Personality traits as indicators of the development of intercultural communication competence

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Abstract
This paper draws on a PhD thesis that investigates the relationship between personality traits and Intercultural Communication Competence (ICC). This research explores if specific personality traits of international students can enhance the success/failure of ICC development and in how far can specific personality traits influence the ability of international students to communicate effectively in an intercultural context. It presents a case study on 95 international undergraduates studying in Saudi Arabia. Based on the Five-Factor Model (FFM) of Personality, Assessment of Intercultural Competence (AIC) to measure participants’ ICC and the International Personality Item Pool IPIP-NEO-120 to identify their personality traits of Neuroticism, Extraversion, Openness to Experience, Conscientiousness and Agreeableness, were administered to explore the relationship between personality traits and ICC. It found that Openness and Conscientiousness had a positive correlation with ICC with while Neuroticism negatively correlated with ICC. It also found no correlation between Extroversion and Agreeableness and the development of ICC.

1. Introduction

In the age of globalization, Intercultural Communication Competence (ICC) development is a necessity (Emert, 2008, p. 41; Moodian, 2008, p. 3; Xiaochi, 2012, p. 62), due to changes in societies, which include new global business, increasing migration and all forms of new technology. Undoubtedly, ICC is also an essential feature of human development, as it develops multicultural vision, enriches worldviews, facilitates successful communication and business, boosts the bond of humanity and promotes an
international perspective. In the context of international students’ mobility, Schmid (as cited in Xiaochi, 2012, p. 64) characterizes ICC as “the fundamental acceptance of people who are different to oneself outside one’s own culture/the ability to interact with them in a genuinely constructive manner which is free of negative attitude (e.g. prejudice, defensiveness apathy, aggression etc. / the ability to create a synthesis, something which is neither ‘mine’ nor ‘yours’”.

It is commonly argued in the existing body of literature that personality traits play the central role in a person’s ability to interact with others, behave in a certain way and deal with new situations when entering new cultures (van Driel & Gabrenya, 2012, p. 874). For example, Geeraert and Demoulin (2013, p. 1245) find that a person’s host country knowledge, psychological adjustment and homesickness were among the most important factors that impact his/her adaptability to a new cultural environment. These findings are in keeping with Bardi and Guerra (2011, p. 917) who also find that the extent to which social actors are aware of the host country’s culture, customs and traditions predict their ability to adapt. In addition, it is hypothesised that personality traits are among elements that may be involved in dealing with cultural differences and affect a decision-making process (Liles, 2016, n.p.). Consequently, it could be theorised that understanding the relationship between personality traits and ICC development will give valuable clues about the ways to “create a composite personality profile” (McCrae, 2001, 832) and reinforce the formation of ICC in international students. Thus, this study attempts to explore the potential impact of personality traits on the development of international students’ ICC in the Kingdom of Saudi Arabia.

1.1. Research problem

Prior research has mainly focused on measuring ICC and on assessing the impact of studying abroad on the development of this competence (Deardorff, 2006, p. 245; Salisbury, 2011, p. 10; Stemler et al., 2014, p. 26). Although some researchers (van der Zee & van Oudenhoven, 2013, p. 929; Leung et al., 2014, p. 489) have addressed the issue of psychological factors and have identified traits which help students effectively engage in intercultural communication, the issue of personality traits is significantly under researched. Thus, the present study intends to fill the gap in the area of ICC and expand the existing research.

In addition, the literature identifies significant gaps in the research on ICC in Saudi Arabia. The choice of the Saudi context is justified by two factors specified by Karolak and Guta (2014): 1) the growth of intercultural communication in Saudi Arabia due to the country’s shift towards a knowledge-based economy; 2) the increase in the number of scholarship programmes that attract international students. Despite these factors, there is a shortage of research and scant empirical evidence on the development of ICC within the Saudi context. More specifically, the reviewed literature provides evidence on the
international students’ ICC in some countries of the Arab world. But, to the best of my knowledge, there is no research found on assessing international students’ ICC in Saudi Arabia. Hence, it is important to fill this gap and carry out studies to explore the impact of personality traits on ICC of international students who come to Saudi Arabia to learn its language and culture. Given that each intercultural setting has unique characteristics and nuances and that the majority of ICC models and personality traits have not been properly tested, a theory-practice gap emerges.

