

Exploring the intercultural development of first
year UK and non-UK psychology students

Caprice Calantha Lantz

PhD

University of York

Education

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Abstract

Understanding students' intercultural development has become increasingly important with the recognition that graduates require knowledge, skills, and attitudes that will allow them to contribute effectively in a global context. Although universities policies often suggest that students who study on culturally diverse campuses will mix and develop intercultural little research actually explores the extent to which this occurs.

This study examined the intercultural development of a cohort of first year UK and non-UK psychology students studying at one UK university. The Intercultural Development Inventory was used to assess students' stages of development upon entry and seven months on. Questionnaires and interviews further explored students' intercultural experiences prior to and during university.

Students entered university at a range of developmental stages. There was no statistically significant difference between the mean scores of UK and non-UK students. Although the majority of students reported relatively high levels of intercultural contact during university, particularly non-UK students, neither group experienced a significant change.

Time lived abroad best predicted initial development for all students. Having friends from other cultures was also a predictor for UK students and growing up in cities was a predictor for non-UK students. No variables predicted changes in students' scores. However, 'feelings of not fitting in' had a small negative relationship with UK students' change scores and 'being increasingly active in clubs and societies' had a small negative relationship with non-UK students' change scores.

Thematic analysis suggests that students' development may have been hindered by the intercultural challenges they experienced at university. UK students with limited prior intercultural experiences in particular reported challenges although some non-UK students with extensive intercultural experience also experienced challenges. Cultural clustering and administrative segregation may have also limited contact opportunities.

Table of Contents

<i>Abstract</i>	2
<i>Table of Contents</i>	3
<i>List of Figures</i>	6
<i>List of Tables</i>	7
<i>Acknowledgements</i>	9
<i>Author's Declaration</i>	10
<i>Dedication</i>	11
Chapter 1 Introduction	12
1.1 Purpose and research questions.....	15
1.2 Significance of the research study.....	16
1.3 Theoretical framework and concepts.....	17
1.4 Research methodology.....	18
1.5 Overview of thesis.....	19
Chapter 2 Literature Review	21
2.1 Literature review methodology.....	22
2.2 Definition of key terms.....	24
2.3 Globalisation.....	26
2.4 Internationalisation.....	27
2.5 Intercultural contact and contact theory.....	30
2.6 Intercultural competence.....	33
2.7 Research into intercultural competence.....	39
2.8 Gaps in the literature.....	44
2.9 Developmental model of intercultural sensitivity.....	45
Chapter 3 Research Methodology	59
3.1 Aim and research questions.....	59
3.2 Research design.....	60
3.3 Population.....	62
3.4 University and department.....	64
3.5 Sample.....	66

3.6	Funding.....	66
3.7	Instrumentation.....	67
3.8	Data collection and analysis.....	96
3.9	Ethical considerations.....	113
3.10	Strengths and limitations of the study.....	115
3.11	Conclusion.....	117
Chapter 4 Quantitative Findings.....		118
4.1	Population and sample.....	120
4.2	Analytic procedures.....	120
4.3	At what stage of development do students enter university?.....	122
4.4	Does development occur over the first two terms of university?.....	127
4.5	What student characteristics and intercultural background experiences predict students' initial stage of intercultural development?.....	130
4.6	What student characteristics and intercultural experiences are related to students' development at university?.....	156
4.7	Summary.....	178
4.8	Discussion.....	179
4.9	Conclusion.....	183
Chapter 5 Qualitative Findings.....		184
5.1	Interview participants.....	186
5.2	Sample bios of interviewees.....	187
5.3	Qualitative analysis.....	191
5.4	Summary.....	212
5.5	Emerging themes.....	214
5.6	Conclusions.....	220
Chapter 6 Integrative Analysis.....		221
6.1	Analytic Summaries.....	223
6.2	Integrative analysis.....	226
6.3	Discussion.....	250

6.4	Conclusion.....	268
Chapter 7 Conclusions and Recommendations.....		260
7.1	Summary of findings and conclusions.....	260
7.2	Limitations.....	261
7.3	Recommendations for practice.....	265
7.4	Recommendations for further research.....	271
7.5	Conclusion.....	275
List of Appendices.....		277
Bibliography.....		314

List of Figures

Figure 4-1: Distribution of DO scores – wave I.....	124
Figure 4-2: IDI developmental stages wave I.....	125
Figure 4-3: IDI developmental stages at wave I & wave II	128
Figure 4-4: UK & Non-UK student developmental stages, wave I & II.....	130
Figure 4-5: Change in DO from wave I to wave II	174

List of Tables

Table 2-1: Purposes for mixed-method evaluation designs	61
Table 4-1: Response rates for wave I and II.....	120
Table 4-2: DO means for UK and Non-UK students – wave I	126
Table 4-3: Participant characteristics part I.....	134
Table 4-4: Participant characteristics part II	135
Table 4-5: Participants’ intercultural backgrounds part I.....	138
Table 4-6: Participants’ intercultural backgrounds part II	139
Table 4-7: Significant or nearly significant correlations: DO1 and student characteristics and intercultural background variables.....	146
Table 4-8: Regression results for entire cohort predicting DO1 scores	149
Table 4-9: Order of elimination of variables in regression	152
Table 4-10: Models best predicting DO1 for UK and non-UK students.....	154
Table 4-11: Intercultural interactions at university	158
Table 4-12: Valance of intercultural interactions	159
Table 4-13: Feelings experienced during intercultural interactions	160
Table 4-14: Mann Whitney U test results indicating significant differences in the extent to which UK and non-UK students experienced negative feelings during intercultural interactions	162
Table 4-15: Intercultural experiences in the department.....	164
Table 4-16: Intercultural experiences on campus.....	167
Table 4-17: Off-campus activities	171
Table 4-18: Volunteering off-campus	171
Table 4-19: Variables entered into regression with IDI change score	175
Table 4-20: Regression results for predicting IDI change scores.....	177
Table 5-1: Summary of interviewees	187
Table 5-2: Issues impacting experiences as identified by students	219
Table 5-3: Learning experiences around cultural difference.....	220
Table 6-1: DO1 scores and intercultural background factors.....	228
Table 6-2: IDI change scores and intercultural background factors.....	235
Table 6-3: IDI change scores and experiences at university	239
Table 6-4: IDI change scores and significant experiences at university	242

Table 6-5: IDI change scores and significant quantitative analysis variables.....246

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Author's declaration

This thesis contains original work carried out by myself under the supervision of Professor Ian Davies.

Some findings from Chapters 4 and 5 were presented at the Bringing psychology to life: Lesson in psychological literacy conference (2014), Higher Education Academy as:

Lantz, C. Intercultural competence and psychologically literate students.

Dedication

To my husband, Rob; my children Julian, Jade, and Drake; and my Mom.

Chapter 1 Introduction

This research explores the intercultural development of a cohort of first year home and international psychology students studying on a UK university campus in the North of England. Its main objectives are to determine the extent to which intercultural development occurs in students, how it may be linked to intercultural contact and to identify factors that may contribute to or hinder its development. The study is based principally on a variety of data collected from psychology undergraduates at different points in their first year of university. It draws upon cross-disciplinary literature from around the world which corroborates the need for all students to be supported in learning to engage in constructive ways with those from different cultures.

