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The effect of study abroad on intercultural competence: A longitudinal case study of international postgraduate students at a British university

Introduction

Study abroad and intercultural competence

Student mobility in higher education (HE) is a burgeoning, global, intercultural and educational phenomenon. There are currently more than four million individuals undertaking tertiary education outside their country of origin worldwide and this number is growing (OECD, 2012). A commonly held belief is that these academic sojourns lead to positive outcomes for students. For example, the official website of the European Youth Portal (EYP) states that a study sojourn abroad can ‘improve language learning, intercultural skills, self-reliance and self-awareness’ (EYP, 2013). With international student numbers growing across the globe, the academic literature too has increasingly sought to demonstrate the benefits of such academic sojourns abroad (e.g. Savicki, 2008; Lewin, 2009). Among advocates of international student mobility, there is a longstanding belief that the experience of living and studying in a different country is a powerful tool for developing intercultural competencies (e.g. Hoffa, 2007; Hoffa and DePaul, 2010). The transformative potential of a study sojourn abroad has been claimed in linguistic and broader intercultural terms, and research has suggested that students who spend an extended period of time abroad develop a more positive view of the host culture (Cushner and Karim, 2004), demonstrate increased world-mindedness (Cushner and Mahon, 2002), and exhibit greater intercultural awareness (Anderson et al., 2006; Pedersen, 2009). Moreover, efforts to incentivise study sojourns abroad are often grounded in the belief that international education experiences can lead to increased intercultural competence (Salisbury, 2011), henceforth IC. However, a number of authors have cautioned that the acquisition of IC as part of study abroad may not always be as straightforward as is often assumed (e.g. Coleman, 2001; de Nooy and Hanna, 2007). For example, Kramsch (1991: 235) writes that there is ‘no conclusive evidence that shows that study abroad per se leads to cross-cultural understanding or to the development of the cross-cultural personality’. Indeed, multiple studies have echoed this assertion. For instance, in their study of British language assistants in Spain, Masgoret, Bernaus and Gardner (2000) found that after four weeks in the host environment, assistants’ attitudes towards Spanish

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1 A sojourn is commonly understood as a temporary stay abroad for a specific purpose such as academic study (Ward, Bochner and Furnham, 2001).
speakers were less positive than before. Similarly, in Van de Berg et al.’s (2009) large scale study of the intercultural development of more than 1,300 US study abroad students, simply being exposed to a different cultural environment did not prove to be a sufficient condition for increased intercultural learning, with some students actually showing a decline in intercultural development over time.

So in sum, there is considerable debate in the academic and discursive literature as to whether, and in how far, study sojourns abroad can lead to increased IC. Nonetheless, IC is increasingly conceived as a student outcome of the ‘internationalisation’ of HE as universities strive to prepare their students for work and life in a globalised world (Knight, 2004). In light of an increasingly diversified student population, and the growing popularity of study sojourns abroad, learning objectives for students now often go beyond academic content (Pedersen, 2010), and both universities and employers are increasingly recognising the importance of IC as a graduate attribute (Young and Schartner, 2014). Thus, HE institutions are gradually seeking ways to enable all students, whether internationally mobile or not, to achieve a global perspective and intercultural awareness, reflected for example in the ‘internationalisation at home’2 efforts of many universities in the United Kingdom (UK). In a climate where HE institutions are under increasing pressure to document and demonstrate educational value (Salisbury and Pascarella, 2013; Quinlan, 2014), investigating the impact and outcomes of academic study sojourns abroad will become increasingly important (Lederman, 2007). Whether or not international students experience a ‘successful’ sojourn is typically measured in the academic literature in terms of academic achievement or degree of adaptation to the host environment (Ward et al., 2001; Young and Schartner, 2014). IC, on the other hand, is less frequently used as an indicator for ‘success’ and most evidence of the positive impact of study abroad on IC remains anecdotal (Paige et al., 2004; Salisbury and Pascarella, 2013). Few HE institutions have designated methods for measuring or monitoring IC, and it therefore remains largely unclear whether universities are in fact graduating interculturally competent students and whether study abroad is indeed linked to increased IC (Deardorff, 2004).

While there is a burgeoning body of research investigating the impact of study abroad on IC, a number of methodological weaknesses challenge the validity of these findings. Prior research that has attempted to measure IC has largely relied on qualitative methods, including

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2 This refers most commonly to the internationalisation of the curriculum and the teaching and learning process (DeWit, 2011).
interviews and reflective writing (Spooner-Lane et al., 2013), and relatively few studies have employed a longitudinal pre-post research design to monitor changes over time. Most quantitative studies to date remain cross-sectional, with IC measured once post-sojourn (e.g. Douglas and Jones-Rikkers, 2001; Chieffo and Griffiths, 2004). Other studies have investigated differences in IC between students with and without experience abroad (e.g. Behrnd and Porzelt, 2012). However, the absence of a pre-test in these studies makes it difficult to quantify changes and to assess the value-added effect of a study sojourn abroad (Salisbury and Pascarella, 2013). Where longitudinal research has been carried out, this remained largely limited to short-term study abroad programmes from the American undergraduate context (e.g. Engle and Engle, 2004; Medina-Lopez-Portillo, 2004; Paige et al., 2004; Anderson et al., 2006). Findings from this body of research are mixed and often limited by relatively small sample sizes. While Paige et al. (2004) and Anderson et al. (2006) both reported significant improvements in IC among samples of US students on short-term study abroad programmes, Medina-Lopez-Portillo (2004) found little statistically significant changes in a similar study. In a larger scale quantitative analysis of the effect of study abroad on IC among undergraduate college students in the US, Salisbury (2011) found that study abroad had no statistically significant effect on appreciation of cultural difference or comfort with diversity.

