# **Short-Term Study Abroad: Effects on Cultural Intelligence**

Mary L. Tucker Ohio University

Katherine Hartman Ohio University

Nicole Gullekson University of Wisconsin-La Crosse

### **ABSTRACT**

Moving into the fourth industrial revolution, it is imperative that business schools include objectives for undergraduates to become more culturally intelligent and broaden their global learning. Likewise, it is important to assess the learning to assure objectives are being met as students are prepared for successful careers. This paper presents a brief literature review of short-term study abroad, discusses cultural intelligence competencies, highlights one short-term study abroad program, and presents findings of student growth in cultural intelligence during their global consulting experience.

Keywords: Short-Term Study Abroad, Cultural Intelligence (CQ), Assessment of Learning

Copyright statement: Authors retain the copyright to the manuscripts published in AARBI journals. Please see the AARBI Copyright Policy at http://www.aarbi.com/copyright.html

### INTRODUCTION

Global learning and cultural intelligence are important learning objectives for business graduates to be most successful in their careers. In fact, it would be easy to assert that being cross-culturally savvy is, indeed, more important than ever. Further, global competency has become a crucial skill for business school graduates seeking competitive job placements. As cross-cultural competencies gained emphasis, business schools encouraged study abroad, and short-term programs became an active way to build student's cultural intelligence and global learning. Moving into the fourth industrial revolution, it is imperative that business schools include objectives for undergraduates to become more culturally intelligent and broaden their global learning. Likewise, it is important to assess the learning to assure objectives are being met as students are prepared for successful careers. This paper presents a brief literature review of short-term study abroad, discusses cultural intelligence competencies, highlights one short-term study abroad program, and presents findings of student growth in cultural intelligence during their global consulting experience.

### LITERATURE REVIEW

From the end of World War II until the economic slowdown of the 2020 Pandemic, multinational companies expanded and supply chains became more intertwined. Working effectively across cultures became a sought-after skill in new hires as well as leaders by multicultural companies. As cross-cultural interactions became more a norm, study abroad became an active way to build student's cultural intelligence. In fact, global competency became a crucial skill for business school graduates seeking competitive job placements (Deloach, Kurt, & Olitsky, 2015; Karl, Mendenhall, Peluchette, Wheatley, Helms, Gullekson, Tucker, Anand, Sanchez, Flores, Sroufe, 2017; Di Pietro, 2019; Potts, 2015; Mendenhall, Amardottir, Oddou, & Burke, 2013; Ng, Van Dyne, & Ang, 2009).

From an experiential view, study abroad offers rich experiences to encourage global competence. Research surrounding study abroad has indicated positive outcomes, such as intercultural adaptability, intercultural sensitivity and creative thinking (Williams, 2005; Lee, Therriault, & Linderholm, 2012); Thus, business schools increasingly developed various study abroad programs, many of which are short-term sojourns (8 weeks or less). In fact, Over 71,139 business majors engaged in study abroad in 2017-2018 (Open Doors, 2019) before the Covid-19 Pandemic caused widespread cancellations of study abroad programs.

As study abroad trips proliferated over the years, these programs have also grown from a tour designed with limited interaction across cultures to a more boundry-spanning approach that enhances global competency by interacting with others across cultures (Barner-Rasmussen, Ehrnrooth, Koveshnikob, & Makela, 2014; Di Marco, Taylor, & Alin, 2010, Karl, et al, 2017). Over the same period of time, research has progressed from overviews of successful programs with tips for designing and managing programs (McComb, Fedele, & Brunese, 2019); Mapp & Rice, 2018; Sachau, Brasjer, & Fee, 2009) to assessing student learning in order to assure that each program's learning objectives are being met. Learning objectives differ across programs and include cultural adaptability (Mapp, 2013) and cultural agility (Pouchak, 2019), intercultural or multicultural sensitivity (Anderson, Lawton, Rexeisen, & Hubbard, 2006; Andha, Uuksel, & Nascimento, 2020), intercultural growth (Gullekson & Tucker, 2013; Gullekson, Tucker, Coombs, & Wright, 2011; Tucker, Gullekson, & Esmond-Kiger, 2014), global awareness

(Chieffo & Griffins, 2004), language-learning motivation (Allen, 2010), listening comprehension (Cubillos, Chieffo, & Fan, 2008), oral skills (Martinsen, 2010), mindset (Rowe, Harbers, & Yacucci, 2019), and global learning (Tucker, Hartman, & Gabler, 2019).

