Assessment of Intercultural Development
of College Students in Study Abroad

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Introduction

According to Patterson (2006), the “development of intercultural awareness, sensitivity, and competence is important for a person to compete in today’s workplace”. It falls on higher education to sharpen intercultural skills in college students entering the workforce. Institutions may seek to impart these skills through study abroad programs.

A majority of the literature observed intercultural development through implementing quantitative surveys; selected studies compared change over time through pre-test and post-test while some compared perceived intercultural development of study abroad participants to a control group. In an effort to provide a comprehensive inclusion of students in different college campuses, the scope of this literature review looks at traditional, non-traditional, public and private institutions, and community college students. However, the resulting selection of articles primarily surveyed study abroad programs that occurred in Western Europe and Latin America, with the exception of the Dwyer’s retrospective longitudinal study (2004) of the alumni of the Institute for the International Education of Students.

In examining literature published within the past ten years, different testing instruments emerged to measure specific values on personal development of study abroad students. This literature review is principally directed to provide insight on methods used to measure intercultural skills that are enhanced while students partake in a study abroad program; such insight may be useful to institution leaders looking to include study abroad programs in course requirements. Additionally, study abroad coordinators seeking to evaluate student development of their participants, may use this literature review to identify instruments available and select one suited for their respective program.
Bennett’s Developmental Model of Intercultural Sensitivity (DMIS) organizes a progression of one’s cultural worldview from ethno-centric stages of denial, defense, and minimization, to ethno-relative stages of acceptance, adaptation, and integration. The DMIS specifies that each stage of orientation can indicate a worldview structure through observation of behaviors and self-reported attitudes, and that each stage progression generates more complicated and complex issues to be resolved in cultural differences (Hammer, Bennett, Wiseman, 2003). However, the DMIS only suggests and describes one’s stage of worldview and compares any progression among the six stages when measured over time; it does not apply specific, measurable value to intercultural sensitivity, which is the “ability to discriminate and experience relevant cultural differences” (Hammer et al., 2003).

The DMIS provided the theoretical basis on which the Intercultural Development Inventory (IDI) was created. The IDI places one’s orientation toward cultural differences on the DMIS and provides a numerical score of intercultural sensitivity. Interviews from 40 men and women representing a varied range of ages, experiences, and cultures were collected and analyzed by the research team trained in cross-cultural interview techniques and the DMIS. The result of the transcribed interviews clustered similar statements that indicated a particular worldview stage. These statements were reviewed for inter-rater reliability by a panel of experts in the intercultural field and the DMIS. Multiple trials for reliability, content validity, and construct validity had resulted in a 50 statement questionnaire measured five core mindsets of orientations: denial/defense, reversal, minimization, acceptance/adaptation, and encapsulated marginality (Hammer et al. 2003).
The IDI does not explain why or how change of sensitivity to cultural difference occurs. Despite this, one may use the IDI as a pre-test and post-test to measure progression along the 5 factor scale of cultural sensitivity. To apply the IDI within the scope of higher education, this instrument is useful for assessing intercultural sensitivity among students, particularly those who study abroad.

**Intercultural Sensitivity**

In a study by Engle and Engle (2004), the IDI was used to measure students’ intercultural sensitivity over time. The sample in the study was derived from 187 study abroad participants at the American University Center of Provence, in France, over the course of six semesters. For those students in a semester-long study abroad program the IDI was administered in the first and the final week of the semester. Those students who studied abroad in a year-long program were tested at the end of the year in addition to the two previous tests with the semester-long program students.

The results of the IDI tests provided “numerical credence” (Engle & Engle, 2004) that full-year participants develop significantly more in cultural understanding than the single-semester participants. However, the results were limited within the AUCP program for a semester- to year-long comparison. There was no control group to strengthen internal validity; participants’ intercultural sensitivity could be the result of maturation. The demographics of the sample were not explicitly examined, so demographic variables such as gender, ethnicity, and past cultural experiences could potentially affect scores on the IDI.

Medina-Lopez-Portillo (2004) also compared program duration’s influence on student development of intercultural sensitivity. The sample consisted of 28 total students at University of Maryland who participated in either a seven-week summer program in Taxco, Mexico, or in a
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16-week semester program in Mexico City, Mexico. Though demographic data was collected to make inferences about race and ethnicity affecting students’ experiences abroad (Medina-Lopez-Portillo, 2004), the demographics of the sample itself were not explicitly mentioned.

In addition to the quantitative data measured by an IDI pre-test and post-test, qualitative data was gathered by using pre-departure and post-program face-to-face individual interviews or pre-departure and post-program questionnaires to further provide insight on student experiences abroad. The analysis of both sets of data suggested overall that students increased in intercultural sensitivity as measured through IDI scores, but that students in the longer Mexico City program showed more development of intercultural sensitivity than the students in the shorter Taxco program, similar to that of Engle & Engle’s findings of program duration study.

