Cultural Intelligence Development and Study Abroad: The Effect of Destination

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Abstract

Cultural intelligence (CQ) is an emerging field in a globalized world. As the world becomes increasingly interconnected, study abroad opportunities at higher educational institutions have become widely-accepted means for developing students' CQ. While a number of variables seem to impact CQ development through study abroad programs, one variable seems as yet to have been largely unexplored. This research examines anonymous archival data from juniors in Liberty University's Global Studies program during the spring semesters of 2016, 2017, 2018, and 2019 to observe a potential pattern that suggests the role of a study abroad host-culture on the student's CQ development. Though lacking the substantial qualitative or statistical analysis necessary for conclusive results, the observations made in this study strengthen calls for the further exploration of the impact of cultural distance between home and host cultures on the change in CQ.

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Introduction

An Emerging Global Crisis

The world today is changing rapidly. People are increasingly exposed to new people in new places from new cultures.[1] A study on cross-cultural management courses observed, "The rapid increase of globalization processes in many aspects of social and work life in the last two decades of the 20th century resulted in record numbers of individuals who, on a daily basis, interact and work with individuals who have been socialized in significantly different cultures."[2] Though there are certainly many benefits from this heightened degree of globalization, like greater access to novel cultural elements and easier means of travelling, it does not come without its challenges. Wood and St. Peters identify communication and decision-making as being particularly affected by interactions between people from different cultural backgrounds.[3] Henderson, Stackman, and Lindakilde went so far as to say that "one of the key challenges to the success of global projects and teams concerns the cultural differences that exist among members."[4] As the world continues to globalize, these challenges will continue to become more significant in all spheres of life – from the interpersonal to the professional.

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[1] Melody J. Harper, "Equipping Culturally Competent Students: The Development of Cultural Intelligence in the Classroom and Beyond," Order No. 10844576, Clemson University, (2018): 1.

[2] Jacob Eisenberg, Hyun-Jung Lee, Frank Brück, Barbara Brenner, Marie-Therese Claes, Jacek Mironski, and Roger Bell, "Can Business Schools Make Students Culturally Competent? Effects of Cross-Cultural Management Courses on Cultural Intelligence," *Academy of Management Learning & Education* 12, no. 4 (2013): 604.

[3] Evan D. Wood and Heather Y.Z. St. Peters, "Short-term Cross-cultural Study Tours: Impact on Cultural Intelligence," *The International Journal of Human Resource Management* 25, no. 4 (2014): 558.

[4] Linda S. Henderson, Richard W. Stackman, and Rikke Lindakilde, "Why Cultural Intelligence Matters on Global Project Teams," *International Journal of Project Management* 36, no. 7, (2018): 954.

One demographic group being uniquely impacted by the cultural challenges presented by globalization is students. During the 2018-2019 academic year, more than three times as many American students studied abroad than even twenty-four years ago.[5] While abroad, students are typically immersed in the host-country's culture all day, with some even being immersed after the day has ended by staying in host homes rather than student dormitories or hotels. These international academic ventures are becoming so enticing that prospective students sometimes factor study abroad opportunities into their university or college selection.[6] Universities and colleges around the world are increasingly evaluating their study abroad offerings to remain competitive. Kurpis and Hunter, however, found an issue with the current trend in that "not all of them have adopted a theory-driven, systematic, and strategic approach to selecting and developing intercultural training opportunities for their students."[7] While they understand the students' desire for and importance of the development of intercultural competencies, many are not giving much thought as to how effectively they are achieving these goals. This is a critical issue because of the role these students will play in shaping the world going forward. Al-Momani and Atoum wrote, "the issue of cultural intelligence among students in particular must be dealt with and enhanced because students success in today's world requires their ability to adapt to a series of cultural challenges and prepare themselves to the outside changing and diverse world

[5] "2020 Fast Facts," U.S. Department of State, 2020, file:///Users/lukezirkle/Downloads/Open-Doors-2020-Fast-Facts.pdf.

[6] Philip H. Anderson, Leigh Lawton, Richard J. Rexeisen, and Ann C. Hubbard, "Short-term Study Abroad and Intercultural Sensitivity: A Pilot Study," *International Journal of Intercultural Relations* 30, no. 4 (2006): 458.

[7] Lada Helen Kurpis and James Hunter, "Developing Students' Cultural Intelligence Through an Experiential Learning Activity: A Cross-Cultural Consumer Behavior Interview," *Journal of Marketing Education* 39, no. 1 (04, 2017): 41.

after graduation."[8] In order to successfully walk through the rest of their lives, students must be equipped with intercultural competencies that allow them to effectively engage the increasingly diverse body of people around them.

These competences must be developed in students while they are still studying due to their importance in the modern workplace. Some note, "Business populations receive, on average, far less support than our student populations, and their cultural adjustment and competence, arguably, carries even greater importance in terms of career and organizational expectations."[9] Companies invest valuable resources in the hope that their employees can find success when overseas. Crowne says, "Sending the right individual, meaning an employee who can be effective and successful in a foreign country, is critical."[10] Stroh concluded that the failure in expatriate assignments can cost companies as much as $1 million.[11] As factors like market globalization, migration, and technological advances have dominated the international commercial spheres, some have identified intercultural competence as a "crucial business success factor."[12] Because this intercultural competence is critical for professional success, it is of extreme importance that it be developed in university students who are being launched into those realms. The question that remains now is how.

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[8] Abdel Al-Momani and Adnan Atoum, "Cultural Intelligence among Jordanian University Students," *International Journal of Education and Management Studies* 6, no.1 (03, 2016): 49.

[9] Karen J. Lokkesmoe, Peter Kuchinke, and Alexandre Ardichvili, "Developing Cross-Cultural Awareness through Foreign Immersion Programs: Implications of University Study Abroad Research for Global Competency Development," *European Journal of Training and Development* 40, no. 3 (2016): 157.

[10] Kerri Anne Crowne, "What Leads to Cultural Intelligence?" *Business Horizons* 51, no. 5 (09-10, 2008), 393.

[11] Linda Stroh, *International Assignments: An Integration of Strategy, Research, and Practice*, (Mahwah, NJ: Lawrence Erlbaum Associates, Inc, 2005), https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=119248&site=ehost-live&scope=site, 14.

[12] Irvine Clarke III, Theresa B. Flaherty, Newell D. Wright, and Robert M. McMillen, "Student Intercultural Proficiency from Study Abroad Programs," *Journal of Marketing Education* 31, no. 2 (08, 2009): 174.

Cultural Intelligence as an Answer

Decades of research on the natures of intelligence, learning, culture, and cultural differences paved the way for the development of a framework for what has been called Cultural Intelligence (CQ). Though a deeper exploration of the CQ framework will be given later, here, it will suffice to say, "There is evidence that successful interactions between members of different cultures require cultural intelligence (CQ)."[13] Early and Ang noted that the greatest challenges presented to international travelers were the abilities to observe, identify, and form cognitive and metacognitive frameworks for interacting appropriately in new cultures.[14] In developing their theory and framework for CQ, their focus was "to provide a new understanding for the age-old problem of the sojourner: Why is it that some people adjust relatively easily, quickly, and thoroughly to new cultures but others cannot seem able to do so?"[15] In order to effectively develop global leaders with intercultural competency, they sought to explain the factors that might contribute to an individual's ability to adapt to new cultural surroundings. To explain why this research will focus on CQ, it is helpful to acknowledge the specific benefits that CQ carries and the needs it meets before exploring the framework and its application in a standard review of the existing literature.

Why CQ?

In contrast to standard definitions of common intelligence, CQ carries specific benefits that are useful in a broad variety of settings. Caputo wrote, "In a multi-cultural situation, an individual with high CQ is able to better understand cultural differences and, thereupon, to adapt

[13] Andrea Caputo, Oluremi B. Ayoko, Nii Amoo, and Charlott Menke, "The Relationship between Cultural Values, Cultural Intelligence and Negotitation Styles," *Journal of Business Research* 99, (2019): 26.

[14] P. Christopher Early and Soon Ang, *Cultural Intelligence: Individual Interactions Across Cultures,* (Stanford, CA: Stanford University Press, 2003), 115.

[15] Ibid., 4.

the behavior to "fit in" with these different values, norms, and beliefs."[16] CQ provides the individual with the tools to adapt to any cultural difference rather than country-specific norms. Additionally, in the contexts of global business and other international professional settings, managers and negotiators specifically benefit from training in CQ because negotiation and management are two behaviors that rely heavily on common understandings of human behavior and expectations.[17]

Beyond some of the unique benefits that CQ carries, it also fills specific gaps left by other models of intelligence. Caputo acknowledged that "Having a high level of inter-personal skills in one's own culture does not necessarily mean that one can easily adapt to other people with a different cultural background."[18] This is likely explained by Early and Ang's assertion that "new cultural contexts provide, at best, ambiguous and, at worst, misleading, cues for what is happening."[19] Some might propose that higher degrees of emotional intelligence are sufficient for cross-cultural interactions, but again, Early and Ang responded that "Emotional intelligence presumes a degree of familiarity with culture and context that may not exist."[20] Because common models of intelligence and emotional intelligence are rendered ineffective when encountering an entirely new cultural context, it is critical for the individual (and their employer) to invest in the development of CQ for prospective success when facing the rising challenges posed by globalization.

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[16] Caputo et al., "Negotiation Styles," 26.

[17] Ibid., 33.

[18] Ibid., 19.

[19] Early et al., *Individual Interactions Across Cultures*, 72.

[20] Ibid., 8.

Literature Review

What is Cultural Intelligence?

