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Krista M. Soria¹ and Jordan Troisi²

Abstract

Colleges and universities are increasingly internationalizing their curricular and cocurricular efforts on campuses; subsequently, it is important to compare whether internationalization at home activities may be associated with students' self-reported development of global, international, and intercultural (GII) competencies. This study examined undergraduate students' participation in study abroad and on-campus global/international activities within nine large public research universities in the United States. Framed within several intercultural development theories, the results of this study suggest that students' participation in activities related to internationalization at home—participation in on-campus global/international activities such as enrollment in global/international coursework, interactions with international students, and participation in global/international cocurricular activities—may yield greater perceived benefits than study abroad for students' development of GII competencies.

Keywords

study abroad, internationalization of the curriculum, internationalization of teaching, learning and research, internationalization of higher education, globalization and international higher education

¹University of Minnesota, Minneapolis, MN, USA

²University of Mississippi, Oxford, MS, USA

Corresponding Author:

Krista M. Soria, University of Minnesota, 272-6 McNamara Alumni Building, 200 Oak St. SE, Minneapolis, MN 55455, USA.

Email: ksoria@umn.edu

Increasingly, colleges and universities recognize the importance of expanding student learning and development outcomes to include global, international, and intercultural (GII) competencies (Brown & Jones, 2007; Burnett & Huisman, 2010; de Wit, 1995; Greenhotlz, 2000; Hammer, Bennett, & Wiseman, 2003; Kimmel & Volet, 2012; Lambert, 1996; Lee, Poch, Shaw, & Williams, 2012). GII competencies are broadly defined in this article to include knowledge about several dimensions of global and international cultures; appreciation of cultural, racial, and ethnic diversity; understanding of the complexities of issues in a global context; and comfort in working with people from other cultures. This definition has emerged under the auspices of several major bodies of work focusing on multicultural and global competency (Deardorff, 2006; Morais & Ogden, 2010; Olson & Kroeger, 2001; Pope & Mueller, 2005; Wilson, 1996), cross-cultural effectiveness (Kealey, 1989), intercultural competence (Byram, 1997; Hammer, 1989; Spitzberg & Changnon, 2009), intercultural communication (Deardorff, 2006, 2009; Kim, 1993, 1994), and intercultural sensitivity (Bennett, 1986; Hammer et al., 2003), among others. GII competencies enable people to live and work effectively with others from diverse cultural backgrounds (Bennett, 1993; Landis & Bhagat, 1996; Taylor, 1994); furthermore, the development of GII competencies can foster the development of leadership skills essential for effective participation and leadership in an increasingly complex and diverse global environment (Earnest, 2003).

In this article, we examine various ways in which undergraduates students develop GII competencies from engagement in a variety of formal and informal activities. Contending that study abroad may not be an accessible or affordable opportunity for all students, this study investigated whether on-campus engagement in globally/internationally themed activities promoted students' self-reported development of GII competencies as much as study abroad. As colleges and universities seek to internationalize their campuses—known as “internationalization at home” (Nilsson, 1990, 2000; Osfield, 2008; Otten, 2000; Paige, 2003)—it is increasingly important to assess whether on-campus activities hold the same benefits as study abroad in promoting students' development of competencies to thrive in an increasingly global world.

Study Abroad: Who Participates?

Traditionally, many institutions have focused on facilitating the development of GII competencies through study abroad opportunities (Dolby, 2008; Rundstrom Williams, 2005), and, indeed, study abroad has been linked to many important intercultural student outcomes (Vande Berg, Connor-Linton, & Paige, 2009). According to Braskamp, Braskamp, and Merrill (2009), “Education abroad has become an increasingly important educational program (experience) in global learning and development, intercultural competence, intercultural maturity, and intercultural sensitivity of students” (p. 101). Through their research, Braskamp et al. concluded that study abroad fosters both holistic and global student development.

The popularity of study abroad among college students has grown in the past decade from 99,448 participants in 1996-1997 to 270,604 participants in 2009-2010

(Institute of International Education, 2011). A broad swath of research has demonstrated the benefits of study abroad participation in a variety of areas, including appreciation for global issues and intercultural awareness (Douglas & Jones-Rikkens, 2001) and growth in intercultural communication skills (Langley & Breese, 2005). Rexeisen, Anderson, Lawton, and Hubbard (2008) further discovered that study abroad experiences have a positive impact on students' intercultural development, although they found the benefits to be immediate and not necessarily long term.

