Commitment to the Study of International Business and Cultural Intelligence: A Multilevel Model

Jase R. Ramsey, Livia L. Barakat & Amine Abi Aad


To link to this article: http://dx.doi.org/10.1080/08975930.2014.902349

Published online: 10 Nov 2014.

Article views: 206

View related articles

View Crossmark data

Citing articles: 4 View citing articles
Commitment to the Study of International Business and Cultural Intelligence: A Multilevel Model

Jase R. Ramsey
Department of Management and Marketing, University of Alabama, Tuscaloosa, Alabama, USA

Livia L. Barakat
Center for International Business, Fundação Dom Cabral, Nova Lima, Minas Gerais, Brazil

Amine Abi Aad
Department of Management and Marketing, University of Alabama, Tuscaloosa, Alabama, USA

Adopting a multilevel theoretical framework, we examined how metacognitive and motivational cultural intelligence influence an individual’s commitment to the study of international business (IB). Data from 292 undergraduate and graduate business students nested in 12 U.S. business school classes demonstrated that individuals’ metacognitive and motivational cultural intelligence are positively related to their commitment to the study of IB. Furthermore, there is additional commitment when the classrooms’ cultural intelligence climate is high. We discuss the implications of these findings within a classroom context that involves cross-cultural interactions.

Keywords: Cultural intelligence, Commitment, Multilevel, International business students, Climate

1. INTRODUCTION

The study of international business (IB) is important for business students as firms become more global (Aggarwal & Goodell, 2011). Ultimately, the challenge of getting students committed to the study of IB is the responsibility of business school professors and administrators. Moreover, since business schools are competing with schools in other countries, there is an “implicit push for a global mindset for the schools and professors” (Grosse, 2013, p. 230). Yet, whether business schools are prepared to adequately convey current and relevant IB research in the classroom has been the subject of recent debate (Burke & Rau, 2010; Shepherd, Douglas, & Fitzsimmons, 2008).

This debate is important for management educators because the process of nurturing effective global managers begins in the classroom, resulting in vital future human capital assets for multinational enterprises (MNEs; Van Dyne & Ang, 2006). Future global managers (e.g., current IB students) need to develop the cultural intelligence skills necessary to understand and operate in diverse business environments. This study aims to contribute to the understanding of how cultural intelligence influences commitment to the study of IB at the individual and classroom levels.
students) that are capable of understanding, functioning, and managing within global settings are valuable, rare, nonsubstitutable, and imitable resources that can help firms achieve a competitive advantage (Aggarwal, 2011; Ang & Inkpen, 2008; Barney, 1991). Ultimately, training and developing future global managers is important due to their future impact on firms’ effectiveness (Stroh & Caligiuri, 1998).

While credible evidence that management teaching enhances management practice, the relationship between management research and teaching is much less explored (Burke & Rau, 2010). Academia has not been giving adequate attention to closing the research-practice gap through teaching (Cohen, 2007). Although teaching students the latest research results has been theorized to help close the research-practice gap, there is little empirical evidence of how teaching can help bridge the gap. Understanding what research to teach business students is important for business professors because integrating research into teaching in the classroom is not spontaneous and requires careful planning (Burke & Rau, 2010; Grosse, 2013). Throughout the remainder of this article, we will advocate researching and teaching of cultural intelligence (CQ) as potentially valuable to IB students.

Thus, our primary line of inquiry toward bridging the research-practice gap is cultural intelligence, defined as “the capability of an individual to function effectively in situations characterized by cultural diversity” (Ang & Van Dyne, 2008a, p. 3). Cultural intelligence has been theorized as a learning capability for global leader development (Ng, Van Dyne, & Ang, 2009). Therefore, the development of CQ in the classroom is a potential line of IB inquiry. Yet, an understanding of how effective is CQ in the study of IB remains unexplored. Are students with high degrees of CQ more committed to the study of IB? Furthermore, can teachers manipulate a classroom-level CQ climate in order to enhance individuals’ commitment to the study of IB? The purpose of this article is to bridge the research-practice gap by presenting empirical evidence of how nurturing CQ within a classroom can lead to positive effects on IB students’ commitment to the study of international business.

Specifically, we posit that individuals with high degrees of CQ are more committed to IB for reasons which will be further explored. We surveyed 292 IB students nested within 12 classroom settings in two universities in the United States in order to determine whether CQ has a positive effect on their commitment to the study of IB. In so doing, our aim is to make three primary contributions to the literature on business school education and cultural intelligence.