In their research, Early and Ang asserted that "A new cultural encounter is unique in that the cues and information relied on from the past experience are largely absent or misleading."[21] Therefore, they articulated the need for a common framework for people who seek to effectively engage cross-culturally.[22] Here, they presented their theory of CQ, defined as "A person's capability for successful adaptation to new cultural settings, that is, for unfamiliar settings attributable to cultural context."[23] Their framework, though initially relying on three connected capabilities, has now expanded to include four: cognition, metacognition, motivation, and behavior.[24] Eisenberg summarized, "CQ is an aggregate multidimensional construct where the four dimensions represent different capabilities that combine to make up the overall construct."[25]

Four Capabilities of CQ

Early and Ang described the cognitive dimension of CQ as the "general cognitive skills that are used to create new specific conceptualizations of how to function and operate within a new culture as well as culture-specific knowledge."[26] They later clarify that this dimension refers to the kind of knowledge people learn about specific cultures based on provided cues.[27] David Livermore, in his application of the CQ framework to cross-cultural leadership, labeled this

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[21] Early et al., *Individual Interactions Across Cultures*, 91.

[22] Ibid., 61.

[23] Ibid., 9.

[24] Ibid., 91.

[25] Eisenberg et al., "Can Business Schools Make Students Culturally Competent?" 605.

[26] Early et al., *Individual Interactions Across Cultures*, 9.

[27] Ibid., 91.

dimension "CQ Knowledge," simplifying it to "*Understanding cultural similarities and differences*."[28] In his chapters dedicated to CQ Knowledge, he identifies understanding a culture's economic, family, educational, legal, religious, and artistic systems and cultural value dimensions as being of primary importance.[29] Livermore also identified the ten largest cultural clusters in the world to provide good starting points for understanding dominant cultural norms: Anglo, Arab, Confucian Asia, Eastern Europe, Germanic Europe, Latin America, Latin Europe, Nordic Europe, Southern Asia, and Sub-Saharan Africa.[30] He wrote that cultural clusters "are large cultural groupings that share some core patterns of thinking and behavior. The countries and groupings of people within each cluster typically share a common history, and the often share similar geography, language, religion, or cultural values."[31] Harper lent a comforting voice, saying, "The expectation is not that the individual knows every fact about every other culture, but that those with high CQ will know the types of questions to ask and information to gather related to the systems and values of another culture."[32]

The metacognitive aspect was first acknowledged in the concept of the self as an active agent in interpreting and reorienting one's social experiences.[33] Earley and Ang noted that each person has their own unique CQ.[34] They then built on this by asserting that how people see

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[28] David Livermore, *Leading with Cultural Intelligence: The Real Secret to Success,* 2nd Ed., (New York, NY: AMACOM, 2015), 65.

[29] Livermore, *Leading with Cultural Intelligence*, 65-134.

[30] David Livermore, *Expand Your Borders: Discover 10 Cultural Clusters*, (East Lansing, MI: Cultural Intelligence Center, LLC, 2013), 5-10.

[31] Ibid., 7.

[32] Harper, "Equipping Culturally Competent Students," 17.

[33] Early et al., *Individual Interactions Across Cultures*, 71.

[34] Ibid., 6.

themselves in light of their social environments helps determine how people process cross-cultural interactions.[35] Given that individuals are largely governed by culturally emic meta-level functions of intelligence like memory, logic, and categorization, they contend that "cultural intelligence refers to a capacity involving a number of metacognitive skills and processes."[36] Livermore re-labeled this dimension "CQ Strategy," namely "*Strategizing and making sense of culturally diverse experiences*."[37] Moving forward though, it is critical to remember that CQ is more than a purely mental function, but that it also includes the motivation and behaviors required for effective cross-cultural adaptation.

Regarding the motivational facet of CQ, Early and Ang recognized that effective cross-cultural interaction demanded that the individual must be motivated to actually engage with that which is foreign. They noted that it "requires a personal sense of efficacy and desire for enactive mastery as well as positive evaluation of such actions."[38] Described by Livermore as "CQ Drive," this domain is occupied with the individual's interest and confidence in cross-cultural engagement.[39] Kurpis and Hunter took care to note that it is motivational CQ that pushes the individual to persevere in cross-cultural interactions even after embarrassment or failure.[40] Without motivational CQ, the individual is left with only that knowledge which is gained apart from actually engaging in authentic interpersonal relationships with people from different cultures. They consequently fail to engage, desire to engage, or grow in their confidence in

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[35] Early et al., *Individual Interactions Across Cultures*, 69.

[36] Ibid., 67 and 95.

[37] Livermore, *Leading with Cultural Intelligence*, 135.

[38] Early et al., *Individual Interactions Across Cultures*, 138.

[39] Livermore, *Leading with Cultural Intelligence*, 43.

[40] Kurpis et al., "Developing Students' Cultural Intelligence," 31.

engaging people from different cultures. It is this aspect of CQ that enables the individual to put their knowledge to the test as they are drawn into cross-cultural interactions.

Defining behavioral CQ, Early and Ang noted, "The final element of our approach refers to the capability for an individual to actually engage in behaviors that are adaptive."[41] Individuals must be able to effectively adapt their behavior to be appropriate for the circumstances in order for their CQ to actually be realized in cross-cultural interactions.[42] Livermore labelled this dimension "CQ Action," and framed it as "*Changing verbal and nonverbal actions appropriately when interacting cross*-culturally."[43] Requiring hard work and persistence in the face of failure, "the behavioral facet is often a product of the cognitive and motivational facets of CQ."[44] With each of the interconnected facets of CQ impacting one another and drawing the individual into deeper spaces of cross-cultural engagement, it is helpful to describe how CQ is measured, applied, and developed.

How CQ is Measured

The framework for the CQ model was developed and scrutinized under meticulous testing by Earley and Ang.[45] Ang went on to develop the twenty-item Cultural Intelligence Scale (CQS) with Van Dyne in 2007.[46] Sampling large numbers of students and professionals from all around the world, they were able to develop a scale that could effectively predict the elements of

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[41] Early et al., *Individual Interactions Across Cultures*, 10.

[42] Ibid., 11.

[43] Livermore, *Leading with Cultural Intelligence*, 155.

[44] Ibid., 83.

[45] Ibid., xiii.

[46] Soon Ang and Linn Van Dyne, "Cultural Intelligence: Its Measurement and Effects on Cultural Judgment and Decision-Making, Cultural Adaptation, and Task Performance," *Management and Organization Review* 3 (2007): 335-71.

cross-cultural interaction identified in the CQ framework. The CQS continues to expand in global use every year.

Applications of CQ

CQ, developed in theory and authenticated in its measurement and practice, wields powerful benefits in many spheres. Everything from professional negotiation tactics to interpersonal relationships are impacted by CQ in spheres ranging from dietetics to business. The development of CQ is of the utmost importance in the multinational endeavors and cross-cultural interactions.

Research has identified that "CQ increases communication effectiveness and job satisfaction for managers in multi-national enterprises."[47] It is also acknowledged that specific domains of CQ were even shown to strengthen relationships between members of global project teams' role clarity and how they communicated with one another, improving job satisfaction and performance.[48] Because CQ helped strengthen the ability of the team members' to communicate, they were able to enjoy their work and perform better.

Al-Jarah, in his research, observed how the facets of CQ are directly related to group effectiveness.[49] Others found benefits of CQ in personal growth, intercultural competence, academic performance, self-confidence, autonomy, initiative, communication skills, cultural sensitivity, obtaining jobs, critical thinking, and being less prejudicial and ethnocentric.[50]

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[47] Henderson et al., "Why Cultural Intelligence Matters on Global Project Teams," 958.

[48] Ibid., 962.

[49] Abdelnaser Al-Jarah, "The Cultural Intelligence Level among International Students in Jordanian Universities," *Educational Research Quarterly* 39, no. 3 (03, 2016): 27.

[50] Angela-MinhTu D. Nguyen, Juliás Jefferies, and Blanca Rojas, "Short Term, Big Impact? Changes in Self-efficacy and Cultural Intelligence, and the Adjustment of Multicultural and Monocultural Students Abroad," *International Journal of Intercultural Relations* 66, (2018): 119-120.

Triandis identified "improved personal relationships" as a result of better understanding other cultures.[51] Wood and St. Peters found that CQ helped facilitate cultural adjustment, cultural judgment, decision-making, well-being, performance, and even mitigated emotional burnout.[52] It is clear how wide-ranging CQ's interpersonal and professional effects on individuals can be.

CQ contributes to more than just individual success. It is an important tool with which employers can develop their employees and as a result, their organizational effectiveness.[53] Research has established how CQ "enhances the extent to which individuals translate their international work experiences into learning outcomes."[54] It not only equips the worker while they are abroad, but enables them to better learn and glean lessons for later application as well. Lokkesmoe and others found that higher CQ enabled managers to better motivate their employees and overcome obstacles.[55] Kurpis and Hunter asserted that it even helped develop good working relationships and establish sustainable relationships that benefited both the companies and their international consumers.[56] Merklen conducted a study that found associations between study abroad programs and higher CQ and professional competence.[57] CQ, as it is developed in the individual, leads to a greater capacity to compete in business, industry,

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[51] Harry C. Triandis, "Cultural Intelligence in Organizations," *Group & Organization Management* 31, no. 1 (02, 2006): 22-23.

[52] Wood et al., "Short-term Cross-cultural Study Tours," 561.

[53] Kurpis et al., "Developing Students' Cultural Intelligence," 31.

[54] Kok-Yee Ng, Linn Van Dyne, and Soon Ang, "From Experience to Experiential Learning: Cultural Intelligence as a Learning Capability for Global Leader Development," *Academy of Management Learning and Education* 8, no. 4 (2009): 523.

[55] Lokkesmoe et al., "Developing Cross-Cultural Awareness," 159.

[56] Kurpis et al., "Developing Students' Cultural Intelligence," 31.

[57] E. Merklen, "Assessing the Relationship between Cultural Intelligence and Study Abroad in Dietetics Curricula," *Journal of the Academy of Nutrition and Dietetics* 119, no. 9, Supp. 1, (2019): A-24.

and on an international scale.[58] It is therefore crucial for employers across a variety of disciplines and professions to invest in the development of their employees' CQ.