Cultural intelligence is an important attribute for business graduates to be most successful in their careers. In fact, it would be easy to assert that being cross-culturally savvy is, indeed, more important than ever. It is imperative that business schools include objectives for undergraduates to become more culturally adapt. Likewise, it is important to assess this learning to assure objectives are being met as students are prepared for successful careers. Therefore, this study was designed to assess whether students' self-assessed cultural intelligence would benefit from a short-term study abroad consulting program.

### **METHODOLOGY**

Data for this study were collected using self-report assessments of cultural intelligence (https://culturalq.com) before and after the Global Competitiveness Program (GCP). GCP is a short-term (2-4 week) study abroad business consulting program. Specifically, students work in teams with host national students to complete a consulting project for a local company in one of seven countries: China, France, Germany, Greece, Hungary, Italy, and Spain. The project is a problem-based, holistic teaching approach where students apply cross-discipline concepts to solve real-world problems. The GCP learning goals are:

- To apply your business training and skills learned at Ohio University to address an international business consulting problem
- To develop project management, team and interpersonal skills in a challenging environment
- To learn how to interact with clients and manage relationships with them
- To develop tolerance for ambiguity and adversity
- To gain new perspectives on conducting business in an international setting
- To develop an appreciation and respect for the country's culture
- To learn and practice proper business etiquette in the context of a different culture
- To learn to create meaningful and high-quality deliverables
- To have a great learning experience in a foreign country

After being selected into the summer GCP and before any instruction was given about the program, students completed the Cultural Intelligence Center's CQ Assessment (T1) and wrote a guided short paper outlining their strengths, opportunities for improvement, and plan for growth while participating in the short-term study abroad. Then, students took a spring semester course to learn about the country, language, and culture of their destination and how to successfully complete the business consulting program. Students were encouraged to journal while abroad about ways their CQ was developing. The CQ assessment was given again at the end of the study abroad program (T2).

# **Cultural Intelligence (CQ) Self-Assessments**

Cultural Intelligence (CQ) was first introduced as a concept by Earley and Ang (2003) and is defined as an individual's capability to function effectively in situations characterized by cultural diversity (Livermore, 2011). The CQ Assessment assesses effectiveness in diverse situations by measuring capabilities in these four areas:

- 1. *CQ Drive* refers to a person's motivation, interest, and confidence in functioning effectively in culturally diverse settings. It includes three measures: intrinsic interest (enjoyment), extrinsic interest (benefits gain), and self-efficacy (confidence).
- 2. *CQ Knowledge* refers to a person's knowledge about how cultures are similar and how cultures are different. It includes four measures: business (economy and legal systems), values & norms (values, social interactions, and religious beliefs), socio-linguistic (language and communication), and leadership (relationships and people).
- 3. *CQ Strategy* refers to how a person makes sense of culturally diverse experiences, such as when they make judgments about their own thought processes and those of others. It includes three measures: planning (strategies before encounters), awareness (sensing self and others' perspectives), and checking (assumptions and adjusting expectations).
- 4. *CQ Action* refers to a person's capability to adapt verbal and nonverbal behavior so it is appropriate across cultural contexts. It involves having a flexible repertoire of behavioral responses that suit a variety of situations. It includes three measures: speech acts (manner and content of communication), verbal, and non-verbal. (https://culturalq.com/products-services/assessments/)

Cultural Intelligence was assessed before (T1) and after (T2) the study abroad experience online through the Cultural Intelligence Center (<a href="https://culturalq.com">https://culturalq.com</a>). Data from each assessment were analyzed and a report provided the researchers by the Cultural Intelligence Center. This report listed scores with comparisons to world-wide norms. For this research, raw data from students' individual reports was used.

### **RESULTS**

One hundred and ten students participated in program. After excluding students with missing data, the final sample used for analysis was 87 students. All students were undergraduates including freshman (18%), sophomores (37%), juniors (36%), and seniors (9%). Most students had declared business as a major (85%). Self-reported gender was evenly split among males (48%) and females (52%). One sample *t* tests and dependent sample *t* tests were used for this study. Additional analyses by major, class rank, gender, and program year indicated no significant mean difference among the groups. As such, results are reported for the full sample.

# One-Sample t Tests

Data were analyzed using one-sample t tests to determine the extent to which sample means differed from the worldwide norms ( $\mu$ ) for each of the four composite CQ scores before and after the study abroad experience. Worldwide norms were available through the Cultural

Intelligence Center (<a href="https://culturalq.com">https://culturalq.com</a>) report. There were no significant differences between the worldwide norm and the pre-test mean for action, p > .05. For the other pre-tests, students performed moderately better than worldwide norms for drive and strategy yet moderately worse than norms for knowledge, p < .001. After the study abroad experience, the composite means indicate students outperformed norms significantly for each measure: drive (M = 86 vs.79), knowledge (M = 68 vs.56), strategy (M = 86 vs.719), and action (M = 77 vs.68), p < .001. Table 1 (Appendix) provides the results of the eight one-sample t tests.