First, in order to extend the commitment literature, we aim to provide the first empirical study to test students’ commitment to the study of international business, a topic known to be in demand among employers. Second, we develop the first empirical study to examine whether CQ has an impact on the commitment to the study of IB (Srivastava, 2012). Finally, in response to calls for more meso-level research, this is the first empirical study to aggregate CQ to the classroom-level in order to see whether developing a CQ climate is possible and, whether it matters or not (see Shokef & Erez, 2008 for an example of a team-level effect).

In the following section, we examine the literature associated with student commitment to international business. Next, we will discuss the nature of cultural intelligence. Then we highlight how CQ might be encouraged in classrooms. And then, after establishing two aspects of a CQ mindset for students’ success in today’s challenging environment, we describe our research methods for testing the relationship between CQ and commitment for international business students. Finally, we report and then discuss the implications of our findings.
2. COMMITMENT TO THE STUDY OF INTERNATIONAL BUSINESS

Organizational commitment is defined as the relative strength of an individual’s identification with and involvement in an organization (Mowday, Steers, & Porter, 1979). Organizational commitment acts as a stabilizing force that maintains behavioral direction when equity conditions are not met (Scholl, 1981, p. 593). For instance, an employee that is committed to an organization may continue to work hard regardless of being paid relatively poorly. In other words, individuals with high organizational commitment will have a strong predisposition to let their internalized standards, rather than conscious consideration of consequences, guide their actions. This conceptualization of commitment may be applied to the study of international business; operating with the same mechanisms as organizational commitment.

Hence, we define commitment to the study of IB as the relative strength of a student’s identification with and involvement in an IB class. Students that are highly committed to the study of IB may internalize the relevance of IB for their careers and act in ways that further their development in the field of IB, regardless of potentially high short-term costs (e.g., studying an unfamiliar subject or language).

Before we investigate cultural intelligence as a possible antecedent to the commitment to the study of IB, we will look at two antecedents of organizational commitment in order to improve the validity of our conceptualization of the commitment to the study of IB. Generalized loyalty and organizational identification are internalized beliefs that are immediate antecedents of commitment (Wiener, 1982). Generalized loyalty is an internal normative pressure that urges individuals to believe that they have a moral obligation to behave in ways reflecting loyalty and duty in social situations in which they are significantly involved (Wiener, 1982). In the context of a university classroom, students may believe they have an obligation to work hard since they have dedicated significant resources (e.g., time and money) to participating in the course. Organizational identification is an internalized belief that individuals are behaving consistently with their organization’s goals, mission, style of operations, and policies (Hall, Schneider, & Nygren, 1970). Students that have a high degree of commitment to the study of IB will identify with their university (and possibly their IB class) and attempt to behave consistently with the expectations of the organization or class.

In summary, the underlying mechanisms of organizational commitment (i.e., a stabilizing force that maintains behavioral direction) should also support the concept of commitment to the study of IB. Furthermore, the antecedents of organizational commitment (generalized loyalty and organizational identification) should carry over into the IB classroom context. Next, we will investigate cultural intelligence as a potential antecedent of commitment to the study of IB.

3. CULTURAL INTELLIGENCE

There are currently two primary lines of inquiry surrounding a construct that aids global managers in unfamiliar contexts. Both cultural intelligence and global mindset (GM) are focused on understanding what global managers need in order to be successful when dealing in unfamiliar social settings (e.g., a different country). A global mindset is defined as “a set of attributes and characteristics that help global leaders better influence individuals, groups, and organizations unlike themselves” (Javidan & Walker, 2013, p. 14). Both constructs have handbooks describing...
how to increase one’s CQ or GM; albeit the handbook on CQ (Ang & Van Dyne, 2008b) is based more on empirical studies while the one on GM is based on experience and discussions with global managers (Aggarwal, 2014). Furthermore, as discussed in the book review by Aggarwal (2014), the GM handbook is focused on “individual capabilities and not on knowledge about specific nations, places, or international business concepts” (p. 3). Cultural intelligence specifically focuses on this type of knowledge as a basis for the capability to function in culturally diverse contexts. Finally, while the concepts of CQ and GM have a number of similarities, we have selected to focus on CQ due to its richer empirical advancement in the literature.

