An "Island" Study Abroad Program and its Impact on the Intercultural Sensitivity and Cross-Cultural Adaptability of its Participants: Perspectives from a Research-Intensive University

Gita Maharaja, Ed.D.
Duquesne University
McAnulty College and Graduate School of Liberal Arts
600 Forbes Avenue, Pittsburgh, PA 15282, USA

Abstract

Traditionally, study abroad programs have involved immersion in the host culture, with particular emphasis on using and learning the native language. However, other types of programs designed to give non-foreign language majors the opportunity to study in another country have become more prevalent in recent years. Many American universities have their own "island" study abroad programs to provide students with an opportunity to travel and live together in the host country. While there is anecdotal evidence that the island model programs have a positive effect on students, there is a dearth of studies that have systematically and objectively assessed the impact of such programs. The purpose of this pre and post quantitative study is to examine the impact of a semester-long island study abroad program on the intercultural sensitivity and cross-cultural adaptability skills of undergraduate college students using the Intercultural Development Inventory (IDI) and the Cross-cultural Adaptability Inventory (CCAI) instruments.

Keywords: study abroad, intercultural sensitivity, island program, cross-cultural

Introduction

Those of us who focus on international initiatives in American higher education struggle to balance the competing realities of sending ever more American students abroad in the face of the minuscule numbers of our students who have foreign language competency. Yet the pressing need to develop cultural awareness and a global perspective in our students cannot be compromised by the reality that most of our students and the great majority of our curricula have little or no foreign language. The proliferation of short-term study abroad programs and semester-long "island programs" has been the result. But are these non-language based programs accomplishing our goals to help our students develop cultural sensitivity and a global perspective? The concurrent rise of a culture of assessment in our institutions of higher education demands that we not only ask this question but that we work to "catch up" the research to the reality of the prevalence and dominance of non-language based study abroad experiences.

2 Review of Relevant Literature

The Institute of International Education (IIE) (2017) compiles comprehensive annual statistics on study abroad trends and participation. In the last decade study abroad participation has tripled (205,988 in 2004/05 compared to 313,415 in 2014/15). A significant trend within this considerable growth pattern is that there has been an enormous shift in how students study abroad. Although IIE and the Open Doors report characterize programs by destination and duration, the explosive growth of short-term programs suggests a trend related to our study of an island model study abroad program.

That is, much of the growth in study abroad experiences is tied to the proliferation of programming accessible to students who are not attempting to master foreign language fluency. The rapid growth of North American programs in Italy in the last ten years is an excellent case in point: almost all of these programs are island programs. The statistical report of a study on the economic impact of North American programs in Italy reveals that the total number of participating members in The Association of the American College and University Programs (AACUPI) in Italy was 76 in 2000 and grew to 125 in 2016 (AACUPI, 2017). These broad trends in both the growth of participation in study abroad and the growth of certain types of programming reinforce the necessity of gathering data about whether these programs are helping to meet the goals of developing intercultural awareness and sensitivity and cross-cultural adaptability.

The literature reveals that so far very few scholars have focused on investigating both the development of intercultural sensitivity and intercultural adaptability in one study. This study will be unusual in investigating both these dimensions. Furthermore, there is a surprising lack of research on island model study abroad programs. Therefore, this literature review will look at studies that have explored students' ability to understand cultural differences, to adapt to living effectively in another culture and to interact effectively with people in the host culture across a wide variety of program formats. This literature review will confine itself to studies that have used the IDI or CCAI instruments.

A study conducted by Williams (2005) on the impact of a semester-long study abroad on students' intercultural communication skills focuses on cross-cultural adaptability and intercultural sensitivity. The students participated in an immersion program. The results of this study reveal that students who studied abroad generally showed a higher level of intercultural communication skills than the students who did not study abroad. The results also indicated that students who chose to study abroad had a higher level of intercultural communication skills both at the beginning and at the end of the semester compared to students who did not participate in the study abroad program.