However, amid the many benefits of study abroad, there remain several challenges that students may encounter when making the decision to engage in traditional study abroad opportunities. According to Shaftel, Shaftel, and Ahluwalia (2007), cost can be a major barrier to students desiring to study abroad, especially for students who may lack resources for the additional costs associated with study abroad. Moreover, students can encounter difficulties transferring credits earned from the institutions at which they study abroad to their home universities. Finally, Shaftel et al. noted that studying abroad can sometimes delay students' progress toward graduation.

Even as study abroad participation has grown and its benefits have been well documented, disparities in study abroad participation remain a concern for higher education institutions. According to Dessoff (2006) and the Lincoln Commission (2005), students of color are less likely to study abroad compared to White students. Research has suggested that several factors influence underrepresented students' decisions not to participate in study abroad, including fears of encountering racism abroad, familial obligations and concerns, and a lack of faculty of color leading study abroad programs (Carter, 1991; Dessoff, 2006; Van Der Meid, 2003). Salisbury, Paulsen, and Pascarella (2011) also noted that study abroad participation may appear to African American students as a potential exposure to stereotype threat. Kasravi (2009) found that students of color who studied abroad encountered negative stereotyping as they engaged with the decision to study abroad. Other research has suggested that the high cost of study abroad, minority group marginalization, and fear of going to unfamiliar places remain barriers to study abroad for students of color (Institute of International Education, 2008; Mattai & Ohiwerei, 1989).

In addition, several researchers have documented that females are overrepresented in study abroad (Davis, 1997; Hoffa, 2007; NAFSA: Association of International Educators, 2003). Despite attempts to balance the proportion of males and females in study abroad, females tend to participate at twice the rate as males (Dessoff, 2006; NAFSA: Association of International Educators, 2003). Students in humanities and social sciences majors also study abroad at higher rates (Hoffa, 2007; Lincoln Commission, 2005), and although one could argue that the gender discrepancy in study abroad is due to the preponderance of females in humanities and social sciences majors, females in traditionally male-dominated majors (such as science, technology, engineering, and mathematics fields) also study abroad at twice the rate of men (Institute of International Education, 2008; Redden, 2008).

Amid these challenges, concerns are growing that students who do not participate in study abroad may not reap the same benefits in GII competencies development as their peers. Therefore, this study examined the potential for all students to gain GII

competencies by engaging in global/international experiences on their home campuses as opposed to engaging in formal study abroad experiences.

Conceptual Frameworks of Intercultural Development

Across the wide swath of literature focusing on intercultural competencies, scholars have concluded that intercultural development requires time and opportunities for refinement (Lee et al., 2012); consequently, current research emphasizes that intercultural competence development should occur within a holistic framework inclusive of cognitive, affective, and behavioral domains (Deardorff, 2006; Kegan, 1994; King & Baxter Magolda, 2005; Lee et al., 2012). Early work supported an interactionist perspective; for example, Allport (1954) hypothesized that in specific settings, the more frequently and the more in-depth members of different social groups interacted, the more likely they would get along with each other (Vogt, 1997). A recent meta-analysis of several hundred empirical studies has indeed supported the idea that intergroup contact typically reduces intergroup prejudice (Pettigrew & Tropp, 2006).

Allport (1954) specified several criteria under which successful intergroup contacts can be achieved: *firm enforcement*, in which educators consistently enforce initiatives and take ownership of participants' success; *meaningful interactions*, which suggest that superficial contact is not sufficient to lead to development but that frequency and intensity of integration yield greater results; *equal status*, as interactions with individuals that retain unequal status can reinforce the stereotypes and prejudices of the dominant group; and *cooperation*, which suggests that interactions are more positive when they are based on cooperation and not competition.

Extensions of Allport's (1954) theory continue to emerge as researchers advance new situational factors for optimal contact. For example, Wagner and Machleit (1986) concluded that positive effects require a common language, voluntary contact, and a prosperous economy. Pettigrew (1998) noted that Allport's theory explained only when contact leads to positive change but not how and why the change actually occurs. Pettigrew and Tropp (2006) suggested that Allport's criteria are not essential for intergroup contact to achieve positive outcomes but instead facilitate conditions that enhance the tendency for positive contact outcomes to emerge. Pettigrew (1998) offered a broader theory of intergroup contact that explains the means through which intergroup contact reduces prejudice, including learning about the out-group, which improves attitudes and disconfirms stereotype evidence; changing behavior, which has the potential to produce attitude change; generating affective ties—positive emotions, empathy, and intergroup friendship, which improves attitudes and reduces prejudice; and intergroup reappraisal, which reshapes one's view of in-group norms and customs because of new insights into out-groups.

