Impact of behavioral styles on student interest in study abroad

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Abstract

There has been a continued emphasis on global studies by business schools (Relyea, Cocchiara, & Studdard, 2008) with limited success (Fugate & Jefferson, 2001). American schools lag in international exposure and some studies indicate that the business student population is less prepared to compete effectively in a global marketplace (Bollag, 2003; Collins & Davidson, 2002). To help address this gap, various universities are engaged in international endeavors including encouraging student participation in study abroad programs.

Previous research has suggested that study abroad experiences can be life changing (Furnham, 1993; Gill, 2007; Mumford, 1990) and other research has found that students with international exposure have better career success and organizational effectiveness (Relyea et al., 2008). A student’s individual behavior style may reveal their learning preference and influence perception of course effectiveness (Moghaddam, Peyvandi & Wang, 2009). Relyea et al. (2008) found a relationship between a student’s propensity for risk and willingness to participate in student study abroad programs. Identifying behaviors such as those associated with risk tolerance can bring more understanding to what draws students to study abroad programs.

The purpose of this study was to identify behavioral styles that influence students’ decisions to participate in study abroad programs. Understanding these behaviors could help in how study abroad programs are marketed and how to target assignments and activities that increase the possibilities for learning (Fairley & Tyler, 2009).

Keywords: study abroad, global studies, behavioral styles, personality

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INTRODUCTION

The roots of study abroad in the U.S. can be traced back to the mid-1800s, a period when only the wealthy and privileged had the means and opportunity to travel abroad. During this time it was not unusual for the sons of wealthy families to spend a year abroad learning about other countries and customs before returning home to accept the responsibilities of adulthood. A little more unusual are the experiences of three women from South Carolina who traveled abroad with their husbands or because their husbands held diplomatic appointments. Ann Russell (2007) wrote about the experiences of three such women. Some traveled with servants and established households in Europe for the time they were living abroad. These experiences differ greatly from most study abroad opportunities today.

While study abroad opportunities appeal to students from a variety of economic levels and backgrounds, efforts have been made to provide access to study abroad programs to all students. As explained by Mukherjee (2012), “The Higher Education Act of 1965 for the first time gave discretionary authority to campuses to use federal financial aid in support of students studying abroad” (p. 81). The world wars fought by the U.S. have also impacted study abroad growth as explained by Mukherjee (2012), “In the post-world war context, with soldiers returning home from various corners of the world along with firsthand knowledge of diverse cultures and educational systems, the importance of study (or research) abroad was deeply felt by educators and policymakers for the promotion of international understanding and peace” (p. 82). Brickman (1966) has highlighted the importance of the combination of aid available to both returning soldiers and other American students to enroll in foreign universities and thus help expand not only the type of study abroad opportunities that were available but also the student groups that were able to access these opportunities.

According to Hoffa (2007), “In recent years, as the American economy has become increasingly globalized, knowledge of other countries has become to contemporary students what seeing the museums of Europe was to the elite youth of the past: a marker of cosmopolitan status and a preparation for their jobs, only now the jobs are in an international economy” (as cited in Long, Akande, Purdy, & Nakano, 2010 p. 91). The Institute of International Education has been tracking enrollment trends of international students in U. S. Higher Education since 1948/49. Data available on their web site at http://www.iie.org/opendoors shows a growth in international students studying in U.S. schools of higher education from 25,464 in 1948/49 to 1,043,839 in 2015/16. This change represents an increase of international students studying in U.S. schools of higher education from an initial 1.1% in 1948/49 to 5.2% in 2015/16. Because there are students from a variety of different countries studying in U.S. schools of higher education, American students who may not be able to participate in a study abroad program still have an opportunity to learn about different cultures and customs from these international students.