A semester-long study program was evaluated by Kitsandas and Meyers (2002) to gauge the impact of study abroad on cross-cultural awareness. Twenty-four students between the ages of 20 and 28 were queried prior to and after their study abroad experience. The results revealed that the scores on all four scales were significantly higher after their return from study abroad. The study also compared the scores of the four scales of the control (stay-at-home campus) and experimental group. The results indicated there was a significant difference between the two groups, with the experimental group scoring higher. The study also reported that the scores revealed no significant change in the self-assessment of the control group at the beginning and end of the semester. These findings were consistent with those of Carlson and Wideman (1988), who reported that studying abroad heightened intercultural understanding, particularly in regard to students' attitudes towards other cultures.

The impact of the duration of study abroad programs on students' intercultural sensitivity was explored by Mendez-Lopez-Portillo (2004). The Intercultural Development Inventory (IDI), a combined design of qualitative and quantitative measures, was employed to examine the different perspectives on the student experience. The findings showed that the duration of the program does indeed significantly impact the development of intercultural sensitivity. The findings indicated that students gained a better understanding of cultural differences while participating in a 16-week program as compared to a seven-week long program.

Another study conducted by Engle and Engle (2004) assessed the impact of the duration of study abroad on intercultural sensitivity and level of openness. Using Hammer's (IDI) instrument for their research, the scholars reported that students who participated in a year-long program gained a higher level of intercultural sensitivity as compared to students who participated in a semester-long program.

Further research was carried out by Anderson, Lawtin, Rexeisen, and Hubbard (2006) explored the impact of a four-week long study abroad program on students' intercultural sensitivity. Preliminary statistics indicated that short-term programs can have a positive effect on the overall development of intercultural sensitivity.

A quasi-experimental study by Patterson (2006) explored the effect of a short-term summer program on intercultural sensitivity. The results showed that the group of students who took an intercultural communication and foreign language courses at the home campus demonstrated no change in the development of intercultural sensitivity, whereas the group of students who studied overseas showed a relatively small level of change on the IDI scales. There was no significant difference in the intercultural sensitivity measurement of the two groups of students. The results also indicated regression in some of the post-test results of the IDI scales.

The qualitative data revealed growth in students' worldview for both off-campus and on-campus groups. The scholar concluded that among the limitations of the study was the short duration of the program and implied that future research is needed to assess the effect of a longer study abroad program using the IDI instrument.

3 Research Methodology

3.1 Research design

A nonequivalent control group, a pretest-posttest design was used for the study. This means that the control and treatment groups of students are similar and are not formed by random assignment. Thus, a convenience sample was utilized to carry out the study. A survey was administered to gather selected demographic information about the participants. Hammer's (2007) Intercultural Development Inventory (IDI) and Kelley and Meyers's (1995) Cross-Cultural Adaptability Instrument (CCAI) served as the testing instruments for both the pretest and posttest for both the control and treatment group at the beginning and end of the semester.

The literature indicates that the pretest and posttest method minimizes the chance of error, is economical and is powerful in determining how changes occur over time. The pretest-posttest experimental design is found by Shannon and Davenport (1994) to be effective in determining the extent to which a treatment has an influence on subjects' performance overtime. Furthermore, referring to this design, they say that "determining that there is some overall difference between treatment and control groups is helpful. However, the interaction between the with-in subjects factor and the between-subjects factor is most helpful in that it will allow to determine whether subjects' change from pretest to posttest was dependent upon membership in a particular treatment group" (p. 273). Hence, a One-within One-Between Repeated Measures ANOVA was appropriate to compare the development of intercultural sensitivity and cross-cultural adaptability skills in students studying abroad and students studying at the home campus.

3.2 Population

The study comprised of students from an urban research-intensive university in the mid-east of the United States. The sample included 131 undergraduate students. The participants consisted of two groups, a treatment group of 53 students who participated in the island program majoring in liberal arts, business and education and a control group of 78 students who studied on-campus also majoring in the aforementioned programs.