Several more recent studies in higher education suggest the importance of interactions involving several dimensions of race, ethnicity, and social class in promoting student understanding of diversity in addition to positively changing campus racial climate (Hurtado, 1992; Hurtado, Carter, & Sharp, 1995). Hurtado, Milem, Clayton-Pedersen, and Allen (1998) demonstrated that interracial contact positively influenced

students' views toward others, whereas Tierney (1992) noted that structured programs that encourage contact and dialogue produced cultural learning, support, and understanding across differences.

In the context of this study, Allport's (1954) contact theory (and its various extensions) can be used to understand the means through which students might gain GII competence by interacting with international students on campus or by interacting with others while studying abroad. Colleges and universities are increasingly enrolling international students: 723,277 international students studied in the United States in 2010-2011, a 32% increase from a decade ago (Institute of International Education, 2011). With the increase in the number of international students enrolling in U.S. higher education, all U.S. students, even those who do not study abroad, are afforded opportunities for contact with international students.

Although contact theory provides support for the potential of interpersonal interactions to lead to development of GII competencies, Lewin's (1936) person-environment interaction theory suggests a more comprehensive paradigm through which to understand the ways in which the college environment promotes students' intercultural development. Lewin suggested that behavior is a function of the interaction of person and environment—within the higher education environment, the curricular, cocurricular, and interpersonal activities can facilitate student development (Strange, 1996). Early behaviorists believed that individual behavior could be explained, predicted, and modified if the mechanisms underlying environmental influences were discovered (Conyne & Clack, 1981).

In the context of this study, intentionally designed curricular and cocurricular global/international experiences—environmental influences—can expose students to others from diverse backgrounds or cultures, present opportunities to gain knowledge about international cultures, and situate students within a globally framed context. Such activities provide students with opportunities to promote growth and development of GII competencies. Ping (1999) noted that campus interactions can provide liberating encounters with people who represent other values, faiths, and social practices; when these contacts reflect genuine human interaction they hold the potential to prepare students to engage in cross-cultural environments.

Finally, Deardorff's (2009) more recent model of intercultural development suggests that intercultural development begins with the foundational attitudes of respect, openness, and curiosity. From there, intercultural mind-sets are developed through increasing knowledge and comprehension of cultural self-awareness, deep cultural knowledge, and sociolinguistic awareness; this awareness leads to adaptability and flexibility within different cultural contexts, which then lead to effective and appropriate communication and behaviors within intercultural situations (Deardorff, 2009). Within Deardorff's (2009) model of intercultural competence, a dynamic interplay between affective, cognitive, and behavioral components fosters lasting intercultural competence; for example, one who has respect toward other cultures and a curiosity about other cultures may seek knowledge about those cultures. These knowledge-seeking behaviors can increase one's empathy for other cultures and enhance one's ability to relate to others from different cultural backgrounds, further stimulating more

knowledge-seeking behaviors and increasing one's ability to effectively communicate within different cultural contexts.

Although the three previously discussed theories (Allport, 1954; Deardorff, 2009; Lewin, 1936) embody diverse perspectives in intercultural competency development, they contribute to a holistic conceptual framework from which we gain an understanding of the myriad ways in which internationalization at home or study abroad efforts can enhance college students' development of GII competencies. Ultimately, these holistic perspectives encourage practitioners and researchers to look beyond mere encounters with those from diverse cultures as a means of developing intercultural competencies; instead, these theories advocate that students need multiple formal and informal opportunities to grow and develop in different contexts (Lee et al., 2012). Guided by these theories, this article explores whether students' engagement in internationalization at home activities and off-campus study abroad activities similarly promotes students' self-reported development in GII competencies. The research questions framing this study are as follows:

- With what frequency do students participate in on-campus internationalization at home and off-campus international and global activities?
- Does participation in on-campus internationalization at home activities (e.g., curricular, cocurricular, and student interactions with international students) have the same significant relationships with students' development of GII competencies as participation in study abroad?

Method

Instrument

The Student Experience in the Research University (SERU) survey is based at the Center for Studies of Higher Education at the University of California, Berkeley. The web-based SERU survey sampling plan is a census scan of the undergraduate experience. In the SERU survey, students answer a set of core questions related to their academic engagement, research experiences, sense of belonging, satisfaction, and demographic information. Students are also randomly assigned one of four modules containing items focused specifically on a research theme, including student life and development, civic engagement, academic and global experiences, and a module specifically created by each partner institution.