CQ Development

Harper, noting how the individual's CQ rises as they move from one stage of the CQ framework to another (e.g. from desiring to engage cross-culturally to strategizing how to engage to engaging), observed that CQ development appears to look like a rising spiral.[59] It is necessary, then, to help people develop their CQ through the stages of this framework. Triandis noted the necessity of extensive training in CQ development and the helpfulness of such endeavors in multicultural communication.[60] A study on antecedents to CQ emphasized "the need for education through comparative cultural studies combined with experimental learning, something that is necessary in order to form behavioral patterns which support cultural intelligence."[61] Because of the nature of cross-cultural interactions, individuals need both knowledge of cultural norms and differences and practice applying such knowledge appropriately in cross-cultural contexts in order to be successful.

Classroom Interventions

One method of intentionally developing CQ is through formal training in academic or professional settings. Eisenberg found that "CCM [cross-cultural management] courses bring a

[58] Ilan Alon, Michele Boulanger, Julie Ann Elston, Eleanna Galanaki, Carlos Martínez de Ibarreta, Judith Meyers, Marta Muñiz-Ferrer, and Andrés Vélez-Calle, "Business Cultural Intelligence Quotient: A Five-Country Study," *Thunderbird International Business Review* 60, (2018), 238.

[59] Harper, "Equipping Culturally Competent Students," 19.

[60] Triandis, "Cultural Intelligence in Organizations," 25.

[61] Laura Brancu, Valentin Munteanu, and Ionut Golet, "Understanding Cultural Intelligence Factors among Business Students in Romania," *Procedia – Social and Behavioral Sciences* 221, (2016): 341.

significant increase in students' CQ following the course."[62] Wood and St. Peters also noted the role that formal preparation can have on enhancing an individual's CQ before they even engage a different culture.[63] Al-Momani and Atoum identified the influence that learning a foreign language has on CQ as well.[64] CQ, then, is affected by even learning about other cultures. Crowne summarized this well, explaining, "Cultural exposure, defined here as experiences related to a region that aid in developing a familiarity with or understanding of the norms, values, and beliefs of that region, is likely to contribute to higher cultural intelligence."[65] Though experience in other cultures will be shown to play a significant role, academic and professional training and preparation before, during, and after such experiences should also be embraced as essential.

Study Abroad Programs

Due to the globalization of the world, and because formal preparation has become recognized as such an effective means of increasing CQ, universities have sought to market themselves by becoming hubs where prospective students can come to prepare for global engagement. Some have recognized study abroad programs as significant channels through which universities seek to achieve this.[66] This recognition is supported by research like that of Alon and others, who suggested that "living in foreign countries is also a good way to increase

[62] Eisenberg et al., "Can Business Schools Make Students Culturally Competent?" 615.

[63] Wood et al., "Short-term Cross-cultural Study Tours," 561.

[64] Al-Momani et al., "Cultural Intelligence among Jordanian University Students," 48.

[65] Crowne, "What Leads to Cultural Intelligence?" 393.

[66] Claude Marcotte, Jocselyn Desroches, and Isabelle Poupart, "Preparing Internationally Minded Business Graduates: The Role of International Mobility Programs," *International Journal of Intercultural Relations* 31, no. 6 (2007): 656.

cultural intelligence."[67] Still others have reflected on how such practices have long been viewed as valuable educational practices.[68] One should note, however, that merely spending time in another country does not guarantee increased CQ. Integrating Kolb's theory of experiential learning with Earley and Ang's theory of CQ, Harper's study emphasized the need to process and debrief after experiential learning opportunities to allow for reflective observation.[69] Harper's data even accentuated this thought in that her results provided evidence that "A semester of immersion in another culture, with supervision and guided processing of cultural learning, is the highest form of experiential learning."[70] As students study abroad, to truly develop their ability to engage people effectively in cross-cultural interactions, they must be guided through reflecting on and processing what they are leaning. Consequently, study abroad programs are becoming increasingly popular as means of university-supported CQ development.

Benefits of Study Abroad Programming. Universities that grant all their students the option to study abroad provide their students with many benefits. As referenced previously, one primary benefit of studying abroad is the potential for increased CQ development. Research has found that all four CQ dimensions were positively affected by extensive international experience.[71] It has also been suggested that living abroad "increases one's cultural knowledge, provides opportunities to develop self-efficacy to manage culturally diverse environments, and

[67] Alon et al., "BCIQ," 243.

[68] Clarke III et al., "Student Intercultural Proficiency from Study Abroad Programs," 173.

[69] Harper, "Equipping Culturally Competent Students," 30; David A. Kolb, *Experiential Learning: Experience as a Source of Learning and Development* 2nd ed., (Upper Saddle River, NJ: Pearson Education, 2015): Chapter 2.

[70] Harper, "Equipping Culturally Competent Students," 66.

[71] Eisenberg et al., "Can Business Schools Make Students Culturally Competent?" 616.

makes students feel more at ease in culturally diverse environments."[72] With such increased CQ development, however, comes an additional benefit of studying abroad: increased intercultural competency.

Before addressing the additional benefit of intercultural competency, it is helpful to clarify terms and the difference between intercultural competency and CQ. Muriel Elmer described intercultural competency in terms of a preparedness for success in intercultural interactions.[73] While it is seen as more of an overarching skill or set of skills one has in cross-cultural interactions, CQ refers to the specific research-based framework developed by Earley and Ang for the measurement and development of one's cultural intelligence in those interactions.[74] With this understanding, some researchers have identified how study abroad programs have been shown to be effective for producing globally-minded students "who may be better prepared for the multicultural marketplace."[75] As students regularly engaged businesses and other entities overseas, they were better equipped to understand the linguistic and cultural challenges in fields like business, leadership, and international relations.[76] Behrnd and Porzelt noted that these "experiences abroad turn a lay into a novice, whereas experiences abroad combined with cultural knowledge provided by intercultural training can turn a lay into an expert." Here, they display that there is a level of expertise in cross-cultural engagement that is developed by spending time abroad. They summarized their findings succinctly, saying,

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[72] Eisenberg et al., "Can Business Schools Make Students Culturally Competent?" 608.

[73] Muriel I. Elmer, "Intercultural Effectiveness: Development of an Intercultural Competency Scale," Order No. 8625019, Michigan State University (1986): 1.

[74] Early et al., *Individual Interactions Across Cultures*, 59.

[75] Clarke III et al., "Student Intercultural Proficiency from Study Abroad Programs," 178.

[76] Wood et al., "Short-term Cross-cultural Study Tours," 567.

"Students that had been abroad a considerable time were cognitively more interculturally competent."[77] Though the benefits of CQ and intercultural competence development would seem to naturally follow from spending time abroad, other research found additional benefits.

Clarke III and others found that study abroad programs increased individuals' chances of possessing skills in intercultural communication and even their simple capacities to engage other people.[78] Simply spending time outside of one's home country was found to increase individuals' abilities to interact with other people. It was also identified that "One of the most significant values of studying and living abroad was being able to travel and experience new cultures."[79] Spending time abroad, for many people, is an enjoyable and adventurous experience that enables them to grow in their abilities to interact with other people, specifically those from other cultural backgrounds, and to do so competently.

Additional Considerations for Study Abroad Programming. While study abroad programming certainly has many benefits, especially in the realm of CQ development, it is not without its specific weaknesses and considerations that are necessary to achieve the desired outcomes. Wood and St. Peters noted how "study tours only exhibited a statistically significant relationship with three of the four CQ factors," in their study.[80] It is usually not enough for the individual to just travel abroad. Some have remarked "how the experience is supported and interpreted can make a significant impact," going on to articulate the need for specifically-

[77] Verena Behrnd and Susanne Porzelt, "Intercultural Competence and Training Outcomes of Students with Experiences Abroad," *International Journal of Intercultural Relations* 36, no. 2, (2012): 221.

[78] Clarke III et al., "Student Intercultural Proficiency from Study Abroad Programs," 177.

[79] Lokkesmoe et al., "Developing Cross-Cultural Awareness," 163.

[80] Wood et al., "Short-term Cross-cultural Study Tours," 566.

developed interventions.[81] Others argued for interventions prior to travelling abroad.[82] Wood and St. Peters advocated for specific measures that can take place while abroad.[83] These interventions can take place before, during, or after the experience, but are necessary for the maximization of opportunities for the individual to develop their CQ.

Another consideration for the feasibility of study abroad programming for the sake of CQ development in students is its impracticability. Kurpis and Hunter observed that "high costs often render study abroad programs unaffordable to a broad range of students."[84] If study abroad is an option only practically afforded to those from more privileged backgrounds, where does this leave those individuals who simply do not have the financial means to explore such an effective personal and professional development tool? Additionally, others have noticed that many students reported having received very little information about study abroad programming from institutional sources.[85] Students must not only be willing and able to afford to study abroad, but they must also be informed of such opportunities. Investing in such programming involves investing in communicating the opportunities to those who would go. It is important that this be undertaken by institutions of higher education due to Wood and St. Peters' observation that "providing long-term international experience, or even intermediate-term assignments of a few months, to the broader workforce seems impractical."[86] Whether the difficulties lie in

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[81] Lokkesmoe et al., "Developing Cross-Cultural Awareness," 166-167.

[82] Ann C. Peng, Linn Van Dyne, and Kyoungjo Oh, "The Influence of Motivational Cultural Intelligence on Cultural Effectiveness Based on Study Abroad: The Moderating Role of Participant's Cultural Identity," *Journal of Management Education* 39, no. 5 (10, 2015): 587.

[83] Wood et al., "Short-term Cross-cultural Study Tours," 567.

[84] Kurpis et al., "Developing Students' Cultural Intelligence," 30.

[85] Marcotte et al., "Preparing Internationally Minded Business Graduates," 665.

[86] Wood et al., "Short-term Cross-cultural Study Tours," 559.

affordability, awareness of such opportunities, or simply the sheer complications of trying to send as many people abroad on these assignments as possible, it does not seem as though these opportunities will soon be readily available to everyone. Thus, it is necessary to know how to best take advantage of study abroad opportunities, including who would benefit most or who has the greatest need, in order to fully realize the potential of the role that study abroad plays on the CQ development of the future global workforce.