Given that the program is predominantly attended by sophomores and relatively few upperclassmen, the treatment group was largely made up of sophomores and only a few juniors and seniors. The control group (on-campus) was also comprised mainly of sophomores and a few juniors. Furthermore, all the students in both the control and treatment groups had a minimum grade point average of 2.75 and above. All the participants were over the age of 18.

3.3 The assessment instruments

Hammer's IDI was selected for this study because it is grounded in Bennett's Developmental Model of Intercultural Sensitivity (DMIS) (Bennett, 1986, 1993), a theoretical framework which examines an individual's intercultural sensitivity. Bennett (1986, 1993) posits a phenomenological model of intercultural learning which can be used to diagnose groups and individuals. The model explains how one responds to cultural differences. It is based on the assumption that individuals' views of other cultures change and develop on a predictable path as they gain experience in other cultures (Bennett, 1986, 1993). This instrument is commonly utilized to assess the effectiveness of different cross-cultural interventions on individuals by measuring their changes in intercultural sensitivity (Hammer, 2007).

The instrument was designed to identify the different stages of development of intercultural sensitivity ranging from denial to integration. The instrument is divided into scales with the intent to measure the participants' worldview development on the continuum from ethnocentrism to ethno relativism. It consists of five scales: *Denial/Defense, Reversal, Minimization, Acceptance/Adaptation, and Encapsulated Marginality*. The *Denial* subscales are *Disinterest* and *Avoidance*. The *Minimization* scale is divided into two subscales: *Similarity* and *Universalism*. The *Adaptation* cluster consists of *Cognitive* and *Behavioral* subscales.

The Cross-Cultural Adaptability Inventory (CCAI) is a criterion-referenced questionnaire that is based on constructs rather than on theory. The instrument is considered to have face-value, content and construct validity, and to have a high reliability.

The CCAI has been commonly used to measure an individual's ability to adjust to cross-cultural situations and to track developments in cultural diversity. The CCAI is a "training instrument designed to provide information to an individual about his or her potential for cross-cultural effectiveness" (Kelley & Meyers, 1995, p.1). The CCAI is a culture-general approach focusing on universal aspects of culture shock and cultural adjustment rather than aiming at a particular culture. It consists of four scales: Emotional Resilience, Flexibility and Openness, Perceptual Acuity and Personal Autonomy.

3.4 Data collection procedures

Pre-test data were collected by the researcher from the treatment group during the pre-departure orientation of students attending the Italian Campus program. Post-test data were collected at the Italian Campus at the end of the semester during the pre-departure orientation. Data were collected from the control group studying at the home campus by requesting the permission of the instructors teaching sophomore level courses in various schools at the university to allow for comparison of results by school. The demographic questionnaire and the instruments were distributed and collected in the classrooms by the researcher upon permission of the instructors at the beginning and end of the semester.

3.5 Research Design Questions

The study addresses the following research questions:

1. Are there changes in the intercultural sensitivity of students studying abroad in an island program over a semester-long period as measured by the Intercultural Development Inventory (IDI)?
2. Are there differences in the intercultural sensitivity between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the IDI?
3. Are there changes in the cross-cultural adaptability skills of students studying abroad in an island program over a semester-long period as measured by the Cross-Cultural Adaptability Instrument (CCAI)?
4. Are there differences in cross-cultural adaptability skills between students studying abroad in an island program and students studying at their home campus over a semester-long period as measured by the CCAI?

4 Results

The results of a paired-test analysis that compared the pre- and post-intercultural sensitivity score of the study abroad group using the IDI instrument revealed that there were distinct differences in the intercultural sensitivity of students studying abroad over a semester-long period, as measured by the *Reversal*, *Minimization*, *Adaptability/Adaptation* scales of the IDI, though changes were not in evidence in the *Denial/Defense* and *Encapsulated Marginality* scale (refer to Table 1).

The IDI instrument was also used to investigate the development of each student's intercultural sensitivity, whether studying abroad or staying at home, over the course of the semester. Table 2 shows the results of the IDI instruments after an Analysis of Variance (ANOVA) was done to compare the difference in the average score of the two groups of study to find out if there were any statistically significant difference between the average score.