In addition to the ambiguity of findings from the short-term undergraduate study abroad context, little is known about the development of IC among postgraduate students studying abroad for a full degree (Young and Schartner, 2014). This is despite an acknowledgement in the literature that the experiences of these ‘vertically mobile’ (OECD 2009) students can be vastly different, for a variety of reasons, from those of their peers on short-term study abroad schemes (e.g. Pitts, 2005). International postgraduate degree students typically spend a significant period of time abroad, ranging from one year in the case of postgraduate taught (PGT) degrees, to several years in the case of postgraduate research (PGR) degrees. A focus on this sub-group of student sojourners is especially worthwhile in light of the body of literature highlighting the importance of time in the development of IC (Byram, Nichols and Stevens, 2001; Bennett and Bennett, 2004; Dwyer, 2004; Behrnd and Porzelt, 2012). The present study thus moves beyond previous research, and explores the impact of studying a full degree abroad on IC using a longitudinal research design.

The concept of intercultural competence
There has been much scholarly debate about IC (Salisbury, 2011) and a range of similar concepts exist in the literature, including intercultural communicative competence, cross-cultural awareness, intercultural sensitivity, multicultural effectiveness and global competencies (for a review see Fantini and Tirmizi, 2006). In fact, in their meta-analysis of definitions and conceptual models of IC, Spitzberg and Changnon (2009) discovered over 300 different conceptual approaches to IC. In the present study, the term ‘intercultural competence’ is employed as it is thought to be the most widely used in the literature (Van Bakel et al., 2014). For this study, IC refers to individual abilities and predispositions needed to ‘perform effectively and appropriately when interacting with others who are linguistically and culturally different from oneself’ (Fantini and Tirmizi, 2006).

The plethora of conceptualisations of IC has also led to a multitude of instruments to measure the construct. In a 2009 review, Fantini (2009) reports 44 such instruments which conceptualise IC in various ways, including aspects such as language proficiency, behaviour and personality. This indicates that there is little consensus in the literature as to which elements exactly constitute IC (Spitzberg and Changnon, 2009). In this study, the Multicultural Personality Questionnaire (MPQ) was used to measure IC. Developed as a measure of intercultural effectiveness (Van der Zee and Van Oudenhoven, 2000, 2001), the MPQ has been designed for assessing ‘the effectiveness of individuals in dealing with groups or individuals that differ culturally from themselves’ (Van Oudenhoven, Timmerman, and Van der Zee, 2007). It measures five dimensions of IC: cultural empathy (CE), open mindedness (OM), social initiative (SI), emotional stability (ES), and flexibility (FL) (Figure 1).

In their review of measures for assessing IC, Matsumoto and Hwang (2013) identify the MPQ as one of the most ‘promising’ (p. 867) psychometric instruments. Indeed, multiple studies across different sojourner groups (i.e. international students, expatriate employees, and refugees) have repeatedly provided evidence for the construct and predictive validity of the MPQ dimensions. For example, several studies have reported significant relationships between the MPQ dimensions and different measures of cross-cultural adaptation (e.g. Leong, 2007; Yakunina et al., 2012; Young et al., 2013; Lee and Ciftci, 2014; Schartner, 2014a). Research has also shown that the MPQ dimensions are better at predicting effectiveness in intercultural settings than more ‘traditional’ personality measures such as the Big Five (Van der Zee and Van Oudenhoven, 2000).
Internal consistencies for the five subscales (i.e. dimensions) among international student samples are generally high, with Cronbach’s alpha ranging from 0.74 to 0.87 in Yakunina et al. (2012) and from 0.71 to 0.82 in Young et al. (2013). Moreover, the instrument has been successfully applied to culturally diverse samples and in multiple national contexts (e.g. the Netherlands, Germany, Taiwan, Singapore, New Zealand, the United Kingdom), and factor analyses have generally supported the cross-cultural equivalence of the MPQ dimensions, at least among ‘western’ cultures (Leone et al., 2005; Van Oudenhoven et al., 2007).

To the best of the author’s knowledge, this is one of the first longitudinal studies to employ the MPQ at two time stages with an international student sample. Prior research on domestic students (i.e. those who were studying in their home country) has indicated that the MPQ dimensions are fairly stable, showing little variation over time (Van der Zee and Van Oudenhoven, 2000). This links to debates in the literature as to whether IC represents innate personality traits (e.g. Johnson et al., 2006; Van de Vijver and Leung, 2009) or whether it can be developed through intercultural experiences, leading some authors to distinguish between relatively stable and more dynamic aspects of IC (e.g. Leiba-O’Sullivan, 1999; Bird et al., 2010). In the case of internationally mobile students, who experience a drastic change in life events and environment (Ward et al., 2001), a long-term effect on dimensions of IC may be considerably more likely compared to their domestic peers (Van Bakel et al., 2014).