Participants

The survey was administered in spring 2011 to 213,160 undergraduate students across nine large public universities in the United States classified by the Carnegie Foundation as having very high research activity. The institutional-level response rate for the SERU survey was 38.1% ($n = 81,135$). The survey items used in this analysis are located in module that was randomly assigned to 30% of students. We only used

non-transfer students in our final analysis ($n = 15,807$). Within the sample, 59% of students were female ($n = 9,329$), 41% male ($n = 6,478$), 0.4% American Indian or Alaskan Native ($n = 56$), 6.3% African American ($n = 988$), 12.4% Hispanic ($n = 1,965$), 19.6% Asian ($n = 3,092$), and 61.4% White ($n = 9,706$). Missing data were deleted list-wise, resulting in a fewer respondents at each level of analysis.

Measures

Demographics. In the analysis, we controlled for the impact of demographic characteristics on students' development of GII competencies. We included students' gender, which was dummy coded (*female* = 1, *male* = 0). We excluded students who listed their race/ethnicity as "other/unknown" and international students from the analysis. First-generation students were defined as those whose parents had not earned a baccalaureate degree. Students were also asked to report their social class when growing up and could choose from five categories: *low income/poor*, *working class*, *middle class*, *upper middle/professional class*, and *wealthy*. We dummy coded the social class and first-generation variables for analysis (*first generation* = 1, *non-first generation* = 0; *low income/poor* = 1, *all others* = 0; *working class* = 1, *all others* = 0). As we used all levels of students in this analysis, we controlled for students' age, which ranged from 18 to 61 ($M = 20.27$, $SD = 1.96$), and the number of credits they had earned ($M = 73.95$, $SD = 40.76$). Race and ethnicity variables were dummy coded with White students as a common referent category.

GII Competencies. Within the survey, students were also asked to self-report their skills before they started college and their current skills in seven GII competency areas: their understanding of the complexities of global issues; their ability to apply disciplinary knowledge in a global context, understand international perspectives (economic, political, social, and cultural), work with people from other cultures, appreciate, tolerate, and understand racial and ethnic diversity, and appreciate cultural and global diversity; and their comfort working with people from other cultures (Table 1). These items were developed by researchers at the Center for the Studies in Higher Education at the University of California, Berkeley. To compute students' self-reported development of intercultural competencies, we subtracted students' ratings of their skills when they started on campus from their current ability ratings.

Antecedents to GII Competency Development. We controlled for factors that might predispose students' development of GII competencies, including their prior interest in pursuing international or global opportunities, the frequency with which students follow global/international events in the media, and students' development of linguistic skills in a language other than their own. The survey asked students to select factors important to them in deciding on their major, including whether the major complements their desire to study abroad and provides international opportunities. We used those items to gauge students' prior interest in international/global experiences. Students were also asked how frequently they followed international/global media and news events (listed in Table 1). Finally, students self-reported their development of

Table 1. Summary of Factor Analysis Results for the Student Experience in the Research University Questionnaire ($N = 12,068$).

Item	Global media ($\alpha = .94$)	Global/ international competency ($\alpha = .81$)	Intercultural competency ($\alpha = .82$)	Linguistic skills ($\alpha = .78$)	International interest ($\alpha = .71$)
Global politics and diplomacy	.918	.019	-.023	.012	-.003
International conflicts and peace issues	.893	.054	-.028	-.012	-.004
Countries outside the United States	.887	.039	-.020	.002	-.004
Global health issues	.862	-.050	.060	.011	-.028
Global climate and environmental issues	.857	-.042	.056	.004	.023
International business and economics	.841	-.007	-.019	-.006	.013
Understand the complexities of global issues	.025	.969	-.139	-.044	.016
Ability to apply disciplinary knowledge in a global context	.002	.959	-.126	-.019	.015
Ability to understand international perspectives (economic, political, social, cultural)	-.005	.599	.183	-.044	.022
Ability to work with people from other cultures	-.024	.454	.423	.093	-.038
Ability to appreciate, tolerate, and understand racial and ethnic diversity	.011	-.129	.944	-.035	.018
Ability to appreciate cultural and global diversity	.025	-.013	.877	-.046	.024
Comfort working with people from other cultures	-.029	.410	.470	.077	-.044
Foreign language skills	.023	-.155	-.009	.961	.020
Linguistic and cultural competency in at least one language other than my own	-.015	.139	-.045	.863	-.009
Complements desire to study abroad	-.033	-.027	.020	.035	.883
Provides international opportunities	.030	.057	.006	-.021	.875

Factor loadings greater than .40 are in bold.

linguistic and cultural competency in at least one language other than their own and foreign language skills.