During a speech given to university graduates, Barack Obama recently said “Our very survival has never required greater co-operation and understanding among all people from all places than at this moment in history” (“Obama's commencement address at Notre Dame,” 2009) . His rationale for prioritising what is often referred to today as intercultural competence (ICC) reflects what a variety of government reports, policy papers and articles from the UK (e.g., Bourn, 2010; Fielden, 2007; Middlehurst & Woodfield, 2007) and other countries (e.g., Hunter, White, & Godbey, 2006; Leask, 2009; Ward & Masgoret, 2004) suggest: globalisation is leading to a massive increase in the movement of and linkages between people all over the world. These trends coupled with a growth in domestic diversity (Vertovec, 2007) increasingly place demands on citizens to be adept at engaging with individuals from different cultures in order to contribute effectively to society professionally (Caruana & Hanstock, 2003; Crossman & Clarke, 2010) and personally (Haigh, 2008).

While the development of ICC is germane to all university students, it may be of particular relevance to psychology students due to the nature of the discipline as studying human behaviour which is in itself inherently intercultural. As noted by a leading psychology educator, psychology students today “must prepare themselves for a world in which...old problems such as poverty, racism, and pollution join new problems such as global terrorism...” (Halpern, 2010, p. 162). Psychology students,

Halpern argues, are well placed to address such problems because of their understanding of psychology. Psychology graduates like other graduates will increasingly need to interact positively with those from other cultures. However, they have the potential to use their disciplinary knowledge not only to enhance their own development but to more broadly influence those around them.

As awareness of the need for interculturally competent graduates has increased, higher education institutions and researchers within the discipline have taken notice. At the institutional level, ICC is increasingly considered a student outcome (Deardorff, 2006) often falling under the rubric of internationalisation (Koutsantoni, 2006a; Middlehurst & Woodfield, 2007) or the way in which universities infuse “international, intercultural or global dimensions” into their institutions (Knight, 2003, p. 3). Many if not most higher education institutions in the UK have internationalisation strategies (Koutsantoni, 2006a; Middlehurst & Woodfield, 2007) that include activities such as offering study abroad, developing international research collaborations and branch campuses, recruiting international students, encouraging language study and contact between students from diverse cultures (Knight, 2004).

Although strategies suggest that institutions prioritise ICC development to some degree, researchers raise concerns. Koutsantoni (2006a) found that that 87% of UK universities focus the majority of effort on abroad approaches (e.g., encouraging study abroad, developing collaborations) and in particular the recruitment of international students. Arguably international students increase campus diversity and help to create “social forums for promoting cultural understanding; fostering tolerance of diversity; discovering alternative ways of thinking; and developing inter-cultural skills” (Volet & Ang, 1998, p. 6). However, many suggest international student recruitment primarily is motivated by economic incentives (e.g., Bone, 2008; Middlehurst & Woodfield, 2007; Toyoshima, 2007) which may undermine goals such as promoting intercultural understanding (De Vita & Case, 2003). Research reviewing internationalisation strategy (Koutsantoni, 2006a) identifies ICC as a particular problem area with institutions using terms such as valuing diversity and achieving cross-cultural capability without translating them into concrete plans. Some (e.g., Middlehurst & Woodfield, 2007) suggest that “the

‘international’ character of an institution is often accepted as a given rather than embedded within the strategic/corporate plans and expressed through practice at different levels” (p. 21). Others suggest that cultural mixing and intercultural development is simply assumed to automatically occur (Hammer, 2012).

Beyond policy studies, looking specifically at the interactions between students from different cultures also raises concerns. While there is some limited literature that suggests that some students, specifically international students may be interacting across cultures regularly and developing interculturality (e.g., Montgomery, 2010) no empirical evidence has been found to date to support this notion. Instead, a variety of research finds that interactions between students from different cultures, in particular home and international students can be limited and challenging. For example, UNITE’s (2006) national survey found that 51% of international students reported that they had no UK friends and 36% noted that they found UK students difficult to get to know and studies from other parts of the world report similar findings (Ward, Masgoret, Ho, Holmes, Newton, & Crabbe, 2005; C. T. Williams & Johnson, 2011). Burnapp and Zhao (2010) identified students’ lack of interactions across cultures as an elephant in the parlour with regard to internationalisation.

At the disciplinary level psychology itself has made substantial contributions to understanding culture (e.g., Hofstede, 2001; Schwartz, 1994), cross-cultural interactions (e.g., Matsumoto, Nakagawa, & Yoo, 2008), blocks to productive interactions (e.g., Allport, 1954; Devine, 1989), and models relating to cultural adaptation and competence (e.g., Berry, 1997). Despite these contributions, there seems to be few concerted efforts (e.g., P. J. Pedersen, 2010) to bring disciplinary knowledge to bear upon developing intercultural competence in psychology students. Some have pointed out the importance of ICC considering that many graduates go on to provide mental health and social care related services to an increasingly diverse client base (Reddy, Lantz, & Hulme, 2013). However, only recently attention has begun to focus upon identifying psychological literacy, which involves aspects of ICC, as a psychology student learning outcome regardless of future employment destinations (e.g., Cranney & Dunn, 2011; McGovern, Corey, Cranney, Dixon, Holmes, Kuebli, Ritchey, Smith, & Walker, 2010; Trapp, Banister,

Ellis, Latto, Miell, & Upton, 2011). As well, little research from psychology seems to inform policy and practice around internationalisation and to address the cross-cultural challenges observed between students in general.

The above research suggests that while there is an increasing need for graduates, particularly psychology graduates to develop interculturally, the extent to which this is happening within and outside the discipline is questionable. While this study does not explore in any great depth or exclusively, the intricacies of psychology as a discipline and does not view psychology students as being entirely distinct from others, psychology provides an appropriate context for this research and all data were gathered from psychology undergraduates.

1.1 Purpose and research questions

The purpose of this study was to explore the intercultural development of UK and non-UK first year psychology students. Questions that guided the study considered students' initial stages of intercultural development, development over the first two terms at university and factors related to development in particular intercultural contact prior to and during university. This study contributes to the growing body of research informing university and departmental policy and practice around supporting the intercultural development of students, in particular psychology students. The research questions were:

Are there differences between UK and non-UK university students' intercultural development?