A number of factors play significant roles in the development of CQ during study abroad opportunities. Alon et al. observed that "both the quantity (length of exposure) and quality (type of exposure: work, education, vacation) of the cultural experience can improve one's CQ."[87] Crowne echoed this sentiment in finding that visits for educational and professional reasons typically developed CQ while visits for vacation did not.[88] In their study, Alon and others also found that the number of countries lived in for more than six months, amount of education, and number of languages spoken were shown to be significant factors in CQ development.[89] Still other research found that the level of a person's CQ (specifically motivational CQ) prior to the trip also played a role in the extent to which their CQ would develop while on the trip.[90] Furthermore, they found that the degree to which a person holds to their cultural identity can also impact the degree to which they benefit from study abroad programming.[91] Nguyen noted similarly that "studying abroad challenges and develops both multicultural and monocultural

[87] Alon et al., "BCIQ," 239.

[88] Crowne, "What Leads to Cultural Intelligence?" 396.

[89] Alon et al., "BCIQ," 237.

[90] Peng et al., "The Influence of Motivational Cultural Intelligence on Cultural Effectiveness," 577.

[91] Ibid., 586.

students, but in different ways."[92] If the cultural background of a student who is studying abroad is a relevant element in CQ development, the cultural distance between one's cultural background and the culture they find themselves in could be an as yet largely unexamined underlying variable in CQ development for study abroad programs. There is ample evidence that CQ development is certainly impacted by a number of factors. The degrees to which students self-identify as coming from multiple cultural backgrounds or they maintain strong cultural identities, however, might be important for the identification of an additional variable that has yet to be explored.

Explored and Unexplored Variables

As previously observed, there are many variables that affect the development of an individual's CQ. Al-Momani and Atoum identify factors like specialization of study or gender as influencing CQ development.[93] Behrnd's study echoed those already referenced by acknowledging the role of having been abroad.[94] Research has also reiterated the role of the duration of the stay while making reference to a unique variable by exploring "away-yet-abroad" programs.[95] In exploring these programs, students spent time in United States territories that do not share cultural similarities with the fifty United States. The cultural differences between the students and their host location could prove to be an additional variable in determining the potential for the CQ development of the student living abroad.

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[92] Angela-MinhTu D. Nguyen, Juliás Jefferies, and Blanca Rojas, "Short Term, Big Impact? Changes in Self-efficacy and Cultural Intelligence, and the Adjustment of Multicultural and Monocultural Students Abroad," *International Journal of Intercultural Relations* 66, (2018): 127.

[93] Al-Momani et al., "Cultural Intelligence among Jordanian University Students," 52.

[94] Behrnd et al., "Intercultural Competence and Training Outcomes," 220.

[95] Nguyen et al., "Short Term, Big Impact?" 127.

Students from different cultural backgrounds seem to experience study abroad opportunities differently. Nguyen noted that "it seemed that monocultural individuals may benefit more from studying abroad than multicultural individuals."[96] Monocultural individuals likely lack the CQ that multicultural individuals possess from growing up navigating multiple different cultural spheres, and they would consequently be presented a larger opportunity to develop their CQ than multicultural students who may begin with a higher level. Peng's research added that "those with strong cultural identities may be less psychologically flexible in adapting to new cultures."[97] Those monocultural individuals who are so entrenched in their own cultural identity may find the flexibility presented by high CQ difficult to attain. Regardless of the specific impact, "cultural identity is an important factor to consider when predicting cultural effectiveness."[98] Other research legitimized this thought by evaluating "whether gains in intercultural sensitivity are possible when language barriers are minimal to non-existent."[99] Henderson also recognized this connection between linguistic and other cultural barriers and the development of different CQ domains among global project team members and expatriates.[100] Because linguistic differences are cultural differences, this provides further legitimation of asking whether or not the degree of cultural differences between the student living abroad and their host country can impact the development of their CQ.

While students' cultural backgrounds and differences seem to play a role in the degree to which they benefit from studying abroad, the culture they study abroad in might also be

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[96] Nguyen et al., "Short Term, Big Impact?" 127.

[97] Peng et al., "The Influence of Motivational Cultural Intelligence on Cultural Effectiveness," 578.

[98] Ibid., 578.

[99] Anderson et al., "Short-term Study Abroad and Intercultural Sensitivity," 460.

[100] Henderson et al., "Why Cultural Intelligence Matters on Global Project Teams," 962.

influential. Crowne asserted that "some cultural exposures are more significant than others."[101] Alon's research found, using the Business Cultural Intelligence Quotient, country-specific variables that may impact that country's ability to engage around the world.[102] They also found that generally, CQ varies across countries, indicating that some cultures have higher capacity for cross-cultural interactions.[103] Al-Jarah observed that "American students score higher than other nationalities on total cultural intelligence," and attributed it to the United States' interaction with many different cultures.[104] Others even proposed that countries may even be able to impact their populations' capacity for CQ by increasing things like cultural diversity and international media.[105] These, when cohesively synthesized, argue that there are certain country-specific elements that can influence the degree to which individuals in that country might be culturally intelligent. Though it is measured individually, countries can play a role in the capacity that individuals have to grow in their CQ.

The very country in which one spends time likely affects the CQ development of those who spend time there. Al-Jarah echoed the sentiment that "Some cultural exposures, however, are more significant than others."[106] Al-Momani and Atoum followed, saying that rich cultural exposures can aid in speeding up the development of CQ.[107] If cultural exposures can seemingly vary in their depth or richness, CQ development would likely take place most effectively in the

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[101] Crowne, "What Leads to Cultural Intelligence?" 393.

[102] Alon et al., "BCIQ," 238.

[103] Ibid., 237.

[104] Al-Jarah, "International Students in Jordanian Universities," 36.

[105] Alon et al., "BCIQ," 247.

[106] Al-Jarah, "International Students in Jordanian Universities," 24-25.

[107] Al-Momani et al., "Cultural Intelligence among Jordanian University Students," 48.

deepest or richest cultural exposures. Alon argued that "Living in an expatriate community abroad is not likely to be developmentally equivalent to living among the native community abroad and learning the language and culture directly."[108] Being fully immersed in a foreign culture would likely be more developmentally effective than living in a community of people from one's home culture. Eisenberg confirmed this, declaring that "the international experience needs to be substantial enough to bring about impact."[109]

This possibility traces back to the founders of the CQ theory. Earley and Ang, in the application of their development of CQ theory, asserted that "in particular cultures the novelty and demands placed on an expatriate are much higher than in other cultures."[110] They pushed their reasoning further as they articulated how particular cultures seem to demand more of the traveler when they are perceived to be more dissimilar, or more culturally distant, from the traveler's home culture.[111] They added, "Some cultural contexts [social history] may be more conducive to the development of CQ just as some learning environments foster cognitive and intellectual development."[112] In the study on American students studying away in the culturally-dissimilar United States' territories, the researchers noted that the white students' challenges in feeling alienated and ostracized seemed to help them grow and develop empathy for marginalized people.[113] Others have gone so far as to call for further research that contrasted the "development of intercultural sensitivity of students exposed to varied cultures and studying for

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[108] Alon et al., "BCIQ," 245.

[109] Eisenberg et al., "Can Business Schools Make Students Culturally Competent?" 608.

[110] Early et al., *Individual Interactions Across Cultures*, 127-8.

[111] Ibid., 149.

[112] Ibid., 145-6.

[113] Nguyen et al., "Short Term, Big Impact?" 127.

varied lengths of times" to better understand how intercultural sensitivity and proficiency are developed.[114] Since a seeming gap in the literature exists regarding how "the social environment shapes a person's collective efficacy and whether it is more likely to develop in certain cultures than others," this research seeks to examine existing archival data to compare the CQ development of university students studying abroad in the different cultural clusters around the world.[115]

Method of Exploration

To begin to explore the degree to which the culture where a student spends time studying abroad impacts the scope of their CQ development, this researcher relied upon the use of existing, unpublished archival data from Liberty University's Global Studies department from the years 2016-2019. The program's director, Dr. Melody Harper, granted this researcher access to anonymous archival data that identified the gender, semester and year of study abroad internship, T1 (pre-trip) and T2 (post-trip) CQ sub-dimension scores as measured by the CQS, and the geographical region in which the student was studying (identified by Livermore as cultural clusters – with the addition of Central Asia as a separate cultural cluster).[116] The students' names were not shared with this researcher for the sake of maintaining student confidentiality, but students were labelled by year of study and random number assignment. For

[114] Clarke III et al., "Student Intercultural Proficiency from Study Abroad Programs," 178.

[115] Early et al., *Individual Interactions Across Cultures*, 128.

[116] Livermore, *Expand Your Borders*, 5-10. Central Asia was identified as a separate cultural cluster because existing research fails to adequately label the cultural cluster into which Central Asian nations like Kazakhstan should fall. Though geographically closest to the Arab cluster, the Arab cluster is united by the shared Arabic language. Despite the shared geography and history of Russian influence with the Eastern European cluster, the nation's values more closely align with the Southern Asian cluster. Thus, for the purposes of this research, Central Asia was identified as a unique cultural cluster.

example, Student 2019-14 represents a student randomly assigned the number 14 who studied abroad in the spring of 2019.

The students whose anonymous archival data constitutes the subject of the following observations were Global Studies majors in their junior year who were registered for GLST 499, a required, fifteen-week-minimum, international internship class consisting of academic coursework and cross-cultural service.[117] These students were required to have their CQ measured according to the CQS prior to leaving for their internship and once again upon returning. This research organized the students according to the cultural cluster where they studied and the semester and year when they studied before calculating the differences between each student's T2 and T1 CQ scores for each of the four CQ dimensions (CQ Drive, CQ Knowledge, CQ Strategy, and CQ Action; see Appendices A, B, C, D, E, F, G and H). Calculations were then made for the average increase in each of the four CQ dimensions for each of the cultural clusters over the four Spring semesters observed (see next section). Then, for each of the four CQ dimensions, the cultural clusters where the students traveled were ranked from highest average increase in that CQ dimension score to the lowest (see next section). No statistical analysis was conducted, but this research organized the data and made calculations simple enough to observe patterns that would determine the value of further research into the role that geographical location might play on the CQ development of students who study abroad.