1.2. Literature review

After you have introduced the problem and have developed the background material, explain ICC concepts can be traced back to Dell Hyme’s notion of “Communicative Competence” developed in 1966 (Rajagopalan, 2008, p. 404) which is defined as “a social judgment about how well a person interacts with others” (Lusting & Koester, 2010, p. 65). Communicative Competence itself was a reaction to Chomsky’s “Linguistic Competence” (Rajagopalan, 2008, p. 404), which “includes the knowledge of vocabulary, grammar, semantics, and phonology” (Littlewood, 2008, p. 503). Despite the lack of academic agreement on a constitutive definition of ICC, scholars tend to argue that ICC leads to “effective and appropriate behavior and communication in intercultural situations” (Deardorff, 2011, p. 66). In this sense, Fantini (2006, p. 9) defines ICC as “a complex of abilities needed to perform effectively and appropriately when interacting with others who are linguistically and culturally different from oneself”, and Bennett (2011, p. 3) stresses that ICC is formalized through a mix of cognitive, behavioural and affective skills.

Stier (2006, p. 6) differentiates between “content-competencies” and “processual competencies” in ICC. Content-competencies are defined as “the knowing that-aspects of both the ‘other’ and ‘home’ culture” including “knowledge of history, language, non-verbal behaviour, world-views, ‘do’s and don’ts’, values, norms, habits, customs, taboos, symbols, behavioural patterns, traditions, sex roles” (ibid.). This kind of static knowledge does not guarantee the successful intercultural interaction (ibid.). While processual competencies, “knowing that-aspects”, are related to acquiring the knowledge of “cultural peculiarities, situational conditions and actors” (ibid.). This study focuses on processual competencies, dynamic knowledge, since their development involves both a) intrapersonal competencies, the cognitive and emotional skills, and b) interpersonal competencies, the interactive skills (ibid.).

Deardroff (2009, p. 266) argues that the acceptance and openness to similarities as well as differences among cultures is key for ICC, not only the awareness of these differences and mere contact with a foreign culture (Deardroff, 2009, p. 266; Pusch, 2009, p. 70). In addition, the interaction with the new environment is the force that stands behind such modification (Spitzberg & Changnon, 2009, p. 7). Emert (2008, p. 221) adds
that there are other factors that play an essential role in ICC development such as one’s tendency, motivation and ability to engage in this experience. However, the precise nature of intercultural gains remains ambiguous as long as the mechanism of such development is under-researched.

In order to examine the link between ICC and personality traits in greater depth, a set of key traits (e.g. psychological adjustment, homesickness, motivation, and conscientiousness) has been identified. For example, it is found that academic and social self-efficacy should also be mentioned as important beliefs in the domain of education (Constantine et al., 2004, p. 237). These beliefs should be added to the list of key traits since they impact one’s confidence to approach or avoid academic challenges as well as to make contact with other individuals (Ward et al., 2001, p. 247; Popescu et al., 2014, p. 150). Nevertheless, the list is not limited by these personality traits.

In particular, to explore the influence of psychological factors on the adjustment process of international students to a new culture, Baier (2005, p. 49) identifies that international students with a higher level of self-confidence and self-efficacy were more likely to leave their home country and come to the US. Nevertheless, the researcher fails to identify any significant difference in the statistical analysis results on levels of personality variables such as self-efficacy and self-confidence and cultural adjustment between international students from western and non-western backgrounds (ibid.) as cultural heritage must be acknowledged when analysing the adaptation process of international students.

