

## THE EFFECTS OF CULTURAL INTELLIGENCE ON INTERNATIONAL STUDENTS' ENGAGEMENT

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### ABSTRACT

*In recent years, there has been a rapid increase in the number of international students enrolled in Malaysian universities. International students often experience transition and adjustment difficulties as they pursue higher education outside of their home countries. In addition, many of them struggle with the cultural, social and academic adjustments in the new environment. If these problems remain unresolved, it can negatively affect international students' engagement with campus life and their academic achievement. Cultural Intelligence (CQ), which is defined as a person's capability to understand and act appropriately across a wide range of cultures, may be one of the solutions to minimise international students' adjustment difficulties and enhance their engagement and participation in foreign universities. Therefore, in this paper, we propose a conceptual model that discusses the impact of CQ on students' engagement, specifically international students who are studying in Malaysian universities. In addition, this paper discusses further the role of CQ in promoting international students' cross-cultural competence development so that they can effectively engage in academic and non-academic matters. In order to help international students adjust to the Malaysian environment and achieve academic success, it is important for educators and higher education administrators to have an insight into how CQ can enhance a positive learning experience.*

**Keywords:** *Cultural Intelligence, International Students, Student Engagement, Higher Education.*

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### INTRODUCTION

Malaysia recently has become a popular destination for international students to pursue their tertiary education. Realising the important contribution of education services to the national economy, the government is seeking to turn Malaysia into an international education hub and centre of excellence in education. In 2010, Malaysia was ranked the 11<sup>th</sup> most preferred study destination in the world by the United Nations Education Scientific and Cultural Organisation (UNESCO), in terms of the number of international students studying in the country (Talebloo and Baki, 2013). Currently, there are *large numbers* of international students furthering their studies in Malaysian public and private higher education institutions. The influx of international students in Malaysian higher institutions has increased steadily since the 1990s. Since then, the Ministry of Higher Education (MOHE) has continuously enforced various higher educational reforms.

The total number of international students was only 5,635 in 1996 and the number rose to 11,733 in years 1998-99. By 2014, there were 135,502 international students from 160 countries around the world enrolled in Malaysian higher education institutions. From the total enrolment, 32,842 (24.24 percent) international students were pursuing their studies in public institutions (The Sun Daily, 2015). This clearly shows that the inflow of international students to Malaysia has increased significantly in recent years. In addition, the MOHE has targeted that the number of international students' enrolment will rise to 200,000 by the year 2020 (Ministry of Higher Education Annual Report, 2011; Abu Bakar & Abdul-Talib, 2013). Nowadays Malaysia has emerged as an important destination for students from various countries with a majority of the students coming from Asia, the Middle East and African countries.

The presence of international students in a country greatly contributes to the diversity and internationalisation of higher education institutions and to the country's economic growth. The attractiveness of international students has resulted in universities around the world competing with one another in the global market (Kretovics, 2011). In order to prevail, higher education institutions in Malaysia need to look into issues that international students face while on campus, such as engagement problem. Many international students are struggling with the cultural, social as well as academic adjustments as they pursue higher education outside of their home countries. This, in turn, may have a dampening influence on international students' participation and engagement in campus life. Lack of engagement at university can lead to more serious problems such as low academic achievement, high levels of student boredom, alienation, and dropout (Fredricks, Blumenfeld, & Paris, 2004).

In order to attract more international students, higher education institutions need to be better equipped to provide accessible and relevant support to help international students cope with the difficulties they may encounter while studying abroad. Thus, it is important for the management and administrators of higher education institutions to address these matters to assure that international students can gain positive learning experiences and successfully engage with their new academic environment.

## PROBLEM STATEMENT

As we are aware, adjusting to a new culture can be a challenging and stressful experience, especially for those who have never experienced living in a foreign country. As for students studying abroad, the type and length of adjustment experienced will vary, depending on the degree to which a student's native culture is similar to or different from the local culture. Thus, international students need to be well prepared to adjust and adapt to their new cultural settings, including different cultural values, norms and customs between their home country and host country (Ang & Liamputtong, 2007).