Observation of the Archival Data

Three general observations can be made by examining the average increases in each of the CQ dimensions in Table 1. The organization of the average increases in each of the four CQ dimensions for each of the cultural clusters over the four spring semesters observed. The first

[117] Harper, "Equipping Culturally Competent Students," 37-39.

observation will address the number of students from each country. The second will address the calculations for each CQ dimension for each of the cultural clusters. The final will address a comparison of the CQ dimensions.

Table 1: *Average Increases in CQ Dimensions for Each Cultural Cluster*

Cultural Cluster	**# of Students**	**Average Increase in CQ Drive**	**Average Increase in CQ Knowledge**	**Average Increase in CQ Strategy**	**Average Increase in CQ Action**
Confucian Asia	11	4.18	13.73	10.45	12.09
Southern Asia	28	-1.96	5.61	-0.61	4.5
Eastern Europe	18	3.72	9.44	5.94	6.94
Sub-Saharan Africa	11	1.45	3.73	1.45	12.27
Arab	5	5.4	10.4	4.8	13
Latin Europe	10	2.5	14.9	6	6.3
Latin America	9	0	7.89	2.33	10.11
Central Asia	3	3.33	3.33	0.33	7.33

The first observation to make regarding the average increases in the CQ dimensions in Table 1 is that the number of students who, over four different Spring semesters, studied and served in each of the cultural clusters varies widely. For example, Southern Asia received an average of seven students per semester, while Central Asia received, on average, less than one student per semester. In fact, Central Asia received all three students during the same year: 2016 (see Appendix H). It is possible that this impacted the way their CQ development should be interpreted. These disparate numbers of students studying abroad in different cultural clusters around the world certainly speak to the weight of the data points. It is necessary to keep this observation in mind as one evaluates the rest of the observations made.

The second observation to be made following an examination of Table 1's average increases in the CQ dimensions is that many of the numbers are very different. Studying abroad

in some areas, like Confucian Asia, led to notably higher average increases in CQ dimension scores than other areas. Studying abroad in other regions, like Southern Asia, actually led to average decreases in CQ dimension scores for those who traveled there. Though it will later be important to understand why this was the case, for now it is sufficient to recognize the data.

The final observation to be made by examining the average increases in the CQ dimensions in Table 1 comes from comparing the dimensions to each other. Within each of the eight identified cultural clusters (with slight exception for Central Asia), CQ Knowledge and CQ Action yielded higher average increases than CQ Drive or CQ Strategy. The exception for Central Asia is simply because the average increases in CQ Drive and CQ Knowledge were the exact same, rather than the average increase for CQ Knowledge being higher than for CQ Drive. Otherwise, the observation holds perfectly for the other seven cultural clusters. With preliminary observations from Table 1 noted, one can move on to observations from Tables 2, 3, 4, and 5.

Table 2: *Average Increases in CQ Drive per Cultural Cluster, Ranked from Highest to Lowest*

Cultural Cluster	**# of Students**	**Average Increase in CQ Drive**
Arab	5	5.4
Confucian Asia	11	4.18
Eastern Europe	18	3.72
Central Asia	3	3.33
Latin Europe	10	2.5
Sub-Saharan Africa	11	1.45
Latin America	9	0
Southern Asia	28	-1.96

The first observation worth making about average increases in CQ Drive Table 2 is that studying abroad yielded average increases in the majority of the cultural clusters. One should recognize that studying in Latin America yielded no average increase in CQ Drive for the students. Also, studying in Southern Asia yielded an average decrease in CQ Drive for the

students. Apart from these two cultural clusters, however, studying abroad seems to have led to an average increase in CQ Drive.

An additional observation worth noting is where some of the cultural clusters appear in the ranking. Studying abroad in Arab, Confucian Asian, and Eastern European cultures seems to have had more positive of an impact on average increases in CQ Drive than some of the other cultures. Sub-Saharan African, Latin American, and Southern Asian cultures, however, seem to have produced less positive impacts on average increases in CQ Drive. This will become more noticeable in light of Tables 3, 4, and 5 – the average increases in CQ Knowledge, Strategy, and Action, respectively.

Table 3: *Average Increases in CQ Knowledge per Cultural Cluster, Ranked from Highest to Lowest*

Cultural Cluster	**# of Students**	**Average Increase in CQ Knowledge**
Latin Europe	10	14.9
Confucian Asia	11	13.73
Arab	5	10.4
Eastern Europe	18	9.44
Latin America	9	7.89
Southern Asia	28	5.61
Sub-Saharan Africa	11	3.73
Central Asia	3	3.33

The first notable observation from the average increase in CQ Knowledge in Table 3 is that studying abroad in all eight of the cultural clusters yielded positive average increases in this dimension. In light of the observations from Table 2, where studying abroad and serving in certain cultural clusters offered average decreases in CQ Drive, that all of the cultural clusters for this dimension of CQ rendered average increases in CQ is relevant. This also refers one back to the observation from Table 1, where CQ Knowledge and CQ Action had higher average increases in each of the cultural clusters than CQ Drive or CQ Strategy.

The other notable observation is, again, where some of the cultural clusters appear in the rankings. With the average increases in CQ Knowledge in Table 3, like with the average increases in CQ Drive in Table 2, Arab, Confucian Asian, and Eastern European cultures are presented in the top half of the table, signifying that traveling there yielded higher average increases in CQ Knowledge. Also, as in Table 2, Sub-Saharan African, Southern Asian, and Latin American cultures fell towards the bottom of the table, yielding lower average increases in CQ Knowledge than some of the other cultural clusters.

Table 4: *Average Increases in CQ Strategy per Cultural Cluster, Ranked from Highest to Lowest*

Cultural Cluster	**# of Students**	**Average Increase in CQ Strategy**
Confucian Asia	11	10.45
Latin Europe	10	6
Eastern Europe	18	5.94
Arab	5	4.8
Latin America	9	2.33
Sub-Saharan Africa	11	1.45
Central Asia	3	0.33
Southern Asia	28	-0.61

The first noteworthy remark following an examination of the average increases in CQ Strategy in Table 4 is that, like with the average increases in CQ Drive in Table 2, studying abroad in each of the cultural clusters did not present average increases in CQ for the dimension being observed. Here, again, the twenty-eight students who studied abroad in Southern Asia experienced an average decrease in CQ Strategy. If one refers back to Table 1, it can be seen that Southern Asia was the only one of the eight observed cultural clusters where average decreases in CQ dimensions were experienced. Though this research cannot label such an observation as statistically significant, it raises a question that deserves further inquiry.

Another observation centers around the order in which the cultural clusters fall. As with the average increases in CQ Drive and Knowledge in Tables 2 and 3 respectively, the Confucian

Asia, Arab, and Eastern Europe cultural clusters yielded the highest average increases in the CQ dimension being noted (CQ Strategy here). Again, one will find the Latin America, Sub-Saharan Africa, and Southern Asia cultural clusters yielding the lowest average increases, or even average decreases, in CQ Strategy.

Table 5: *Average Increases in CQ Action per Cultural Cluster, Ranked from Highest to Lowest*

Cultural Cluster	**# of Students**	**Average Increase in CQ Action**
Arab	5	13
Sub-Saharan Africa	11	12.27
Confucian Asia	11	12.09
Latin America	9	10.11
Central Asia	3	7.33
Eastern Europe	18	6.94
Latin Europe	10	6.3
Southern Asia	28	4.5

In considering Table 5, one notes again, as with the average increases in CQ Knowledge in Table 3, that studying and serving in all eight of the cultural clusters developed average increases in the emphasized CQ dimension. This again references previous observations from Tables 1, 2, and 4, where CQ Action and CQ Knowledge were found to have yielded higher average increases than CQ Drive and CQ Strategy and where Southern Asia was identified as the only region to yield average decreases in CQ dimensions. Here, however, even study abroad in Southern Asia was found to have yielded a positive increase in CQ Action.

Additionally, the order of the cultural clusters according to which rendered the highest average increases in CQ Action is notable here. Like in each of the other tables, the Arab and Confucian Asia cultural clusters remained in the top half of the ranks, while Southern Asia remained at the bottom of the table. What is noteworthy here, however, is that, for the first time, the Sub-Saharan Africa and Latin America cultural clusters were also listed among the top half of the regions, while Eastern Europe simultaneously fell to the lower half of the ranks. Though at

this time it is difficult to ascertain what may have caused the changes or the reason for the pattern in the first place, it is important to take note that a pattern was developing but that it did not match this final data set.

Beyond the observations from each of the individual tables, it is also useful to make a general note about the tables when viewed collectively. With each Table highlighting the role that the cultural cluster may have played in the average increases (or decreases) in students' CQ dimension scores, there existed a gap between the highest and the lowest increases. In the Table 2, the difference between the highest and lowest average increase in the students' CQ Drive was 7.364. In Table 3, the difference between the highest and lowest average increase in the students' CQ Knowledge was 11.567. In Table 4, the difference between the highest and lowest average increase in the students' CQ Strategy was 11.062. In Table 5, the difference between the highest and lowest average increase in the students' CQ Action was 8.500. At first glance, each of these differences all seem relatively close to one another. The spread between the highest and lowest cultural clusters' average increases in the CQ dimension being examined seem even. A statistical analysis would be required to determine any mathematical significance in this observation.

Discussion of the Observations

The impact of the limited sample size in each cultural cluster must be acknowledged and the effect on the data considered. As noted, Central Asia only hosted three students in a single year. Southern Asia, on the other hand, hosted twenty-eight students across four years. Though their scores were representative of those students, the average increases observed in Central Asia were only determined by three students while those in some of the other cultural clusters were determined by up to nine times as many students. This does not necessarily mean that the data

from Central Asia cannot be trusted, but it only means that it is only representative of three people, and this is worth acknowledging.