When we compared the group studying abroad to the group that stayed home, the data shows that there was insufficient evidence to conclude that there was significant digression between the two groups. However, the outcomes were decidedly different between the two groups in the Reversal scale ($p=.032$), Acceptance/Adaptability scale ($p=.033$) and Encapsulated Marginality ($p= .030$) when comparing the results of the pre- and post-test. The highest level of variance between the groups was revealed in the *Acceptance/Adaptation* ($p<.001$) scale across the pre- and post-test, with the study abroad group having a higher score than the on-campus group (refer to Table 2).

The CCAI instrument was administered to find out if there were any changes in the cross-cultural adaptability of students studying abroad over a semester-long period. The results of a paired- test analysis showed a marked evolution in the cross-cultural adaptability skills of students studying abroad over a semester-long period, as measured by the Emotional Resilience ($p=.046$), flexibility/Openness ($p=.008$) and Personal Autonomy scales ($p=.001$), with only the Perceptual Acuity ($p=.417$) scale evidencing no change. Overall the students showed a statistically significant difference ($p=.003$) in their cross-cultural adaptability skills at the end of their experience (refer to Table 3).

When the two groups were compared, the CCAI data similarly produced insufficient evidence to conclude that there was a definite divergence in the measurement of cross-cultural adaptability skills between the two groups However, once again there was a significant difference between the two groups when comparing the pre and post-test, as measured by the Flexibility/Openness and Personal Autonomy scales. The study abroad group had a higher score in both of these scales at the end of the semester compared to the on-campus group. The score, combining all four scales of the CCAI, was also significantly different for the study abroad group when comparing the pre- and post-results. This means that the study abroad group demonstrated a higher level of cross-cultural adaptability skills at the end of the semester. On the other hand, the on-campus group did not show any significant differences in any of the scales and in the combination of all four scales when comparing the scores at the beginning of the semester to those at the end of the semester (refer to Table 4).

5 Discussion

The overall results of the CCAI and IDI Acceptance/Adaptability scales strongly indicated that the student who studied abroad in this island program increased their cross-cultural adaptability and skills and intercultural sensitivity at a higher level than students who studied on campus when comparing the pre- and post-survey results. Moreover, more significant changes occurred in the direction of the study abroad group than in the on-campus group. The results indicate that the island study program of the type undertaken by the research university had a positive impact on the students who participated in them. Students gained not only intercultural sensitivity marked by an increased ability to adapt to and accept cultural differences but also significant personal growth manifested by an enhanced independence, flexibility, open-mindedness, and self-confidence.

The findings point to a definitive development in the intercultural sensitivity of students in an island program over a semester-long period as measured by the *Reversal*, *Minimization*, *Acceptance/Adaptation* and *Encapsulated Marginality* of the IDI, although the *Denial/Defense* scale, did not exhibit any changes. The regression discovered in the examination of the *Reversal* could mean that the students became less likely to project the culture of the host country in their own culture's terms (Hammer, 2007). The result of this study may imply that students should be given more opportunities to explore and to reflect on the cultural differences between the host and home culture during the study abroad experience. Some type of intervention, for example, service learning, group discussions or journal-keeping might reduce the tendency to see other cultures as better than their own (Hammer, 2007).

The backward shift in the *Minimization* scale may imply that students became less likely to notice the differences between other cultures and their own. We were not surprised by this finding since other studies which have used the IDI instrument to assess the impact of study abroad on intercultural development found the same results (Anderson et al., 2006; Patterson, 2006). The fact that the students regressed in the Minimization scale should not be surprising because the complex understanding of cultural differences is not an easy process for individuals who have spent very little time overseas. The demographics statistics in this study indicated that the majority of the participants (80%) have spent up to four weeks in another country, perhaps explaining the lack of forward change in this particular stage.