To obtain factors for the items we used as outcome and predictor variables, we conducted a factor analysis on 17 items with oblique rotation (promax). The Kaiser–Meyer–Olkin measure verified the sampling adequacy for the analysis ($KMO = .85$). Bartlett’s test of sphericity, $\chi^2(136) = 121629.1$, $p < .001$, indicated that correlations among items were sufficiently large for principal component analysis. An initial analysis was run to obtain eigenvalues for each component in the data; five components had an eigenvalue greater than Kaiser’s criterion of one and explained 74.82% of the variance. Given the large sample size, Kaiser’s criteria for components, and the convergence of a scree plot that showed inflexions that justify retaining five components, the final analysis retained the following factors: following global/international media, global and international competencies, intercultural competencies, linguistic skills in a foreign language, and interest in international opportunities. Table 1 shows the factor loadings after rotation in a pattern matrix, with factor loadings greater than .40 in bold. The factor scores were computed using the regression method and saved as

Table 2. Survey Respondents' Participation in Global and International Activities.

Variable	<i>n</i>	%
1 Interacted with students from outside the United States in social settings (e.g., in clubs or student organizations, or in informal settings)	12,705	91.8
2 Interacted with students from outside the United States in class (e.g., through discussion sections, study groups, or class projects)	12,587	90.8
3 Developed a friendship with a student from outside the United States	11,910	86.3
4 Attended a performance with an international/global focus	8,455	61.5
5 Attended lectures, symposia, workshops, or conferences on international/global topics	8,059	58.5
6 Enrolled in a course with an international/global focus	5,731	41.6
7 Worked with faculty member on a project with an international/global theme	5,497	40.0
8 Presented a paper at a symposium or conference or participated in a panel on international/global topics	3880	28.2
9 Travel abroad for cross-cultural experience or informal education	2,272	16.4
10 Travel abroad for a service-learning, volunteer, or work experience	1,730	12.5
11 Any university study abroad, including summer study abroad	1,473	10.6
12 Obtained a certificate/minor/major with an international/global theme (e.g., in Latin American Studies)	1,258	9.2
13 Study abroad program affiliated with another college or university	771	5.6

standardized scores with a mean of zero and a standard deviation of one. The factors ranged in their reliability (Cronbach's α) from .71 to .94.

Global and International Engagement. Students were asked to indicate their involvement in 13 different curricular and cocurricular global/international activities by selecting either "yes, doing now or have done" or "no." These are listed in Table 2.

Limitations

One limitation to this research is the potential for nonresponse bias typically present in most survey research. In addition, we relied on students' self-reported development of GII competencies, as they compared their levels of competence when they first arrived on campus with their current abilities. This presents a challenge to researchers, as students' actual levels of GII competencies were not directly measured. Deardorff (2006) found that most higher education administrators and intercultural scholars preferred a wide variety of assessment approaches, including narrative diaries, self-reported instruments, focus groups, interviews, observations, student portfolios, and

professor evaluations, among others; our study presented only one glimpse into students' self-reported development of GII competencies and is therefore limited as a consequence.

In addition, the particular definition of GII competencies used in our study is very broad and may mask some of the unique characteristics of students' development process in each area. Deardorff (2006) discovered the wide variety of definitions of GII competencies used between higher education administrators and intercultural scholars and acknowledged that one component or definition of intercultural competence alone is not entirely enough to ensure competence (although all of the intercultural scholars agreed that "understanding of others' views" was important in developing intercultural competency). The amount of variance explained in our models is very low, suggesting additional factors that contribute to students' self-reported GII gains went unanalyzed in our analysis.

Some of the students in this sample are recent, first-generation, or second-generation immigrants (Stebbleton, Huesman, & Kuzhabekova, 2010); as a result, some of their responses related to linguistic skills, ability to understand international perspectives, and ability to appreciate cultural and global diversity may therefore reflect the international diversity that remains a part of their current identity. With this perspective, students' self-reported development in GII competencies may be lower (because their competencies when they arrived on campus were already high) and the impact of participation in global and international activities may be limited because these students may already have high GII competencies based on their precollege experiences. Students who selected to engage in some of these global/international activities may have a natural enthusiasm that may have promoted their development of GII competencies; as a consequence, this self-selection bias may have influenced our findings. Finally, the context of this article is limited to the experiences of undergraduates at large public research universities in the United States. Any results thus observed should be interpreted with caution due to these limitations.