Nonetheless, it is believed that certain aspects of IC might be more prone to develop over time than others. For example, CE, OM and SI are thought to be more susceptible to change because of their strong social component (Herfst, Van Oudenhoven and Timmerman, 2008). On the other hand, ES is widely seen as a more stable personality trait (Ones and Viswesvaran, 1997). Although this paper seeks to primarily address the impact of a study sojourn abroad on IC, the investigation will also shed some light on whether IC can be considered a set of ‘trainable’ skills or a collection of more stable personality traits.

In the next section, hypotheses about the impact of study abroad on each of the five MPQ dimensions are formulated.

*Cultural empathy* (CE) is defined as the ‘ability to empathise with the feelings, thoughts and behaviours of members from different cultural groups’ (Van Oudenhoven and Van der Zee, 2002: 680). This dimension is also often more broadly referred to as ‘sensitivity’ in the literature (e.g. Hawes and Kealy, 1981). The constructs of empathy and sensitivity are widely seen as something that can be developed (e.g. Hammer et al., 2003). It seems reasonable to
assume that a sojourn in a multilingual and multinational study environment will provide ample opportunities to learn about and recognise the feelings, thoughts and behaviours of culturally others, thereby leading to an increase in CE.

**H1: A study sojourn abroad will lead to an increase in CE.**

*Open mindedness* (OM) is defined as ‘an open and unprejudiced attitude towards out-group members and towards different cultural norms and values’ (Van der Zee and Van Oudenhoven, 2000: 294). OM is described as an attitude in this definition. It therefore seems plausible to assume that it can be cultivated through training and/or experiences (Williams and Johnson, 2011). Prior research on international students has shown that a study sojourn abroad can indeed impact on attitudinal aspects such as for example perceptions of the host culture and acceptance of different values (Gu, Schweisfurth and Day, 2010). This leads to the second hypothesis:

**H2: A study sojourn abroad will lead to an increase in OM.**

*Social initiative* (SI) is conceptualised as a behavioural aspect of IC (Wiseman, 2002), referring to the ability to approach social situations actively, and to establish and maintain social relationships (Van Oudenhoven and Van der Zee, 2002: 681). As student sojourners arrive in the host country largely devoid of social contacts (Neri and Ville, 2008), establishing a new social network is of paramount importance for this group (Ong and Ward 2005). In comparison to their domestic peers, international students need to make extra efforts to achieve social integration in the new environment as their familiar social networks are usually not within easy reach (Rienties et al. 2012). It seems thus reasonable to assume that these circumstances will lead to an increase in SI.

**H3: A study sojourn abroad will lead to an increase in SI.**

*Emotional stability* (ES) reflects a tendency to remain calm in stressful situations (Van der Zee and Van Oudenhoven, 2000: 294). A sojourn abroad has been characterised as a stressful life event by various scholars (e.g. Berry, 2006), and the ability to cope with psychological stress has repeatedly been identified as crucial for cross-cultural sojourners (Ward et al., 2001). In the literature, the ability to deal with stress is generally seen as a relatively stable personality trait (e.g. Bird et al., 2010). ES is therefore not expected to be significantly affected by a study sojourn abroad.

**H4: ES will not significantly change as a result of study abroad.**
Finally, flexibility (FL) refers to ‘the ability to learn from mistakes and adjustment of behaviour whenever it is required’ (Van der Zee and Van Oudenhoven, 2000: 295). This and other definitions conceptualise FL as a behavioural component of IC (Wiseman, 2002; Deardorff, 2006), suggesting that it is prone to change. As student sojourners enter the host environment, familiar ways of handling things might no longer work (Van Oudenhoven and Van der Zee, 2002). Thus, in order to become effective in the new environment FL is vital (Arthur and Bennet, 1995; Spreitzer et al., 1997). This leads to the fifth hypothesis:

**H5: A study sojourn abroad will lead to an increase in FL.**

**Methods**

This study employed a two-stage, mixed-methods research design. ‘Mixing’ of both quantitative and qualitative data in a single research study is generally employed to gain a better understanding of the phenomenon under study (Tashakkori and Teddlie, 1998). More specifically, a sequential explanatory design was chosen for this study where quantitative data was collected in the first stage, and qualitative data was analysed in a second stage to help explain and elaborate on the results of the first stage (Ivankova, Cresswell and Stick, 2006). A design of this kind can be especially valuable when unexpected results arise from quantitative data (Morse, 1991), as was the case with the study (see below).

**Stage one**

Stage one consisted of a quantitative analysis of changes in the IC of international postgraduate students over a nine-month period. Participants were non-UK students undertaking full-time one-year taught MA degrees in the humanities and social sciences at the same British university. Participation was limited to two degree programmes which were closely matched in terms of student cohort composition (with typically 20+ nationalities being represented, and the majority being female), programme structure (with a taught element running from October to June, and an independent student-led research project from June to August), English language proficiency, prior academic achievement, and assessment standards applied to students’ work. It was hoped that this would maximise homogeneity of the sample in terms of teaching experience, academic demands, and social interaction on campus (cf. Wright and Schartner, 2013). The two degree programmes were an MA in Cross-Cultural Communication (CCC) and an MA in Applied Linguistics and TESOL\(^3\) (ALT).