The topic of international students’ adjustment to a new cultural environment has attracted close interest from scholars and researchers (Shieh, 2014, p. 61; van der Zee & van Oudenhoven, 2013, p. 930; Wilson et al., 2013, p. 908; Milstein, 2005, p. 226). For example, Winkelman (1994, p. 121) found that culture shock was associated with the feelings of confusion, loss and impotence a person experiences when he/she losses accustomed cultural cues as well as social rules. Moreover, this chapter reviews the three causes of this phenomenon; “1) the loss of familiar cues, 2) the breakdown of interpersonal communication, and 3) an identity crisis” according to Milstein (2005, p. 219). International students who come to a new culture experience both psychological and physical reactions, which involve emotional, interpersonal, social and cognitive components with impacts results from changes in their socio-cultural relations (Winkelman, 1994, p. 121).

1.3. Overview of the literature on the Saudi context

According to Hofstede’s (Hofstede, 2011, p.11) cultural framework, Saudi Arabia has a collectivist culture in which the ties among individuals are extremely strong, family values are imposed on children from early childhood, and people provide support not only to their families, but also to members of their society (Alsubaie et al., 2015, p.24; Havril,
Hofstede’s ‘power distance’ dimension shows a particularly high score (95 percent) (Davis, 2014, p.3; Khan et al., 2016, p.51), which signifies that members of Saudi society maintain a hierarchal order which creates social and gender inequality and minimises individualism (Alsubaie et al., 2015, p.24). Another high scored dimension – ‘uncertainty avoidance’ – means that Saudi culture heavily relies on rules and may be resistant towards innovations and new ways of thinking, to ensure the survival of cultural values and traditions (Alsubaie et al., 2015, p.24).

The Arabic language has some peculiarities which pose certain difficulties for international students (Gutierrez et al., 2009, p. 20). More specifically, its characteristic feature is diglossia, or the simultaneous use of two language varieties (higher and lower) in one speech community (Palmer, 2013, p. 59; Suchan, 2014, p. 3). The higher variety is Modern Standard Arabic (MSA), which is widely employed for writing or for communication in academic circles. International students learning the Arabic language outside the Arab world are taught MSA (Ryding, 1995, p.226; Gutierrez et al., 2009, p.20). The lower variety is Spoken Colloquial Arabic (SCA), which people use for everyday communication. Despite the fact that the emphasis in many educational programmes has long been put on developing students’ skills in MSA, Palmer (2013, p.59) asserts that many international students choose the programmes which provide them with an opportunity to learn both varieties. With regard to SCA, this variety allows international students to engage in informal communication with Arabs and penetrate deep into their culture (Palmer, 2013, p.62). However, in view of the fact that SCA is viewed as an ‘ungrammatical’ variety, “students who wish to learn spoken varieties of Arabic are often left to their own devices” (Palmer, 2013, p.64). Hence, it is claimed that international students who learn the Arabic language outside the Arab world fail to communicate with Arab nationals when they come to an Arab country (Gutierrez et al., 2009, p.20).

The importance of ICC for those who study and work in Saudi Arabia is difficult to overstate. The research carried out by Karolak and Guta (2014, p.45) clearly demonstrates that the faculty in one of the largest private universities – Prince Mohammad Bin Fahd University (PMU) – consists of people from 27 countries. In view of the existing multi-ethnicity, educators and students need ICC to understand each other. An ethnographic study of Lauring (2011, p.231), provides evidence that intercultural communication between Danish expatriates and Saudi employees was viewed as a process that hindered decision making within a company. In light of this, some employees are excluded from participation in intercultural communication. As this was a Saudi subsidiary of a Danish corporation, Saudi employees are exposed to exclusion. However, as Lauring (2011, p.231) reveals, the failure to engage in intercultural communication is attributed to the reluctance of culturally diverse employees to pay attention to each other’s needs and intentions.
1.4. Theoretical framework

Five-Factor Model (FFM) of Personality is especially useful for addressing research questions and for generating insights into the role of personality traits in shaping international students’ ICC. The trait approach draws parallels between personality traits and individual’s skills and behaviour and, more importantly, predicts the formation of specific skills and competencies, referring to personality traits (Kline, 2013, p. 4; Cooper, 2015, p. 90). FFM is found to be crucial for recognising valid predictors of personality and for making generalisations (Costa & McCrae, 2009, p. 307; Barrick & Mount, 2012, p. 227), and it has previously been used very successfully for higher education analysis (Block, 2010, p. 8). The framework is based on the dimensions of Neuroticism (Emotional Stability), Extraversion, Openness to Experience, Conscientiousness and Agreeableness (Rothmann & Coetzer, 2003, p. 69). John and Srivastava (1999, p. 113) summarise a Big Five Trait taxonomy, presented in table (1) below:
### Table (1): Personality Traits Index Meaning