Results

To address our first research question, we employed a descriptive analysis to examine students' rates of participation in global/international activities. Table 2 demonstrates students' participation in global/international activities at home or abroad. Students were overwhelmingly more likely to interact with international students in social settings (91.8%) and in classes (90.8%)—this type of interaction was twice as likely to occur as most of the other activities, including enrolling in global/international courses (41.6%) and working with faculty on global/international research (40.0%). Students were least likely to have enrolled in a study abroad program affiliated with another college or university (5.6%) and to have obtained a certificate, minor, or major with a global/international theme (9.2%).

We next used multiple linear regression predicting students' self-reported development in global/intercultural competencies. In all of our regressions, we examined assumptions of multicollinearity, homoscedasticity, linearity, and independent/normal errors. We found that multicollinearity assumptions were not violated (tolerance

statistics were between 0.52 and 0.99 and variance inflation factors ranged from 1.04 to 1.93). In testing homoscedasticity, we found random scatter and variability in scatterplots of standardized residuals against the standardized predicted values. In producing histograms of standardized residuals and normal probability plots comparing the distribution of standardized residuals to a normal distribution, we found evidence for slight negative skewness of the data. Examinations of matrix scatterplots suggested the relationships between the predictor and outcome variables were relatively linear. We found consistently that the residual errors were independent across our models (the Durbin–Watson values for our models were 1.59 and 1.88, respectively).

Our first model predicting students' self-reported development of understanding of global/international competencies was significant, $F(26, 10496) = 131.57, p < .001$ (Table 3). This model explains 24.6% of the variance in students' development in understanding the complexity of global/international perspectives controlling for students' demographic characteristics and antecedents to global and intercultural development. This model suggests that students who enrolled in a course with an international/global focus; interacted with international students in social settings; and attended lectures, symposia, workshops, or conferences on international global topics reported statistically significant higher development in global/international competencies. Students who presented a paper at an internationally/globally themed conference reported statistically significant lower development of global/international competencies.

Our second model predicting students' self-reported development of intercultural competencies was significant, $F(26, 10469) = 53.32, p < .001$. This model explains 11.7% of the variance in students' comfort and ability working with others from a different culture (intercultural competencies). The model suggests that students who participated in study abroad; enrolled in a course with an international/global theme; developed a friendship with an international student; attended lectures, symposia, workshops, or conferences with an international/global focus; and attended a performance with an international global focus reported statistically significant higher development of intercultural competencies. Students who were obtaining a certificate, minor, or major in an international/globally themed area had statistically significant and lower self-reported development of intercultural competencies.

Across all models, some demographic variables were consistently related to students' self-reported development of GII competencies. For example, females and first-generation, low-income, and working-class students self-reported greater development in both GII competencies. Furthermore, age and academic credits earned were consistently positively associated with students' self-reported development of both GII competencies. African American students reported statistically significant and lower development of intercultural competencies, Asian students reported statistically significant and lower development of competencies in both GII areas, and Hispanic students reported statistically significant and higher development of global/international competencies.

The only antecedent consistently and positively associated with students' GII competencies was students' self-reported development of linguistic skills. Both frequency in following global media and having an interest in international opportunities were

Table 3. Regression Analysis Predicting Students' Self-Reported Development of Global, International, and Intercultural Competencies.