1. *At what stage of intercultural development do students' enter university?*
2. *Does intercultural development occur over the first two terms at university?*
3. *What student characteristics and intercultural background factors predict students' initial stage of intercultural development?*
4. *What factors are related to students' intercultural development during university? Factors to be explored include:*
 - a. *Student characteristics (e.g., age, sex, ethnic minority).*
 - b. *Previous intercultural experiences (e.g., living abroad, international travel, previous intercultural relationships, foreign language study).*
 - c. *Intercultural experiences in the department.*
 - d. *Intercultural experiences on campus.*
 - e. *Intercultural experiences off-campus.*

5. *What are students' perceptions of their intercultural experiences and how might these contribute to intercultural development? Factors to be explored include:*
 - a. *Students' own intercultural backgrounds:*
 - i. *How do students characterise their intercultural backgrounds and experiences prior to coming to university?*
 - ii. *Did students view themselves as prepared to encounter diversity at university?*
 - b. *Students' intercultural experiences during university:*
 - i. *What are students' experiences of their university and course as providing intercultural environments?*
 - ii. *How do students characterise their closest friends whilst at university?*
 - iii. *What have been students' most significant intercultural experiences or interactions during university?*
 - iv. *To what extent do students believe they have developed interculturality since beginning their course?*

1.2 Significance of the research study

The 2004 UK report *Putting the World in World Class Education* stated: "Our vision is that the people of the UK should have the knowledge, skills and understanding they need to fulfil themselves, to live in and contribute effectively to a global society and to work in a competitive global economy" (Department for Education and Skills, 2004, p. 1). Key points highlighted by the report stress the need for institutions to produce graduates who will become responsible global citizens who appreciate, respect and engage positively with diversity.

The British Psychological Society's guidelines for undergraduate courses (2013) state that psychology students should be supported "in developing a coherent set of knowledge, skills and values that underpin their psychological literacy and which enable them to apply psychology to real life contexts. Those...skills encapsulate the contributions a psychology graduate can make to the workplace and to society more generally" (p. 9). Key points highlighted in this guidance stress need for departments to produce graduates who will apply their study of the discipline, to engage positively with diversity, and to contribute more broadly across a variety of contexts.

The intercultural development of students fits neatly within such policy statements and culturally diverse UK campuses and departments provide rich

environments through which students may learn to interact positively across cultures (Bohm, Follari, Hewett, Jones, Kemp, Meares, Pearce, & Van Cauter, 2004; UK Higher Education International Unit, 2007). This is important because whether it is support workers assisting refugees, diplomats negotiating international policies, or neighbours planning community activities, the future of villages, cities, nations and the world will increasingly be governed by people's abilities to engage constructively with cultural difference. Exposure to individuals from other cultures holds the potential to enhance intercultural relations but requires overcoming the difficulties that can occur when those from different cultures meet. Such challenges are evidenced not just by those occurring on university campuses but by the heated debates arising around increasing cultural diversity (e.g., Guillam, 2011; P. Kelly, 2011; Sparrow, 2008), protests held by conservative nationalist groups (e.g., Townsend, 2011), and outbreaks of physical violence between culturally different others (e.g., McDonald, 2011). Perhaps the most dramatic evidence of such challenges can be seen in the terrorist attacks on the US in 2001 and the UK in 2005 which some suggest resulted from extreme intercultural hostility (Giroux, 2002 as cited in Riley, 2007). Such evidence demonstrates the need to place increased importance upon students' intercultural development to promote productivity and positive relations as well as peace. Although cultural diversity can be represented in many forms, this study explores in particular UK home and international students. Home and international student distinctions represent one of the more obvious forms of cultural difference and are of increasing importance to universities.

1.3 Theoretical framework and concepts

Deardorff defines ICC as "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills and attitudes" (2006, p. 247). While there are many terms used to identify ICC related capabilities and many definitions of these terms, I used Deardorff's term and definition because they are research informed and incorporate concepts found across most theoretical models. They are also found within the Developmental Model of Intercultural Sensitivity (DMIS), the main theoretical framework used for this research.

The DMIS (M. J. Bennett, 1993) is a phenomenological model in that it describes individuals' subjective experiences of cultural difference rather than just considering overt behaviour. It is centred on the concepts of ethnocentrism and ethnorelativism. Individuals who are more ethnocentric assume that their view of the world is central to reality; whereas individuals who are more ethnorelative recognise that there are many valid cultural perspectives. Development from ethnocentric towards ethnorelative stages occurs first cognitively as individuals generate categories around cultural difference and become aware of their affective reactions to these differences. As individuals become more aware of cultural difference and how they react to it, they become more 'sensitive' to cultural difference. They then have the potential to become more accepting of cultural differences and may go on to enhance their knowledge and adapt their behaviour to accommodate cultural differences. The concepts of intercultural sensitivity and ICC are therefore, entwined with intercultural sensitivity considered the forerunner of ICC. That is, the more interculturally sensitive individuals become the more capable they are of behaving in interculturally competent ways (M. J. Bennett, 2009).

I selected the DMIS framework as the primary theoretical model for this study because it bears some resemblance to those of other recent theorists (e.g., Baxter Magolda, Okechukwu, King, & Maser, 2004), it takes into account the complexity of ICC including the attitudes, behaviours and knowledge suggested in the literature to be key components in approaches to ICC (e.g., Spencer-Oatey & Franklin, 2009; Spitzberg & Changnon, 2009) and it is the theoretical model for a well established measure, the Intercultural Development Inventory (IDI) which was the primary measure used in this study.

1.4 Research methodology

For this study I used a longitudinal cohort mixed-methods approach in order to investigate students' initial stages of intercultural development, intercultural development over time and to gather data which would allow for the exploration of the relationship between stages of development and student characteristics and intercultural experiences prior to and during university. The study included three waves of data collection. During the first wave of data collection in October 2011, I

gathered quantitative data by administering two questionnaires, the IDI and the Intercultural Background Questionnaire (IBQ) which I developed. During the second wave of data collection in May 2012, I gathered mainly quantitative data again by administering the IDI and the Intercultural Experiences Questionnaire (IEQ) which I developed. The third wave of data collection occurred in June and July of 2012 during which I gathered primarily qualitative data through one-on-one semi-structured interviews with 20 study participants purposefully selected based upon UK or non-UK status and IDI score. Data gathered during this final wave included participants' perceptions of their intercultural experiences prior to and during university.

1.5 Overview of thesis

Following this introduction, Chapter 2 contains the literature review. This chapter describes globalisation focusing upon its impact upon universities. It then describes the internationalisation of universities and calls into question the extent to which the provision of culturally diverse campuses supports students' intercultural development. This is achieved through a review of research on institutional policy and the challenges seen in cross-cultural interactions between home and international students. Research from social psychology is then presented to explain the difficulties that can ensue when individuals from different cultures meet and interact. After unpacking the concept of 'intercultural competence' research into students' intercultural development is reviewed highlighting gaps in the literature and justifying the aim of this study. The chapter concludes by reviewing the Developmental Model of Intercultural Sensitivity (DMIS), the main theoretical model used in this.

Chapter 3 reviews the research methodology used in this study. This includes a review of the aims of the study and research questions and an overview of the design. It reviews contextual information regarding the university, department, and population from which the sample was drawn. The main instrument used for this study, the Intercultural Development Inventory (IDI), is reviewed in terms of its development, reliability, and validity. Criticisms of the IDI are also addressed. The development of other instruments used for this study, two questionnaires and an

interview protocol, are then described. A section reviewing the data collection and analyses for this study then outlines the procedures followed in regard to ethical considerations, data collection, data entry, and data analysis. Finally the strengths and limitations of the study are considered.