\(^3\) Teaching English to Speakers of Other Languages
In order to measure the development of IC over time, the 91-item English version of the MPQ (Van Oudenhoven and Van der Zee, 2002) was administered to participants at two time stages – two weeks into their programme of study (T1, October), and nine months into the programme (T2, June). Items were rated on a 5-point Likert scale, ranging from 1 (totally not applicable) to 5 (completely applicable). Table 1 shows example items and measures of internal consistency. Cronbach’s alpha (α) was sufficiently high for all five subscales at T1 and at T2.

A total of 239 MA CCC and MA ALT students completed the survey at T1. After an initial analysis of respondents’ demographic data, 16 participants were excluded from further analysis as they had previously obtained undergraduate or postgraduate degrees from UK universities. It was felt that the inclusion of this data in the analysis would have affected the authenticity of the findings due to the greater familiarity of these students with life and study in the UK. Of the remaining participants (N = 223), 128 students were studying for an MA CCC, and 95 for an MA ALT. Of the 223 students who had completed the T1 survey, 143 also completed the T2 survey (64% response rate).

Table 2 presents participants’ demographics at T1 and T2. On average, the sample as a whole was relatively young with a mean of around 24 years at both times. The students ranged in age from 20 to 42 years. The vast majority of respondents were female, mirroring the gender bias in this group and previous cohorts (cf. Wright and Schartner, 2013; Young and Schartner, 2014). Most respondents came from the People’s Republic of China (PRC), the main sending country of international students to the UK (UKCISA, 2013). The remaining respondents came from a variety of countries or territories. To compare differences in IC scores over time, analysis was conducted using paired-samples t-tests as is recommended for normally distributed data (Field, 2005).

Stage two

Stage two of the study was prompted by the findings of stage one and was largely exploratory in nature. It involved an analysis of qualitative interview data in order to obtain a

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4 In some cases, students identified territories which are not officially recognised as nation states as their places of origin (e.g. Palestine, Kurdistan) – these places are included here as reported by the students, although their ‘official’ nationality may be different (e.g. a Kurdish student with an Iraqi passport)
more fine-grained perspective on IC development over time. It also followed increasing calls in the literature for a combination of quantitative and qualitative methods when assessing IC (e.g. Deardorff, 2006; Fantini, 2009). The qualitative data-set under analysis here initially formed part of an investigation of international postgraduate students’ academic, psychological and sociocultural adjustment (Schartner, 2014a). Eighteen student volunteers (14 females and four males, see Table 3), all of whom also formed part of the larger MPQ survey-sample above, took part in three waves of semi-structured interviews – two around the same time as the MPQ data collection, and one mid-programme (Figure 2, below). It was hoped that, while the MPQ data would reveal patterns and trends amongst a larger sample, the interview data would provide insights into the more qualitative aspects of IC which may be difficult to capture in a survey instrument (Deardorff, 2006). The interview questions focused, broadly, on how students themselves felt they were adjusting, and how they experienced life and study in the host environment.

Thematic analysis (Braun and Clark, 2006) was employed on all interview transcripts using NVivo 10. The thematic focus was on students’ accounts of intercultural experiences, with the ‘cultural’ being very broadly conceptualised (Holliday, Hyde and Kullman, 2004). Any comment which provided insights into students’ attitudes towards ‘culturally others’ and their ‘ability to get along with, work and learn with people from diverse cultures’ (HEA, 2013) was included in the analysis. It was hoped that this would reveal accounts of intercultural experiences which could help shed some light on the quantitative findings (presented below).

According to Rauscher and Greenfield (2009), the integration of quantitative and qualitative data can occur at a number of points throughout the research process. In this study, integration occurred at discussion stage as the aim was to use the MPQ results as a kind of baseline data, with the qualitative interview data providing ways of examining and explaining the findings (cf. Carvalho and White, 1997).

**Results**

Table 4 presents the means, standard deviations and bivariate correlations for the five MPQ subscales measured at T1. Pearson’s r ranged from .22 to .65, pointing to some possible theoretical relatedness among the MPQ dimensions (Van Oudenhoven and Van der Zee,
These subscale intercorrelations are, however, not unusual, and are similar to those found in previous studies employing the MPQ with international student samples (e.g. Yakunina et al., 2012). At T1, respondents scored above the midpoint of the 5-point scale on CE, OM, SI and FL, and nearer to the midpoint on ES. SD varied between .38 and .45. Particularly high means were found for CE and OM. Again, similarly high means for CE and OM have been reported in previous research with international students (e.g. Young et al., 2013).

Table 5 presents descriptive statistics for the five MPQ subscales measured at T2. Again, the subscales correlated significantly with each other, with Pearson’s r ranging from .26 to .74. At T2, participants scored above the scale midpoint on all subscales and SD varied between .40 and .48. Similar to T1, the highest means were found for CE and OM.

