A Comparative Study of the Teaching of Cross-Cultural Management: Face-to-Face vs. Online Delivery

Eimear Nolan, Xiaoning Liang, Louis Brennan, and Mairead Brady

Trinity College Dublin, Ireland

Abstract. Research to date notes the effectiveness of cross-cultural training courses in increasing students' cultural intelligence. This study aims to establish whether or not the online delivery of a cross-cultural management course increases students' cultural intelligence, academic satisfaction and commitment to learn. Adopting a longitudinal approach, we researched students undertaking a cross-cultural management module as part of their MSc programme in Management. Pre and post face-to-face intervention measures were used for sample 1 (face-to-face), and sample 2 (online). Our findings reveal that the mode of delivery did not impact student's cognitive CQ, behavior CQ, and metacognitive CQ, with the face-to-face mode of delivery and the online delivery equally effective in improving students' CQ in these domains. However, our study found that the online mode of delivery can enhance students' motivational CQ relative to that of the face-to-face mode of delivery. These findings are novel as they are the first to assess how the delivery mode of cross-cultural management education impacts on students' cultural intelligence, academic satisfaction and commitment to learn.

Keywords: cross-cultural management education, cultural intelligence, academic commitment to learn, student satisfaction, online delivery, face-to-face delivery.

1. Introduction

There is consensus among academics and partitioners alike that cross-cultural competencies are necessary for international managers in today's world (Ng, Van Dyne, & Ang 2009; Eisenberg, Lee, Brück, Brenner, Claes, Mironski & Bell 2013). This need is becoming more crucial with the increasing rate of globalization and expatriation globally.

To ensure students become culturally adept for their future work environment, it is suggested that educational facilities need to focus on increasing students' overall cultural intelligence (CQ) (Ramsey & Lorenz 2016). CQ can be defined as the ability of an individual to navigate successfully through culturally diverse situations. Overall CQ is comprised of four elements: behavior CQ,

cognitive CQ, motivational CQ, and metacognitive CQ. These four elements are defined and discussed in detail in the following section. The growing importance for such skills has led to an increase in cross-cultural education being introduced in numerous disciplines, including but not limited to, international management. Past research has looked at how effective cross-cultural management education is in increasing students' CQ (e.g., Eisenberg *et al.* 2013; Ramsey & Lorenz 2016). However this research has largely focused on traditional in-class face-to-face delivery where students are physically present in the room, and more recently in blended modes of delivery which combine a mixture of face-to-face and online delivery (e.g., Roux, Suzuki Matsuba, & Goda 2020). This research aims to extend the existing knowledge and understanding of how cross-cultural management education increases students' CQ beyond face-to-face and blended modes of delivery, by investigating the effectiveness of cross-cultural management education delivered solely in an online format.

The teaching of cross-cultural management typically encompasses a great deal of interactive and participative exercises involving experiential learning that entails the acquisition by students of high levels of tacit, implicit knowledge and skills. As such, the appropriateness and feasibility of reliance on an exclusive online delivery mode can be questioned, and there has been a reluctance to exclusively rely on this mode of delivery for cross-cultural management. Uniquely this study embodies such an exclusive approach and tests its efficacy when compared to face-to-face delivery.

The first aim of this study is to extend the conversation on cross-cultural education effectiveness by determining how effective such a course is when the mode of delivery is online. While past research indicates that online education can be as effective or even more effective than face-to-face education when the course is designed and delivered to be taught online (e.g., Bernard *et al.* 2004; Broadbent & Poon 2015; Rasheed, Kamsin & Abdullah 2020; Weightman, Farnell, Morris, Strange, & Hallan 2017), little is known whether CQ can be increased by taking a solely online cross-cultural class. Additionally, to date, limited research exists on how the four components of CQ are influenced by a cross-cultural management course (e.g., Eisenberg *et al.* 2013). In general, research has either investigated overall CQ, where all four components of CQ are combined into an overarching scale (e.g., Ramsey & Lorenz 2016), or some of the four components of CQ are selected and investigated (e.g., Groves & Feyerherm 2011). Additionally, to our knowledge no research investigates and compares how the four components of CQ are influenced by the mode of delivery (online vs face-to-face) of a cross-cultural management course. Thus, the second aim of this study is to extend existing research on CQ by determining the validity, importance and strength of each of the four components of CQ in an online and face-to-face delivery mode of a cross cultural management course. We conduct this research by assessing the CQ of two cohorts of business students taking an Management MSc in a leading European University. Sample 1 was completed in 2019, where

the delivery mode was traditional face-to-face, while sample 2 was completed in 2020, where the delivery mode was online due to governmental restrictions on face-to-face teaching during the Covid pandemic. We also explore how committed to learning students are in the two modes of delivery and how satisfied they are with the course. We assessed both cohorts through the same questionnaire at the pre and post-delivery stages.