The Institute of International Education also has information available on their web site about U.S. student participation in study abroad programs. They show that participation in U.S. study abroad programs in 2014/15 was 313,415 students. The duration of the U.S. study abroad programs varied from 63% (short-term; summer or up to eight weeks) to 34% (mid-length; one or two quarters or one semester) with only 3% (long-term; academic or calendar year). These data clearly show that, large numbers of study abroad students from the U.S. are opting for the shorter-term study abroad programs. The fields of study represented by U.S. study abroad students show a majority of Business students make up the majority of participants as noted in Table 1.
While students from all disciplines may not elect to participate in study abroad programs, significant numbers of students from schools in the U.S. and students from countries outside the U.S. choose to participate in study abroad opportunities as indicated by the data provided by the International Institute of Education.

This paper is to review study abroad literature related to the role that personality traits and behavior styles can have on a student’s intent to study abroad. Data collected using the DISC is analyzed to show how one of four behavioral tendencies (Dominance, Influencing, Steadiness, and Compliance) can predict student intent to study abroad. The statistical analysis of the DISC data collected for this project and related concepts identified from the following literature review could be examined to determine whether a trend could be seen that might be useful to help identify students who might be more successful in participating in a study abroad program. Additionally, the data collected for this study could be used to identify ways study abroad programs might be structured to meet the needs of students with different behavioral tendencies. The review of related literature that highlights behavioral and personality traits could infer a student’s likelihood to declare intent to study abroad. The methodology used for the data analysis is described and results of the data analysis are discussed. Recommendations for future related research concludes the paper.

LITERATURE REVIEW

As described by D’Acquisto, (2009) “study abroad literature reflects overall a positive attitude of students toward study abroad opportunities” (p. 6). Students who have elected to participate in study abroad opportunities may very likely identify with the statement by Hoffa (2007), “Since its very beginning, study abroad has been promoted as a way to acquire new knowledge and skills, enhance personal growth, and foster professional development” (p. 91). What is not addressed in Hoffa’s comment is the ability of individual students to adapt effectively during the study abroad program in order to gain these potential benefits. Personality traits of individual students may influence their intent to study abroad and, possibly, their effectiveness during a study abroad program. While several articles discuss learning styles and personality styles as part of student attributes, few authors have proposed designing a study abroad program to accommodate specific personality/behavioral styles of potential study abroad students or to predict their likelihood of intending to study abroad.

Salyers, Carston, Dean, and London (2015), stated that “studies have shown that university students who participate in study abroad programs may develop improved cultural sensitivity, language proficiency, personal growth, openness to diversity, and enhanced civic responsibility as the result of these experiences” (p. 368). According to McLeod, Carter, Nowicki, Tottenham, Wainwright, and Wyner (2015), “The goal of most, if not all, study abroad programs is to provide students with a set of life experiences that will broaden their perspectives and expectations and have a positive impact on the way they live and think” (p. 368). Salyers, et al. (2015) concluded that students participate in study abroad opportunities for a variety of reasons, including, but not limited to, “personal dispositions, interest in other cultures, travel to other countries, language acquisition, and opportunities for career, professional development, and pleasure” (p. 369).

Selected personality models and behavioral traits have been identified in a combination of study abroad literature and vocational career literature. These traits are discussed below along with comments about possible fit with positive experiences in study abroad programs.
MBTI

Miao and Harris (2012) have stated “in terms of type theory, that extraverts and sensates derive the most benefit from study tours” (p. 435). They have used the MBTI (Myers and Myers, 1980) and similar instruments (Keirsey and Bates, 1984) with strong focus on the MBTI as evidenced by their statement, “It is better normed than most instruments of its kind and has a massive database of research behind it. It is also arguably more sophisticated and complex than most others” (Miao & Harris, 2012, p. 437). Jensen (1987) claimed:
What is most striking about the MBTI, and what empowers it, is that the instrument was developed as, and primarily remains, an assessment of personality type… Rather than assessing behavior, the MBTI assesses personality type. Once the student’s type is identified, teachers can make predictions about how that student learns best… The MBTI … allows teachers to penetrate through the veil of behavior to underlying cognitive functions as can few other assessments of learning style. (p. 182).