In the Malaysian context, a study on international student experience conducted by Slethaug & Manjula (2012) showed that international students were frustrated with the administrative process such as admission, subject registration and add-drop system. Nur Sofurah (2011) has conducted an empirical study on international student learning experience at one of the Malaysian technical and vocational education university in Malaysia, and she discovered that international students faced *difficulties* in *adapting* to new *learning* style and they were not actively engaged in campus due to lack of communication skills. Ramsay, Barker and Jones (1999) suggested that international students need to make greater efforts to face challenges when they are in a foreign academic institution as opposed to the local students. Furthermore, culture shock, different communication styles, social isolation, cross-cultural relationships, financial difficulties, anxiety, stress and depression, are examples of problems which international students have to deal with, and all of these conditions can interfere with their studies (Sarkodie-Mensah, 1998; Wang & Frank, 2002).

*Student engagement* in learning refers to the students' active participation in the academic environment, which can result in enhancing their learning experience. Previous studies have indicated that student engagement (i.e., students devoting their time to educationally purposeful activities) is one of the important predictors of their satisfaction with and success in their studies (Pascarella & Terenzini, 2005; Kuh et al., 2005; Kuh et al., 2007). Furthermore, Kuh et al. (2005) proposed that student engagement comprises two main components: (i) "the amount of time and effort students spend on academic activities and other activities that lead to the experiences and outcomes that constitute student success"; and (ii) "the ways in which institutions allocate resources and organise learning opportunities and services to induce students to participate in and benefit from such activities".

Besides focusing on academic studies, it is equally important that they sharpen their intercultural competence. During intercultural interactions, international students who are culturally intelligent will have the ability to select and exhibit *appropriate* behaviour to successfully *fit* into the new environment. Therefore, developing the sensitivity of Cultural Intelligence (CQ) that is viable important so that international students can deal and interact effectively with people from different cultures. When international students develop effective cross-cultural communication skills and demonstrate appropriate behaviour, all these can improve their engagement in university life.

Recently, Teoh, Abdullah, Roslan & Daud (2013) conducted a study to investigate the characteristics of student engagement in one of public university in Malaysia and results indicated that the majority of Malaysian students are highly involved in the learning process in the university. However, attempts to empirically examine engagement level of international students in Malaysia have been very limited. As Malaysia is receiving a huge number of international students every year, higher education institutions need to ensure that the campus structure, system and environment support international students' learning needs and development. Addressing the problem of *cultural differences* in the learning process is important; it is evident that CQ can help international students to deal with cross-cultural complexities. Thus, in this paper, we propose a conceptual framework *to explore and investigate the effects* of CQ on international students' engagement.

## SIGNIFICANCE OF THE STUDY

The theoretical framework for this study is based on two important theories: Gardner's Theory of Multiple Intelligence and Astin's (1999) Student Involvement Theory. Cultural Intelligence (CQ) is claimed to be the theoretical extension of Gardner's Theory of Multiple Intelligence (Early and Ang, 2003). Gardner (1983) came up with the theory of Multiple Intelligence that focused on the importance of non-cognitive aspect of intelligence. Gardner (1983) defines intelligence as "the ability to solve problems or to create products that are valued with one or more cultural settings" (p.11). Earley and Ang (2003) has introduced the concept of Cultural Intelligence (CQ) which is the ability to understand and solve cross-cultural problems. Drawing upon Sternberg and Detterman's (1986) multi-loci theory of intelligence, Early and Ang (2003) conceptualized CQ as a four-factor construct that includes metacognitive, cognitive, motivational, and behavioural dimensions.

