

**EFFECTS OF STUDY ABROAD PARTICIPATION UPON SELECTED  
PERSONALITY MEASURES**

An Undergraduate Research Scholars Thesis

by

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# **ABSTRACT**

Effects of Study Abroad Participation upon Selected Personality Measures

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## **Introduction**

It is generally felt that studying abroad is a transformative experience for undergraduate students for a multitude of reasons including social skills, the ability to adapt to different surroundings, and character building. Nevertheless, some people do not take advantage of study abroad opportunities. The purpose of this study was to investigate personality characteristics of students who participated in a study abroad program in Germany during the summer of 2016. The Positive and Negative Affect Schedule (PANAS-X; Watson & Clark, 1994) measures of six negative and positive mood states, the Dark Triad (Paulhus and Jones, 2011) which measures Machiavellianism, Narcissism, and Psychopathy, and the Multidimensional Locus of Control Scale (Levenson, 1973) which assesses internal, powerful others, and chance locus of control orientation. Additionally, the Competitive State Anxiety Inventory (CSAI-2R; Cox, Martens, & Russell, 2003) was used to assess anxiety associated with study abroad experiences.

## **Method**

Participants were 18 female undergraduate students who responded to a booklet concerning collegiate study abroad experiences. The booklet included the above described

psychometric measures. SAS statistical analyses were employed to compare pre-trip and post-trip scale scores (correlated t-test).

## **Results**

PANAS X findings: the participants were significantly more fatigued ( $t = -2.18, p < .05$ ) and less shy ( $t = 2.09, p = .05$ ). While not achieving statistical significance, the students were less attentive ( $t = 1.76, p = .10$ ) and were less surprised ( $t = .161, p = .13$ ). It is felt that had the number of participants been greater, these effects may have emerged as significant. All other PANAS-X subscales did not achieve statistical significance.

Locus of Control results: participation in the study abroad resulted in increases in chance locus of control ( $t = -2.51, p < .02$ ). The internal and powerful others orientation measures were not significant.

Dark Triad findings: the Machiavellian scale ( $t = 1.83, p < .08$ ) and the Psychopathy measure ( $t = -1.54, p = .14$ ) approached but did not achieve statistical significance. Again, had a larger sample size been possible, these effects may have reached significance. The Narcissism index was not significantly different.

Competitive State Anxiety Inventory results indicated there were no significant changes in somatic anxiety, cognitive anxiety, or self-confidence as a result of the study abroad experience.

## **Conclusion**

These analyses demonstrated changes in personality characteristics resulting from participation in a study abroad program. Future research may compare study abroad experiences in Europe versus other countries. It would be interesting to study personality characteristics associated with other forms of international travel such as family experiences or internships, etc.

Future studies might involve the effect of study abroad experiences upon a more thorough assessment of subjective experiences. A future increase in sample size should increase the power of the statistical analysis.

## **ACKNOWLEDGEMENTS**

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## **NOMENCLATURE**

PANAS-X    Positive and Negative Affect Schedule

CSAI-2R    Competitive State Anxiety Inventory

# CHAPTER I

## INTRODUCTION

Effects that result from studying abroad are both positive and negative. Some positive effects provided by studying abroad can include extending learning outside of the classroom, increasing cultural diversity, and an awareness of change within an individual's self (Mapp, 2012). However, additional effects are prevalent as well, but are not as readily apparent as those in recent research. These effects include those of anxiety, narcissism, negative emotions, and a change in one's locus of control.

Study abroad programs give students the ability to be a part in international experiences and grow in their mindsets of the world around them. Traveling and living abroad can lead to an individual's acceptance of new ideas and values (Mapp, 2007). When living in a new environment, students are challenged to evaluate their own values and culture, further leading to an understanding in what they find important. Also, a foreign environment can cause students to develop a true national identity, as well as a new awareness of self and social identification of themselves (Savicki, 2011). In a study done by Carlson and Widaman (1988), they discovered that students who studied abroad showed more interest across cultures, as well as political concerns, in comparison to students who only studied at an American University. Furthermore providing evidence that studying abroad allows them to have a new appreciation of different cultures and lifestyles, ultimately becoming more globally minded, provides continued support for the opportunity.

Internal travel is an impactful life event that can lead to personality development especially for individuals in early adulthood (Zimmerman, 2013). Undergraduates are at a pivotal



age to learn and explore the world around them. Therefore, an individual's personality develops and study abroad helps to broaden that development. Personality development can take place by increasing a student's confidence. Navigating and communicating in a foreign environment leads a student to step out of their comfort zones and into a new confidence of themselves.