Four Personality Factors

Li, Olson, and Frieze (2013) supported the belief that “personality factors represent the major reasons why students do or do not go abroad to study” (p. 75). The four personality factors identified in their study include the following:

Achievement motivation: This personality factor is based on McClelland’s work (1961) and is defined as “the desire to work hard and to do things well and is associated with higher confidence in one’s abilities; 1987” (as cited by Li, Olson, & Frieze, p. 76).

Neophilia: This personality factor has been defined by Janda (2001) as the “appreciation for and even a desire to have, fresh, new experiences” or “a love of the new” (as cited by Li, Olson, and Frieze, p. 75).

Migrant personality: “People who are highly mobile are believed to have a migrant personality or mobile personality” (as cited by Li, Olson, and Frieze, 2013, p. 77).

Desire to help: “Study abroad intention may relate to students’ desire to help others” (as cited by Li, Olson, and Frieze, 2013, p. 77).

One outcome of the study by Li, Olson, and Frieze (2013) is the recommendation to target students who are more neophilic and who have a high desire to help through community service options.

Cooperativeness and Competitiveness

Research conducted by Lu, Au, Jiang, Xie, and Yam (2013) “validated the construct and criterion validities of the Cooperative and Competitive Personality Scale (CCPS) in a social dilemma context. The results from three studies supported the notion that cooperativeness and competitiveness are two independent dimensions, challenging the traditional view that they are two ends of a single continuum” (p. 1135). In a departure from the tradition of defining personality in terms of overt behaviors (for a review, see Pervin, 1994), however, Xie, Yu, Chen, & Chen, (2006) studied cooperativeness and competitiveness from a trait perspective, through which personality traits were broadly defined as ‘stylistic and habitual patterns of cognition, affect and behavior’” (Winter, John, Stewart, Klonen, & Duncan, 1998, p. 232).

Based on previously cited studies, it could be inferred, while not definitively proven at
this time, that students who scored higher in Cooperativeness and lower in Competitiveness might be more likely to declare an intent to study abroad.

Awareness, Self-Awareness, and Knowledge

Cultural Intelligence (CQ) “refers to individual capacities that enable one to interact effectively with others from different cultural backgrounds and in different cultural contexts” (Brislin, Worthley, & MacNab, 2006, p. 40). CQ represents the capability to be effective across and within cultures (Ng & Earley, 2006) and people can be taught these skills (Earley & Ang, 2003; Thomas & Inkson, 2003). (as cited by MacNab et al., 2012, p. 1322).

MacNab, Brislin, and Worthley (2012), have suggested that this aspect of CQ should be the first step in developmental training (Thomas & Inkson 2003; Thomas, 2006). While the traits of Awareness, Self-Awareness, and Knowledge are identified as CQ traits that can be learned (as opposed to inherent personality components), it seems likely that the more students are able to learn the skills on which these traits are based, the more likely they might be to declare an intent to participate in study abroad opportunities.

Agreeableness and openness are personality traits that relate to interpersonal competency and are considered vital for the development of CQ (Li, Mobley, and Kelly, 2016). They address how different combinations of agreeableness and openness can impact one’s CQ in that “open individuals who are low on agreeableness are less likely to learn from culturally different others in comparison with open individuals who are high on agreeableness due to their lower level of interpersonal competencies” (p. 106).

Emotional Intelligence

Salovey and Mayer (1990) espouse emotional intelligence as “a set of information-processing skills that individuals use to construct reality from emotional stimuli for the purpose of managing life in an adaptive manner” (Puffer, 2011, p. 131). Emotional intelligence is seen by Salovey and Mayer (1990) as “the characteristic ability to perceive and express emotion accurately and adaptively, the ability to understand emotional knowledge, the ability to use feeling to facilitate thought, intellectual growth and problem-solving, and the ability to regulate emotions in oneself and in others” (p. 190). Subsumed under these emotional intelligence abilities are cognitive self-regulatory processes such as an objective awareness and appraisal of one’s own and others’ feelings, the ability to manage and express these feelings and using emotions to motivate as part of the utilization of emotions (Cobb & Mayer, 2000, p. 14). These processes are thought to be important psychological resources for adaptive intrapersonal and interpersonal emotional functioning (Salovey & Mayer, 1990; Schutte, Malouff, & Bhullar, 2009)” (as cited by Coetzee, M. & Harry, N., 2014, p. 91).