Chapter 4 presents the analysis of quantitative data. This includes a descriptive profile of the students included in the study as well as statistical tests including *t*-tests, correlations, and multiple regression analyses used to answer the research questions. The findings are summarised and discussed in the context of the literature.

Chapter 5 presents the analysis of the qualitative findings. It presents a sample of biographies of students representing different developmental levels. It then analyses the qualitative data by describing the different ways in which students answered interview questions. The findings are summarised and emerging themes are discussed in the context of the literature.

Chapter 6 integrates the findings from the qualitative and quantitative data analyses. It presents displays of the data in tables comparing the quantitative and qualitative results and considers ways in which the findings can be triangulated. The findings are summarised and discussed in the context of the literature review.

Chapter 7 draws conclusions from the study and makes recommendations. This chapter reviews the limitations of the study related to sampling, instrumentation, and other issues. It makes suggestions for providing enhanced support for students' intercultural learning on university campuses in general and psychology departments in particular. Finally, it makes recommendations for further research.

Chapter 2 Literature Review

A variety of literature suggests that globalisation has led to the increased need for graduates who are capable of living and working in a global environment and engaging with individuals from a variety of cultures (e.g., Bourn, 2010). Universities today commonly develop internationalisation strategies to support the development of such graduates. However, often such strategies primarily focus upon recruiting international students (Koutsantoni, 2006a). The multicultural campuses created through internationalisation can provide excellent forums for the promotion of “cultural understanding; fostering tolerance of diversity... and developing intercultural skills” (Volet & Ang, 1998, p. 6) perhaps leading policy makers to assume that students automatically develop intercultural skills (Hammer, 2012). However, only a limited amount of research suggests that some students, specifically international students, may have a lot of positive intercultural experiences and may develop intercultural skills (e.g., Montgomery, 2010; Montgomery & McDowell, 2009). Generally, research suggests the opposite, specifically that university policy and practice typically are not aligned to support students’ intercultural development (e.g., Middlehurst & Woodfield, 2007) and that intercultural contact between students can be limited and challenging (e.g., Harrison & Peacock, 2009; Thom, 2000).

A review of the relevant research found some gaps in the literature. First, few studies attempt to quantitatively assess students’ intercultural development on university campuses in general. Second, almost no studies exist which quantitatively compare differences between home and international students to determine if there are group level differences. Third, few studies explore the intercultural contact experiences of students alongside their intercultural development to identify experiences that might help or hinder development. This study intends to help fill these gaps in the literature.

The first section of this chapter reviews the methodology used to conduct the literature review. The second section provides definitions of key terms used in this study. The third section describes globalisation and its impact upon universities. The fourth section considers the internationalisation practices of universities, how this is

relevant to the intercultural development of students, and what is known about the interactions between home and international students. The fifth section provides an overview of research emanating from social psychology relevant to intercultural contact situations and the extent to which contact may support intercultural development. The sixth section suggests how graduates might develop interculturality by interrogating the concept of intercultural competence (ICC) which includes reviewing the origins of the concept, determining a definition for this study, and reviewing methods of assessing the development of ICC. The seventh section reviews research into the intercultural development of university students. The eighth section identifies gaps found in the literature and describes how this study attempts to help fill these gaps. The ninth section describes, justifies, and evaluates the theoretical framework for this study, the Developmental Model of Intercultural Sensitivity (DMIS) (M. J. Bennett, 1986b, 1993). The final section includes some conclusions based upon this review.

The above chapter framework clarifies the meaning of key terms used in the study, allows reflection upon contextual matters, identifies the tensions and gaps in the literature associated with the development of ICC, and discusses the literature associated with the particular approaches that have been adopted in this study. The decision was taken to present the theoretical framework for the study in this chapter after consideration and initial drafting which had placed it in the methods chapter. While some weaknesses of the theoretical framework are noted within this chapter, they are more thoroughly and critically addressed within the research methods chapter.

2.1 Literature review methodology

To identify the literature for this study, I initially used two key search terms 'intercultural competence' and 'internationalisation'. The databases that I searched were Google Scholar, Metlib (Educational studies, Psychology and Sociology), British Education Index, ERIC, Linguistics and Language Behaviour Abstracts and the OECD Library. I initially restricted my search to review literature from 2005 to the present to focus on more recent developments. However, as I read I began to review older literature cited in sources that I initially found that were considered

seminal or otherwise seemed particularly relevant to my study. For instance, as the term 'ethnocentric' became of particular relevance to my study, I reviewed the work of Sumner who originally coined the term in 1906.

My aim in identifying literature around ICC focused upon defining ICC and understanding why it is important, how it is measured, and how it is developed in university students. While initial searches involved this key word, I then began using terms that I found in the literature that seemed to be used interchangeably with ICC (e.g., global competence, intercultural sensitivity) in order to identify additional sources of relevance. As my interest in the developmental models and measurement tools, specifically the Developmental Model of Intercultural Sensitivity (DMIS) and the Intercultural Development Inventory (IDI) took shape, I used the search terms 'DMIS' and 'IDI' to identify related literature.

In identifying literature around 'internationalisation' I aimed to increase my understanding of what internationalisation is particularly in the UK but also in other, typically Western countries represented in the literature including Australia, New Zealand, and the United States. Through reviewing sources related to internationalisation, I identified other key words related to internationalisation that I used to conduct further searches for related literature such as 'international education', 'cross-border higher education', 'study abroad', 'international students', 'globalisation', and 'student interaction.' For instance, developing cross-border relationships and encouraging study abroad are activities considered to be internationalisation strategies employed by institutions. Student interactions, particularly between home and international students was identified as a concern by multiple research studies that suggested that intercultural interactions between students may not be as prevalent as is assumed.

As I reviewed the literature, I screened out some literature that seemed less relevant. For instance, much has been written regarding intercultural competence in relation to expatriates and business professionals. While I read from a few sources in these areas, I focused reading much more around university students. Similarly, while literature was available from disciplines such as anthropology, human

resources, and business, I focused my reading instead in higher education, intercultural studies, communication studies, and social psychology.

As I read, I realised that it would be helpful to gain a better understanding of the psychological processes associated with intercultural contact. Therefore, I continued the literature review using search terms including ‘contact’ and ‘intergroup relations’. Although the results of these searches generated research taking place outside of universities, it helped me to develop a better understanding of intercultural contact situations and to form opinions regarding what the important issues were in relation to ICC.

Finally, I conducted searches specific to psychology students using terms including ‘psychological literacy’, ‘psychology student development’, and ‘psychology learning and teaching’ to identify work that would be of particular relevance to psychology students.

Most of the literature that I reviewed included articles published in scholarly journals with a limited number of papers from the grey literature. I also read a number of books and particular book chapters relevant to my topic. Government reports and policy papers also figured into the literature review although were identified through Google searches. I also reviewed about 20 PhD theses on similar topics. The final count of the sources included in my Endnote database was 706, with 235 referred to explicitly in the final thesis.

2.2 *Definition of key terms*

This chapter and study refer to a number of specialised terms. They are defined in this section to help the reader make sense of the subsequent writing.

