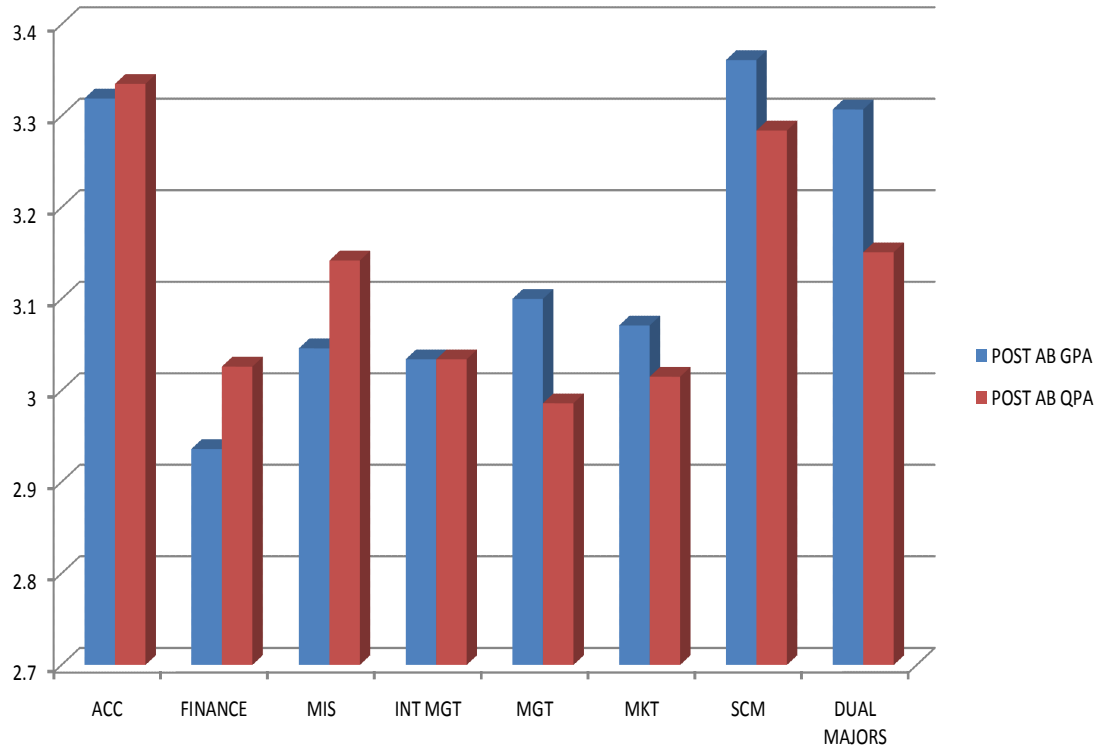
# Before Study Abroad



## Appendix 3. After Study Abroad



# After Study Abroad



## Appendix 4. Final QPA by Major

# Final QPA by Major