Our paper is structured as follows. First, we review the literature on CQ, the theoretical foundation and teaching pedagogy for cross-cultural management classes, students' satisfaction and students' commitment to learn. This discussion then leads to the development of our hypotheses. We follow this by outlining the research context, sampling procedure, measures, method and our analytical strategy for managing the data collected. Following this, we present our results and discuss them in the context of the broader related literature. We conclude by highlighting attendant limitations associated with our study and we suggest possible directions for future research.

2. Literature Review

2.1. Cultural Intelligence in an Educational Setting

CQ is being increasingly studied both in management and educational domains and is acknowledged as an important framework in achieving cultural competencies (Alexandra 2018; Gooden, Creque, & Chin-Loy 2017; Ramsey & Lorenz 2016). CQ theory was developed as a response to increased levels of globalization in business and the importance of diversity in the workplace (Collins, Duyar, & Pearson 2016). Ang and Van Dyne (2008:3) defines CQ as the "capability of an individual to function effectively in situations characterized by cultural diversity". It is important here to note that while CQ can relate to stable individual differences such as personality traits, in that they can predict CQ levels to a small degree, it is essentially different as it goes beyond these stable individual differences to explain variance in cross-cultural competence (Eisenberg *et al.* 2013).

CQ extends beyond general cultural awareness; it looks at the effectiveness of an individual to work and relate to people and projects within different cultural contexts. Earley and Ang (2003) developed a CQ index, consisting of four components. Behavior CQ refers to individuals' ability and awareness to adapt their verbal and nonverbal behavior to different cultural settings and having the flexible repertoire to do so. Cognitive CQ (knowledge) refers to the individuals' general understanding of diverse cultures (economic & legal systems, norms and behaviors in social interactions, religious beliefs, language etc.). Motivational CQ refers to an individual's overall interest and curiosity in experiencing and

interacting with other cultures, and their confidence in functioning effectively in culturally diverse locations; Metacognitive CQ (strategy) refers to the process in which individuals interpret intercultural experiences, the judgments they make of others who are culturally different to themselves, and how they strategize prior to intercultural meetings and adjust their mental maps throughout the actual encounter if their experiences are dissimilar to their expectations.

As a response to globalization and the increasingly diverse global workplace, organizations such as large multinationals, began to focus on delivering cross-cultural training to their expatriate managers. Educational providers over the last decade have also began to recognize the importance of teaching cross-cultural training to their students in various disciplines (e.g., psychology, international management and HRM). The aim of such academic courses is to prepare students for working in a global environment by equipping them with cross-cultural knowledge and competencies (MacNab 2012). Past research indicates that such academic interventions increase students CQ (e.g., Roux *et al.* 2020; Ramsey & Lorenz 2016; Eisenberg *et al.* 2013). These studies have mostly been carried out in either traditional face-to-face educational delivery mode (e.g., Ramsey & Lorenz 2016), or in a blended delivery mode (e.g., Roux *et al.* 2020). What is less known is if students taking a cross-cultural management course in an online delivery mode can produce similar outcomes in relation to CQ. In general, research indicates that diverse cohorts of students can learn cross-cultural/ intercultural skills from each other in a virtual setting (e.g., Barbosa & Ferreira-Lopes 2021; Hauck, Müller-Hartmann, Rienties, & Rogaten 2020; Liu, Wimpenny, DeWinter, & Harrison 2021; Mittelmeier, Rienties, Gunter, & Raghuram, 2021; Mittelmeier, Rienties, Rogaten, Gunter, & Raghuram 2019; O'Dowd, & Lewis 2016). However limited research exists around how the mode of delivery of a specific cross-cultural course influences participants' CQ. A research project by Roux & Suzuki, (2017), Roux *et al.* (2018, 2020), and Roux, Matsuba, Goda and Suzuki (2019a, 2019b) focuses on CQ, experience-based learning and instructional design in a blended mode of delivery, a mixture of face-to-face classes and online content. Erez, Kisak, Harush, Glikson, Nouri, & Shokef, (2013) investigated how online virtual team based learning can influence MBA and graduate students' CQ and global identity in a multi-cultural virtual team project. While their study paves an important pathway into the effectiveness of online cross-cultural education, it focuses on experiential learning in a virtual online group project context. As the aim of the above studies is not directed towards online course delivery, little comparisons can be drawn in terms of face-to-face vs online effectiveness of a cross-cultural course in relation to increasing students' CQ. To the authors' knowledge, limited research exists looking at the effectiveness of online cross-cultural management courses in increasing learners' CQ compared to that of traditional face-to-face delivery.