Most international travel is expected to have a component of stress related situations. There have been several studies that have evaluated these stressful experiences. The vast majority of the study abroad students experiences are described and interpreted as stressful. In a study conducted by Ryan and Twibell (2000), they evaluated six major themes or stressors that the study abroad students encountered while abroad. The six major stressors were making friends, academic achievement, communication, personal adjustment, health and safety, and government regulations. However, the highest levels of concern for Ryan and Twibell's study dealt with social performance and adaptation, rather than having physical needs met. Stress and anxiety while studying abroad can have an effect on the students overall experience, causing a lower level of functioning while abroad (Hunley, 2009). Loneliness is an apparent stressor that can add to the aspects of the study abroad programs. Therefore, it is important for future study abroad students to become knowledgeable and aware of the complications and stress related situations that they could experience. With this upcoming research, students may be more prepared for the experience.

In addition, international travel for a young adult is found to be associated with a shift in locus of control. Studying abroad brings about new situations that students may not have experienced before and assign responsibility with an internal or external cause. It has been found that students who have previous experience with international travel and students who resided in an international country for a longer amount of time reported having a greater internal locus of

control (Martin, 1987; Ward & Kennedy, 1992). With exposure to different situations in different countries, a student's coping of the situation may alter to adjust for the new experiences. Furthermore, Ward & Kennedy (1992) reported that students with greater cultural differences, closed cultural identity, and slower psychological adjustment were associated with a greater external locus of control. Here, the position of a student's locus of control can contribute to their ability to adjust cross-cultural differences.

As mentioned above, the expectations of the student can impact their study abroad experience. There have been several studies exploring this idea through a pre-post test design. For example, Kauffman & Kuh (1984) administered various measures at multiple times used as a pre-test, post-test, and a second post-test. When these measures are used for study abroad effects, a change is hypothesized and observed. However, expectations are a crucial factor in the transition across cultures. Sometimes these expectations have gaps from what the student expects and actually experiences, such as their experience with their host family, or with the attitude of the population as a whole (Kauffman & Kuh, 1984; Pitts, 2009).

As a result, students sometimes do not reap the advantages that studying abroad offers. Varying lengths of programs are offered to students, ranging from less than one month to 12 months. As Martin (1987) found, students who study abroad longer find greater differences in cognitive abilities, including an increased awareness of self and an ability to facilitate communication in a different culture. However, past studies have also reported that students experience an increase in xenophobic reactions (McGuigan, 1959). In these transitions across cultures, students continue to experience both positive and negative effects, resulting in changes.

Though these growths may not be distinctively good or bad, they are changes that could be understood with more research, nonetheless. By performing further research into study abroad

effects, we can provide a fuller understanding to all effects as a result of studying abroad to an unfamiliar country. It is ultimately hypothesized that students enrolled in the study abroad program will experience an increase in anxiety, narcissism, negative affects, and a change in the origin of control.

## **CHAPTER II**

### **METHODS**

Eighteen study abroad students (19-23-year-olds) from the Texas A&M Psychology department were used as participants. The students were a part of a five-week study abroad program in Bonn, Germany for the summer. All participants in the study were female. The students had the option of whether or not to participate in the study. A paper packet was made containing a printed version of each of the four scales. The participants responded in writing to each of the questionnaires handed out. The students were tested the first and last week of the program, establishing a pre-post test design. The materials needed for the study were a pencil and the paper questionnaire.

## CHAPTER III

### RESULTS

In our survey we evaluated four separate scales through a correlated-t test, which included the PANAS X, Multidimensional Locus of Control, Dark Triad, and Competitive State Anxiety Inventory scales. Some of the results showed statistical significance, while others approached statistical significance, or did not reach significance at all.

The Multidimensional Locus of Control measure resulted in a statistical significant increase in chance of the individual's locus of control ( $t = -2.51, p < .02$ ). However, the results were not significant for the internal and powerful others measure associated with orientation.

In the Dark Triad scale, the two measures consisting of Psychopathy ( $t = -1.54, p = .14$ ) and Machiavellianism ( $t = 1.83, p < .08$ ) approached statistical significance, however did not fully reach it. The Narcissism index did not reach statistical significance either.

To our surprise, the Competitive State Anxiety Inventory results did not show any statistical significance or significant change in the individual's cognitive anxiety, somatic anxiety, or self-confidence. However, with a larger sample size the statistical significance may have emerged.