# **Dependent Sample** *t* **Tests**

Data were analyzed using dependent sample t tests to identify statistical differences between cultural intelligence before and after the study abroad experiences. There were no significant mean differences for extrinsic interest and self-efficacy, p > .01. By comparison, there were large (d > .70), significant mean gains after the study abroad experience for all four knowledge measures: business, values & norms, socio-linguistic, and leadership, p < .001. Mean differences for the other 10 measures were moderate (d = 0.41 - 0.68) and significant, p < .001. Table 2 (Appendix) provides the results of the seventeen dependent sample t tests.

### DISCUSSION

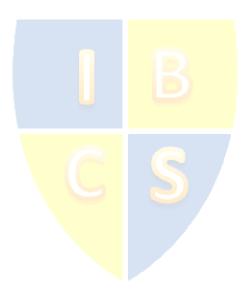
In the aggregate, the results of this study suggest that study abroad experiences help to build students' cultural intelligence. The results of the one-sample *t* tests suggest that students' self-reported Cultural Intelligence exceeded worldwide norms for all four composite scores after the experience. The largest mean difference was strategy, where students outperformed norms by 14 points. More substantially, students' knowledge score underperformed norms by almost 9 points before the experience yet outperformed norms for knowledge by more than 11 points after the experience. Arguably, the 20-point gain in knowledge before and after the experience represents a substantial, direct benefit of study abroad on learning outcomes.

Likewise, the results of the dependent sample *t* tests identified multiple, significant gains in self-reported assessments before and after the experience. The largest mean differences were related to the knowledge of business (+37%), values and norms (+32%), socio-linguistic (+99%), and leadership (+99%). By comparison, only one significant mean difference was found for drive – intrinsic interest (+9%) – while extrinsic interest (+1%) and self-efficacy (+4%) were not significantly different. One explanation is that experiential learning programs such as study abroad can quickly deliver knowledge gains through the immersive, lived experience (Black & Mendenhall, 1989; Kolb, 1984; Littrell, et al, 2006; Wood & St. Peters, 2013). By comparison, changes in attitudes such as a person's motivation, interest, and confidence may require longer or multiple exposures.

Given the importance of Cultural Intelligence in the workplace, these results lend support for study abroad programs, even short-term programs, in helping to develop the next generation of culturally intelligent business professionals. Future studies should continue to explore the impacts of both study abroad programs on competencies for business professionals and also on how to use such programs for targeted student and employee development.

# **CONCLUSION**

Whether college graduates begin their careers working for multinational companies, interacting with international companies, or dealing mostly with Americans, there will always be differing cultures and the challenge to effectively interact using cultural intelligence. Business schools are charged to equip their graduates with the competencies for successful career entry. Using cultural intelligence training is one way to trigger student interest in becoming more aware and engaged in bridging cultural divides. Providing students an opportunity to self-assess their cultural intelligence encourages a growth mindset. At the same time, assessing students' cultural intelligence before and after a learning experience provides a strong indicator for whether students are, in fact, achieving the business program's learning goals.