Another notable observation is the comparable developments between the four different CQ dimensions. As observed, CQ Knowledge and CQ Action were higher than CQ Drive and CQ Strategy in each of the cultural clusters – barring the special exception of CQ Knowledge and CQ Drive being equal in Central Asia. This was to be expected, as spending significant time in a foreign country will hopefully lead one to learn about the culture and norms of that country, as well as provide one with the opportunity to begin to exemplify culturally-appropriate behaviors in that country. Earley and Ang predicted that motivation (CQ Drive) would likely wane when faced with continued struggles adapting to a new culture that is dissimilar from one's own.[118] Though it cannot yet be established as statistically significant, it does follow that CQ Drive would not increase as much, on average, as some of the other dimensions.

Still another observation worthy of analysis is that the vast majority of the cultural clusters yielded positive increases in average CQ dimension scores. Of the eight cultural clusters, only Southern Asia rendered decreases in average CQ dimension scores, and even here, it only rendered decreases for two of the four CQ dimensions. This is important in a number of ways.

The first thing that signifies this observation's importance is the number of students who studied abroad in Southern Asia. Of the ninety-five students who studied abroad through the Global Studies major internship program at Liberty University in the Spring semesters of 2016, 2017, 2018, and 2019, 29.47% of them studied abroad in Southern Asia. This was the most of any of the cultural clusters, and it rendered decreases in average CQ Drive and average CQ Strategy. This would seem to follow Earley and Ang's assertion that CQ Drive would wane in

[118] Earley et al., *Individual Interactions Across Cultures*, 149.

cultures more dissimilar from one's home culture.[119] That this was evident in the cultural cluster where the most students studied abroad, however, challenges Nguyen and others' thought that the experience of being seen as different lead to greater empathy and intercultural sensitivity.[120] Alon might suggest that it could have resulted more from the housing accommodations of the students while in Southern Asia.[121] Without qualitative study and interviewing the students, it is impossible to identify the specific reason for the average decreases. Though statistical significance is not determined here, this does suggest the potential for future research.

This observation is also important because it further validates the claim that study abroad programs are an effective means for CQ development. Aside from the single cultural cluster that only delivered average decreases in CQ for two of the four CQ dimensions, the claim that "extending the classroom beyond the conventional campus setting to include an actual international encounter with people and cultures has long been recognized as a valuable educational practice," is further affirmed.[122] Again, it is critical to be aware that statistical significance was not proven (nor even explored) here, but the observations do provide support to calls for further research.

The final observation worth discussing at length is the positions of the cultural clusters in the rankings found in Tables 2, 3, 4, and 5. Given the lack of clarity surrounding the role that one's "social environment" might play on the development of CQ, it is helpful to consider the consistent ways that certain cultural environments seemed to shape the average increases in CQ

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[119] Earley et al., *Individual Interactions Across Cultures*, 149.

[120] Nguyen et al., "Short Term, Big Impact?" 125-126.

[121] Alon et al., "BCIQ," 245

[122] Clarke III et al., "Student Intercultural Proficiency from Study Abroad Programs," 173.

dimension scores. The Arab and the Confucian Asia regions remained in the highest four cultural clusters with regard to the average increases in scores across all four CQ dimensions. Likewise, the Southern Asia region remained in the lowest four cultural clusters with regard to the average increases (and occasional decreases) in scores across all four CQ dimensions. Additionally, for three of the four CQ dimensions, the Eastern Europe region remained in the highest four according to average increase in the students' scores, while the Sub-Saharan Africa and Latin America regions remained in the lowest four. The pattern began to emerge that studying abroad in the Confucian Asia, Arab, and Eastern Europe cultural clusters appeared to increase scores for all four CQ dimensions more than in the Southern Asia, Latin America, or Sub-Saharan Africa cultural clusters. This would seem to support the thought developed by Nguyen that a student's cultural background, and consequently the cultural distance between a student and their host culture, could play a role in their CQ development.[123] Without having conducted qualitative research, it is difficult to identify any particular cause, or even group of causes, that could have led to the appearance of the pattern. It would likewise be difficult to identify reason behind the difference found in the rankings while observing the average increases in CQ Action. The observable differences in the average increases (or decreases) in CQ dimension scores based on the cultural clusters that the students studied in do support the idea that host-location could play a role in the extent to which one develops their CQ while studying abroad and support Clarke III's calls for this to be explored further.[124]

[123] Nguyen et al., "Short Term, Big Impact?" 125-126

[124] Clarke III et al., "Student Intercultural Proficiency from Study Abroad Programs," 178.

Weaknesses of this Study

This research, as with all research, does not come without its weaknesses. A primary weakness referenced even throughout the observation and discussion sections was the lack of a statistical analysis to determine the significance of the archival data points. Without such an analysis, all one is left with is mere observations and considerations about what could be later discovered. An additional weakness is in the lack of qualitative research. Without asking the students about their experiences studying abroad and what they perceive the causes of the changes in their individual CQ dimension scores to be, it is extremely difficult to form any helpful conclusions beyond the need to conduct more research. Another weakness includes the small size of the data sample. By only observing ninety-five students over four years across eight cultural clusters, it is difficult to observe results that are not skewed in favor of those cultural clusters who hosted the fewest students. Additionally, the study did not isolate based on other variables including the year in which the student studied abroad, the gender, or numerous other previously identified factors affecting CQ development during study abroad programs. With the goal to purely observe the effect of the host-culture, the lacking statistical analysis would have aided in isolating and determining the significance of each identified variable. Still another weakness in this study was that the sample was constituted entirely of juniors in Liberty University's Global Studies program, who had taken previous courses on CQ and adjustment and cross-cultural communication.[125] These Global Studies students likely all began with higher CQ dimension baselines (specifically for CQ Drive) as they chose their field of study understanding the required international internship. A final weakness in this research, as with much research on CQ development, is that CQ is a form of intelligence measurable and developable only at the

[125] Dr. Melody Harper, Microsoft Teams conversations with the author, February 16, 2021.

level of the individual person.[126] Thus, attempts to generalize entire populations of people by averaging together CQ scores can sometimes render distorted images of what one is hoping to discover. Despite each of these weaknesses, the observations made here emphasize the potential value of further research on the impact of the cultural distance from home to host culture on the change in CQ development.

Calls for Further Research

While the observations noted above and consequent discussion lack the capacity to establish new understandings of whether or how CQ is developed in different cultures, they do empower the calls for further research into this realm in the field of CQ development. A qualitative study where students who study abroad are asked about their experiences and the perceived reasons behind the changes in their CQ scores could benefit the existing body of knowledge by providing a glimpse into the mind of the individuals whose CQ is being developed by their time spent studying abroad. It would be extremely valuable to ask the individuals about which cultural factors played a role in the changes to their CQ Drive, CQ Knowledge, CQ Strategy, and CQ Action. Additionally, though the value of a qualitative study here cannot be underestimated, what might be necessary first is a thorough statistical analysis to determine the significance of the data. Without such determination, the time, energy, and resources spent interviewing students and compiling interviews into research would be only suggestive.

The globalizing world of today is a world in crisis. There is a tremendous need for culturally intelligent leaders who can direct themselves, their peers, and their organizations through the complex cross-cultural dynamics that are increasingly shaping the world. Universities and organizations that desire for their students and employees to be global leaders

[126] Early et al., *Individual Interactions Across Cultures*, 6.

and will continue to use study abroad programs to accomplish this goal must understand and implement best practices when undertaking such endeavors. Consequently, if the cultural distance between one's home and host cultures when studying, serving, or working abroad does in fact impact the degree to which the student's or employee's CQ is developed, this must be taken into account. The observations made here describe the existence of a pattern that justifies taking the next step of determining statistical significance within the data. After that should follow student interviews about perceived causes and culture-specific factors.

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Appendix A

Student data for Confucian Asia 2016-2019 – All CQ Dimensions

Confucian Asia												
2019	**Gender**	**Region**	**Semester/Year**	**T1/T2**	**CQ DRIVE**	**T2-T1 Drive**	**CQ KNOWLEDGE**	**T2-T1 Knowledge**	**CQ STRATEGY**	**T2-T1 Strategy**	**CQ ACTION**	**T2-T1 Action**
2019-1	Female	Confucian Asia	Spring 2019	T1	67		74		96		67	
2019-1	Female	Confucian Asia	Spring 2019	T2	85	18	79	5	95	-1	69	2
2019-4	Female	Confucian Asia	Spring 2019	T1	71		43		71		51	
2019-4	Female	Confucian Asia	Spring 2019	T2	71	0	76	33	93	22	72	21
2019-7	Female	Confucian Asia	Spring 2019	T1	91		38		71		76	
2019-7	Female	Confucian Asia	Spring 2019	T2	87	-4	37	-1	82	11	76	0
2019-9	Female	Confucian Asia	Spring 2019	T1	93		44		80		56	
2019-9	Female	Confucian Asia	Spring 2019	T2	89	-4	61	17	87	7	85	29
2019-17	Male	Confucian Asia	Spring 2019	T1	78		59		78		91	
2019-17	Male	Confucian Asia	Spring 2019	T2	91	13	72	13	82	4	96	5
2019-23	Male	Confucian Asia	Spring 2019	T1	78		66		72		80	
2019-23	Male	Confucian Asia	Spring 2019	T2	93	15	73	7	74	2	74	-6
2018												
2018-11	Male	Confucian Asia	Spring 2018	T1	87		58		67		72	
2018-11	Male	Confucian Asia	Spring 2018	T2	95	8	71	13	82	15	87	15
2017												
2017-2	Female	Confucian Asia	Spring 2017	T1	85		35		60		16	
2017-2	Female	Confucian Asia	Spring 2017	T2	93	8	72	37	80	20	71	55
2017-7	Female	Confucian Asia	Spring 2017	T1	67		43		65		98	
2017-7	Female	Confucian Asia	Spring 2017	T2	98	31	68	25	89	24	93	-5
2016												
2016-2	Male	Confucian Asia	Spring 2016	T1	98		88		84		98	
2016-2	Male	Confucian Asia	Spring 2016	T2	98	0	96	8	98	14	98	0
2016-4	Male	Confucian Asia	Spring 2016	T1	93		66		87		72	
2016-4	Male	Confucian Asia	Spring 2016	T2	54	-39	60	-6	84	-3	89	17
			11 Students		Average Increase =	4.18181818		13.72727273		10.45454545		12.09090909