The change in *Acceptance/Adaptation* suggests that the students who studied abroad improved their ability to accept and adapt to cultural differences. By the same token, the improvement in students' *Acceptance/Adaptation* after their study abroad experience is consistent with the literature review, which asserts that adaptability skills are crucial to the process of understanding cultural differences (Kim, 2001).

Statistically significant changes in the cross-cultural adaptability of students studying abroad in the island program over a semester-long period were found in the Personal Autonomy, Flexibility/Openness and Emotional Resilience scales of the CCAI, but not in the area of Perceptual Acuity. We do not find these results surprising since, according to the demographic information on travel time overseas, the majority of the participants in this study had not been previously exposed to extended journey in other countries and consequently a semester-long experience in a host country would have made a positive change in their personal growth, in particular, self-confidence (Emotional Resilience), independence (Personal Autonomy) and tolerance (Flexibility/Openness), measured by the CCAI instrument.

The results of the CCAI instrument supports the findings of a survey which was conducted by the university on the impact of the Italian Campus Island program on students' maturity and self-confidence. The results revealed that the majority of the students who participated in the Italian campus program responded that the experience increased their maturity and self-confidence. Out of 218 students who completed the survey, 80% responded that the experience highly increased their understanding of themselves, and 76% responded that the experience highly increased their self-confidence. Therefore, the results of this study and the university's survey are consistent.

6 Limitations and Recommendations for Further Research

The organizational structure of study abroad programs differs by institution in the United States. This study was limited to students who participated in a semester-long island type study abroad in Italy, organized by a middle-sized urban private university. The responses of the participants may not be generalized to reflect the effect of study abroad on the overall population of college students in higher education institutions. In addition, programs of longer time period or in different locations may have projected different results.

This study consisted of students studying in a program organized by the Office of International Programs at the university under consideration. Programs of different types such as direct enrollment, hybrid, faculty-led, and shorter-term (less than a semester) could have produced different results using the CCAI and IDI instruments. Furthermore, this study examined a predominantly sophomore-level study abroad program. Results from an experience involving upperclassmen may have differed.

The pre- and post-test research design may have had a carry-over effect, meaning that the participants were already aware of the purpose of the study and familiar with the content of the two instruments at the time of the post-test. Therefore, students may have manipulated their responses accordingly during the post-test (McMillan & Schumacher, 2001). The results of this study were based on a quantitative research design. A mixed qualitative and quantitative or a qualitative approach may have possibly projected different responses.

More research is needed to show if study abroad has a lasting impact after students return to their home culture. Longitudinal studies would help educators and administrators to understand the effects of time on the intercultural sensitivity and cross-cultural skills of students in an island model and other types of study abroad programs.

It would also be interesting to explore the intercultural sensitivity and cross-cultural adaptability skills of international students who study in the U.S.A., using the IDI and CCAI instruments, and comparing the results to a group of students participating in an island model study abroad program over a semester-long period.

The present study was conducted using a predominantly Caucasian population in a mid-size private institution. Further research similar to this is needed in academic institutions with a larger non-Caucasian population so that a more diverse group of students can be tested in future studies. In a similar vein, we recommend a study in which students go abroad to non-Western countries. Finally, with respect to the use of potentially different models for research, it may also be beneficial to educators to conduct a "portraiture" study that essentially follows a single student in order to focus more closely the individual cultural experiences through personal narration.

7 Conclusion

This research concludes that a semester-long island model study abroad program can have a positive impact on students' intercultural sensitivity, particularly in its dimension of *Acceptance/Adaptation.* The study also found that the students who studied abroad demonstrated a higher ability to accept and adapt to cultural differences than the students who studied solely on campus. In the absence of additional gain in the other scales of the IDI, this may suggest that additional incentives should be introduced to encourage students to continue along the path of higher understanding of cultural differences that the island model and other programs seek to promote.

This study also provides conclusive evidence that a semester-long island model study abroad program has a positive impact on students who studied abroad improving their overall cross-cultural adaptability skills with significant changes in the Personal Autonomy, Flexibility/Openness, and Emotional Resilience dimensions, while the students who studied on campus exhibited no significant change in those areas. Such results demonstrate that an island model program significantly contributes to students' ability to not only function in and adapt to our multicultural world but also to gain more independence, self-confidence, flexibility, and openness.