While emotional intelligence may be a composite of learned skills, as opposed to inherent personality traits, an argument could be made that students with stronger emotional intelligence skills might be more likely to declare an intent to participate in one or more study abroad programs, all other things being equal.

Five Factor Model (Big-Five Personality Traits)

The Five Factor Model includes openness to experience, extroversion, agreeableness, conscientiousness, and neuroticism. “Results from a survey in Chinese university students (N = 264) showed that career exploration correlated negatively with neuroticism, and positively with openness to experience, extroversion, agreeableness, conscientious and BAS (behavioral activation system)” (Li, Guan, Wang, Zhou, Guo, Jiang, Mo, Li, & Fang, 2015, p. 39).

The study also included measurement of the behavioral inhabitation system/behavioral activation system (BIS/BAS). “The behavioral inhabitation system represents a predisposition
that motivates individuals to avoid negative stimuli. The behavioral activation system represents a predisposition that motivates individuals to approach positive stimuli” (Carver & White, 1994, p. 319).

“A body of research indicates that much of personality can be described by the Big Five model, which consists of the traits of extraversion, agreeableness, conscientiousness, emotional stability and openness.” (Zhang & Shutte, 2015, p. 298). “One might expect that the behaviors and competencies associated with stability, such as regulating emotions, adherence to goals, and positive interactions with others would lead to better performance” (Zhang & Shutte, 2015, p. 298).

Again, a review of the literature related to study abroad practices did not reveal an example of the Five Factor Model being used to predict a student’s intent to participate in study abroad at some point in their educational program. It would appear to be plausible that students who have stronger scores in the areas of openness to experience, extroversion, agreeableness, conscientious and a behavioral activation system that represents a predisposition that motivates them to approach positive stimuli might be more likely to declare an intent to study abroad.

METHODOLOGY

The data collected in this survey involved several universities, but the majority of the data were collected from one major university in the southern mid-west of the United States. Students, both graduate and undergraduate, took part in the survey. While mostly students majoring in business volunteered to participate, there were some students from other disciplines who participated. Qualtrics, an online survey tool, was used to collect student information about intentions to participate in study abroad. After students completed the Qualtrics portion of the survey, they were sent to another website to take The Excellence for Learning – Student Version (DISC).

The Excellence for Learning – Student Version (DISC) was selected to measure student behavioral tendencies. This instrument is intended to measure the “how” about behavior and does not attempt to measure values or other personality characteristics. For example, it will measure communication tendencies, introversion/extroversion behaviors, task/relation tendencies, tolerance for risk, level of optimism, behavioral adaption and other behaviors. The cost of the instruments was met by a university grant.

Students taking the Excellence for Learning – Student Version (DISC) were provided with a report on their behavioral style. This report was used to determine the intensity and influence of the D (Dominance), I (Influence), S (Steadiness) and C (Compliance) on behavior. Figure1: Graph 2 Natural Behavior with Energy Line, as shown in the Appendix, was contained in the report and is an example of the graph from which data was extracted.

The vertical axis on Figure 1 ranges from 0 to 100. At 50 there is a bold line that is called the energy line. The distance above the energy line represents the intensity of the dimension to one’s behavioral style [16]. It should be noted that the makeup of a person’s behavioral style is a blend of all four dimensions (D, I, S and C) [16]. However, the fact that a person is above the energy line means that that dimension has a significant impact on his or her behavioral style.