Predictor	Global/international competency			Intercultural competency		
	B	SE	β	B	SE	β
Constant	-1.281***	0.105		-0.996***	0.114	
Any university study abroad, including summer study abroad	0.044	0.031	.013	0.082*	0.033	.025
Study abroad program affiliated with another college or university	0.014	0.041	.003	-0.081	0.045	-.018
Travel abroad for a service-learning, volunteer, or work experience	-0.033	0.030	-.011	0.011	0.032	.003
Travel abroad for cross-cultural experience or informal education	0.036	0.027	.013	-0.002	0.029	-.001
Enrolled in a course with an international/global focus	0.176***	0.019	.087	0.040*	0.020	.020
Obtained a certificate/minor/major with an international/global theme	-0.055	0.033	-.016	-0.144***	0.035	-.041
Interacted with students from outside the United States in class	0.011	0.038	.003	0.037	0.041	.011
Interacted with students from outside the United States in social settings	0.109**	0.043	.030	0.040	0.046	.011
Developed a friendship with a student from outside the United States	0.002	0.031	.001	0.120***	0.033	.042
Worked with faculty member on a project with an international/global theme	-0.035	0.023	-.017	0.001	0.025	.000
Presented a paper at a symposium or conference or participated in a panel on international/global topics	-0.140***	0.025	-.062	-0.036	0.027	-.016
Attended lectures, symposia, workshops, or conferences on international/global topics	0.184***	0.022	.091	0.092***	0.024	.046
Attended a performance with an international/global focus	-0.011	0.022	-.005	0.058*	0.024	.029
Female	0.051**	0.018	.025	0.096***	0.019	.047
American Indian or Native American	0.094	0.136	.006	0.012	0.147	.001
African American	0.041	0.039	.009	-0.100*	0.042	-.023
Asian	-0.074**	0.023	-.028	-0.135***	0.025	-.052
Hispanic	0.078**	0.027	.025	0.011	0.030	.004
First generation	0.074**	0.022	.031	0.105***	0.024	.045
Low income	0.157***	0.042	.034	0.112*	0.046	.024
Working class	0.068**	0.025	.026	0.057*	0.027	.022
Age	0.033***	0.005	.065	0.023***	0.006	.045
Credits	0.004***	0.000	.165	0.003***	0.000	.110
Frequency in following international/global media	0.137***	0.009	.138	-0.026**	0.010	-.027
Interest in international opportunities	-0.018*	0.009	-.018	-0.033***	0.010	-.033
Self-reported gains in linguistic skills	0.332***	0.009	.333	0.256***	0.010	.257
R ² (%)			24.6			11.7

* $p < .05$. ** $p < .01$. *** $p < .001$.

negatively associated with students' self-reported gains in intercultural competencies, whereas following global media was positively associated with students' gains in global and international competencies.

Discussion

The findings illustrate some key themes noteworthy of mention. First, the majority of students reported greater frequency in interacting with international students and participating in cocurricular global/international activities than participating in curricular and study/travel abroad activities. This suggests the internationalization at home efforts conducted by these colleges and universities have higher rates of student participation and engagement than some of the more traditional and formal study and travel abroad opportunities.

Second, the results suggest that participating in some on-campus global/international activities may benefit students' development of GII competencies more than participating in study abroad; specifically, enrolling in global/international academic coursework and attending international/globally themed lectures, symposia, or conferences were activities positively predictive of students' self-reported development in both GII competency areas. Interacting with international students and developing a friendship with an international student were positively predictive of students' self-reported development of global/international competencies and intercultural competencies, respectively. Attending a performance with an international/global focus and participating in study abroad were positively associated only with students' self-reported development intercultural competencies. Conclusively, this study suggests that internationalization at home activities can positively influence students' development of GII competencies as much as—if not more than—traditional study/travel abroad.

Of interest, students who obtained an international/global certificate, minor, or major and those who presented a paper at an international/global conference reported lower intercultural competencies and global/international competencies, respectively. Due to their deeper immersion in global/international issues and topics, it is perhaps the case that these students have become aware of how much knowledge there is to be gained on international/global topics and feel a sense of humility or self-effacement with regard to their GII competency development.

In part, Lewin's (1936) person-environment interaction theory and Dearsdorff's (2009) intercultural development theory can help to explain why on-campus cocurricular experiences were beneficial for students: The comprehensive experiences found in cocurricular programs can offer students opportunities to gain knowledge about other cultures in engaging ways. When students are provided opportunities to learn about diverse global and international cultures through formal/structured (e.g., attending an international/global conference) and informal/unstructured (e.g., attending a performance with an international/global theme) experiences *on campus*, they can reap the benefits of enhanced GII competencies.

Furthermore, Allport's (1954) contact theory can serve as a framework to understand why students who interacted with international students on campus were more likely to develop gains in GII competencies—when students interact with each other

inside and outside of classroom contexts, they grow more comfortable interacting with others from different cultures. Although the specifics of the interactions are unknown (e.g., whether the interactions were meaningful, were encouraged by educators, etc.), the interactions in and of themselves were significant predictors of students' GII competencies in this study. Within the higher education environment, then, engagement with international students can be a powerful way in which students can acquire knowledge about other cultures to enhance their intercultural competencies (Deardorff, 2009).

Enrollment in formal global/international academic coursework was also predictive of students' self-reported GII competencies in this study; as noted by Lee et al. (2012), classrooms are powerful venues for students to develop intercultural skills and behaviors that can be supported and developed across the curriculum. Yet the results of this study also suggest that learning experiences within cocurricular activities such as attending lectures and performances on international/global themes can be powerful ways in which students can acquire GII knowledge and skills. Such activities can enhance students' awareness of different cultures, which in turn can lead to their development of effective relational intercultural skills (Deardorff, 2009).