After evaluating the PANAS X post-test data, we discovered that the participants were significantly less shy ( $t = 2.09, p = .05$ ) and more fatigued ( $t = -2.18, p < .05$ ). There was a small change, but not statistically significant in the students' attentiveness and surprise level. The students were less attentive ( $t = 1.76, p = .10$ ) and less surprised ( $t = 1.61, p = .13$ ). The other PANAS-X subscales were not statistically significant or near significance.

A more comprehensive list of our results is included in the appendix (Table 1). As stated earlier, if the number of participants had been greater then there may have been an increase in statistical power in the present statistically significant results, and more statistically significant results overall.

## CHAPTER IV

### CONCLUSION

Our study focused on the personality differences and negative affects that occurred within undergraduate study abroad students. After evaluating our results and conducting the pre-post test questionnaire, we discovered that most of the individual's were significantly more fatigued at the end of the program. Although fatigue may not come as a surprise to most, it is still beneficial for study abroad students to understand the factors that could happen to them. Similar to Pitts (2009) study and the Kauffman and Kuh (1984) experiment, it is important for study abroad students to grasp the reality of what effects the study abroad experience will have on them and then be able to input that into their own expectations. An increase in fatigue is probably due to the vigorous and active lifestyle that the study abroad program offered. We believe that after five weeks the participants were simply tired, especially after having traveled non-stop for the last week of the program.

After evaluating the results, we also discovered that the participants were less shy. We believe that the participants became more comfortable in approaching the foreigners to gather information and help in situations where they found themselves lost, as well as the ability to interact more freely with the other students in the program itself. Studying abroad is definitely an experience that puts the individual out of their comfort zone and into a new environment, therefore becoming less shy and more outgoing can help to ease that discomfort.

Another statistical significant finding in the pre-post test was that the participants increased in chance on the Multidimensional Locus of Control Scale. Similar to the study by Ward and Kennedy (1992), when students are placed into an environment with different cultures,

an individual can show an increase in their greater external locus of control. We believe this could be that while studying abroad there are many events and happenings that can cause the world to feel out of an individual's control like missing a bus or getting lost. After experiencing these external events, the individual may grow a greater sense of ease and understanding of living in a chance environment.

Two elements of personality that showed a change in our results however did not quite reach statistical significance were attentiveness and Machiavellianism. The participants' attentiveness decreased in the post-test. We believe this could have been because the students were more relaxed and felt more comfortable in the foreign environment. Therefore, they were less attentive or aware about the happenings around them. Showing more comfort and less stress about being in a foreign country is a beneficial trait that can help study abroad students to better handle situations later on in life. The participants also decreased in Machiavellianism. We found this to be an interesting finding, for Machiavellianism is a pretty dark and set personality trait. Machiavellianism is the ability to put one's self above others or potentially harm another individual for one's own success. This change in Machiavellianism may have been from a constant interaction with others, as well as a greater appreciation and love for the study abroad group. With a greater sample size, these two traits may have reached statistical significance.

However, our results showed limitations. For instance, our sample consisted of all females with no male participants. In addition, we were provided with a small sample size; there were only 18 total participants. If we had had a larger sample size, the statistically significant results may have proven to be even more significant and some of the non-significant results may have reached statistical significance. Another limitation was that the program was only for five weeks. Study abroad programs that last for a semester or even a year, may show different or



stronger results. Five weeks may not be enough time to significantly effect an individual's stable personality and traits compared to a program of a semester or longer.

For future research, we would hope to focus more on the cultural aspect of studying abroad. In Carlson and Widaman's (1988) study abroad experiment, they discovered that students who studied abroad showed more interest across cultures and valued different ideas. Similar to their experiment, we would like to evaluate the openness to different cultures. We also think it would be interesting to experiment across different study abroad programs. For instance, analyzing groups studying abroad in China versus groups studying in Europe. We would be interested in seeing the different results that the two groups would experience and change outcomes. Some cultures and countries are more "Americanized" compared to others and we would be interested to see if that was noticeable in the results.

Studying abroad is such an impactful experience that every undergraduate student should have the opportunity to utilize. Traveling outside of the United States allows individuals to change and grow in a positive way. We believe that by knowing the outcomes of the experience, future study abroad students can be better prepared for their own experience. Also, knowing the outcomes may convince potential study abroad students that the experience is not just a good time, but is in fact profoundly beneficial for their personality growth.