One central point that this present study clearly demonstrates is that not only should island model and other programs continue to be promoted, but also that they need to be assessed in an in-depth and consistent manner to ensure that they are designed to be personally fulfilling and at the same time beneficial in both practical and humanitarian ways. For there is no doubt that, if one of the goals of higher education is to produce a generation prepared to face the challenges of the global universe, then programs like study abroad that cultivate knowledge of other cultures and understanding of what it takes to survive in a diverse world, are vital to that mission.

References

American Council on Education: Center for Institutional and International Initiatives, (2001).*Students' Interest in international education and survey of international attitudes and knowledge*. Washington D.C.: American Council on Education. Retrieved July 2017 from http//www.acenet.edu

Anderson, P. H, Lawton, L., Rexeisen, R. J., & Hubbard, A. C. (2006). Short-term study abroad and intercultural sensitivity: A pilot study. *International Journal of Intercultural Relations, 30*, 457-469.

Association of American College and University Programs in Italy (AACUPI) (2017). *IRPET (Instituto Regionale per la Programmazione Economica della Toscana) 2000 study on the economic impact of North American programs in Italy*. Retrieved on July5, 2017 from http://.aacupi.org/3vol_set_complete/Frames/vol3_cover.htm

Bennett, M. J. (1986). A developmental approach to training for intercultural sensitivity. *International Journal of Intercultural Relations, 10*, p. 179-196.

Bennett, M.J. (1993*).* Towards ethnorelativism: A developmental model of intercultural sensitivity. In R.M. Paige (Ed.), *Educational exchange for the intercultural experience* (pp.21-71). Yarmouth, ME: Intercultural Press.

Bennett, M.J. (1998). *Basic concepts of intercultural communication*. Yarmouth, ME: Intercultural Press.

Bennett, M. J. (2004). Becoming Interculturally Competent. In Wurzel, J. (Ed.). *Toward multiculturalism: A reader in multicultural education (*2nd ed., pp. 62-77). Newton, MA: Intercultural Resource Corporation.

Bennett, M.J. & Bennett, J. M. (2004 b). Developing Intercultural Sensitivity: An integrative approach to global and domestic diversity. In D Landis, J. M. Bennett & M. J. Bennett (Ed.). *Handbook for intercultural training* (pp. 147-165) Thousand Oaks, CA: Sage.

Carlson, J.S. & Widaman, K.F. (1988). The effect of study abroad during college on attitudes towards other cultures. *International Journal of Intercultural Relations, 12*, 1-17.

Cushner, K. & Karim, A. U. (2004). Study abroad at the university level. In D Landis, J. M. Bennett & M. J. Bennett (Ed.). *Handbook for intercultural training* (pp. 147-165). Thousand Oaks, CA: Sage.

Cushner, K., & Mahon, J. (2002). Overseas student teaching: Affecting personal, professional, and global competencies in an age of globalization. *Journal of Studies in International Education, 6*, 44-58.

Deardoff, D. (2004). Internationalization: In search of intercultural competence. *International Educator, 8*(2), 13-15

Deardoff, D. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education, 10*, 241-261.

Hall, E. T. (1976). *Beyond culture*. Garden City, NY: Anchor Press/Doubleday.

Hammer, M. R. (2007). *The Intercultural Development Inventory Manual.* Intercultural Communication Institute: Portland, OR.

Hammer, M. R., & Bennett, M.J. (1998, 2001). Intercultural Development Inventory. Intercultural Communication Institute: Portland, OR.

Hammer, M. R., Bennett, M.J. & Wiseman, R. (2003). Measuring intercultural sensitivity: The intercultural development inventory. *International Journal of Intercultural Relation, 27*, 421–433.

Hammer, M. R., Gudykunst, W. B., & Wiseman, R. (1978). Dimensions of intercultural effectiveness. An exploratory study. *International Journal of International Relations, 2*, 382-393.