<table>
<thead>
<tr>
<th>Extraversion</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
<th>Neuroticism</th>
<th>Openness</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>high</td>
<td>low</td>
<td>high</td>
<td>low</td>
</tr>
<tr>
<td>Quiet</td>
<td>Talkative</td>
<td>Fault-finding</td>
<td>Sympathetic</td>
<td>Careless</td>
</tr>
<tr>
<td>Reserved</td>
<td>Assertive</td>
<td>Cold</td>
<td>Kind</td>
<td>Disorderly</td>
</tr>
<tr>
<td>Shy</td>
<td>Active</td>
<td>Unfriendly</td>
<td>Appreciative</td>
<td>Frivolous</td>
</tr>
<tr>
<td>Silent</td>
<td>Energetic</td>
<td>Quarrelsome</td>
<td>Affectionate</td>
<td>Irresponsible</td>
</tr>
<tr>
<td>Withdrawn</td>
<td>Outgoing</td>
<td>Hard hearted</td>
<td>Soft hearted</td>
<td>Slipshod</td>
</tr>
<tr>
<td>Retiring</td>
<td>Outspoken</td>
<td>Unkind</td>
<td>Warm</td>
<td>Undependable</td>
</tr>
<tr>
<td>Dominant</td>
<td>Cruel</td>
<td>Generous</td>
<td>Forgetful</td>
<td>Dependable</td>
</tr>
<tr>
<td>Forceful</td>
<td>Stern</td>
<td>Trusting</td>
<td>Conscientious</td>
<td>Highly strung</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>Thankless</td>
<td>Helpful</td>
<td>Precise</td>
<td>Self-pitying</td>
</tr>
<tr>
<td>Show off</td>
<td>Stingy</td>
<td>Forgiving</td>
<td>Practical</td>
<td>Temperamental</td>
</tr>
<tr>
<td>Sociable</td>
<td>Sensitive</td>
<td>Delicate</td>
<td>Unstable</td>
<td>Sharp witted</td>
</tr>
<tr>
<td>Spunky</td>
<td>Good natured</td>
<td>Painstaking</td>
<td>Self-punishing</td>
<td>Ingenious</td>
</tr>
<tr>
<td>Adventurous</td>
<td>Friendly</td>
<td>Cautious</td>
<td>Despondent</td>
<td>Witty</td>
</tr>
<tr>
<td>Noisy</td>
<td>Cooperative</td>
<td>Emotional</td>
<td>Resourceful</td>
<td></td>
</tr>
<tr>
<td>Bossy</td>
<td>Gentle</td>
<td>Wise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unselfish</td>
<td>Praising</td>
<td>Civilised</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitive</td>
<td>Polished</td>
<td>Foresighted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Method

To assess the relationship between the two phenomena, namely the personality traits and ICC of international students in Saudi Arabia, I used a mixed method approach, which “opens the door to multiple methods, different worldviews, and different assumptions, as well as to different forms of data collection and analysis” (Creswell, 2014, p. 11). I incorporated both quantitative and qualitative approaches as it helps to “develop rich insights into various phenomena of interest that cannot be fully understood using only a quantitative or a qualitative method” (Venkatesh et al., 2013, p. 21). Furthermore, drawing on both quantitative and qualitative methods allows to strengthen the advantages of both approaches and minimise their limitations. In the current research, quantitative and qualitative approaches are employed sequentially to gain complete explanations; qualitative data are used to gain additional insights into the results obtained in the quantitative phase. Another reason for choosing this approach is that divergent or convergent results may be produced from combining qualitative and quantitative methods; this enhances the understanding of the phenomena being studied. Thus, the absence of one method may leave the research questions partially or totally unanswered (Hashemi & Babaii, 2013, p. 829). Therefore, I consider the mixed-methods approach as a useful strategy that best provides in-depth answers to the research questions.