Appendix B

Student data for Southern Asia 2016-2019 – All CQ Dimensions

Southern Asia												
2019	**Gender**	**Region**	**Semester/Year**	**T1/T2**	**CQ DRIVE**	**T2-T1 Drive**	**CQ KNOWLEDGE**	**T2-T1 Knowledge**	**CQ STRATEGY**	**T2-T1 Strategy**	**CQ ACTION**	**T2-T1 Action**
2019-2	Female	Southern Asia	Spring 2019	T1	62		19		76		65	
2019-2	Female	Southern Asia	Spring 2019	T2	62	0	48	29	69	-7	69	4
2019-6	Male	Southern Asia	Spring 2019	T1	74		97		96		91	
2019-6	Male	Southern Asia	Spring 2019	T2	91	17	91	-6	96	0	85	-6
2019-13	Male	Southern Asia	Spring 2019	T1	78		80		91		80	
2019-13	Male	Southern Asia	Spring 2019	T2	87	9	84	4	95	4	87	7
2019-16	Male	Southern Asia	Spring 2019	T1	95		84		84		91	
2019-16	Male	Southern Asia	Spring 2019	T2	93	-2	76	-8	71	-13	76	-15
2019-18	Female	Southern Asia	Spring 2019	T1	87		59		87		96	
2019-18	Female	Southern Asia	Spring 2019	T2	98	11	91	32	98	11	96	0
2019-19	Male	Southern Asia	Spring 2019	T1	72		42		80		62	
2019-19	Male	Southern Asia	Spring 2019	T2	63	-9	47	5	78	-2	67	5
2019-25	Male	Southern Asia	Spring 2019	T1	96		47		71		3	
2019-25	Male	Southern Asia	Spring 2019	T2	98	2	49	2	80	9	45	42
2019-26	Female	Southern Asia	Spring 2019	T1	84		72		89		93	
2019-26	Female	Southern Asia	Spring 2019	T2	85	1	68	-4	96	7	95	2
2018												
2018-3	Female	Southern Asia	Spring 2018	T1	71		46		56		41	
2018-3	Female	Southern Asia	Spring 2018	T2	93	22	69	23	87	31	60	19
2018-8	Female	Southern Asia	Spring 2018	T1	87		70		87		72	
2018-8	Female	Southern Asia	Spring 2018	T2	80	-7	48	-22	91	4	82	10
2018-12	Male	Southern Asia	Spring 2018	T1	95		76		98		67	
2018-12	Male	Southern Asia	Spring 2018	T2	62	-33	66	-10	87	-11	84	17
2018-19	Male	Southern Asia	Spring 2018	T1	82		45		65		58	
2018-19	Male	Southern Asia	Spring 2018	T2	80	-2	71	26	80	15	80	22
2019-20	Female	Southern Asia	Spring 2018	T1	84		49		82		74	
2018-20	Female	Southern Asia	Spring 2018	T2	89	5	65	16	80	-2	78	4
2018-21	Male	Southern Asia	Spring 2018	T1	84		84		87		76	
2018-21	Male	Southern Asia	Spring 2018	T2	12	-72	13	-71	5	-82	10	-66
2018-26	Female	Southern Asia	Spring 2018	T1	85		74		93		84	
2018-26	Female	Southern Asia	Spring 2018	T2	84	-1	79	5	84	-9	82	-2
2017												
2017-4	Male	Southern Asia	Spring 2017	T1	93		63		65		69	
2017-4	Male	Southern Asia	Spring 2017	T2	98	5	90	27	91	26	91	22
2017-15	Female	Southern Asia	Spring 2017	T1	84		61		98		87	
2017-15	Female	Southern Asia	Spring 2017	T2	98	14	90	29	95	-3	98	11
2017-17	Male	Southern Asia	Spring 2017	T1	82		47		76		71	
2017-17	Male	Southern Asia	Spring 2017	T2	84	2	68	21	76	0	72	1
2017-18	Male	Southern Asia	Spring 2017	T1	69		39		45		58	
2017-18	Male	Southern Asia	Spring 2017	T2	91	22	67	28	76	31	84	26
2016												
2016-1	Female	Southern Asia	Spring 2016	T1	72		66		93		98	
2016-1	Female	Southern Asia	Spring 2016	T2	76	4	67	1	74	-19	98	0
2016-5	Female	Southern Asia	Spring 2016	T1	69		36		65		82	
2016-5	Female	Southern Asia	Spring 2016	T2	62	-7	21	-15	32	-33	60	-22
2016-6	Female	Southern Asia	Spring 2016	T1	72		44		62		58	
2016-6	Female	Southern Asia	Spring 2016	T2	56	-16	41	-3	58	-4	60	2
2016-13	Female	Southern Asia	Spring 2016	T1	87		61		89		93	
2016-13	Female	Southern Asia	Spring 2016	T2	84	-3	80	19	87	-2	91	-2
2016-14	Female	Southern Asia	Spring 2016	T1	69		63		98		93	
2016-14	Female	Southern Asia	Spring 2016	T2	60	-9	36	-27	98	0	95	2
2016-15	Female	Southern Asia	Spring 2016	T1	72		46		84		67	
2016-15	Female	Southern Asia	Spring 2016	T2	67	-5	61	15	87	3	84	17
2016-16	Female	Southern Asia	Spring 2016	T1	98		64		95		98	
2016-16	Female	Southern Asia	Spring 2016	T2	85	-13	69	5	91	-4	91	-7
2016-17	Female	Southern Asia	Spring 2016	T1	72		52		71		60	
2016-17	Female	Southern Asia	Spring 2016	T2	67	-5	62	10	71	0	82	22
2016-22	Male	Southern Asia	Spring 2016	T1	63		58		43		74	
2016-22	Male	Southern Asia	Spring 2016	T2	78	15	84	26	76	33	85	11
			28 Students	Average Increase =		-1.964285714		5.607142857		-0.607142857		4.5

Appendix C

Student data for Eastern Europe 2016-2019 – All CQ Dimensions

Eastern Europe	Gender	Region	Semester/Year	T1/T2	CQ DRIVE	T2-T1 Drive	CQ KNOWLEDGE	T2-T1 Knowledge	CQ STRATEGY	T2-T1 Strategy	CQ ACTION	T2-T1 Action
2019												
2019-3	Female	Eastern Europe	Spring 2019	T1	84		60		82		69	
2019-3	Female	Eastern Europe	Spring 2019	T2	89	5	72	12	85	3	87	18
2019-5	Male	Eastern Europe	Spring 2019	T1	5		58		76		95	
2019-5	Male	Eastern Europe	Spring 2019	T2	82	77	47	-11	82	6	84	-11
2019-12	Male	Eastern Europe	Spring 2019	T1	76		29		63		32	
2019-12	Male	Eastern Europe	Spring 2019	T2	63	-13	64	35	96	33	82	50
2019-21	Female	Eastern Europe	Spring 2019	T1	78		63		95		89	
2019-21	Female	Eastern Europe	Spring 2019	T2	80	2	77	14	96	1	96	7
2019-22	Female	Eastern Europe	Spring 2019	T1	78		69		85		62	
2019-22	Female	Eastern Europe	Spring 2019	T2	62	-16	69	0	69	-16	63	1
2019-24	Female	Eastern Europe	Spring 2019	T1	76		52		82		60	
2019-24	Female	Eastern Europe	Spring 2019	T2	78	2	52	0	89	7	84	24
2018												
2018-4	Male	Eastern Europe	Spring 2018	T1	84		60		74		63	
2018-4	Male	Eastern Europe	Spring 2018	T2	78	-6	53	-7	84	10	62	-1
2018-10	Female	Eastern Europe	Spring 2018	T1	71		49		67		74	
2018-10	Female	Eastern Europe	Spring 2018	T2	58	-13	44	-5	71	4	65	-9
2018-16	Male	Eastern Europe	Spring 2018	T1	96		82		85		76	
2018-16	Male	Eastern Europe	Spring 2018	T2	91	-5	80	-2	98	13	89	13
2018-27	Male	Eastern Europe	Spring 2018	T1	78		34		91		98	
2018-27	Male	Eastern Europe	Spring 2018	T2	85	7	57	23	84	-7	84	-14
2017												
2017-1	Female	Eastern Europe	Spring 2017	T1	74		64		89		52	
2017-1	Female	Eastern Europe	Spring 2017	T2	80	6	78	14	93	4	74	22
2017-9	Male	Eastern Europe	Spring 2017	T1	82		63		60		78	
2017-9	Male	Eastern Europe	Spring 2017	T2	93	11	98	35	95	35	98	20
2017-10	Female	Eastern Europe	Spring 2017	T1	65		50		56		58	
2017-10	Female	Eastern Europe	Spring 2017	T2	62	-3	47	23	45	-11	69	11
2017-11	Female	Eastern Europe	Spring 2017	T1	63		39		67		78	
2017-11	Female	Eastern Europe	Spring 2017	T2	62	-1	62	-3	72	5	65	-13
2017-12	Female	Eastern Europe	Spring 2017	T1	82		66		80		67	
2017-12	Female	Eastern Europe	Spring 2017	T2	96	14	90	24	91	11	93	26
2017-13	Female	Eastern Europe	Spring 2017	T1	87		49		58		65	
2017-13	Female	Eastern Europe	Spring 2017	T2	89	2	69	20	67	9	54	-11
2017-16	Female	Eastern Europe	Spring 2017	T1	60		24		58		30	
2017-16	Female	Eastern Europe	Spring 2017	T2	60	0	24	0	58	0	30	0
2016												
2016-19	Male	Eastern Europe	Spring 2016	T1	82		56		87		82	
2016-19	Male	Eastern Europe	Spring 2016	T2	80	-2	54	-2	87	0	74	-8
			18 Students	Average Increase=		3.722222222		9.444444444		5.944444444		6.944444444