Paired-samples t-tests were conducted to investigate differences in IC over time. The results revealed significant changes in IC over time albeit not in the expected direction (Figure 3, below). Firstly, mean scores for CE were significantly higher at T1 (M = 3.83, SD = .40) than at T2 (M = 3.76, SD = .45), t(143) = 2.51, p = .013. Secondly, mean scores for OM were significantly higher at T1 (M = 3.67, SD = .42) than at T2 (M = 3.59, SD = .46), t(143) = 2.92, p = .004. Thirdly, ES was lower at T1 (M = 3.07, SD = .39) than at T2 (M = 3.12, SD = .42). This difference was significant at the 90% level, t(143) = -1.86, p = .065. Separate paired-samples t-tests for the MA CCC and MA ALT students respectively revealed similar dynamics in both groups, thereby ruling out subject of study as a possible confounding variable. As these results were not in line with expectations, H1 – H5 could not be confirmed.

Discussion

The aim of this study was to understand whether and, if so, how an academic sojourn abroad impacts on student sojourners’ intercultural competence (IC). Analyses of entry and exit MPQ-scores revealed significant changes in aspects of IC over time albeit not in the expected direction. After nine months of study in the UK, participants’ mean scores for cultural empathy (CE) and open-mindedness (OM) had dropped significantly whereas the mean score for emotional stability (ES) showed a marginally significant increase. No effect was found for social initiative (SI) and flexibility (FL). These findings suggest that a study sojourn abroad
may impact more on the attitudinal/cognitive aspects of IC (CE, OM, ES) as opposed to its behavioural aspects (SI, FL). The findings also challenge the widely held belief that the development of IC occurs simply by osmosis as a result of ‘being abroad’, and point to a need for additional inquiry. Possible explanations for the findings are provided below in relation to the hypotheses presented earlier, and with reference to the interview data which can provide insights into the possible underlying reasons for the observed results.

Firstly, the observed decrease in CE and OM over time (Figure, 3, above) was surprising, given that students generally reported high levels of intercultural contact in the interviews, as exemplified below:

*I think I spend about 70 per cent of the time with international friends, yes all the time. I’m surrounded by international friends.* (Interviewee 9, February)

*90% with international, then 5% on Skype with my Slovakian group and the British people is my roommate (*)* (Interviewee 14, February)

One possible explanation for the significant drop over time may be that students arrived in the UK with high levels of CE and OM, as suggested by the high scores relative to other dimensions (Table 4, above), but found the reality more challenging than initially expected. Indeed, prior UK-based research has indicated that the IC development of international students can be hindered by intercultural challenges experienced at the host university (Lantz, 2014). In the present study, there were strong indications in the interview data that students were highly motivated and eager to interact with a multiplicity of nationalities, with some interviewees explicitly seeking to form friendships with peers outside their own national group:

*I want to meet as many people as I can from different backgrounds.* (Interviewee 1, October)

*I can meet Italians in Italy, why should I meet new Italians here?* (Interviewee 3, October)

Similarly, students seemed keen to experience and learn about ‘British culture’, as exemplified below:

*(…) just get immersed into the different culture and different things that they have here that we don’t have back home.* (Interviewee 2, October)

*You have to take advantage of the British culture.* (Interviewee 6, October)
It is possible that this initial openness may have left students more vulnerable to disappointed expectations associated with their intercultural experiences in the host country (Herrera, 2012). An example of pre-sojourn impressions versus in-sojourn reality was provided by a Romanian interviewee:

> It's quite a difference between my impression from media and so on from Romania and the impression you see here. (Interviewee 1, October)

Similarly, one Finnish interviewee described her disappointment with regard to interactions she had with local people:

> Maybe I expected their politeness to be authentic but a lot of times I felt that it's just a crust, it's not real. (Interviewee 8, February)

A further intercultural challenge was contact with students from China, the majority on the degree programmes under study here. The data suggested that the skewed student intake created perceived and actual barriers to communication:

> (...) it's a bit difficult here because there are a lot of Chinese people and Chinese people tend to be all together and speak Chinese. (Interviewee 3, October)

> It is really hard to make friends with the Chinese because they are just in their group. (Interviewee 8, October)

Most crucially, the interview data strongly suggested that many students found it difficult to form social ties with British people, often to the great perceived detriment of the former. This was expressed across the sample and is best illustrated in the comments below:

> (...) at first I thought that UK is going to be exciting but now actually I have kind of a bit difficult to know the local people (...) (Interviewee 7, October)

> I would like to know someone from [host city] but they are not here. I don't know where they are. (Interviewee 10, February)

> I have made a lot of friends here but all of them are from different countries, not UK (...) so this is a little sad I guess. (Interviewee 17, February)

This finding is in line with much of the prevailing international student literature, which suggests that the UK can indeed be a difficult place for international students to make local friends (e.g. UKCOSA, 2004; Wright and Schartner, 2013; Schartner, 2014b). There were also instances in the interview data where students reported difficult experiences with intercultural group work. Here, communication barriers were at times attributed to the ‘culture’ of those they were working with:
communication was a big problem because they didn’t speak [...] maybe this is a system in China. (Interviewee 3, February)

We Chinese girls and the American girl have different opinions about the cooperation problem [...] so the cooperation have broken. (Interviewee 15, February)

Prior research has shown that negative intercultural group work experiences can affect student motivation and progression (e.g. Appelbaum, Elbaz and Shapiro, 1998). It is therefore possible that experiences of this kind may have impacted on students’ self-ratings for CE and OM at T2.