Cultural intelligence is a multidimensional construct first introduced by Earley (2002) to analyze the process through which an individual adapts to new contextual inputs that are generated through exposure to unfamiliar social settings. Empirical studies have demonstrated that individual-level overall CQ (as opposed to its components) has effects on expatriate adjustment (Lee & Sukoco, 2010; Moon, 2010), emotional exhaustion (Tay, Westman, & Chia, 2008), interpersonal trust and idea sharing (Chau & Morris, 2009), product innovation (Elenkov & Manev, 2009), leadership emergence and cross-border leadership effectiveness (Rockstuhl & Ng, 2008), and job performance (Chen, Lin, & Sawangpattanakul, 2011).

With a theoretical basis in cognitive, social, and emotional intelligence, the multidimensional construct of CQ has four facets: behavioral, cognitive, metacognitive, and motivational (Earley, 2002). Next, we discuss each of the four CQ components. Yet, for the purpose of understanding a student’s commitment to the study of international business, we have decided to focus on the metacognitive and motivational aspects of CQ rather than the behavioral or cognitive parts. Since commitment is defined as a bundle of mental abilities and feelings, we assume that behavioral and cognitive CQ would not be as related to commitment to the study of IB. Behavioral CQ is focused on the physical actions of the individual (Earley, Ang, & Tan, 2006) and thus is not directly related to commitment (Ng et al., 2009). Similarly, cognitive CQ, which emphasizes cross-cultural knowledge, is not sufficient to induce commitment without self-knowledge and strong reasoning skills (i.e., metacognition). Therefore, we will focus on metacognitive and motivational CQ as an antecedent to commitment to the study of IB.

3.1. Behavioral CQ

The behavioral facet of CQ is an individual’s ability to relevantly and appropriately interact (verbally and nonverbally) with people from different cultures (Earley, 2002). To succeed in different cultural contexts, individuals should be able to rapidly change their actions by mimicking or acquiring the appropriate behaviors until they get accustomed to the cultures’ norms and start acting without hesitation (Lovvorn & Chen, 2011). Behavioral CQ has been shown to positively influence task performance (Ang et al., 2007) and transformational leadership (Elenkov & Manev, 2009). Yet, for the reasons discussed above, we don’t expect behavioral CQ to affect commitment to the study of IB.

3.2. Cognitive CQ

Cognitive CQ reflects knowledge of norms, conventions, and practices in alternate cultures obtained from education and personal experience (Ang, Van Dyne, & Tan, 2011). The cognitive
facet is essentially the knowledge component of CQ and has been shown to improve transformational leaders (Elenkov & Manev, 2009), cross-cultural judgment, and decision making (Ang et al., 2007). As we discussed previously, we don’t expect cognitive CQ to affect commitment to the study of IB.

3.3. Metacognitive CQ

Metacognitive CQ is an individual’s level of cultural awareness during cross-cultural interactions (Ang et al., 2011). It is focused on higher level mental activities—such as challenging an individual’s own value system, cultural assumptions, and norms of how the individual interacts with others. The self-knowledge of an individual who is willing to work with and learn from others increases behavioral effectiveness (Adler & Bartholomew, 1992). This self-knowledge combined with strong reasoning skills will enable the individual to recognize, integrate, and interpret different contextual milieus and social signals. The people high in metacognitive CQ are able to understand new cultures because they are better able to draw mental pictures of new cultural settings (Earley, 2002).

Additionally, individuals who possess high metacognitive CQ monitor and think about their emotions, beliefs, and assumptions while they process environmental cues (Ng et al., 2009). They use their reasoning capabilities to translate their insights from particular experiences and general interpretations into concepts that can be applied to different cultural contexts (Ng et al., 2009).

Finally, metacognitive CQ has been documented in the empirical international business literature as well. It improves cultural judgment, decision making, and task performance (Ang et al., 2007). It is also positively related to conscientiousness and openness to change (Ang, Van Dyne, & Koh, 2006). To the best of our knowledge, there has not been an empirical study that examines the relationship between metacognitive CQ and organizational commitment, or more specifically, commitment to the study of IB. Yet, since metacognitive CQ is a combination of self-knowledge and mental processes, we believe that students with high levels of metacognitive CQ will excel in IB courses, and thus be more committed to the study of IB (see Figure 1). As a result, we hypothesize that:

**H1**: International business students with higher metacognitive cultural intelligence are more committed to the study of international business.