Appendix D

Student data for Sub-Saharan Africa 2016-2019 – All CQ Dimensions

Sub-Saharan Africa	Gender	Region	Semester/Year	T1/T2	CQ DRIVE	T2-T1 Drive	CQ KNOWLEDGE	T2-T1 Knowledge	CQ STRATEGY	T2-T1 Strategy	CQ ACTION	T2-T1 Action
2019												
2019-8	Female	Sub-Saharan Africa	Spring 2019	T1	85		46		54		54	
2019-8	Female	Sub-Saharan Africa	Spring 2019	T2	91	6	56	10	69	15	65	11
2018												
2018-6	Female	Sub-Saharan Africa	Spring 2018	T1	82		60		69		74	
2018-6	Female	Sub-Saharan Africa	Spring 2018	T2	84	2	70	10	76	7	95	21
2018-7	Female	Sub-Saharan Africa	Spring 2018	T1	52		46		78		65	
2018-7	Female	Sub-Saharan Africa	Spring 2018	T2	69	17	80	34	85	7	84	19
2018-9	Male	Sub-Saharan Africa	Spring 2018	T1	93		83		76		82	
2019-9	Male	Sub-Saharan Africa	Spring 2018	T2	84	-9	77	-6	85	9	89	7
2018-14	Male	Sub-Saharan Africa	Spring 2018	T1	85		58		84		89	
2018-14	Male	Sub-Saharan Africa	Spring 2018	T2	74	-11	56	-2	72	-12	80	-9
2018-18	Female	Sub-Saharan Africa	Spring 2018	T1	87		55		98		89	
2018-18	Female	Sub-Saharan Africa	Spring 2018	T2	89	2	42	-13	95	-3	87	-2
2018-23	Female	Sub-Saharan Africa	Spring 2018	T1	69		39		85		54	
2018-23	Female	Sub-Saharan Africa	Spring 2018	T2	69	0	53	14	91	6	89	35
2018-24	Female	Sub-Saharan Africa	Spring 2018	T1	69		47		47		25	
2018-24	Female	Sub-Saharan Africa	Spring 2018	T2	84	15	66	19	63	16	54	29
2017												
2017-8	Male	Sub-Saharan Africa	Spring 2017	T1	89		67		89		84	
2017-8	Male	Sub-Saharan Africa	Spring 2017	T2	93	4	72	5	93	4	96	12
2016												
2016-7	Female	Sub-Saharan Africa	Spring 2016	T1	72		58		87		76	
2016-7	Female	Sub-Saharan Africa	Spring 2016	T2	76	4	31	-27	78	-9	89	13
2016-18	Female	Sub-Saharan Africa	Spring 2016	T1	74		38		80		72	
2016-18	Female	Sub-Saharan Africa	Spring 2016	T2	60	-14	35	-3	56	-24	71	-1
			11 Students	Average Increase=		1.454545455		3.727272727		1.454545455		12.27272727

Appendix E

Student data for Arab 2016-2019 – All CQ Dimensions

Arab	Gender	Region	Semester/Year	T1/T2	CQ DRIVE	T2-T1 Drive	CQ KNOWLEDGE	T2-T1 Knowledge	CQ STRATEGY	T2-T1 Strategy	CQ ACTION	T2-T1 Action
2019												
2019-10	Female	Arab	Spring 2019	T1	78		79		82		91	
2019-10	Female	Arab	Spring 2019	T2	82	4	86	7	87	5	87	-4
2019-15	Female	Arab	Spring 2019	T1	65		39		72		43	
2019-15	Female	Arab	Spring 2019	T2	80	15	49	10	76	4	63	20
2018												
2018-1	Female	Arab	Spring 2018	T1	91		65		85		72	
2018-1	Female	Arab	Spring 2018	T2	87	-4	80	15	98	13	93	21
2018-2	Female	Arab	Spring 2018	T1	75		49		76		65	
2018-2	Female	Arab	Spring 2018	T2	87	12	51	2	78	2	82	17
2017												
2017-6	Male	Arab	Spring 2017	T1	98		78		98		87	
2017-6	Male	Arab	Spring 2017	T2	98	0	96	18	98	0	98	11
			5 Students	Average Increase=		5.4		10.4		4.8		13

Appendix F

Student data for Latin Europe 2016-2019 – All CQ Dimensions

Latin Europe	Gender	Region	Semester/Year	T1/T2	CQ DRIVE	T2-T1 Drive	CQ KNOWLEDGE	T2-T1 Knowledge	CQ STRATEGY	T2-T1 Strategy	CQ ACTION	T2-T1 Action
2019												
2019-11	Male	Latin Europe	Spring 2019	T1	58		32		78		67	
2019-11	Male	Latin Europe	Spring 2019	T2	74	16	55	23	93	15	85	18
2019-14	Female	Latin Europe	Spring 2019	T1	58		54		72		45	
2019-14	Female	Latin Europe	Spring 2019	T2	71	13	49	-5	69	-3	38	-7
2018												
2018-5	Female	Latin Europe	Spring 2018	T1	82		32		72		65	
2018-5	Female	Latin Europe	Spring 2018	T2	84	2	52	20	71	-1	56	-9
2018-13	Female	Latin Europe	Spring 2018	T1	80		39		49		54	
2018-13	Female	Latin Europe	Spring 2018	T2	69	-11	73	34	72	23	65	11
2018-25	Male	Latin Europe	Spring 2018	T1	85		54		93		91	
2018-25	Male	Latin Europe	Spring 2018	T2	93	8	79	25	96	3	95	4
2017												
2017-3	Male	Latin Europe	Spring 2017	T1	84		49		76		74	
2017-3	Male	Latin Europe	Spring 2017	T2	93	9	73	24	93	17	82	8
2017-14	Female	Latin Europe	Spring 2017	T1	93		62		78		78	
2017-14	Female	Latin Europe	Spring 2017	T2	67	-26	77	15	76	-2	89	11
2016												
2016-12	Female	Latin Europe	Spring 2016	T1	74		71		72		65	
2016-12	Female	Latin Europe	Spring 2016	T2	87	13	79	8	87	15	82	17
2016-23	Female	Latin Europe	Spring 2016	T1	78		59		89		76	
2016-23	Female	Latin Europe	Spring 2016	T2	80	2	65	6	80	-9	84	8
2016-24	Female	Latin Europe	Spring 2016	T1	72		45		60		38	
2016-24	Female	Latin Europe	Spring 2016	T2	71	-1	44	-1	62	2	40	2
			10 Students	Average Increase[m]		2.5		14.9		6		6.3

Appendix G

Student data for Latin America 2016-2019 – All CQ Dimensions

Latin America	Gender	Region	Semester/Year	T1/T2	CQ DRIVE	T2-T1 Drive	CQ KNOWLEDGE	T2-T1 Knowledge	CQ STRATEGY	T2-T1 Strategy	CQ ACTION	T2-T1 Action
2019												
2019-20	Female	Latin America	Spring 2019	T1	98		70		98		91	
2019-20	Female	Latin America	Spring 2019	T2	96	-2	81	11	89	-9	95	4
2018												
2018-15	Female	Latin America	Spring 2018	T1	78		53		72		74	
2018-15	Female	Latin America	Spring 2018	T2	85	7	77	24	84	12	85	11
2018-17	Female	Latin America	Spring 2018	T1	89		58		87		67	
2018-17	Female	Latin America	Spring 2018	T2	91	2	58	0	93	6	84	17
2018-22	Female	Latin America	Spring 2018	T1	69		53		84		49	
2018-22	Female	Latin America	Spring 2018	T2	72	3	59	6	76	-8	74	25
2017												
2017-5	Female	Latin America	Spring 2017	T1	89		65		82		87	
2017-5	Female	Latin America	Spring 2017	T2	95	6	79	14	93	11	91	4
2016												
2016-8	Male	Latin America	Spring 2016	T1	69		55		72		76	
2016-8	Male	Latin America	Spring 2016	T2	74	5	63	8	71	-1	84	8
2016-9	Female	Latin America	Spring 2016	T1	72		43		67		71	
2016-9	Female	Latin America	Spring 2016	T2	71	-1	62	19	71	4	93	22
2016-11	Male	Latin America	Spring 2016	T1	93		82		74		98	
2016-11	Male	Latin America	Spring 2016	T2	78	-15	78	-4	69	-5	80	-18
2016-20	Female	Latin America	Spring 2016	T1	74		66		52		60	
2016-20	Female	Latin America	Spring 2016	T2	69	-5	59	-7	63	11	78	18
			9 Students	Average Increase=		0		7.888888889		2.333333333		10.11111111

Appendix H

Student data for Central Asia 2016-2019 – All CQ Dimensions

Central Asia	Gender	Region	Semester/Year	T1/T2	CQ DRIVE	T2-T1 Drive	CQ KNOWLEDGE	T2-T1 Knowledge	CQ STRATEGY	T2-T1 Strategy	CQ ACTION	T2-T1 Action
2016												
2016-3	Female	Central Asia	Spring 2016	T1	74		53		69		85	
2016-3	Female	Central Asia	Spring 2016	T2	71	-3	62	9	71	2	78	-7
2016-10	Female	Central Asia	Spring 2016	T1	85		65		80		43	
2016-10	Female	Central Asia	Spring 2016	T2	87	2	41	-24	76	-4	69	26
2016-21	Male	Central Asia	Spring 2016	T1	82		50		82		84	
2016-21	Male	Central Asia	Spring 2016	T2	93	11	75	25	85	3	87	3
			3 Students	Average Increase=		3.333333333		3.333333333		0.333333333		7.333333333