Contact Theory: Gordon Allport (1954) developed the theory of contact as a means to suggest how prejudice could be reduced through contact between individuals from different groups. The theory suggests that certain contact conditions lead to prejudice reduction including equality of status within situations, the pursuit of common goals, cooperation between group members, and support of authority figures.

Culture: While many definitions of culture exist, Ting-Toomey's definition embodies elements found in many. She suggest that culture is "a complex frame of reference that consists of patterns of tradition, beliefs, values, norms, symbols, and meanings that are shared to varying degrees by interacting members of a community"(Ting-Toomey, 1999, p. 10). Objective culture is comprised of the readily apparent parts of culture such as political and economic systems, music, cuisine, and art; subjective culture is less apparent and made up of beliefs, values and behaviours that evolve based upon shared experiences (Berger & Luckmann, 1966).

Developmental Model of Intercultural Sensitivity (DMIS): Developed by Milton J. Bennett (1986b), the DMIS provides a theoretical framework through which to view an individual's orientation towards encountering culturally different others. According to the theory, as a person's understanding of difference becomes more sophisticated, he or she develops more intercultural sensitivity leading to a progression along a continuum of development beginning in ethnocentric stages and moving towards ethnorelative stages.

Ethnocentrism: The term ethnocentrism originated from the work of Sumner (1906) and is considered to be the tendency for individuals to prefer those from their own cultural groups ('in-group'). Likened to Piaget's egocentric thinking, the most basic form of ethnocentrism can be seen in an individual who views his or her own cultural view as the only definitive reality (Levine & Campbell, 1972).

Ethnorelativism: Considered to be the antithesis of ethnocentrism, ethnorelativism is the tendency of individuals to acknowledge and accept the existence of many world views as equally valid in defining reality (M. J. Bennett, 1993).

Intercultural Competence (ICC): ICC in this research study is considered to be "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills and attitudes" (Deardorff, 2006, p. 247).

Intercultural contact or interaction: Kim (1998) as described by Dunne (2009, p. 222) defines intercultural contact as "direct face-to-face communication encounters

between or among individuals with differing cultural backgrounds.” Spencer-Oatey and Franklin (2009, p. 3) suggest that an interaction becomes intercultural when “the cultural distance between the participants is significant enough to have an effect on the interaction/communication that is noticeable to at least one of the parties.”

Intercultural sensitivity: Intercultural sensitivity is “the ability to discriminate and experience relative cultural differences” (Hammer, Bennett, & Wiseman, 2003, p. 442). As an individual’s understanding of cultural differences becomes more sophisticated, he or she develops higher levels of intercultural sensitivity leading towards movement from a more ethnocentric to a more ethnorelative worldview (M. J. Bennett, 1993).

Intercultural Development Inventory (DI): The IDI is a 50-item objective assessment. Theoretically grounded in the DMIS, the IDI was developed by Hammer, Bennett and Wiseman (2003) to identify individuals’ levels of intercultural sensitivity.

Stereotype: Broadly stereotypes are collections of knowledge, beliefs, and expectations about a group of individuals (Spencer-Rodgers, 2001). The assumed characteristics that make up stereotypes can be viewed positively (positive stereotypes) or negatively (negative stereotypes). Stanger (2009) suggests that negative stereotypes predominate and even positive stereotypes can be viewed negatively.

Prejudice: Prejudice is “any positive or negative evaluation of others based on group membership; more specifically, negative affect and evaluations directed toward specific outgroups”(Brewer, 2003, p. 131). Explicit prejudice is conscious while implicit prejudice is considered to be unconscious (Cunningham, Nezleck, & Banaji, 2004).

2.3 Globalisation

Historical records provide examples of people from different cultural groups coming into contact through travelling for work and study or to conquer or settle in different areas (Bochner, 2003). However, some argue that intercultural contact has increased

in recent years as advances in transportation and technology have increased the flow of information, products, services and people across national borders, a process often referred to as globalisation (Scholte, 2002). Government reports, policy papers and articles from the UK (e.g., Bourn, 2010; Fielden, 2007; Middlehurst & Woodfield, 2007) and abroad (e.g., Hunter, et al., 2006; Leask, 2009; Ward & Masgoret, 2004) provide support for this view.

Alongside globalisation are the increases seen in domestic diversity. For example, between 1991 and 2011 the proportion of the population in England and Wales that identified themselves as having an ethnic background doubled from 7% to 14% of the total population (Jivraj, 2012). International migration has also increased with usual UK residents who were born in other countries growing from 9% to 13% of the total population in England and Wales between 2001 and 2011 (Office for National Statistics, 2012). Some have written about the implications of super-diversity in the UK, that is “the notion intended to underline a level and kind of complexity surpassing anything the country has previously experienced” (Vertovec, 2007, p. 1024).

Such changes suggest that the world is increasingly in need of citizens who can positively engage with those who are different from themselves whether they are from other countries or simply different domestic ethnic or racial groups. Such ability, often referred to as intercultural competence (Deardorff, 2009b), is increasingly sought by employers (Busch, 2009; Shiel, Williams, & Mann, 2005). However, positive engagement with cultural difference goes beyond reasons of employment. Haigh and Clifford (2010) write that “graduates of our higher education system will be more than employees/employers, they will also be future leaders in our world and our neighbours and so affect our lives at all levels” (p. 1). Others write about the importance of developing cultural understanding in graduates for the purposes of promoting peace whether global or local (Rizvi, 2003).

2.4 *Internationalisation*

Responding to the forces of globalisation, universities now prioritise their international activities, a process known as internationalisation. The term

‘international’ is connected to several complex concepts and contexts around which there are different understandings. It is possible, for example, in preparation for research assessment exercises and in league tables, international status could be seen primarily as a matter of achieving a particular standard that is not necessarily connected to intercultural understandings. As well, critics of internationalisation may argue that it equates to homogenisation and that universities should strive to maintain their cultural character to provide students with an authentic experience of the country in which they choose to study. In part this may reflect an attempt to provide a uni-directional intercultural experience in that ‘international’ students develop their understanding of British education and society. Others may consider that even that rather one sided approach to internationalisation is inappropriate as students’ intercultural development is irrelevant to the achievement of the principal goal in universities that is teaching disciplinary knowledge in ways that transcend cultural difference. However, in this thesis the focus is on the exploration of the intercultural development of university students and attempts have not been made to engage with the idea of education as something which does not encompass cultural issues or that focuses primarily upon the achievement of university status.

Internationalisation is generally considered to be a process by which universities become international and involves “integrating an international, intercultural, or global dimension into the purpose, function or delivery of postsecondary education” (Knight, 2004, p. 11). However, the way in which institutions internationalise varies and often relates to the motivations of university leaders. Motivations can be economic (e.g., income generation), academic (e.g., extension of knowledge), social/cultural (e.g., intercultural understanding), or political (e.g., foreign policy) (Knight, 2004). Differing motivations lead to different activities. Economic motivations, for instance, may lead to activities like recruiting large numbers of international students. Academic motivations may lead to a focus on developing international collaborations. Social/cultural motivations may lead to the development of intercultural certification programmes for students, and so on.