---

**FIGURE 1** Model of Individual- and Classroom-Level Cultural Intelligence on Commitment to the Study of International Business.
3.4. Motivational CQ

The motivational CQ facet reflects the capability to direct attention and energy toward learning about and functioning in culturally diverse situations (Ang et al., 2011). It is based on two well-developed constructs: self-efficacy and conscientiousness (Earley, 2002). Self-efficacy is the belief in one’s ability to succeed, and it is critical for an individual that wants to adapt to novel situations and conditions. An individual high in self-efficacy initiates interaction even under uncertain and ambiguous cultural environments (Lovvorn & Chen, 2011). Conscientiousness is the desire to continuously achieve goals regardless of setbacks, challenges, uncertainty, failures, and misunderstandings that can be generated by interactions set in novel cultural environments (Earley, 2002). In summary, an individual that believes in one’s ability to succeed and continuously strives to achieve goals is motivated to act and perform well in different cultural environments (Earley & Ang, 2003; Ng et al., 2009).

Motivational CQ has the most empirical support of the four components of CQ. It has been found to be positively related to general adjustment in expatriate settings (Ang et al., 2007; Templer, Tay, & Chandrasekar, 2006), extraversion and openness (Ang et al., 2006), carrying out a sequence of steps toward achieving goals (Earley et al., 2006), previous international work (Shannon & Begley, 2008), and nonwork experiences (Tarique & Takeuchi, 2008). Yet one article is particularly germane to our study because it utilizes employee commitment as a dependent variable. De la Garza Carranza and Egri (2010) surveyed 122 Canadian small business executives and found that motivational CQ significantly affects employee commitment. While the authors refer to their independent variable as “managerial CQ,” after further examination, the measure was Ang et al.’s (2007) motivational CQ subscale. Therefore, there is some support that motivational CQ increases commitment.

Finally, individuals who possess high motivational CQ are prone to carry out a sequence of steps in order to achieve their goals (Earley et al., 2006). We believe that students that are high in motivational CQ are committed to the study of IB due to their drive and ability to persevere through the steps necessary to achieve their goals. Thus, we hypothesize:

\[ H2: \text{International business students with higher motivational cultural intelligence are more committed to the study of international business.} \]

In the next section, we will discuss how cultural intelligence may emerge at a higher level than the individual level. Once the emergence of CQ has been established, we will look at possible results from CQ at the classroom level.

4. CULTURAL INTELLIGENCE CLIMATE

A primary concern of multilevel research is emergence. Emergence is the process that explains how and why phenomena happening at lower levels interact to create higher level distinct phenomena (Ployhart & Moliterno, 2011). Emergence is an important process because it clarifies the interpretations of individual events that affect unit or company-level phenomena (Kozlowski & Klein, 2000). We use human capital theory in order to justify the emergence of the CQ facets
from the individual level to the classroom level. Having its origins in economics, the human capital theory emphasizes the contribution, costs, values, and transferability of human capital across different levels of the organization (Becker, 1964).

The mechanism through which the facets of CQ emerge in human capital theory is the interaction of students within the classroom. Kozlowski and Klein (2000, p. 50) describe a phenomenon as emergent when it originates in the cognition, affect, behaviors, or other characteristics of individuals, is amplified by their interactions, and manifests itself as a higher level collective phenomenon. Further support for using interaction as a mechanism of emergence is its ability to capture individual characteristics, contextual factors, and important roles individuals play in organizations (Ang & Inkpen, 2008; Cantor, Mischel, & Schwartz, 1982; Shoda, Lee-Tiernan, & Mischel, 2002).

Recent work has begun to explore the emergence of individual-level CQ to the organizational-level CQ (Chen, Liu, & Portnoy, 2011). Chen, Liu, and Portnoy (2011) surveyed 305 realtors in the United States nested in 26 firms and found that an individual and firm-level motivational CQ has a direct and indirect impact on individual-level performance. Our study extends the Chen, Liu, and Portnoy (2011) work by also aggregating the metacognitive CQ component (in addition to the motivational CQ component) and testing the higher level effects on a different outcome variable, commitment to the study of IB and, at a different level, the classroom.

Aside from interacting on a daily basis, students in the same classroom, intentionally or unintentionally learn from each other by exchanging ideas, experiences, knowledge, and information. Moreover, students learn and are motivated from their interactions with faculty, and, in particular, faculty involved in research (Jenkins, Blackman, Lindsay, & Paton-Saltzberg, 1998; Lindsay, Breen, & Jenkins, 2002).