A further explanation for the observed drop over time could be that students may have overestimated their CE and OM at the start of the sojourn. It is possible that nine months later they were able to reflect on first-hand ‘lived’ experiences, thereby providing a more accurate self-rating. Indeed, social psychologists have previously shown that people tend to overestimate their abilities when presented with hypothetical choices (e.g. Kruger and Dunning, 1999; Ehrlinger and Dunning, 2003). For example, a study by Altshuler, Sussman and Kachur (2003) comparing two intercultural sensitivity elements, showed a gap between participants’ perceived and actual worldview. Moreover, researchers have questioned the ability of respondents who have little first-hand intercultural experience, as was the case for the participants at T1, to accurately assess their behaviour and tendencies in multicultural settings (e.g. Arasaratnam and Doerfel, 2005).

Underestimation, on the other hand, may provide further clues as it has previously been suggested that ‘culture’ may impact on rating-behaviour for psychometric instruments such as the MPQ (Van Oudenhoven and Van der Zee, 2002). For example, cross-cultural comparisons indicate that respondents from East Asian countries, where the need for positive self-regard is said to be relatively low (Markus and Kitayama, 1991; Heine et al., 1999), tend to underestimate their abilities. A large proportion of respondents in this study were from East Asian countries and it is possible that this could be reflected in the MPQ scores. Indeed, an independent-samples t-test showed that the students who came from East Asian countries (N = 87) scored significantly lower than their ‘western’ counterparts on CE, OM, SI, and FL at both T1 and T2. Unfortunately, it is difficult to discern whether these differences were due to differences in self-evaluation or other underlying demographic reasons. They do however point to the importance of testing the cross-cultural validity of the MPQ-scales with respondents from ‘Eastern’ cultures (cf. Van Oudenhoven et al., 2007).
Finally, the significant increase in ES is striking and against expectations. A possible explanation could be the timing of the T1 survey – students had only recently arrived in the UK and were thus likely to experience early acculturative stress as a result of cross-cultural transition (Berry, 2006). Not surprisingly therefore, students may have reported lower ES at the beginning of their sojourn. This corresponds closely to findings from recent studies which depict the initial sojourn stage as a time of particular stress and nervousness (e.g. Brown and Holloway, 2008; Schartner, 2014a), and is also sustained by the interview data. Accounts of homesickness and loneliness, such as the ones below, were frequent in the first interview round:

\[\text{\ldots} \text{the first one month I was here, I was really homesick \ldots I was just feeling lonely in my room, "Oh my God, I'm so far away!" (Interviewee 11, October)}\]

\[\text{I was always on the telephone saying that I want to go back for sure, and I even once I packed my stuff and went to the airport. (Interviewee 4, October)}\]

This is in line with Ward et al. (2001) who claim that psychological distress is likely to be highest early in the sojourn when coping resources (e.g. social support) are at their lowest while the number of life changes is high. The interview data shows that, after several months in the UK, participants had become more familiar and settled in the new environment:

\[\text{I started to get used to living alone because this was a first for me and I was a bit anxious in the beginning but now I feel good. (Interviewee 9, February)}\]

\[\text{\ldots it took some physical and mental maybe some efforts but now I feel that I'm already, like, where I have to be. (Interviewee 6, February)}\]

This suggests that students felt more emotionally stable as the sojourn progressed, possibly resulting in the significantly higher mean score for ES at T2.

**Limitations and directions for future research**

In light of the findings above, it is tempting to conclude that a sojourn abroad can have a negative bearing on aspects of international students’ IC. However, it would be unreasonable to draw any final conclusions based on a snapshot of a nine-month period. As Salisbury (2011) suggests, it would be unwise to operate under the assumption that any change is evident immediately upon completion of the study period abroad. In fact, it is possible that a delay of intercultural understanding might have occurred (Pedersen, 2010). Future research could therefore very usefully expand the present longitudinal research design by tracking students’ IC development beyond the period spent abroad. The ‘re-entry’ experiences of
international students are of increasing interest to educational and intercultural researchers (e.g. Butcher, 2002; Pritchard, 2010), and might provide further clues as to the longer-term impact of study abroad on IC.

It is also possible that students may have been constrained in the development of IC by the short and relatively intense nature of their PGT programmes (cf. Peckenpaugh, 2012). Further research measuring IC at various points in time is needed to chart the path of IC development in student sojourners. International undergraduate or doctoral students could provide a much needed longer-term timeframe for this type of research.