Astin's (1984) involvement theory suggests that student involvement has a positive impact on development and learning. He hypothesized, "the greater the student's involvement in college, the greater will be the amount of student learning and personal growth" (p. 307). Astin (1993, 1999) also differentiated between highly involved and non-involved students. Students who are highly involved devote a great deal of energy to studying, spend a lot of time on campus, actively participate in student organizations, and regularly interact with faculty and other students. On the other hand, non-involved students neglect studies, are hardly ever on campus, do not participate in student organizations, and have little contact with faculty and other students.

Many international students face stiff challenges as they pursue higher education outside of their home countries (Hull, 1978; Ozturgut and Murphy, 2009). This is because they have to live in a new environment which is completely different from their home country. *A substantial number of studies have been conducted* in an effort to *understand* the basic needs and requirements for international students (Butcher & McGrath, 2004; Mamiseishvili, 2012; Roberts & Dunworth, 2012); the issues and challenges faced by international students while studying abroad (Gaw, 2000; Lee & Rice, 2007; Popov et al., 2012); challenges international students face, such as adapting to the new living and learning environment (Gebhard, 2012; Wu, Garza & Guzman, 2015; Kusek, 2015; Abdul-Talib, Abdul Malik, Jaguli and Husin, 2016); the psychological and social well-being of international students (Mehta, 2011; O'Reilly, Ryan, & Hickey, 2010; Sakurai, McCall-Wolf, & Kashima, 2010; Sobré-Denton, 2011); and international students' adjustments while studying abroad (Andrade, 2006; Khatiwada, 2010; Swami, 2009; Ward & Kennedy,

1993a, 1993b). However, attempts to empirically examine the influence of cultural competency on international students' engagement have been very limited. Furthermore, very little is known about the extent to which international students are engaged in their host country's educational practices and activities

The importance of mastering cultural competency, such as CQ among international students, has been widely discussed in the literature. Past studies have provided clear evidences that CQ positively influences international students' sociocultural adjustment (Ward et al., 2009; Ward, Wilson and Fischer, 2011); acculturative adjustment (Wang, Hepner, Wang & Zhu, 2015); and psychological adjustment (Harrison and Brower, 2011). Despite this research effort, studies on the effect of CQ on international students' engagement are still lacking. Thus, the main aim of this paper is to explore and investigate the influence of CQ on students' engagement, specifically *among international students who are studying in Malaysian* higher learning institutions. Another important aim of this study is to explore the differential effects of the four CQ dimensions, namely Strategy CQ, Knowledge CQ, Action CQ and Drive CQ, on international students' engagement. The focus of the current study is to propose CQ as an important competency that international students must possess to successfully engage in academic as well as non-academic activities.

## LITERATURE REVIEW

### Cultural Intelligence (CQ)

CQ is defined as a person's capability to adapt effectively to a new cultural context (Early and Ang, 2003). To function effectively, individuals need to be socially apt in deciding on the most appropriate behaviour in an intercultural interaction. Many international students face challenges as they pursue higher education outside of their home countries (Ozturgut & Murphy, 2009). Livermore (2011) emphasised that those who possess a high level of CQ will be able to determine the appropriate strategy and attitude to adapt to foreign culture and behaviour. Culturally intelligent individuals have a strong sense of their own efficacy or ability to understand and adapt to a new culture (Earley, 2003; Earley & Peterson, 2004). Individuals with a high level of CQ are more confident with their own ability and they can successfully adjust their actions when interacting with people from different cultures. Thus, CQ can help international students to function effectively in the face of cultural diversity. With CQ, international students can develop the ability to connect with people and they will be more prepared to have an open mind to new learning experiences.

Livermore (2008) introduced a new dimensional model of CQ that presents CQ as a four-step process comprising: Knowledge CQ (Cognitive Intelligence), Strategy CQ (Meta-cognitive Intelligence), Drive CQ (Motivational Intelligence) and Action CQ (Behavioural Intelligence). Each dimension of CQ leads to different outcomes. Ang et al. (2007) and Templer et al. (2006) claimed that it is critical to examine CQ as a multidimensional construct with differential relationships and specific intercultural effectiveness.