## REFERENCES

- Carlson, J. S., & Widaman, K. F. (1988). The effects of study abroad during college on attitudes toward other cultures. *International Journal of Intercultural Relations*, *12*(1), 1-17. doi:10.1016/0147-1767(88)90003-X
- Cox, R. H., Martens, M. P., & Russell, W. D. (2003). Measuring anxiety in athletics: The revised Competitive State Anxiety Inventory-2. *Journal of Sport & Exercise Psychology*, *25*, 519-533.
- Hunley, H. A. (2010). Students' functioning while studying abroad: The impact of psychological distress and loneliness. *International Journal of Intercultural Relations*, *34*(4), 386-392. doi:10.1016/j.ijintrel.2009.08.005
- Kauffman, N. L., & Kuh, G. D. (1984, April 23-27). *The Impact of Study Abroad on Personal Development of College Students*. Speech presented at Meeting of the American Educational Research Association, New Orleans. In *The Impact of Study Abroad on Personal Development of College Students* (pp. 1-25). (1984).
- Levenson, H. (1973). Multidimensional locus of control in psychiatric patients. *Journal of Consulting and Clinical Psychology*, *41*(3), 397-404.
- Mapp, S. C. (2012). Effect of short term study abroad programs on students' cultural adaptability. *Journal of Social Work Education*, *48*(4), 727-737. doi:10.5175/JSWE.2012.201100103
- Mapp, S. C., McFarland, P., & Newell, E. A. (2007). The effect of a short-term study abroad class on students' cross-cultural awareness. *The Journal of Baccalaureate Social Work*, *13*(1), 39-51.
- Martin, J. N. (1987). The relationship between student sojourner perceptions of intercultural competencies and previous sojourn experience. *International Journal of Intercultural Relations*. *11*(4), 337-355. doi:10.1016/s0147-1767(87)80002-0
- McGuigan, F. J. (1959). Further study of psychological changes related to intercultural experiences. *Psychological Reports*, *5*(3), 244-248. doi:10.2466/pr0.1959.5.3.244

- Paulhus, D. L., & Jones, D. N. (2011, January). *Introducing a short measure of the Dark Triad*. Poster presented at the meeting of the Society for Personality and Social Psychology, San Antonio, TX.
- Pitts, M. J. (2009). Identity and the role of expectations, stress, and talk in short-term student sojourner adjustment: An application of the integrative theory of communication and cross-cultural adaptation. *International Journal of Intercultural Relations*, *33*(6), 450-462. doi:10.1016/j.ijintrel.2009.07.002
- Ryan, M. E., & Twibell, R. S. (2000). Concerns, values, stress, coping, health and educational outcomes of college students who studied abroad. *International Journal of Intercultural Relations*, *24*(4), 409-435. doi:10.1016/S0147-1767(00)00014-6
- Savicki, V., & Cooley, E. (2011). American identity in study abroad students: Contrasts, changes, correlates. *Journal of College Student Development*, *52*(3), 339-349. doi:10.1353/csd.2011.0035
- Ward, C., Kennedy, A. (1992). Locus of control, mood disturbance, and social difficulty during cross-cultural transitions. *International Journal of Intercultural Relations*, *16*(2), 175-194. doi:10.1016/0147-1767(92)90017-O
- Watson, D., & Clark, L. A. (1999). The PANAS-X: Manual for the positive and negative affect schedule—expanded form.
- Zimmermann, J., & Neyer, F. J. (2013). Do we become a different person when hitting the road? Personality development of sojourners. *Journal Of Personality And Social Psychology*, *105*(3), 515-530. doi:10.1037/a0033019

## APPENDIX

<b>TABLE 1</b>	
<b>CHANGES IN PERSONALITY CHARACTERISTICS</b>	
<b>Personality Characteristic</b>	<b>t-Value (*p≤ .10, **p&lt; .05)</b>
Self-Assurance	-1.32
Attentiveness	1.76*
Surprise	1.61
Fatigue	-2.18**
Shyness	2.09**
Chance	-2.51**
Machiavellianism	1.83*
Narcissism	-1.02
Psychopathy	-1.54
Negative Affect (overall)	1.00
Positive Affect (overall)	.55
Fear	1.01
Hostility	.12
Guilt	1.17
Joviality	.86
Serenity	-.17
Internal	.68

Power	-.64
Somatic Anxiety	.62
Cognitive Anxiety	.44