The role teachers play in the classroom is crucial for the transfer of knowledge. Teachers incorporate existing research in order to increase students’ learning, thus providing them with evidence-based practices for their future jobs (Burke & Rau, 2010). Moreover, teachers facilitate knowledge exchange by taking part in and encouraging classroom interactions (Jenkins & Zetter, 2003; Locke, 1996). Finally, involving students in research projects helps to improve interactions and increase their learning experience since the focus will shift from the teachers to the students (Brew, 2002; Palmer, 2007). We believe that teachers that focus on this unique learning environment will create a cultural intelligence climate at the classroom-level that has positive effects on a student’s commitment to the study of IB. As a result, we hypothesize:

**H3**: International business classrooms with a high metacognitive cultural intelligence climate will result in students that are more committed to the study of international business.

**H4**: International business classrooms with a high motivational cultural intelligence climate will result in students that are more committed to the study of international business.

### 5. METHODS

#### 5.1. Sample

In order to test the hypotheses of this study, a survey was conducted with students from two universities in the Southeast region of the United States. The students were one month from the
end of the semester and enrolled in an international business course. They ranged from sophomores through MBAs (76% BBA and 24% MBA), had a mean age of 25, with 57% male, and 9% were of a nationality other than from the United States. We asked the professors to offer the students either a URL link or a hard copy in order to complete the voluntary academic study. Twelve classes were surveyed with a response rate of 92%. Due to the high response rate, we did not consider nonresponse bias a problem. A final sample size of 292 was used to test the hypotheses.

5.2. Measurement

This study has cultural intelligence as the independent variable and commitment to the study of international business as the dependent variable. We used validated scales for both and also added several control variables.

To measure cultural intelligence, we used the scale developed by Ang et al. (2007), which was submitted to all students that responded the survey. CQ is a multidimensional construct comprised of 20 items in four dimensions. As mentioned above, this study uses two components of CQ. Each construct represents different capabilities to function in diverse cultural settings. Metacognitive CQ was measured by a four-item scale (sample item: I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me). The Cronbach alpha reliability was .89. Motivational CQ was measured by a five-item scale (sample item: I enjoy interacting with people from different cultures), Cronbach alpha reliability was .83. Finally, the constructs were mean centered to aide in the interpretation of the results (Aiken & West, 1991). Cultural intelligence capital is operationalized as the classroom-level mean of aggregate individual level CQ scores, nested within each classroom. This aggregation approach to classroom CQ is identical to prior multilevel research on personality homogeneity (Schneider, Smith, Taylor, & Fleenor, 1998) and human capital emergence (Ployhart, Weekley, & Baughman, 2006).

To measure commitment to the study of international business, we adjusted the Shortened Organizational Commitment Questionnaire developed by Mowday et al. (1979). We selected six of the nine questions (three could not be adapted to our classroom context) and altered them from a job context to an IB class context. For example, an original question of “I really care about the fate of this organization” was changed to “I really care about international business.” International business was previously defined during classes, based on the textbook adopted by both institutions (Cavusgil, Knight, & Riesenberger, 2008). Cronbach’s alpha was .91, demonstrating good reliability.

We also tested the effect of seven control variables: class, year in college, gender, whether they had studied abroad, number of countries visited, age, and nationality. The Class that the student was enrolled in was dummy-coded for each of the twelve sections, with class size ranging from 5–42 and an average of 24 students. The Year in College ranged from 2–8, with a mean of 4 (senior). Gender was coded 0 = female, 1 = male. Studied Abroad was coded 0 = no, 1 = yes (19% had studied abroad). Number of Countries Visited was a count, with a mean of 4. Age was the year they were born subtracted from 2012, the year the survey was conducted (range of 20–54 years old). Nationality was coded 0 = non-USA, 1 = USA (87% USA).
6. RESULTS

6.1. Descriptive Analysis

Descriptive statistics, reliabilities, and intercorrelations for all the study variables at the individual and classroom levels are presented in Table 1. Given the nested structure of our data, caution should be exercised when interpreting correlations; consequently the reader should focus on hierarchical linear modeling (HLM) results below for more accurate estimates of the hypothesized relationships.