There were 283 usable surveys extracted from the Qualtrics data about student intentions. The data from these surveys were used to report some of the data. However, when merged with the DISC data, only 276 surveys contained all the requested information. Thus, the 276
respondents’ data are used to report on the behavioral tendencies.

**RESULTS AND DISCUSSION**

Table 2 (Appendix) shows the student breakdown by gender of those participating in the research. As you will note, there was an almost even split between males and females.

Students were asked “Would you participate in a Study Abroad if the opportunity presented itself?” Students were given a choice of yes, no or maybe. Table 3 (Appendix) lists the results based on gender.

Students were grouped to determine the frequency and percentage of students with high DISC elements (D, I, S or C). This would be indicated by the highest plotted bar in Graph 2 of their reports. For example, in Figure 1 (Appendix) the highest plotted point is a C. Table 4, (Appendix) indicates the results. Note that the sample size for this analysis is 276 students.

What was thought to be more relevant was the students that were introverts versus students that are extroverts. Speculation would suggest that extroverted students would have a stronger interest than introverted ones. A Pearson Chi-Square test for Independence showed no statistically significant relationship between introversion and extroversion. This is reflected in Table 5 (Appendix).

While the DISC measures introversion and extroversion, it also measures the relational and task-oriented characteristics of students. A Pearson Chi-Square test for Independence showed a statistically significant relationship between relationship/task-oriented tendencies and responses to participating in study abroad, $X^2(2) = 8.97$, $p < 0.05$. Students that have a strong relational component indicated they would travel on study abroad trips more frequently than those students with a task-orientation. Table 6 (Appendix) provides the frequency results.

When comparing the DISC element means (D, I, S and C), three of the four (D, S and C) did not show a statistically significant relationship in how students responded about their intentions to study abroad. However, the I (Influencing) element showed a statistically significant difference. This is not unexpected because I’s tend to be extroverted and relational. The results are shown in Table 7 (Appendix).

The DISC used in this research study measured students’ traits in eight areas as follows:

1. Analysis of Data – Analyzing and challenging details, data and facts prior to decision making and is viewed as an important part of decision making. Information is maintained accurately for repeated examination as required.
2. Competitiveness - Tenacity, boldness, assertiveness and a “will to win” in all situations.
3. People-Oriented - Maintaining a positive and constructive view of working with others. Spending a high percentage of time listening to, understanding and successfully working with a wide range of people from diverse backgrounds to achieve “win-win” outcomes.
4. Frequent Change - “Juggling many balls in the air at the same time.” Moving easily from task to task or being asked to leave several tasks unfinished and easily move on to the new task with little or no notice.
5. Frequent Interaction With Others - A strong people orientation, versus a task orientation. Dealing with multiple interruptions on a continual basis, always maintaining a friendly interface with others.
8. Versatility - Carrying a high level of optimism and a “can do” orientation. Bringing together a multitude of talents and a willingness to adapt the talents to changing assignments as required.

Source: Target Training International, Anne Klink (personal communication, November 24, 2009)

When compared to their intentions to study abroad, only two of the eight variables showed any statistically significant relationship. A Pearson Chi-Square test for Independence showed a statistically significant relationship between people oriented tendencies and responses to participating in study abroad, $X^2(2) = 7.48, p < 0.05$. People-oriented students indicated they would like to study abroad. A Pearson Chi-Square test for Independence showed a statistically significant relationship between analysis of data and responses to participating in study abroad, $X^2(2) = 6.68, p < 0.05$. However, students who indicated a strong score in Analysis of Data were more definite in their “no” response to studying abroad.

CONCLUSION

While it was theorized that extroverts would go on study abroad more than introverts, that was not the case. There was no statistical significant difference. However, the research did indicate that students with a strong relational component did indicate they would join study abroad trips. When the introversion/extroversion was combined with the relational/task dimensions, students with a high extroversion-relational component did indicate they would join study abroad trips more than those with other combinations. Additionally, students that scored high on the People-Oriented dimension were more likely to take study abroad trips. Interestingly, students that scored high on the Analysis of Data dimension were more definite in their “no” response to taking study abroad trips.