However, there were flaws within the study about the Taxco and Mexico City programs. The sample size was too small to make generalized claims on the quantitative data, as a t-test is recommended to have at least 30 (Medina-Lopez-Portillo, 2004). There was no control group, so the scope of the study was limited to comparing one program to another. The difference in program locations with different durations is a threat to the study’s validity; program location and design could also have had an effect on student development of intercultural sensitivity.

Qualitative data was gathered with different techniques for each group; a written questionnaire was administered for students in the shorter Taxco program, while the longer Mexico City students were personally interviewed. The interviews provided “lengthier and richer accounts about their experiences” (Medina-Lopez-Portillo, 2004), which can positively affect qualitative accounts. The interviews were administered by the researcher, who was also the faculty director of the study abroad programs; it was possible that interview responses could have been positively influenced by the presence of a leader figure with whom the students had
interacted for 16 weeks. Despite these considerations, supplementing the IDI with qualitative data provided a more complete understanding of changes in a student’s perceptions after a study abroad program (Medina-Lopez-Portillo, 2004). Through a questionnaire or interview, changes in intercultural sensitivity can be explained further as to how or why such changes occurred.

Intercultural Sensitivity in Private University Students

The previously mentioned studies were researched with respective convenience samples and did not include students attending a private university. Also, neither study followed up with the participants to test whether intercultural improvement was retained. However, a study by Rexeisen, Anderson, Lawton, and Hubbard (2008) addressed these shortcomings. Additionally, the study sought to assess whether GPA scores or gender were related to changes in intercultural development resulting from study abroad. The IDI was administered to the participants prior to the program’s departure, at the program’s end before returning to the USA, and four months after the end of the study abroad program (Rexeisen et al. 2008). 39 out of the 54 students enrolled in the semester abroad program completed all three IDI tests. With an average GPA of 3.5, the 54 students were traditional college-aged juniors, majoring in business and participating in semester-long study abroad program in London, England.

The results of the longitudinal study suggested that the study abroad had an immediate positive impact on intercultural development of students; unexpectedly, the follow-up test did not show the anticipated improvement of intercultural development after four months. Additionally, the results of the study suggested little support between cumulative GPA and intercultural development. Furthermore, the results of the study suggested some differences in change in intercultural development between genders: “women consistently scored higher on overall development” but only “men showed a significant improvement in overall development”
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(Rexeisen et al., 2008). However, the difference between genders in regards to intercultural development diminished over time.

Similar to the previously mentioned empirical studies, the subjects were a non-probability sample; more so in regards to the Rexeisen study, the students applied to the program and were selected for the study abroad program based on interviews, letters of recommendation, personal interviews, and cumulative GPA. Therefore the study had less degree of generalizability to study abroad programs that have open admission. Though gender difference regarding intercultural development was specifically examined, a small sample of men participated in the study relative to the number who partook in the study abroad program.

By utilizing the IDI as an instrument to measure intercultural sensitivity among students in study abroad, program directors can provide indications that study abroad programs enhance the development of intercultural competence.

The Global-Mindedness Scale

Another instrument to measure intercultural proficiency is Hett’s Global-Mindedness Scale. Global-mindedness is explained as how an individual identifies oneself as related to the world community and feels a sense of responsibility for its members (Kehl & Morris, 2008). The Global-Mindedness Scale is a survey of 30 statements with which participants must agree or disagree on a five-point Likert scale response for each statement.

In a study by Kehl and Morris (2008), the Global-Mindedness Scale was administered to study the differences in global-mindedness of students who had participated in a short-term study abroad program and those who studied in semester-long study abroad program upon completion of the respective programs. A non-equivalent control group (Kehl & Morris, 2008) was administered the Global-Mindedness Scale; the students had been accepted into a future study
abroad. The sample consisted of 520 students from three private institutions with similar mission statements and similar study abroad program models.

Analysis of data suggested that there was no significant difference between the mean of the global-mindedness of student groups who studied abroad in a short-term program and those who planned to study abroad in the future. Additionally, the mean global-mindedness of students in the semester-long study abroad grouping was significantly higher than that of students who have yet to study abroad. Analysis of the demographics of each group of respondents also yielded notable results. Participants who reported parent’s annual income to be above $100,000 had statistically significant lower levels of global-mindedness (Kehl & Morris, 2008). Overall, males scored higher levels of global-mindedness than females.