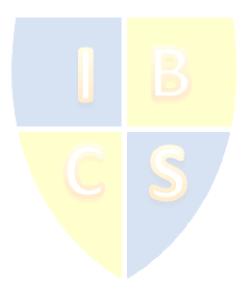


### REFERENCES

- Allen, H. W. (2010). Language-Learning motivation during short-term study abroad: An activity theory perspective. *Foreign Language Annals*, 43(1), 27-49.
- 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(4), 457-469. <a href="https://doi.org/10.1016/j.ijintrel.2005.10.004">https://doi.org/10.1016/j.ijintrel.2005.10.004</a>
- Andha, A., Yuksel, P. & Nascimento, F. (2020). Forging multicultural sensitivity: How short-term study abroad experiences can help college students engage in a global society. *FIRE: Futuristic Implementations of Research in Education*, 1(1), 13-21. Retrieved from <a href="http://firejournal.org/index.php/fire/article/view/8">http://firejournal.org/index.php/fire/article/view/8</a>
- Barner-Rasmussen, W., Ehrnrooth, M., Koveshnikob, A., & Makela, K. (2014). Cultural and language skills as resources for boundary spanning within the MNC. *Journal of International Business Studies*, 45, 886-905.
- Black, J., & Mendenhall, M. (1989). A practical but theory-based framework for selecting cross-cultural training methods, *Human Resource Management*, 28(4), 511-539.
- Chieffo, L., & Griffiths, L. (2004). Large-scale assessment of student attitudes after a short-term study abroad program. Frontiers: The Interdisciplinary Journal of Study Abroad, 10, 165-177.
- Cubillos, J. H., Chieffo, L., & Fan, C. (2008). The impact of short-term study abroad programs on L2 listening comprehension skills. *Foreign Language Annals*, 43(1), 27-49. https://doi.org/10.1111/j.1944-9720.2010.01058.x
- Deloach DeLoach, S. B., Kurt, M., & Olitsky, N. H. (2015). Does Content Matter? Analyzing the change in global awareness between business-and nonbusiness-focused short-term study abroad courses. *Journal of Teaching in International Business*, 26(1), 4-31.
- Di Marco, M. K., Taylor. J. E., & Alin, P. (2010). Emergence and role of cultural boundary spanners in global engineering project networks. *Journal of Management Engineering*, 26(3), 123-132.
- Di Pietro, G. (2019). University study abroad and graduates' employability. IZA World of Labor.
- Earley, P. C., & Ang, S. (2003). *Cultural Intelligence: Individual Interactions across Cultures*. Palo Alto, CA: Stanford University Press.
- Gullekson, N. L., & Tucker, M. L. (2013). An examination of the relationship between emotional intelligence and intercultural growth for students studying abroad. *Journal of the Academy of Business Education*, 13, 162-178.
- Gullekson, N. L., Tucker, M. L., Wright, S., & Coombs, G. (2011. Examining intercultural growth for business students in short-term study abroad programs: Too good to be true? *Journal of\_Teaching in International Business*, 22(2), 91-106.
- Karl, K., Mendenhall, M., Peluchette, J. V., Wheatley, K., Helms, M., Gullekson, N., Tucker, M. L., Anand, V., Sanchez, C., Flores, R., & Sroufe, R. (2017). Developing global competency through short-term study abroad trips: A focus on the interface, Professional Development Workshop, presented at the annual conference of the Academy of Management, Atlanta, GA.
- Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*, Englewood Cliffs, NJ: Prentice Hall PTR.

- Lee, C. S., Therriault, D. J., & Linderholm, T. (2012). On the cognitive benefits of cultural experience: Exploring the relationship between studying abroad and creative thinking. *Applied Cognitive Psychology*, 26(5), 768-778.
- Littrell, L. N., Salas, E., Hess, K. P., Paley, M., & Riedel, S. (2006). Expatriate preparation: A critical analysis of 25 years of cross-cultural training research, *Human Resource Development Review*, 5(3) 355-388.
- Livermore, D., (2011). The Cultural Intelligence Difference: Master the One Skill You Can't Do Without in Today's Global Economy. New York, NY: AMACOM.
- Mapp, S. C. (2013). Effect of short-term study abroad programs on students' cultural adaptability. *Journal of Social Work Education*, 48(4), 727-737.
- Mapp, S., & Rice, K. (2018). Conducting rights-based short-term study abroad experiences, *Social Work Education: The International Journal*, 38(4), 427-438.
- Martinsen, R. A., (2010) Predicting changes in oral skills. *Foreign Language Annals*, 43(3), 504-530. <a href="https://doi.org/10.1111/j.1944-9720.2010.01095.x">https://doi.org/10.1111/j.1944-9720.2010.01095.x</a>
- McComb, S. A., Fedele, L., Brunese, P. A., & Simpson, V. L. (2019). An interprofessional, intercultural, immersive short-term study abroad program: Public health and service systems in Rome. *Frontiers: The Interdisciplinary Journal of Study Abroad*, *31*: 148-168.
- Mendenhall, M. E., Amardottir, A. A., Oddou, G. R., & Burke, L. A. (2013). Developing cross-cultural competencies in management education via cognitive-behavior therapy. *Academy of Management Learning and Education*, 12(3): 436-451.
- Ng, K. &., Van Dyne, L., & Ang, S. (2009). From experience to experiential learning: Cultural intelligence as a learning capability for global leader development. *Academy of Management Learning and Education*, 8: 511-526.
- Open Doors (2019). Retrieved May 22, 2020 from <a href="https://www.iie.org/Research-and-Insights/Open-Doors/Fact-Sheets-and-Infographics/Fast-Facts">https://www.iie.org/Research-and-Insights/Open-Doors/Fact-Sheets-and-Infographics/Fast-Facts</a>
- Potts, D. (2015). Understanding the early career benefits of learning abroad programs. *Journal of Studies in International Education*, 19(5): 441-459.
- Pouchak, L. (2019). Development of cultural agility in high achieving emerging adults: The evaluation of a short-term study abroad experience. Northwestern University Doctoral Thesis. ProQuest Dissertations Publishing 27544907.
- Rowe, A., Harbers, H. M., & Yacucci, A. L. (2019). Effects of short-term study abroad on Mindset. *Graduate Independent Studies Communication Sciences and Disorders*. 20. https://ir.library.illinoisstate.edu/giscsd/20
- Sachau, D., Brasher, N., & Fee, S. (2009). Three models for short-term study abroad. *Journal of Management Education*, 34(5), 645-670. <a href="https://doi.org/10.1177/1052562909340880">https://doi.org/10.1177/1052562909340880</a>
- Tucker, M. L., Hartman, K., & Gabler, C. (2019). Global learning in short-term study abroad: Assessing business students after Global Consulting Program. *Journal of Scholastic Inquiry: Business*, 10(1), 32-43.
- Tucker, M. L., Gullekson, N. L., & Esmond-Kiger, C. (2014). Accounting for EI: Does emotional intelligence predict greater intercultural growth? *Journal of International Business and Cultural Studies*, 81-11.
- 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(4), 356-371.