FURTHER RESEARCH

There is very limited data on personality/behavioral styles and participation in study abroad programs. The research should be expanded to include other universities from various regions of the United States as well as countries that have high participation in study abroad programs. Though the Institute of International Education has just recently started tracking long and short term study abroad participants more research of offerings and impact is needed. Bonnstetter & Suiter (2007) suggests that certain behavioral styles process information differently. Therefore, could changing the amount and way information and advertising on study abroad is presented influence intentions to participate in study abroad programs?
APPENDIX

Table 1: Top Five Major Fields of Study of U.S. Study Abroad Students

<table>
<thead>
<tr>
<th>Field</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM Fields</td>
<td>24%</td>
</tr>
<tr>
<td>Business</td>
<td>20%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>17%</td>
</tr>
<tr>
<td>Foreign Language &amp; International Studies</td>
<td>8%</td>
</tr>
<tr>
<td>Fine and Applied Arts</td>
<td>7%</td>
</tr>
</tbody>
</table>

Table 2: Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150</td>
<td>133</td>
<td>283</td>
</tr>
<tr>
<td></td>
<td>53%</td>
<td>47%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3 – Participation by Gender

<table>
<thead>
<tr>
<th>Response</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>27</td>
<td>44</td>
<td>71</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Maybe</td>
<td>38</td>
<td>44</td>
<td>82</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>93</td>
<td>178</td>
</tr>
</tbody>
</table>

Table 4 – Frequency & Percentage of Students with High DISC Elements

<table>
<thead>
<tr>
<th>DISC Element</th>
<th>Number of Students</th>
<th>Percentage of All Students N=276</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>44</td>
<td>15.9%</td>
</tr>
<tr>
<td>I</td>
<td>86</td>
<td>31.2%</td>
</tr>
<tr>
<td>S</td>
<td>78</td>
<td>28.3%</td>
</tr>
<tr>
<td>C</td>
<td>68</td>
<td>24.6%</td>
</tr>
</tbody>
</table>

Table 5 – Frequencies of Introverted/Extroverted Students Responding to Study Abroad Intentions

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Study Abroad Intention</th>
<th>Study Abroad Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introversion</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Extroversion</td>
<td>36</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 6 – Frequencies of Task-Oriented/Relational Students Responding to Study Abroad Intentions

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Study Abroad Intention</th>
<th>Study Abroad Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Extroversion</td>
<td>48</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>16</td>
</tr>
</tbody>
</table>
### Table 7 – Mean (SD) Natural D, I, S, & C Scores by Responses to Study Abroad Intentions

<table>
<thead>
<tr>
<th>Element</th>
<th>Study Abroad Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>D*</td>
<td>45.45</td>
</tr>
<tr>
<td>I**</td>
<td>66.35</td>
</tr>
<tr>
<td>S***</td>
<td>65.59</td>
</tr>
<tr>
<td>C****</td>
<td>48.38</td>
</tr>
</tbody>
</table>

Notes:
- D* A one-way analysis of variance did not show a statistically significant difference among mean natural D scores by students’ indication of their willingness to participate in study abroad, $F(2,175) = 0.41$, $p > .05$
- I** A one-way analysis of variance showed a statistically significant difference among mean natural I scores by students’ indication of their willingness to participate in study abroad, $F(2,175) = 3.98$, $p > .05$
- S*** A one-way analysis of variance did not show a statistically significant difference among mean natural S scores by students’ indication of their willingness to participate in study abroad, $F(2,175) = 0.26$, $p > .05$
- C**** A one-way analysis of variance did not show a statistically significant difference among mean natural D scores by students’ indication of their willingness to participate in study abroad, $F(2,175) = 1.48$, $p > .05$

Figure 1: Graph Natural Behavior with Energy Line
REFERENCES


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