The following paragraphs explain further the differential effects of the four CQ dimensions and how each dimension influences the process of international students' engagement in a different *academic environment*.

**Knowledge CQ** focuses on the acquiring of knowledge of the norms, practices and conventions in different cultures from educational and professional experiences (Ang et al., 2007). This includes the knowledge of the economic, legal and social systems of different cultures and subcultures (Triandis, 1994); and knowledge of the basic frameworks of cultural values (e.g., Hofstede, 2001). Those with high Knowledge CQ are perceived to be able to interact better with people from a culturally different society (Ang and Inkpen, 2008). Those with high Knowledge CQ are able to understand cultural similarities and differences in the new environment. Thus, they are more capable of making accurate judgement and decisions in situations that involve cultural diversity.

**Strategy CQ**, also known as meta-cognitive CQ, refers to the mental process that individuals use to acquire and understand cultural knowledge, including knowledge and control over individual thought processes relating to culture (Flavell, 1979). People with high Strategy CQ are consciously aware of other people's cultural preferences before and after their interaction (Ang et al., 2007). International students with high Strategy CQ will have more accurate understanding of expected role behaviours in situations characterised by cultural diversity. Thus, they are able to understand other people better and they also can make quality cultural decisions.

**Drive CQ** reflects an individual's ability to focus his/her attention and energy toward learning about cultural differences (Ang et al., 2007). Those with high Drive CQ have more motivation to seek out opportunities to interact and engage in cross-cultural situations. Furthermore, they are also more confident with their cross-cultural effectiveness (Bandura, 2002). Thus, international students with high Drive CQ will make more conscious efforts to use information and knowledge they acquire about the new culture and they will devote a great deal of energy to excel in their studies, actively participate in student organisations or campus activities and regularly interact with faculty and other students.

**Action CQ** dictates an individual's capability to exhibit appropriate verbal and non-verbal actions when interacting with people from different cultures (Ang et al., 2007). International students with high Action CQ are more flexible and can successfully adjust and modify their behaviours to adapt to a culturally diverse situation. To develop effective cross-cultural communication skills, international students should have the capability to coordinate appropriate words, gestures, tones and facial expressions. This could lead to a greater level of personal or social engagement.

### International Students' Engagement

Student engagement is defined as, "the quality and quantity of students' psychological, cognitive, emotional and behavioural reactions to the learning process as well as to in-class or out-of-class academic and social activities to achieve successful learning

outcomes” (Gunuc and Kuzu, 2014). This means that student engagement includes not only the time students spend on academic tasks but also their willingness to take part in social activities on campus.

Researchers seem to agree that there are two components of engagement: psychological and behavioural components. The psychological component emphasises on students’ sense of belonging or attachment to the school, which has to do with feelings of being accepted and valued by their peers, and by others at their school; while the behavioural component refers to students’ active involvement in learning activities (Finn, 1989, 1993; Goodenow, 1993; Voelkl, 1996). In addition, Chapman (2003) depicted student engagement as students’ willingness to participate in routine school activities, such as attending classes, completing required work and following educators’ instructions in class.