Wood, E. D., & St. Peters, H. Y. Z. (2014). Short-term cross-cultural study tours: Impact on cultural intelligence. *The International Journal of Human Resource Management*, 25(4), 558-570. <a href="http://dx.doi.org/10.1080/09585192.2013.796315">http://dx.doi.org/10.1080/09585192.2013.796315</a>



# **APPENDIX**

Table 1: One-Sample t Test Results for Cultural Intelligence

Time	Measure	μ	M	SD	df	t	d
Pre-Test (T1)	Drive	79	82.92	9.57	86	3.82*	0.41
	Knowledge	56	46.29	17.53	86	-5.17*	0.55
	Strategy	71	76.31	13.56	86	5.31*	0.39
	Action	68	64.97	17.34	86	ns	ns
Post-Test (T2)	Drive	79	86.46	9.70	86	7.17*	0.77
	Knowledge	56	67.94	14.79	86	11.94*	0.81
	Strategy	71	85.51	11.63	86	14.51*	1.25
	Action	68	77.47	16.27	86	5.43*	0.58

<sup>\*</sup> *p* < .001

Table 2: Dependent Sample t Test Results for Cultural Intelligence (CQ)

Measure	T1 M	T1 <i>SD</i>	T2M	T2 SD	T1-T2 M	df	t	d
					<u>(⊿%)</u>			
Drive	82.92	9.57	8 <mark>6.</mark> 46	9.70	3.54 (4%)	86	3.84*	0.41
Intrinsic interest	75.09	13.84	81.93	15.01	6.84 <sub>(9%)</sub>	84	4.64*	0.51
Extrinsic interest	86.98	11.02	87.54	11.39	0.56 (1%)	84	ns	ns
Self-efficacy	85.34	1 <mark>4.64</mark>	88.36	10.91	3.02 (4%)	84	ns	ns
Knowledge	46.29	17 <mark>.53</mark>	67.94	14.79	21.65 (47%)	86	10.46*	1.13
Business	55.04	25. <mark>79</mark>	75.65	20.30	20.61 (37%)	84	6.89*	0.75
Values & norms	59.79	19.8 <mark>0</mark>	78.96	13.05	19.17 (32%)	84	7.58*	0.83
Socio-linguistic	20.01	19.75	39.85	28.82	19.84 (99%)	84	7.08*	0.77
Leadership	49.14	20.47	76.25	14.06	27.11 (55%)	84	11.02*	1.20
Strategy	76.31	13.56	85.51	11.63	9.20 (12%)	86	6.26*	0.68
Planning	70.48	17.79	78.75	15.33	8.27 (12%)	84	4.08*	0.45
Awareness	80.35	15.09	89.18	10.78	8.83 (11%)	84	5.31*	0.58
Checking	77.85	14.32	87.47	12.60	9.62 (12%)	84	5.85*	0.64
Action	64.97	17.34	77.47	16.27	12.50 (19%)	86	5.90*	0.64
Speech Acts	71.08	16.95	80.55	15.10	9.47 (13%)	84	4.58*	0.50
Verbal	60.25	20.72	74.09	19.03	13.84 (23%)	84	5.55*	0.61
Non-verbal	62.53	20.54	76.61	19.04	14.08 (23%)	84	5.31*	0.58

<sup>\*</sup> *p* < .001