The study’s consistency was compromised because the window of time between student study abroad experience and the completion of the Global-Mindedness Scale varied between participant groups. The scope of the research using the Global-Mindedness Scale was limited to study abroad students in selected private universities. However, in a study by Clarke, Flaherty, Wright, and McMillen (2009), the Global-Mindedness Scale was used to measure the global-mindedness between student groups in a US state university. Similar to research gathered by Kehl and Morris, this study sought to compare global-mindedness of students who studied abroad for one semester and students who did not. The groups, one receiving instruction at home campus, the other completing similar coursework while on a semester study abroad program, consisted of junior-level students enrolled in the business school of the midsize university.

To further provide a deeper measure of intercultural proficiency the groups were also tested on intercultural sensitivity using the Intercultural Sensitivity Index. The index was developed by Olson and Kroeger to measure the stages of intercultural development as outlined
by the previously mentioned DMIS. The surveys were administered to both groups at the conclusion of the semester (Clarke et al. 2009).

Comparison findings illustrated that students who participated in the study abroad semester scored higher in areas of cultural pluralism, efficacy, and interconnectedness on the Global-Mindedness Scale. Additionally, the study abroad students showed greater openness to diversity to those who did not study abroad. Though no significant differences were found in the first 4 stages of the DMIS using the Intercultural Sensitivity Index, the students who spent a semester abroad had overall higher scores in the three stages of ethno-relativism, particularly in the final stages of adoption and integration (Clarke et al., 2009).

Institution-Specific Quantitative Test Design

Though the Intercultural Development Inventory and the Global-Mindedness Scale are well-reputed and provide a theory-based instrument with which to measure student intercultural development, some institutions elect to design similar tests that are more suited to its respective study abroad programs and desired course outcomes. The results of quantitative testing offer insight into the study abroad program itself and can provide administrators, students, and their parents valuable information about the impact of study abroad on student development.

In Community Colleges

There was little research on the impact of study abroad on student development in community colleges. A “Study Abroad Student Development Survey” (Drexler & Campbell, 2011) was created and incorporated variables from Chickering’s Theory of Student Development. This survey was administered to 46 students in study abroad programs from nine colleges in six states. The study examined whether students perceived enhanced self-
development after a study abroad program and if demographic variables had an impact on participation in study abroad.

Data analysis of the pre-test and post-test suggested that students that studied abroad “had a higher overall development than those who had not” (Drexler & Campbell, 2011). Through employment of ANOVA, the demographics of the study yielded unexpected findings: a majority of the participants were white/female, a majority of students were undecided or had not selected a degree major, and the second largest major was in pre-professional areas such as pre-medicine and pre-law. Though gender, race, and choice of major were examined, the study was limited because key demographic variables such as use of financial aid, income level and age were not gathered; these might have had an impact on choice to study abroad as well as student development.

For Non-Traditional Students

Research studies on the outcomes of study abroad have not focused on the non-traditional, working adult, college student. A study launched by Peppas (2005) addressed this gap in research. Peppas used a constant sum scale to assess students’ perceptions of various components and the educational value thereof. In addition to the constant sum scale and a questionnaire to gather demographic data, Peppas created 8 positively-worded Likert questions to reflect the predicted outcomes in Porth’s Model. Porth’s Model is used for designing and teaching a study abroad course. The survey differed in its sample of non-traditional students, but also it was conducted by telephone by the researcher and an assistant. In addition to the quantitative data gathered through using the previously mentioned methods, two additional open-ended questions about advantages and disadvantages provided qualitative insight on the program’s effectiveness on students.
The sample consisted 70 of 129 individuals studying business; these students had taken the business course which included a two-week study abroad course across an eight-year span. The results of the study indicated that, on average, students perceived themselves to be more accepting of other cultures as a result of the course. When demographics were analyzed by employing ANOVA, no significant differences were found on seven of the eight statements between age, race and gender. The exception to this is the question that compared the course to that of a traditional classroom in regards to theory and practice; females significantly agreed more strongly with the statement than males.

**Retrospective Longitudinal Study**

In 2002, a study conducted by the Institute of the International Education of Students (IES) sought to look at general findings, academic attainment, intercultural development, career impact, and personal growth (Dwyer, 2004). The sample pulled from the IES’s fifty years of alumni who originated from over 500 colleges and universities across the USA. The survey designed 28 questions for respondents to rate on a five-point Likert scale. The sample was large with over 3,700 returned surveys from a possible 14,800 current available alumni; however the data was self-reported and therefore subjective.