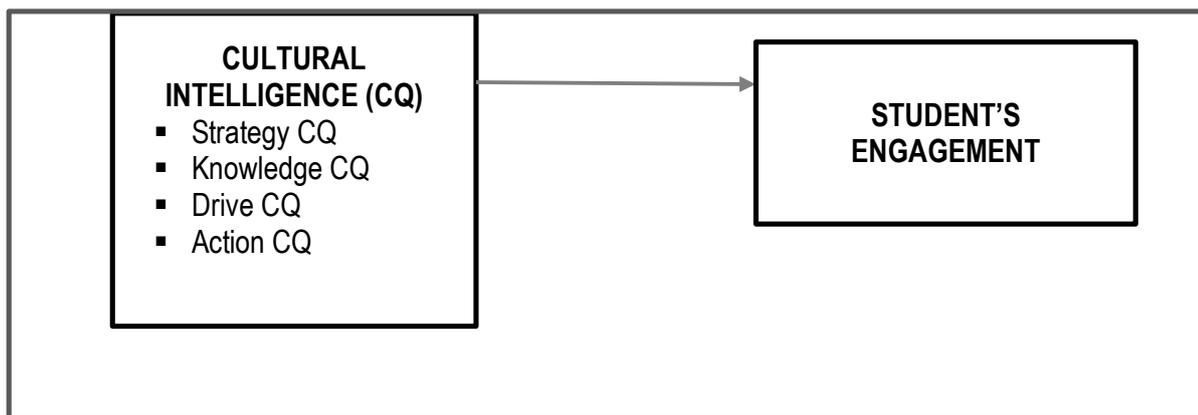
Student engagement is important because it enhances the quality of the student learning experience. In addition, Pascarella & Terenzini (2005) asserted “the greater a student’s engagement in academic work or in the academic experience in college, the greater his or her level of knowledge acquisition and general cognitive growth” (p. 608). Previous studies have shown that student engagement has a positive influence on academic success of American students (Astin, 1993; Chickering & Gamson, 1987; Ewell & Jones, 1996; Pascarella & Terenzini, 2005). Schaufeli et al. (2002) conducted a study among university students from Spain, Portugal, and the Netherlands, and they found that engagement was positively related to academic performance. Edwards (2010) came out with a thorough analysis on international students’ engagement and findings revealed that international students in USA universities have higher levels of engagement with their institution when compared to international students enrolled in Australian universities. The study also reported that difference between USA and Australian international students’ engagement level was related to student and staff interaction.

Earlier studies have found that student’s engagement is a key factor for achieving academic success because engaged students invest high levels of effort and energy toward their studies, and they are often immersed in their study activities (Chickering & Gamson, 1987; Ewell & Jones, 1996; Carini, Kuh and Klein, 2006; Pascarella & Terenzini, 2005; Harper and Quaye, 2009). Student engagement also has been linked to improved performance (e.g., Lee and Shute 2010; Schaufeli et al., 2002), learning and personal development (e.g., Kuh, Chen & Laird, 2007; Carini, Kuh & Klein, 2006), and persistence (e.g., Pascarella & Terenzini, 2005; Tinto, 2000). Tinto (1997) stated student involvement is important, in that the greater the involvement in college life, the greater the acquisition of knowledge and development of skills. High levels of student engagement are associated with purposeful student-faculty contact, active and collaborative learning and positive affirmation of the institutional environment. International students who fully engage in campus life, embrace the opportunity to socialise outside their own ethnic group, and create meaningful friendships. In this way, they will have more motivation and seek better ways to adjust themselves to the new environment. The more engaged students are in the learning process, the greater is their chance to graduate successfully.

**CONCEPTUAL FRAMEWORK**

In this paper, we propose a conceptual framework *to investigate* the effects of CQ on international students’ engagement as shown in Figure 1. The independent variable is CQ and the dependent variable is student’s engagement. CQ comprises four dimensions: 1) Knowledge CQ; 2) Strategy CQ; 3) Drive CQ; and 4) Action CQ.

**Figure 1: Proposed Conceptual Framework**



The following hypotheses are developed to determine the influence of Cultural Intelligence on international student’s engagement.

**Main hypothesis**

H1 - Culture Intelligence will positively influence international student’s engagement

**Sub-hypotheses:**

H1a – Strategy CQ will positively influence international student’s engagement.

H1b – Knowledge CQ will positively influence international student’s engagement.

H1c – Drive CQ will positively influence international student’s engagement.

H1d – Action CQ will positively influence international student’s engagement.