Hannigan, T.P. (1990). Traits, attitudes, and skills that are related to intercultural effectiveness and their implication on cross-cultural training. *The International Journal of Intercultural Relations, 13*, 89-111.

Hanouille, L. & Leuner, P. (2001). Island programs: Myths and realities in international education. *World Education News and Reviews, 14*(1), 1-7. Retrieved on October 10, 2007 from http://www.wes.org/ewenr/01/jan/feature.htm.

Institute for the International Education of Students (IES) (2017). The IES MAP (Model Assessment Practice) for study abroad. Chicago: Institute for the International Education of Students. Retrieved July 5, 2017,from http://www.iesabroad.org/IES/Advisors and Faculty/iesMap.html.

Kauffmann, N.L. Martin, J.N., & Weaver, H.D. (1992). *Students abroad: Strangers at home.* Intercultural Press: Yarmouth, Maine.

Kealey, D. J. (1989). A study of cross-cultural effectiveness: Theoretical issues, practical applications. *International Journal of Intercultural Relations, 13*, 387-428.

Kelley, C. & Meyers, J. (1995). *Cross-intercultural adaptability inventory*. Minneapolis, MN: National Computer Systems.

Kim, Y. Y. (2001). *Becoming intercultural: An integrative theory of communication and cross-cultural adaptation.* Thousand Oaks, CA: Sage.

Kitsantas A. (2004). Study Abroad: The role of college students' goals on the development of cross-cultural skills and global understanding. *College Student Journal, 38*, 441-449.

Kitsantas, A. & Meyers, J. (2002). Studying Abroad: Does it enhance student cross-cultural awareness? *Educational Resources Information Center*, ED 456-648.

Mahoney, S. L., & Schamber, J. F. (2004). Exploring the application of a developmental model of intercultural sensitivity to a general education curriculum on diversity. *The Journal of General Education, 53*(3-4), 312-334.

Open Doors: Report on International Educational Exchange. Institute of International Education. Open Doors (2017) *Fast Facts*. Retrieved on January 31, 2018 from https://www.iie.org/Research-and-Insights/Open-Doors/Data

Paige. R. M., Cohen A.D., & Shively, R. (2004). Assessing the impact of a strategies-based curriculum on language and culture learning abroad. *The Interdisciplinary Journal of Study Abroad, 10*, 253-276.

Patterson, P. K. (2006). Effect of study abroad on intercultural sensitivity. Dissertation for Doctor of Education, University of Missouri, United States – Columbia.

Pusch, M. D. (1981*) Multicultural education: A cross-cultural training approach.* Yarmouth, ME: Intercultural Press.

Ward, C., & Searle, W. (1991). The impact of value discrepancies and cultural identity on psychological and socio-cultural adjustment of sojourners. International Journal of Intercultural Relation, 15, 209-225.

Williams, T. R. (2005). Exploring the impact of study abroad on students' intercultural communication skills: Adaptability and Sensitivity. Journal of Studies in International Education, 9, 356-371.

Wiseman, R. L., Hammer, M. R., & Nishida, H. (1989). Predictors of intercultural communication competence. *International Journal of Intercultural Relations, 13*, 349-370.

Vande Berg, M. (2001). The assessment of learning outcomes in study abroad. *International educator, 10*(2), 31.

Table 1

Paired Samples t-Test Comparisons of Intercultural Sensitivity for the Study Abroad Group

Scale	Mean (SD) Pre-test	Mean (SD) Post-test	*t*(df = 50)	*p*
Denial/Defense	1.97 (.614)	2.08 (.680)	1.219	.229
Reversal	2.59 (.778)	2.31 (.678)	2.411	.020*
Minimization	3.59 (.678)	3.30 (.707)	2.527	.015*
Acceptance/Adaptation	2.30 (.662)	3.40 (.544)	-4.736	<.001*
Encapsulated Marginality	1.97(.614)	2.08(.680)	1.219	.229

* $p < .05$

Table 1 compares the pre- and post-results of students who have participated in the study abroad program using the Intercultural Development Inventory (IDI) instrument.