Several international at home and travel/study abroad activities were not found to be significantly associated with students' self-reported development of GII competencies in both of our models, including studying abroad with another college, traveling abroad for service learning/volunteerism, traveling abroad for cross-cultural experiences, interacting with international students in classes, and working with faculty members on international/global research. On one hand, some of these activities—such as interactions with international students in classes—may have been so minor that they did not contribute to students' development. On the other hand, some of these activities—such as working with faculty on international/global research—may have been so significant that students' perception of their development was minimized compared to their peers because these students had a heightened awareness of the enormity of international and global issues and perceived that they still had much to learn.

Finally, we found that participating in study abroad was positively associated with students' self-reported development of intercultural—but not global/international—competencies. Although study abroad is traditionally perceived to be a paramount way in which students can gain GII competencies, our study suggests that internationalization at home activities can also promote students' development of GII competencies just as effectively as—if not more effectively than—formal study abroad. Cocurricular activities, engagement with international students, and academic coursework on campuses may be more accessible and more effective ways for colleges and universities to enhance students' development of GII competencies.

Recommendations

Colleges and universities may wish to examine why some students are more likely to engage in global/international activities than other students and seek to remove barriers for all students to participate in these activities. For example, students who

attended global/international-focused lectures, workshops, and performances reported higher development of GII competencies—these events could be offered for free or at a lower cost to encourage all students' participation, emphasized as activities in which students can earn extra credit for participating, or offered at various times during the week to encourage students to participate at times that are most convenient.

In addition, this research demonstrates the importance of continued collaboration between offices that focus on supporting global/international experiences and those that develop student programs. For example, collaboration between an office of international programs and residence life aimed at developing interactions between domestic students and international students could promote the development of GII competencies for students who participate (Markos, 2009-2010). Living-learning programs with intercultural programming or peer mentorship opportunities with international students can lead to better integration between international and domestic students (Markos, 2009-2010). We fully encourage colleges and universities to continue promoting the social engagement between international and domestic students in classrooms and outside of classrooms as well (Hser, 2005).

Students can also be encouraged to enroll in courses that offer international/global themes—these courses can be encouraged by academic or faculty advisors, added to general education requirements, and integrated into existing degree programs (Altbach & Knight, 2007). More work can be done on college campuses to assist faculty in these efforts—as suggested by several researchers, faculty often report a willingness and openness to enhancing interculturalism in their courses but struggle with knowing how to incorporate interculturalism and diversity in their pedagogy (Lee et al., 2012; Mayhew & Grunwald, 2006; Pope & Mueller, 2005).

In promoting a more holistic perspective to expand internationalization at home efforts, several authors (Bennett & Bennett, 2004; Hanson & Meyerson, 1995) have argued that campuses can develop a stronger connection between global and domestic cultural diversity to take greater advantage of the knowledge and expertise they have developed in both areas. Global and international themes can be embedded in several facets of campus life—from individual classrooms to collaborative research with faculty, from programming in residence life to adding new majors and certificates to the curriculum. To that end, Ping (1999) also conveyed that internationalization should not be considered as an add-on to campuses; instead, internationalization “is a radical transformation of academic disciplines, a freeing of both teaching and researcher from the dominance of the acceptance of and training in the intellectual traditions of a particular culture” (p. 18).

Finally, we recommend that scholars continue to examine the differences between the benefits of on-campus participation in international/global activities and study abroad for all students. This study examined correlations among variables; however, future experimental and causal studies should be used to tease out the benefits of students' participation in internationalization at home and study abroad. Future research can reveal insights into students' perception of their development of GII competencies and the extent to which their cultural identity affects their perceived growth in these areas. Additional research is also needed to examine whether students' self-reported development reflects their actual development of GII competencies.

Conclusion

Our study enhances scholarship related to study abroad and on-campus global/international activities as they relate to students' self-reported development of GII competencies. As colleges and universities seek to further internationalize their campuses, the relationships observed in this study suggest that internationalization at home efforts can be valuable in promoting students' development of GII competencies. All students can potentially benefit from increased global and internationalized efforts at home—including interactions with international students and participation in curricular and cocurricular global/international activities.

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Author Biographies

Krista M. Soria recently completed a doctorate in educational policy administration (higher education emphasis) at the University of Minnesota, where she also works as an analyst for institutional research. Dr. Soria researches the benefits of high impact college experiences, social class in higher education, and undergraduates' leadership development.

Jordan Troisi recently completed a masters degree in higher education administration and currently works as a regional admissions counselor in the honors college at the University of Mississippi.