2.1. Data collection tools

The quantitative instruments, AIC and IPIP-NEO-120, were administered to each participant to explore the relationship between personality traits and ICC. I then used the qualitative data gathered from semi-structured interviews to investigate which personality traits help students to cope with intercultural situations. The participants were international learners of Arabic; thus, the two quantitative tools were translated into Arabic. In order to reduce potential challenges arising from translating data collection tools for research†, I utilised “back-translation” in both phases of the current study, which requires at least two translators (Hilton & Skrutkowski, 2002, p. 2). The two translators who interpreted the tools used in this study are professional translators holding degrees in translation from English to Arabic and Arabic to English.

In terms of measuring the participants’ ICC, I used AIC which was designed in the ‘Your Objectives, Guidelines and Assessment’ (YOGA) format as part of a research project conducted by the Federation of the Experiment in International Living (Fantini and Tirmizi, 2006, p. 6). Since this research project intends to generate insights into the

† As Hilton and Skrutkowski (2002, p. 1) noted, ‘translating questionnaires for cross-cultural research is fraught with methodological pitfalls related to colloquial phrases, jargon, idiomatic expressions, word clarity, and word meanings’.
role of personality traits shaping international students' ICC, the AIC is employed because personal characteristics, which are related to this study, such as flexibility and open-mindedness, are listed as components of ICC (Fantini, 2009, p. 198).

I chose to utilise the IPIP-NEO-120 as a means of data collection on five personality traits of Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. The IPIP-NEO-120 consists of 120 negative and positive statements, 24 items for each trait (Maples et al., 2014, p. 1072). I used this self-reporting tool because the study aims to identify the specific personality traits of international students and the relevance of these traits to their ICC by exploring the participants' actual behaviours. Based on the Big Five personality theory (Othman et al., 2014, p. 116), the IPIP-NEO was introduced in 1996 as a reaction to the restrictions such as the fees to use commercial personality inventories like the Revised NEO Personality Inventory (NEO-PI-R) (Goldberg et al., 2006, p. 86; Maples et al., 2014, p. 1070).

The current study's data was analysed through SPSS statistics version 20. Prior to actual analysis, the data was screened for the missing values, and study variables were tested for accuracy and normality. Following data screening, reliability analysis for the two instruments was done. Multiple linear regression was used to explain the correlation between the dependent variable; ICC, and independent variables; personality traits.

2.2. Data collection site

This research was conducted at Umm Al Qura University, in Holy Makkah that provides a uniquely multicultural campus, compared to other universities in the Kingdom of Saudi Arabia, and broadening the multicultural nature of the student body continues to be a goal for the university. International students benefit from inclusion in the community and classes, allowing them to interact with Saudi nationals and promoting intercultural understanding. A growing body of research has found that a mixture of international and local students plays a vital role in developing students' ICC (Gurin et al., 2004, p. 30; Vande Berg et al., 2009, p. 25; Stemler et al., 2014, p. 45).

Umm Al Qura University provides support for international students, which reduces the obstacles that they may face during their study-abroad experience (About UQU, 2017). Cultural mentors have been put forward as facilitators of students' ICC development (Vande Berg et al., 2009, p. 25; Spenader & Retka, 2015, p. 22). Given these characteristics, the researcher has chosen Umm Al Qura University, because it has achieved a diversity that facilitates intercultural interactions among staff and students, thereby helping students enhance their ICC (Medina-López-Portillo, 2004, p. 196; Gutel, 2008, p. 173; Stemler et al., 2014, p. 41; Engberg & Jourian, 2015, p. 3).
2.3. Participants