The findings of this retrospective longitudinal study supported the belief that year-long study abroad programs have significantly more impact than semester-long programs on students when comparing attained degrees, seeking diversity in friendship, working/living internationally, foreign language use, and community participation. Surprisingly, the data reflected that summer abroad students benefited the same if not more than semester-long students (Dwyer, 2004). Furthermore, as the study indicated that impact from study abroad is sustainable for as long as fifty years.
Though some studies supplement quantitative data with qualitative questioning (Medina-Lopez-Portillo, 2004; Peppas, 2005), a purely qualitative approach to assessing student development from study abroad was introduced by Williams (2009). This approach, the Reflective Model of Intercultural Competence, defined intercultural competence as having three increasingly complex dimensions from which to draw four desired learning outcomes. The cognitive dimension was described as having appropriate knowledge about cultural issues, values, and behaviors. The affective dimension was designated as having a motivation to act appropriately in intercultural situations through flexibility and open-mindedness. Finally, the behavioral dimension was explained as implementing critical skills such as resourcefulness, culturally-appropriate people skills, and problem-solving (Williams, 2009). From these dimensions the following learning outcomes emerged: increased knowledge and understanding of cultural issues, increased flexibility in new environments with people from diverse backgrounds, increased open mindedness and curiosity, and enhanced critical skills in culturally diverse settings.

The desired learning outcomes were presented to students through a pre-departure handbook and assessed through required open-ended questions on a web-based survey one to two weeks after the program’s end. Though participation in the survey was optional, response rate ranged from 42% to 55%. Demographic data, gender, academic major and previous travel, was collected but not for analytical purposes. The learning outcomes provided categories for a photo contest for the respective following year. In the photo contest participants submitted a short explanation describing how his or her photograph demonstrated one of the learning outcomes (Williams, 2009).
The qualitative approach to assessing student development from study abroad permitted a deeper explanation of student learning experiences; however, responses were self-reported and subjective. The photo contest provided a venue for study abroad promotion but through competition there is a chance for the desired learning outcome to be inflated or fabricated. Despite these weaknesses, a qualitative survey with the inclusion of a creative venue of learning assessment presented a unique approach to assessing student development.

Summary

This review of literature critiqued various measuring instruments and examined different approaches to survey the intercultural development in students. Intercultural proficiency is increasingly becoming important in higher education institutions. It is important to be able to measure intercultural development to visually ascertain personal growth in study abroad. By offering evidence that reinforces the belief that study abroad provides a meaningful experience that develops intercultural skills, students, parents, and administrators can make informed decisions about study abroad selection.
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<td>Advanced French-learning students from either public or private institutions studying in Provence, France</td>
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<td>Semester versus year</td>
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<td>Longer duration had more impact on intercultural sensitivity score</td>
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<td>Medina-Lopez-Portillo, 2004</td>
<td>Students at public university studying in two Mexican cities</td>
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<td>Seven-week versus semester</td>
<td>Collected but not specified</td>
<td>Longer duration had more impact on IDI score and had higher on average increase pre-test to post-test</td>
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<td>Rexeisen, Anderson, Lawton, &amp; Hubbard, 2008</td>
<td>Traditional, college-aged students at a private university studying for one semester in London, England</td>
<td>Quantitative; IDI pre-test, post-test, and follow-up four months after program</td>
<td>No</td>
<td>Yes, gender differences examined; women consistently scored higher on overall development, men showed more significant improvement</td>
<td>Study abroad had immediate positive impact on IDI scores but follow-up results implied lack of development improvement</td>
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<td>Kehl &amp; Morris, 2008</td>
<td>Private institution students who completed a short-term (8 weeks or less) or semester-long program; control group of students intending to study abroad in future</td>
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<td>Short-term versus semester</td>
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<td>Longer duration had more impact on global mindedness mean. There was no significant difference between global-mindedness of short-term and future study abroad students</td>
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<td>Clarke, Flaherty, Wright, &amp; McMillen, 2009</td>
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<td>Quantitative; Global-Mindedness Scale, Intercultural Sensitivity Index</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Study</td>
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<td>Drexler &amp; Campbell, 2011</td>
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<tr>
<td>Peppas, 2005</td>
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<td>Yes, Gender, age, ethnicity. No significant differences found between responses except on Q3a*</td>
<td>Students perceived to be more accepting of other cultures as a result of study abroad course.</td>
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<tr>
<td>Dwyer, 2004</td>
<td>Alumni of the Institute for the International Education of Students</td>
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<td>Williams, 2009</td>
<td>Traditional college students at a private university</td>
<td>Qualitative; Photo contest and 5 open-ended questions based on learning outcomes derived from Reflective Model of Intercultural Competence</td>
<td>No</td>
<td>No</td>
<td>Study abroad participation enhances intercultural competence</td>
</tr>
</tbody>
</table>

*Q3a, “In comparison to conventional classroom business courses that I have taken, Studies Abroad allowed me to better understand linkages between theory and practice” (Peppas, 2005). Females were found to agree significantly more strongly than males.
References