6.2. Hypotheses Testing

Given the nested nature of our data (i.e., students were nested within classrooms), we used HLM to test our hypotheses. HLM allows researchers to examine relationships across different levels by simultaneously estimating both within-class and between-class variances of the study variables (Raudenbush & Bryk, 2002). We tested all of the hypotheses using a grand-mean center technique. To more clearly test for these cross-level effects, we controlled for the class-level mean of individual metacognitive and motivational CQ at Level 2 (classroom). When significant cross-level variance is identified in the dependent variable, HLM is deemed an appropriate technique for modeling multilevel relationships (Raudenbush & Bryk, 2002). Therefore, to justify HLM as the appropriate analytic technique for our nested data, we first ran a null model with no predictors, with commitment to the study of international business as the dependent variable. This analysis yielded a significant variance in commitment to the study of IB across classes, $\chi^2 = 48.55, p < .001; \text{ICC}(1) = .11$, indicating 11% of the variance exists across classes (see Table 2). As a result, we proceeded to test the hypotheses using HLM.

The main effects of individual metacognitive and motivational CQ on commitment to the study of IB were tested in HLM. The results shown in Model 2 of Table 3 provide support for the Hypotheses 1 and 2 that both metacognitive and motivational CQ positively impact a student’s commitment to the study of IB. The results shown in Model 3 of Table 3 provide support for Hypothesis 3, stating that international business classrooms with high metacognitive cultural intelligence positively influence students to be more committed to the study of international business. Hypothesis 4, on the other hand, was not supported. Thus, there seems to be a lack of support for international business classrooms with high motivational cultural intelligence to positively influence students to be more committed to the study of international business.

7. DISCUSSION

7.1. Conclusion

In an attempt to address the research-teaching gap in management education and the IB literature, we sought empirical evidence that CQ would have a positive effect on the commitment to the study of international business. Once the relationship between CQ and commitment to the study of IB is established, investigators can turn their attention to the question of: what are the best ways to teach CQ in the classroom? Through a survey of 292 international business students
TABLE 1
Descriptive Statistics, Reliabilities, and Intercorrelations Among Measures

| Variable                                           | M    | SD   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Year in college                                 | 4.22 | 1.18 |      |      |      |      |      |      |      |      |      |      |      |
| 2. Gender                                          | 0.57 | 0.50 | 0.08 |      |      |      |      |      |      |      |      |      |      |
| 3. Studied abroad                                   | 0.19 | 0.39 |      | 0.23 |      |      |      |      |      |      |      |      |      |
| 4. Countries visited                               | 4.15 | 4.48 | 0.22 |      | 0.06 |      |      |      |      |      |      |      |      |
| 5. Age                                             | 25.35| 5.50 |      |      |      |      |      |      |      |      |      |      |      |
| 6. Nationality                                     | 0.87 | 0.33 |      |      |      | 0.06 | 0.04 |      |      |      |      |      |      |
| 7. Individual commitment to the study of IB        | 4.32 | 1.13 | -0.17|      |      |      |      | 0.04 |      |      |      |      |      |
| 8. Individual metacognitive CQ                      | 4.22 | 0.97 |      |      |      |      |      |      |      |      |      |      |      |
| 9. Individual motivational CQ                       | 4.41 | 0.90 |      |      |      |      |      |      |      |      |      |      |      |
| 10. Classroom metacognitive CQ                      | 4.19 | 0.41 |      |      |      |      |      |      |      |      |      |      |      |
| 11. Classroom motivational CQ                       | 4.38 | 0.33 |      |      |      |      |      |      |      |      |      |      |      |

Note. IB = international business; CQ = cultural intelligence; Reliabilities of the measures are boldfaced and noted in the diagonals.

1Variables 1–9 are at the individual level; Variables 10–11 are at the classroom level; n = 292 at the individual level; n = 12 at the classroom level.

*p < .05, **p < .01.
TABLE 2
Results from the One-Way ANOVA Model Based on Commitment

<table>
<thead>
<tr>
<th>Fixed Effect</th>
<th>Coefficient</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average class mean</td>
<td>4.37</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Random Effect

<table>
<thead>
<tr>
<th></th>
<th>Variance Component</th>
<th>df</th>
<th>$\chi^2$</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class mean</td>
<td>0.14</td>
<td>11</td>
<td>48, 55</td>
<td>.000</td>
</tr>
<tr>
<td>Level-1 effect</td>
<td>1.14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% of variance of individual’s commitment is between classes (ICC1): 11.01%

Note. This tests the hypothesis of whether all classes have the same mean value of satisfaction. The null hypothesis is implausible ($p < .05$), indicating significant variation exists among classes in grades.