The researcher recruited bachelor degree students from the Institute of Arabic Language for Non-Native Speakers at Umm Al Qura University. The Institute is dedicated to serving as a global destination for those aspiring to learn the Arabic language using advanced technologies. All 444 enrolled students receive a free education, free housing with rich social amenities, a monthly living allowance, a free annual round-trip ticket home, free textbooks and free medical services (Overview, 2017). A total of 120 male and female international students had been given information sheets and invited to take part in the quantitative phase after signing the consent forms. One-hundred and eight students returned the surveys (87 male students and 21 female students). The completed surveys were 95 of which 79 male and 16 female students. This gender imbalance can be attributed to the low number of female students at the institution who represent 20.7%. The majority of participants (N=43) were between 24 to 26 years of age representing 45.3%, followed by 20 to 23 years old (N=26) with 27.4%, then (N=17) 17.9% of them are 20 years old or younger and finally (N=9) 9.4% were older than 26.

3. Findings

The results of the study reveal the correlations between ICC and personality traits. The discussion of the results is interlaced with reference to academic theory in order to better understand the implications and significance of these findings to provide meaning and insight to be attached to these findings as simply reporting on these findings is not enough. These findings will also be used in the development of the qualitative research instrument, namely the interview questions. Any themes that emerge through the quantitative inquiry will be expounded and elaborated during the interviews.

This test relates to the correlation between ICC and personality traits. The findings indicated that Openness was positively associated with ICC with \( t = 6.684, p.\text{value} = .000 \) as seen in the following table (2).

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>( t )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>128.949</td>
<td>7.048</td>
<td>18.296</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-2.029</td>
<td>.383</td>
<td>-.244</td>
<td>-5.301</td>
</tr>
</tbody>
</table>
It would thus appear that the more openness a person is, the more likely they are to possess ICC. In addition to this, Conscientiousness again is found to have a positive correlation with ICC with \( t = 1.935, p\text{.value}= .050 \) as presented in table (2). Whereas Neuroticism emerged as being the trait had a strong negative correlation with ICC \( (t = -5.301, p\text{.value}= .000) \). Extraversion also had no correlation with ICC \( (t = -1.411, p\text{.value}= .159) \). This may come as a surprise given that this trait is associated with individuals who are sociable, energetic and talkative (Hayes & Joseph, 2003, p. 726). That said however, as highlighted within the first part of the findings where it emerged that extraverts tended to ‘take charge’ and become excited relatively easily. Additionally, this study found that Agreeableness was not related to ICC development \( (t = .706, p\text{.value}= .481) \).

In keeping with the above findings, Wilson et al.’s (2013, p. 900) study in which the relationship between personality and sociocultural adaptation was examined and analysed using FFM, and through a meta-analysis of secondary sources, found that three out of the five dimensions of personality, namely Agreeableness, Extraversion and Conscientiousness were positively correlated with peoples’ ability to adapt and integrate into new cultural environments. It is prudent to note that, unlike others (Propat 2009, p. 332), Wilson et al. (2013, p. 900) included contextual factors such as length of residency abroad, previous cultural experiences, cultural knowledge and perceived discrimination. These were dubbed ‘situational factors’ and were contrasted with the personality measures as part of the study (Wilson 2013, p. 906). This is mirrored by the empirical findings of Blume et al. (2010, p. 1065) and Kappe and van der Flier (2010, p. 142), who akin to the present study, suggest that Conscientiousness, Extraversion and Agreeableness are relevant in the development of ICC especially in attributes such as cultural awareness, increased training ability and being able to have successful and meaningful relationships with people from different cultures; the present study has found the two relevant personality traits of Conscientiousness and Openness as being key in the development of ICC.
4. Conclusions

In addition to the issues emerging around extraversion and the extent to which the study suggests that this may not be as important for ICC, these issues will be explored further. Participants who identify as extraverted will subsequently be asked to outline their key strengths. The findings suggested that conscientiousness and openness had a greater correlation with ICC; self-identified extraverts will then be asked how they deal with cultural diversity and the behaviours of others around them. They will also be asked of their listening skills as well as values; conscientious individuals tend to have values systems which are more human centric, thus they are likely to spend time cultivating. The present study finds that extraverts, despite being regarded as having a high social aptitude in the literature, did not score highly on ICC. Interviewees will thus be asked about their communication styles and the extent to which they adapt these depending on their surroundings.

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