Similarly, the interpretation of the findings is limited by the fact that IC development is an ongoing and lengthy process (Deardorff, 2009). It could be that the observed changes might simply be part of the dynamic and continual process that characterises IC development, a process which may include moments of stagnation or even regression (Fantini, 2005). After all, there may not be a ‘pinnacle at which someone becomes interculturally competent’ (Deardorff, 2009: xiii). Moreover, it is important to acknowledge that despite a statistically significant drop in CE and OM over time, scale means for these two dimensions remained high relative to the other MPQ dimensions and were comparable to the mean scores found in previous studies with similar student samples (e.g. Van Oudenhoven and Van der Zee, 2002; Leong, 2007: Young et al., 2013). Additionally, there was evidence in the interview data of at least some intercultural gains by the end of the sojourn, increased intercultural awareness and an ability to deconstruct stereotypes, for example:

*I think I’m more interculturally sensitive and I have heightened my awareness of other peoples from different backgrounds and cultures [...]* (Interviewee 13, June)

*Definitely the stereotyping, prejudices, this changed so much.* (Interviewee 14, June)

Several interviewees also reported increased poise in intercultural encounters and more confidence when communicating with those from different backgrounds:

*Before I come here I'm very nervous, I don't dare to speak to strangers, to people I'm not familiar with but now I can find a topic or I can speak with them.* (Interviewee 18, June)

Whilst the longitudinal design of this study considerably advances research in the area, the exclusive focus on international students may limit the power of the research and the conclusions to be drawn from it. It remains unclear whether the observed fluctuations in IC are specific to students undergoing a study abroad experience, or whether they may simply be
part of the normal experiential cycle of university study in general. There are indications in the literature that some of the challenges encountered by international students may be equally relevant to their domestic counterparts – social acceptance and the specific demands of academic study, for example (Andrade, 2006). Future research on IC development could therefore very usefully include a control group of ‘home’ students (i.e. those studying in their own country). The student cohort composition of the degrees under study here was heavily skewed towards international students, as is often the case on UK PGT degrees (cf. UKCISA, 2013). It was therefore difficult for the researcher to access British students on the same programmes at the time of data collection.

A further limitation of this study is that there may have been some method bias as many of the participants were second language speakers of English, making it difficult to discern whether the MPQ items translated well for each participant. However, given that all participants fulfilled the English language entrance requirements for their degree programmes, it was reasonable to assume that they would have sufficient English language skills to be able to understand the survey items.

Moreover, while this study did not account for the effect of confounding variables (e.g. nationality, gender, age etc.), future research could ascertain whether changes in IC could be a function of students’ predispositions rather than the experience of study abroad itself (Salisbury and Pascarella, 2013).

In sum, while it is difficult to draw definite conclusions about the effect of study abroad on IC, findings from this study do point to the malleability of IC over time and, albeit limited in scope, the effort to monitor changes in MPQ scores over time constitutes, at the very least, a beginning for further longitudinal research on the development of IC among international student samples.

**Implications for intercultural education and training**

A number of implications for education and training arise from this study. Firstly, the findings indicate that exposure to a multicultural study environment in itself might not be enough to significantly develop IC in international students. Conscious pedagogical efforts and intentional intervention might therefore be needed on the part of the host universities and organisations sending students abroad. Although the need for pre-departure training and orientation is increasingly being acknowledged (e.g. Cemalcilar and Falbo, 2008), provision of training of this kind remains largely restricted to international business sojourners (Littrell
et al., 2006). Nonetheless, host universities could play a critical role in helping incoming students to develop self-efficacy and agency in intercultural encounters. For example, prior research has shown that students who receive ‘cultural mentoring’ tend to report greater intercultural gains (e.g. Engle and Engle, 2004; Van de Berg et al., 2009). On a broader institutional level, the importance of a curriculum that allows for intercultural learning to take place is increasingly being emphasised (e.g. Pedersen, 2010). Recent research has shown that intercultural education plus the experience of ‘living abroad’ can create optimal conditions for IC development in international students (e.g. Behrnd and Porzelt, 2012; Young and Schartner, 2014). Courses in inter- and cross-cultural communication5, where ‘active processing’ (Peckenpaugh, 2012: 145) of intercultural encounters can take place, should therefore be increasingly offered to students undergoing a sojourn experience. This ‘pedagogy of intercultural experience’ (Alred, 2003: 14) may foster the development of IC more actively. The ‘multicultural campus’ (Valverde and Castenell, 1998) can certainly provide a fruitful setting for applied intercultural training techniques such as critical instances, case studies and role playing (Fowler and Blohm, 2004). Moreover, as Einbeck (2002: 59) notes, through ‘effort and thoughtful selection of appropriate readings, we can more effectively teach students the skills of mediation between cultures during even a relatively short study abroad program’.

References


5 In line with much of the prevailing literature, ‘inter-’ and ‘cross-’ cultural is used synonymously here, although there is some debate about distinctions between the two (e.g. Gudykunst 2003).