While internationalisation can be viewed as a set of activities that universities carry out, activities are also labelled in terms of the context in which they occur, on home campuses, termed “internationalisation at home”, or abroad

(Knight, 2004). Abroad activities include, for example, creating satellite campuses in other countries, recruiting international students, and developing international research collaborations while at home activities include, for example, integrating intercultural or global perspectives into curriculum, supporting cross-cultural student associations, or encouraging language study (Koutsantoni, 2006b).

As alluded to earlier, statistics show that the proportion of non-UK students studying on UK campuses has increased. Recent figures suggest that about 17% of students studying in the UK are from outside the UK (International Unit, 2013) with the proportion of non-EU international students increasing from 8% to about 12% between approximately 2002 and 2011 (Universities UK, 2012) and institutional income from these students more than doubling during that time (Universities UK, 2013). Many researchers suggest that the underlying motivation for internationalisation at many universities is economic (e.g., Bone, 2008; Middlehurst & Woodfield, 2007; Toyoshima, 2007). A review of UK universities' strategies by Koutsantoni (2006a), for example, found that most (87%) universities tend to focus their efforts on abroad approaches in general but specifically on recruiting international students. De Vita and Case (2003) argue that internationalisation has been high on HE agendas since the beginning mainly because of financial incentives not because of an aim to develop interculturally competent graduates. Such an economic focus, they continue, is problematic because of its undermining effect on social and cultural goals such as the promotion of understanding cultural difference (De Vita & Case, 2003). Koutsantoni (2006a) and Middlehurst and Woodfield (2007) argue that universities use terms like 'valuing diversity' and 'achieving cross-cultural capability' in strategy statements without actually converting them into concrete plans.

Despite what seems to be a misalignment between institutional policy and practice, increasingly diverse campuses do provide environments in which students can potentially engage with diversity and develop interculturally (Volet & Ang, 1998) and a limited number of studies suggest that some student groups might do just that. Specifically a UKOSA (2004) study found that international students have a lot of contact with students from different countries and international students in another study were found to have a rich community of practice suggesting that

intercultural development might occur (Montgomery, 2010). However, there is a much larger body of research from around the world documenting self-segregation and challenges occurring between students from different cultures but particularly between home and international students. For instance, researchers in Australia found that home students keep interactions with international students to a minimum (Volet & Ang, 1998); a US study found that international and home student friendships were both “challenging and rare” (C. T. Williams & Johnson, 2011); in New Zealand, one-third of international students in one study reported that they had no home student friends and similar literature has appeared in the UK (e.g., Sovic, 2008; Thom, 2000). The specific challenges that students encounter when in intercultural situations are also well documented. For example, studies by Dunne (2009) and Harrison and Peacock (2010) found that language barriers, anxiety, fears of appearing racist, academic concerns, and differences in values and priorities often permeate intercultural interactions and may be related to why students limit cross-cultural interactions.

In summary, there is evidence to suggest that there is a lack of alignment between university internationalisation policies and practices. Specifically, universities seem to focus upon income generating activities, particularly recruiting international students, and to neglect students’ intercultural development under the assumption that it occurs automatically. Although there is limited evidence that international students may engage positively across cultures, most of the evidence suggests that group segregation and negative experiences can be common among home and international students. This calls into question the extent to which intercultural development occurs for students in general and whether it may occur for some student groups more so than others. The next section reviews research from social psychology which identifies factors underlying the challenges of contact situations looking specifically at contact theory as a means to better understand what occurs when individuals from different cultures meet and interact.

2.5 Intercultural contact and contact theory

Social psychology is the study of individuals’ thoughts feelings and behaviours and how these are influenced by the presence of others (Jones, 1998). Decades’ worth of

research from social psychologists suggests that contact between individuals and groups from different cultures is often not easy.

Social identity theory asserts that individuals develop a self-concept in part from their membership in social groups (Tajfel & Turner, 1986). As described by Brewer (2003) the separation of individuals into groups is a normal part of the human experience with classifications ranging from the micro level (e.g., family, friends) to the macro level (e.g., religion, nationality). Identifying oneself with in-groups (i.e., groups with which one shares similarities) allows individuals to develop a sense of identity, self-esteem, and security with the view that in-group members will share certain values and beliefs and behave in particular ways. Categorisation of others into out groups (groups to which one does not belong) serves various purposes as well. For instance, it allows individuals to make assumptions regarding the beliefs and behaviours of out-group members (i.e., stereotypes) which help to conserve cognitive resources.

There are a variety of phenomena associated with the automatic categorisation of individuals and the thoughts and feelings that result from interacting with individuals from different groups. For example, when one is unfamiliar with the norms of another group and unsure how to react to them (e.g., a person from a Westernised culture interacting with a woman dressed in a burka), the person is likely to feel confused or uncomfortable. As described by Stephan and Stephan (1985) such situations place demands upon cognitive resources leading to negative mood states which can cause individuals to direct attention to negative rather than positive aspects of interactions leading to more negative evaluations of such situations. Further negative mood states can cause reliance on superficial information such as stereotypes so that individuals encountered are categorised instead of viewed and understood as individuals. Stereotyping is problematic because it precludes understanding people as individuals and leads to making mistakes in understanding others' behaviours (Försterling, 2001). As well it can lead to the formation of prejudices or negative attitudes towards a group or individual members of a group (Stanger, 2009). Prejudices in turn are problematic in that they serve as the foundation for discrimination or treating individuals in unjust ways based upon prejudicial attitudes (Vaughn, 2010).

The above research provides a variety of explanations for the difficulties that tend to arise when individuals interact across cultures. If contact across cultures is characterised by challenge, then why might university policy makers assume that intercultural contact on university campuses will help students to develop?

Gordon Allport's contact theory (1954) is based on the assumption that prejudiced attitudes and behaviours typically result when contact between different cultural groups occur. His theory also suggests that contact under certain conditions (i.e., equal status between group members, pursuit of common goals, cooperative interactions, support of authority figures) can reduce prejudice and lead group members to interact in more favourable ways. Allport's theory was the impetus behind the widespread racial desegregation laws in the US in the 1950's (Brewer & Miller, 1996) and may be related to why university policy makers assume that students from different groups studying on the same campus will simply mix and develop interculturally.

Inspired by Allport's contact theory researchers over many years have sought to determine whether contact does work in reducing prejudice and if so under what conditions (Pettigrew & Tropp, 2006). Research into US school desegregation found mixed results. Some studies found that prejudices were reduced and individuals went on to live and work in situations that were more integrated (Braddock, 1985) while others found that individuals re-segregated themselves by mainly interacting with those from their own ethnic group (Schofield & Sagar, 1977). Brewer's (2003) review of the literature led her to conclude that "the effectiveness of intergroup contact experiences as a method of reducing intergroup prejudice depends on a complex interaction of the structure and quality of the contact experience, the context in which it takes place, and the frequency and extensiveness of contact relationships" (p. 108) thus suggesting that the process is far from simple. Taking a quantitative approach, a meta-analytic study conducted by Pettigrew and Tropp (2006) examined 515 contact studies and interestingly found that contact more often reduces prejudice than not although when optimal conditions are ensured prejudice reduction increases. Based upon their findings Pettigrew and Tropp went on to suggest changing the focus of contact research from identifying conditions under which contact leads to a reduction in prejudice to a focus upon identifying factors

that interfere with the potential of contact to reduce prejudice since facilitating factors have been well researched while interfering factors are least understood.