TABLE 3
Results of HLM analyses predicting individual commitment to the study of IB

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>4.33** (.13)</td>
<td>4.41** (.14)</td>
<td>3.31 (1.87)</td>
</tr>
<tr>
<td>Individual-level variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year in college</td>
<td>-.10 (.09)</td>
<td>-.10 (.09)</td>
<td>-.11 (.09)</td>
</tr>
<tr>
<td>Gender</td>
<td>.11 (.14)</td>
<td>.06 (.13)</td>
<td>.04 (.14)</td>
</tr>
<tr>
<td>Studied abroad</td>
<td>.48* (.19)</td>
<td>.19 (.21)</td>
<td>.18 (.21)</td>
</tr>
<tr>
<td>Countries visited</td>
<td>.00 (.02)</td>
<td>-.01 (.03)</td>
<td>-.01 (.03)</td>
</tr>
<tr>
<td>Age</td>
<td>-.01 (.02)</td>
<td>-.00 (.01)</td>
<td>-.00 (.01)</td>
</tr>
<tr>
<td>Nationality</td>
<td>-.27 (.19)</td>
<td>.05 (.16)</td>
<td>.06 (.16)</td>
</tr>
<tr>
<td>Metacognitive CQ</td>
<td>.48* (.08)</td>
<td>.46** (.07)</td>
<td></td>
</tr>
<tr>
<td>Motivational CQ</td>
<td>.29* (.10)</td>
<td>.30* (.10)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classroom-level variables</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Class metacognitive CQ</td>
<td>.28** (.07)</td>
<td></td>
</tr>
<tr>
<td>Class motivational CQ</td>
<td>-.02 (.19)</td>
<td></td>
</tr>
</tbody>
</table>

$R^2$ | .07 | .41 | .45 |

Note. $R^2$ is calculated proportional change of Level 1 and Level 2 error variance because of predictors added in the models of Table 2. Parenthetical values indicate standard errors; $n = 292$ individuals nested in 12 classes.

$n^*p < .05$. $**^p < .01$. nested within 12 classrooms in two universities in the United States, we were able to test our hypotheses.

The hypotheses tested and conclusions are summarized below:

H1: International business students with higher metacognitive cultural intelligence are more committed to the study of international business. (Supported)

H2: International business students with higher motivational cultural intelligence are more committed to the study of international business. (Supported)
H3: International business classrooms with a high metacognitive cultural intelligence climate will result in students that are more committed to the study of international business. (Supported)

H4: International business classrooms with a high motivational cultural intelligence climate will result in students that are more committed to the study of international business. (Not supported)

Thus, three of our hypotheses were supported, which we discuss next.

First, we tested whether international business students with higher metacognitive (H1) and motivational CQ (H2) would be more committed to the study of international business. Results provide support for these hypotheses signifying that students who are highly capable of reasoning during cross-cultural interactions and with a greater desire to learn about and function in culturally diverse situations tend to be more committed to the study of IB. For teachers, this means that developing these two specific components of CQ in students may increase their engagement with IB studies. This will involve changing students’ frame of reference regarding culture in order to increase their commitment to the IB classroom. The future outcome of more committed IB students may be more effective global managers (Van Dyne & Ang, 2006) and ultimately, firms (Stroh & Caligiuri, 1998).

Also, we examine whether developing a CQ climate within the classroom is possible and whether it influences students to be more committed to the study of IB above and beyond the individual-level effects. First, our results provide support for the emergence of individual-level CQ to the classroom-level, extending the existing multilevel CQ literature (Chen, Liu, & Portnoy, 2011) by aggregating the metacognitive CQ component (in addition to the motivational component) and testing its higher order effects on the commitment to the study of IB. The results demonstrated that classes with a high metacognitive CQ climate (H3) increase a student’s commitment to the study of international business. Therefore, fostering cultural awareness by facilitating thinking and interactions among students may create a higher metacognitive CQ climate at the classroom level. This is in line with previous literature on the role of professors and importance of encouraging classroom interactions (Jenkins & Zetter, 2003; Locke, 1996).