Table 2

Results of Repeated-Measures ANOVA for Comparison of Intercultural Sensitivity between the Study Abroad Group and the On-campus Group

Source	SS	*df*	MS	*F*	*p*
Group	.142	1	.142	.235	.629
Denial/Defense 1.163	1	1.163	.068	.009*	
Group*Denial/Def.	.122	1	.122	.744	.390
Error (Denial/Def.)	16.786	102	.165		
Group	.686	1	.686	.940	.335
Reversal	.698	1	.698	2.344	.129
Group*Reversal	1.409	1	1.409	4.731	.032*
Error (Reversal)	30.373	102	.298		
Group 946	1	.946	1.383	.242	
Minimization	.942	1	.942	2.697	.104
Group*Minimization	1.238	1	1.238	3.542	.063
Error (Minimization)	35.642	102	.349		
Group	.668	1	.688	1.463	.229
Acceptance/Adapt	4.041	1	4.041	21.448	<.001*
Group*Acce./Adapt.	.881	1	.881	4.674	.033*
Error (Acce,/Adapt.)	46.601	102	.188		
Group	.163	1	.163	.229	.633
Encap. Marginality	.345	1	.345	1.230	.270
Group*Encap. Marg.	1.359	1	1.359	4.841	.030*
Error (Encap. Marg.)	28.623	102	.281		

$p < .05$

Note: Denial/Def. = Denial/Defense, Acce/Adapt = Acceptance/Adaptation and Encap. Marg. = Encapsulated Marginality

Table 2 shows compares the results of the study abroad group and the on-campus group using the Intercultural Development Inventory (IDI) instrument.

Table 3
Paired Samples t-test Comparisons of Cross-Cultural Adaptability for the Study Abroad group

Scale	Mean (SD) Pre-test	Mean (SD) Post-test	t(df) = 50	p
Emotional Resilience	4.64(.437)	4.85(.401)	-3.137	.046*
Flexibility/Openness	4.70(.499)	4.87(.491)	-2.050	.008*
Perceptual Acuity	4.69(.533)	4.76(.515)	-0.818	.417
Personal Autonomy	4.70(.486)	5.12(.387)	-5.449	< .001*
Overall	4.64(.437)	4.85(.401)	-3.137	.003*

* $p < .05$

Table 3 compares the pre- and post-results of students who have participated in the study abroad program using the Cross-cultural Adaptability Instrument (CCAI) instrument.

Table 4

Results of Repeated-Measures ANOVA for Comparison of Cross-Cultural Adaptability Skills between the Study Abroad and the On-Campus Group

Source	SS	*df*	MS	*F*	*p*
Group	.126	1	.126	.400	.528
Emotional Resilience	.315	1	.305	2.166	.144
Group*Emo. Res.	.382	1	.382	2.713	.103
Error (Emo. Res.)	14.361	102	.141		
Group	.215	1	.215	.508	.478
Flexibility/Openness	.720	1	.720	5.950	.016*
Group*Flex./Open.	.713	1	.713	5.887	.017*
Error (Flex./Open.)	12.350	102	.121		
Group	.356	1	.356	.964	.329
Perceptual Acuity	.240	1	.240	1.688	.197
Group*Perc. Acuity	.001	1	.001	.004	.950
Error (Perc. Acuity)	14.518	102	.142		
Group	.003	1	.003	.011	.917
Personal	3.300	1	3.300	23.607	<.001*
Group*Personal Auto.	1.570	1	1.570	10.975	.001*
Error (Personal Auto.)	14.593	102	.143		
Group	.013	1	.013	.050	.823
Overall (all four scales)	.652	1	.652	7.573	.007*
Group*Overall	.422	1	.422	4.909	.029*
Error (Overall)	8.776	102	.086		

* $P < .05$

Table 4 compares the results of the study abroad group and the on-campus group using the Cross-cultural Adaptability Instrument (CCAI) instrument.