## RESEARCH METHODOLOGY

The aim of this research is to ascertain the relationship between Cultural Intelligence and student’s engagement. There are several hypotheses to be tested in this study. Not only that, this study is also interested in finding out the details of the relationships. Data will be collected quantitatively using survey method. As the data are quantitative. Quantitative data will be analysed using statistical packages such as Statistical Package for the Social Sciences (SPSS), Partial Least Square (PLS) and Structural Equation Modelling (SEM). The respondents will be international students from 20 public universities in Malaysia.

Cultural Intelligence will be measured using Cultural Intelligence Scale (CQS) developed by Ang et al. (2007). The CQ scale (CQS), consisted of 20 items with four sub-scales which consisted of Strategy CQ (4 items), Knowledge CQ (6 items), CQ Drive (5 items) and CQ Action (5 items). The Student Engagement Instrument (SEI) will be utilized to measure student’s cognitive engagement and psychological engagement (Appleton et al. 2006). Four subscales of the SEI are: Lecturer-Student Relationships (LSR – 9 items), Control and Relevance of University Work (CRUW – 9 items), Peer Support at University (PSU – 6 items), Future Aspirations and Goals (FG – 5 items). To adapt the SEI for university students, some wording on the instrument will be adjusted. For example, the phrase “school” or “high school” will be replaced with the words “university”, and “adults” and “teachers” were replaced by “faculty and staff” or “lecturers”. Original SEI items such as “My teachers are there for me when I need them”, will be changed to “My lecturers are there for me when I need them”.

## LIMITATIONS OF THE STUDY

The study has several limitations. First, only one method of collecting data will be used, which is self-report questionnaire. Self-report methods are widely used because they are often the most practical and easy to administer in classroom settings. However, one concern with self-report measures is that students may not answer the survey honestly, and it may not reflect student’s actual behaviours (Appleton et al., 2006). In order to obtain more reliable results we recommend researchers to use both quantitative and qualitative methods to assess student’s engagement. Second limitation derived from the context of the study. The samples in this study are limited to international students who enrolled in Malaysia public universities. In the future, it would be worthwhile to include international students who are pursuing tertiary education in public and also private universities in Malaysia. Lastly, this study is cross-sectional in design. Future researchers should consider longitudinal study since the level of individual CQ and student’s engagement may varies over time.

## CONCLUSION

Most international students choose to study abroad so that they can acquire experiences and knowledge in a different study environment, which can form new cultural, social and academic values as well as valuable opportunities for personal growth. Experiencing a study period abroad might enhance their employability opportunities in the international labour market that is now increasingly dynamic, demanding and competitive. Rapid globalisation and the interconnectedness of the multinational work environment have intensified the demand for graduates capable of operating in a culturally diverse context.

Following global trends of increased workforce immigration and mobility, many private and public sector organisations, and especially, multinational corporations (MNCs), have responded to the growing need for a cross-culturally competent workforce. Therefore, future managers need to seek and acquire as much contemporary training and knowledge as possible to enable them to comply with the current demand for managers capable of working in a diverse and uncertain environment. In order to fulfil the great demand for a sophisticated and well trained global workforce, most higher learning institutions around the globe have responded to these needs by equipping their students with enhanced cross-cultural skills and competencies. This has led to a proliferation of teaching and educational activities designed to equip students with the necessary cross-cultural competencies. Thus, instead of globalising the teaching and educational activities, it would be more worthwhile for the students to mobilise themselves by enrolling in foreign higher education institutions.

In the modern world where global boundaries are being reduced, CQ is one of the capabilities required for international students to help them interact with people from different cultural backgrounds effectively. CQ can be enhanced through intensive training programmes, on-the-job and off-the-job experiences or simulations and practical educational enhancement activities. Thus, it is essential for university educators and administrators to craft and design suitable courses and tailor-make programmes that focus on enhancing international students’ CQ.

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