Schartner, A. 2014b. “‘You cannot talk with all of the strangers in a pub.’ A longitudinal case study of international postgraduate students' social ties at a British University.” *Higher Education. DOI 10.1007/s10734-014-9771-8*


### Table 1. MPQ example items and reliability measures

<table>
<thead>
<tr>
<th>MPQ Dimension</th>
<th>Example Item</th>
<th>$\alpha$ – T1</th>
<th>$\alpha$ – T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural empathy (CE)</td>
<td>‘Tries to understand other people’s behaviour’</td>
<td>.81</td>
<td>.88</td>
</tr>
<tr>
<td>Open-mindedness (OM)</td>
<td>‘Finds other religions interesting’</td>
<td>.81</td>
<td>.86</td>
</tr>
<tr>
<td>Social initiative (SI)</td>
<td>‘Waits for others to initiate contact (-)’</td>
<td>.85</td>
<td>.85</td>
</tr>
<tr>
<td>Emotional stability (ES)</td>
<td>‘Remains calm in misfortune’</td>
<td>.76</td>
<td>.82</td>
</tr>
<tr>
<td>Flexibility (FL)</td>
<td>‘Enjoys unfamiliar experiences’</td>
<td>.75</td>
<td>.77</td>
</tr>
<tr>
<td>1. Gender</td>
<td>Time 1 (N = 223)</td>
<td>Time 2 (N = 143)</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>200 (90%)</td>
<td>127 (89%)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23 (10%)</td>
<td>16 (11%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M = 24.04</td>
<td>20-24: 155 students</td>
<td>20-24: 97 students</td>
</tr>
<tr>
<td></td>
<td>25-29: 46 students</td>
<td>25-29: 32 students</td>
</tr>
<tr>
<td></td>
<td>30-35: 9 students</td>
<td>30-35: 8 students</td>
</tr>
<tr>
<td></td>
<td>35+: 2 students</td>
<td>35+: 2 students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Place of origin</th>
<th>Time 1 (N = 223)</th>
<th>Time 2 (N = 143)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRC</td>
<td>121 (55%)</td>
<td>63 (44%)</td>
</tr>
<tr>
<td>Europe</td>
<td>37</td>
<td>35</td>
</tr>
<tr>
<td>Americas/Caribbean</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>East Asia</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>Middle East</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Africa</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Subject area</th>
<th>Time 1 (N = 223)</th>
<th>Time 2 (N = 143)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA CCC</td>
<td>129 (58%)</td>
<td>109 (76%)</td>
</tr>
<tr>
<td>MA ALT</td>
<td>94 (42%)</td>
<td>34 (24%)</td>
</tr>
</tbody>
</table>

Table 2. Demographics of the sample
<table>
<thead>
<tr>
<th>Interviewee No.</th>
<th>Gender</th>
<th>Nationality</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>Romanian</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>Malaysian</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>Italian</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>Turkish</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>German</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>M</td>
<td>Lithuanian</td>
<td>23</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>Indonesian</td>
<td>26</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>Finnish</td>
<td>27</td>
</tr>
<tr>
<td>9</td>
<td>F</td>
<td>Romanian</td>
<td>24</td>
</tr>
<tr>
<td>10</td>
<td>M</td>
<td>Mexican</td>
<td>25</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>Indonesian</td>
<td>28</td>
</tr>
<tr>
<td>12</td>
<td>M</td>
<td>USA</td>
<td>23</td>
</tr>
<tr>
<td>13</td>
<td>F</td>
<td>USA</td>
<td>26</td>
</tr>
<tr>
<td>14</td>
<td>F</td>
<td>Slovakian</td>
<td>24</td>
</tr>
<tr>
<td>15</td>
<td>F</td>
<td>Chinese</td>
<td>23</td>
</tr>
<tr>
<td>16</td>
<td>M</td>
<td>Chinese</td>
<td>23</td>
</tr>
<tr>
<td>17</td>
<td>F</td>
<td>Latvian</td>
<td>23</td>
</tr>
<tr>
<td>18</td>
<td>F</td>
<td>Chinese</td>
<td>24</td>
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</table>

Table 3. Interviewee profiles
Table 4. Bivariate correlations and descriptive statistics T1

<table>
<thead>
<tr>
<th>Subscales</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural empathy</td>
<td>.60**</td>
<td>.47**</td>
<td>.09</td>
<td>.22**</td>
<td>3.83</td>
<td>.40</td>
</tr>
<tr>
<td>Open mindedness</td>
<td>.65**</td>
<td>.30**</td>
<td>.31**</td>
<td>3.67</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>Social initiative</td>
<td>.35**</td>
<td>.37**</td>
<td>3.34</td>
<td>.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional stability</td>
<td></td>
<td>.23**</td>
<td>3.07</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.19</td>
<td>.38</td>
</tr>
</tbody>
</table>

**significant at p < .01 (2-tailed)
<table>
<thead>
<tr>
<th>Subscales</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural empathy</td>
<td>.74**</td>
<td>.56**</td>
<td>.26**</td>
<td>.34**</td>
<td>3.76</td>
<td>.45</td>
</tr>
<tr>
<td>Open mindedness</td>
<td>.67**</td>
<td>.36**</td>
<td>.43**</td>
<td></td>
<td>3.59</td>
<td>.46</td>
</tr>
<tr>
<td>Social initiative</td>
<td>.35**</td>
<td>.52**</td>
<td></td>
<td></td>
<td>3.35</td>
<td>.48</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>.32**</td>
<td></td>
<td></td>
<td></td>
<td>3.12</td>
<td>.42</td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.24</td>
<td>.40</td>
</tr>
</tbody>
</table>

Table 5. Bivariate correlations and descriptive statistics T2

**significant at p < .01 (2-tailed)
Figures:

Figure 1. IC as conceptualised in the MPQ

Figure 2. Data-collection schedule for this study

Figure 3. Changes in IC from T1 to T2