The above research suggests that contact between individuals from different cultures appears to have the potential to reduce prejudice and enhance intercultural development. While intercultural contact situations appear to be complex with anxiety, negative affect, stereotyping, and prejudice to be expected; research also suggests that examining these difficulties more closely might be useful in particular issues that might limit intercultural development. These findings led me to focus primarily upon examining students' negative experiences as a means to understand what might interfere with their development.

2.6 *Intercultural competence*

To have a thorough understanding of the study, it is important to unpack what is meant by ICC and to consider how it might be measured. This section provides a brief review of the field of intercultural relations, defines the term intercultural competence as the outcome of intercultural development, and describes how it may be assessed.

2.6.1 ICC history

While the concepts of globalisation and internationalisation have developed in the last half century or so, interest in intercultural interactions and the promotion of intercultural competence has a somewhat longer history. Early roots can be found in cross-cultural psychology which arose in the 1800's from a variety of studies and observations made around relationships occurring across cultures (Segall, Lonner, & Berry, 1998). As described by Segall and colleagues, the field underwent significant expansion after World War II when researchers focused more attention on efforts to understand war and the psychology of other cultures.

In terms of the study and promotion of intercultural skills, Fantini (2000) suggests that at least one organisation began promoting related activities in 1932 while Ruben (1989) suggests that particular interest in ICC developed more widely in the 1950's as a result of the problems that individuals from Western countries

experienced whilst working abroad. Early research around ICC typically involved brief self-report surveys and interviews that assessed attitudes, personality, values and motives in order to try to explain why some employees who were sent on overseas assignments were not successful, to develop selection strategies, and to design effective preparation programmes (Ruben, 1989).

More recently Sinicrope, Norris and Watanabe (2007) described research around ICC as undergoing significant developments. Today, it spans wider contexts (e.g., international schools, medical training, study abroad programmes, expatriatism), includes additional goals (e.g., cross-cultural mediation, assessment of intercultural learning outcomes), and has evolved frameworks and assessments ranging from the simplistic to the highly sophisticated and comprehensive.

2.6.2 ICC definition

The term intercultural competence does not enjoy a universally agreed upon definition nor is it identified by the same name with nearly 20 terms used to describe or define it (e.g., cross-cultural awareness, global competitive intelligence, international competence) (Fantini & Tirmizi, 2006). While different terms are often used interchangeably, they imply differences often not explicitly stated leading to confusion regarding exactly what it is (Sinicrope, et al., 2007).

In the 1956 essay "Essentially Contested Concepts" Gallie, as described in Hunter, White and Godbey (2006), suggests that there are some concepts that defy clear definition because individuals and organisations that have a stake in them will interpret them according to their own agendas and philosophical values. Such, the authors suggest, may be the case with ICC and is perhaps evident in fact that different disciplines each have somewhat different interpretations of it (Spencer-Oatey & Franklin, 2009) and that HE institutions view it differently according to their motivations for internationalisation (e.g. Knight, 2004).

Helping to unpack the meaning of ICC, Merriam Webster (1987) defines the prefix 'inter' as meaning 'between'. Intercultural therefore means between cultures. Anthropologists have been exploring the meaning of culture for more than a century and many definitions exist (Spencer-Oatey & Franklin, 2009). Cultural groups are

often thought to mean national or ethnic groups; however, culture is much broader and includes a variety of cross-cutting criteria such as family, social class, political, and occupational affiliations (Avruch, 1998). Such a definition suggests that any two people interacting who do not share all the same group memberships could be said to be having an intercultural interaction (Spencer-Oatey & Franklin, 2009). However, researchers suggest that an intercultural interaction is defined by the extent to which the interaction is impacted by cultural distance, that is the extent to which two cultures are similar or different (Shenkar, 2001). The more similar cultures are, the shorter the cultural distance and, it is argued, the easier it is to communicate, while the more dissimilar cultures are, the longer the cultural distance is and the harder it is to communicate. Spencer-Oatey and Franklin (2009, p. 3) suggest that an interaction becomes intercultural when “the cultural distance between the participants is significant enough to have an effect on the interaction/communication that is noticeable to at least one of the parties.”

In terms of the word ‘competence’ in intercultural competence, Merriam Webster suggests that it implies capability, aptitude, know-how or proficiency (1987). Therefore being interculturally competent would suggest that one is proficient in interacting with individuals from cultures other than one’s own.

While such a general understanding is useful, further consideration begs questions such as how do we know when a person is interculturally competent, and exactly what skills, aptitudes, or capabilities constitute intercultural competence? One recent and important resource to address these questions is Spencer-Oatey and Franklin’s book on intercultural interaction (2009) which provides a multidisciplinary analysis of the concept of ICC and examines related research. A second resource, *The SAGE Handbook of Intercultural Competence* (Deardorff, 2009b), brings together a variety of international scholars in addressing topics related to intercultural competence.

Perhaps unsurprisingly, there are varying views as to what constitutes intercultural competence. This may be partially due to the fact that a variety of disciplinary areas (e.g., anthropology, communication studies, social and organisational psychology, sociology, marketing, management studies, foreign

language learning) conduct research into it (Spencer-Oatey and Franklin, 2009). Spencer-Oatey and Franklin view this as a major drawback to the development of the field since often researchers fail to look outside of their own disciplines to learn from research conducted in other fields. Spitzberg and Changnon's (2009) chapter in Deardorff (2009) suggests that there are five types of ICC models emanating from various disciplines that help elucidate the concept of intercultural competence. Compositional models, they note, tend to identify lists of traits and skills without specifying how they relate to one another. Co-orientational models focus more on how intercultural understanding is achieved through interactions. Developmental models focus upon how intercultural competence develops over time. Adaptational models focus on process and the adjustments that interactors undergo. Finally causal path models suggest that ICC can be explained through a theoretical linear system whereby variables are successively influenced and are influenced by moderating or mediating variables. The many models in existence suggest literally hundreds of different conceptual ICC subcomponents, (e.g., openness, stress tolerance, mindful listening, increased self-awareness, language proficiency).

Intercultural competence appears to be one of the more common terms used in the literature. In terms of the variety of definitions and models of intercultural competence as well as the theorised components, Spitzberg and Changnon as well as Spencer-Oatey and Franklin suggest that there is substantial overlap. Deardorff (2006) captured both a general definition and the more common elements of ICC based on her survey of intercultural scholars. She defines ICC as “the ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills and attitudes” (Deardorff, 2006, p. 247). While use of the word ‘effective’ suggests that one is able to accomplish the goals of their interaction, ‘appropriate’ suggests that the other person involved in the interaction views the other persons’ behaviour as suitable to the situation. The model includes 22 components organised into a pyramid shown in Figure 1. The main components of ICC include attitudes, knowledge, and skills which facilitate effective and appropriate intercultural interactions.