On the other hand, an attempt to develop a classroom-level motivational CQ climate (H4) seems to be less worthwhile to increase students’ commitment to the study of IB. Therefore, a class with great energy and disposition to learn about culturally diverse situations may not necessarily be more committed to the study of IB. A possibility exists that a culturally motivated class will be more interested in the practice of IB, by means of in-class cross-cultural interactions or simulations than in the study of IB itself. This may be because when students perceive themselves as a group they may be more willing to learn from the each other’s experience than from teachers and textbooks. This is not the case of students’ perceiving themselves individually, as shown by H2, since in such case each one’s cultural motivation/energy may be realized as hours of study.

7.2. Implications

The support found for H1 and H2 lead us to conclude that international business students with higher metacognitive and motivational CQ are more committed to the study of international
business. In order to change students’ frame of reference and develop metacognitive and motivational CQ, teachers may use a variety of tools. For instance, presenting and discussing cases of cultural differences may be a good way to foster reasoning upon the challenges and outcomes of cross-cultural interactions (metacognitive CQ). Also, stimulating cross-cultural interactions within class (if there are international students) or outside class (within the university, neighborhood, and family) by means of assignments and group work, may help to increase motivational CQ. Inviting international speakers to share their experiences with other cultures, providing an international mentor or peer to work with students, and even organizing international excursions may be useful tools to develop both metacognitive and motivational CQ.

Also, we provided empirical evidence that classroom-level metacognitive CQ increases students’ committed to the study of IB. Thus, an additional effect on commitment is expected when teachers are able to increase metacognitive CQ climate. In that regard, fostering interactions among students within the classroom is essential, because students may learn from their colleagues by sharing, discussing, and observing their reasoning skills.

Yet, classrooms with a high motivational CQ climate do not necessarily result in students that are more committed to the study of IB. Therefore, if a professor wants to increase the commitment to the study of IB for the entire class, he or she might be better off focusing on increasing metacognitive CQ.

It may also be beneficial to assess students’ level of metacognitive and motivational CQ at the beginning of the semester in order determine if CQ is being learned. Instructors could adjust their teaching methodology in order to test which methods work best at increasing CQ. Examples such as individual tasks and homework that aim to increase both cross-cultural reasoning and motivation may be useful to increase CQ and ultimately commitment to the study of IB. Finally, group tasks related to cultural reasoning (metacognitive) will be more effective at increasing commitment to the study of IB than attempts to increase classroom motivational CQ.

7.3. Limitations and Future Research

Despite its contributions to both researchers and educators, this study is not without limitations. First, the fact that it was conducted in only two universities and in one country restricts its generalizability to other contexts. Also, despite the positive effect of CQ on the commitment to study IB, there is no evidence that the same would be verified for other disciplines (e.g., entrepreneurship). Thus, we encourage future studies to test these hypotheses in other contexts and extend the possible outcomes of CQ (e.g., performance and satisfaction) at both individual and classroom levels. Next is the problem of causality underlying a cross-sectional study of CQ and commitment. It could be argued that commitment to study of IB may be among the strongest candidates for predicting the development of cultural awareness and capabilities that define our antecedents. A longitudinal analysis may help understand the nature of this phenomenon. Finally, the size of our sample may have limited our ability to find a significant relationship between motivational CQ climate and commitment to the study of IB at the classroom level. A larger sample size at both levels would help to understand this relationship.
AUTHOR BIOGRAPHIES

**Jase R. Ramsey** is an Assistant Professor of International Business at Saint Louis University. He received his PhD in Management from the University of South Carolina and has published in journals such as the *Academy of Management Journal, Journal of International Management, Journal of World Business, International Journal of Cross Cultural Management, and the Journal of Teaching in International Business*. His research focus is on international strategy and cross cultural management.

**Livia L. Barakat** is an Assistant Professor of Marketing and International Business at Fundacao Dom Cabral, Brazil. She is also an International Program Director in the International Affairs Department of FDC. She has taught Marketing Research at the Federal University of Minas Gerais and International Business at the Pontificia Catholic University of Minas Gerais. She has published in international journals such as *Journal of Teaching in International Business, Transnational Corporations*, and *Latin American Business Review*. Her research focus is on the internationalization process, cross-cultural interactions, and services marketing.

**Amine Abi Aad** is a Assistant Professor of Management at the Lebanese American University. He received his PhD in Management at the University of Alabama. He worked as an entrepreneur for nine years in Lebanon. His research interests include strategy, cultural intelligence, and the informal economy.

REFERENCES