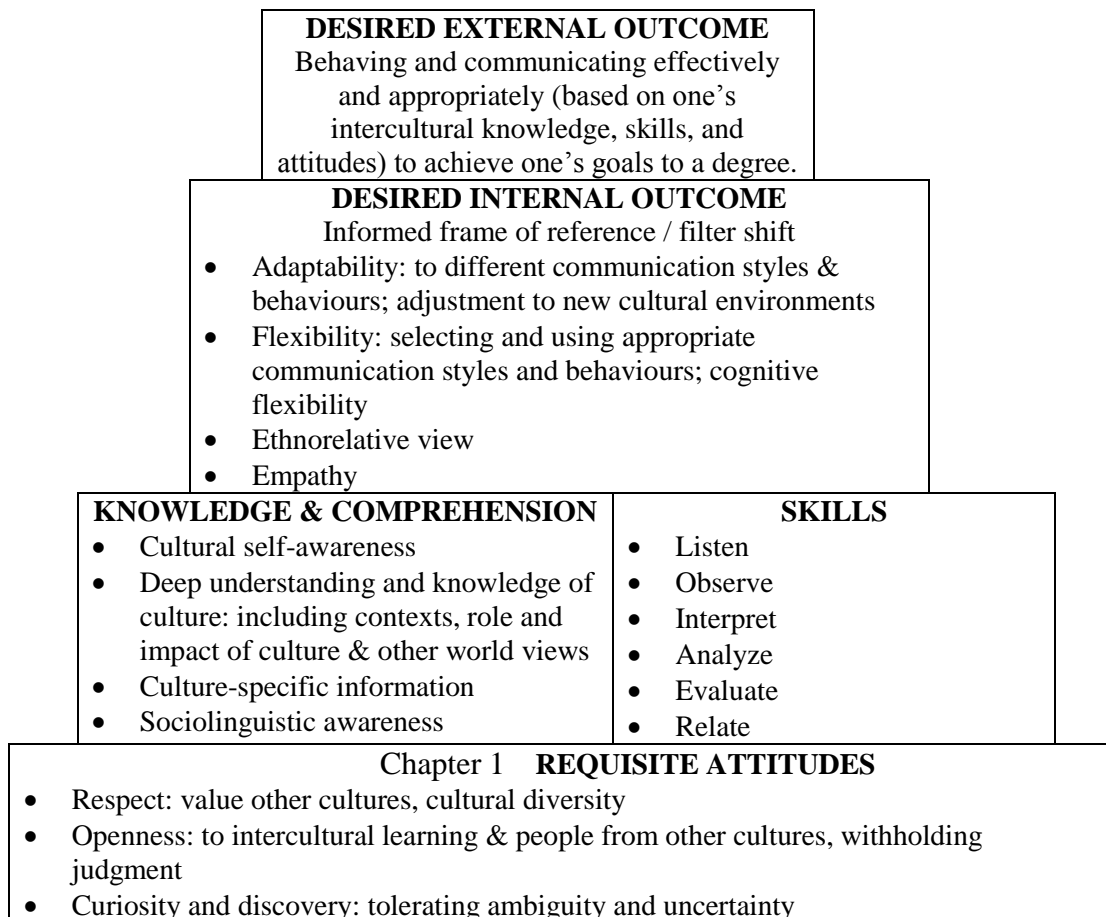


Figure 1. Pyramid Model of Intercultural Competence (Deardorff, 2006, p.254)

Although not the definitive model, Deardorff's pyramid is included here to provide the reader with a general view of what ICC is thought to be. I chose this model as it is research based and evidently influential since it is included in leading and relevant literature (e.g., Deardorff, 2009b; Spencer-Oatey & Franklin, 2009) and is one of the most frequently cited.

2.6.3 Assessment

Assessing ICC can be helpful in finding out the extent to which students have met educational objectives (Fantini, 2009). It can also be useful in helping students to gauge their intercultural competence (Fantini, 2009) and in helping educators to design appropriate learning activities (M. J. Bennett, 1993). Just as terminology, frameworks, and theorised elements of ICC vary, so too has there been little agreement on how to assess it. Some assessment tools list composite abilities, some focus on linguistic accomplishments, others on international or intercultural learning, and so on. Paige (2004) describes 30 instruments, the Society for

Intercultural Education Training and Research (SIETAR) (2003) lists 50, and Spencer-Oatey and Franklin (2009) provide descriptions of 77.

While the methods and instruments through which to assess ICC are not agreed upon, Secru (2010) highlights the fact that some models are particularly problematic because they include principles that have little to do with concepts associated with intercultural competence. She describes, for instance, Kim's (1996) model of global intelligence which uses statements such as "be aggressively curious about other cultures' (global mentality), 'shift their paradigms as necessary' (global mentality) and 'challenge the negative cultural influence on the status quo' (global competency)" (p. 22). While, such statements seem far from the more humanistic goals of most models, they never-the-less may figure into both models and assessment methods and may be attractive to universities more focused upon developing the employability of their students.

Although some might suggest that ICC cannot be assessed, leading intercultural experts believe that it can (Deardorff, 2009a). However, as noted by Fantini (2009), the starting point for assessment begins with defining what is being measured and making certain that it is aligned with the aims of whatever programme students participate in. Assessment can be undertaken in a variety of ways such as through the use of self-report instruments, analysing narrative diaries, observing individuals during interactions, and so on, however, current wisdom suggests that multiple methods should be used for effective assessment (Deardorff, 2009a).

A survey of practitioners during a worldwide webinar sponsored by the Intercultural Communication Institute in the spring of 2013 that I attended found that the Intercultural Development Inventory (Hammer, et al., 2003) was the most frequently used ICC assessment tool. It also appears to be the most widely used instrument in the literature and was the primary tool used in the majority of studies identified for this review. While by no means the definitive instrument, it is described here to give readers an understanding of the primary assessment tool used in most of the studies outlined below.

The IDI is a rigorously developed self-report instrument that measures the extent to which individuals first perceive cultural difference and then are willing to accept and adapt to cultural difference. Grounded in the DMIS (M. J. Bennett, 1993) although defined by five stages instead of six, the IDI places individuals on a developmental continuum described later in this chapter. Three stages are ethnocentric in nature (*denial, defence, minimisation*) while two are ethnorelative (*acceptance, adaptation*). The higher individuals score on the continuum, the greater their sensitivity to cultural difference and the more potential they have to behave in intercultural competent ways. The IDI is therefore a general indicator of intercultural competence rather than a measure of specific attitudes, behaviours, and knowledge.

2.7 Research into intercultural competence

Deardorff (2006) noted that although ICC is an anticipated outcome of internationalisation, few universities address its development and even fewer have attempted to measure development. A review of research literature in the UK found little if any evidence that ICC is specifically cultivated or assessed. While there has been some piloting of cultural certification programmes from 2009 which were offered at a limited number of UK universities (Stout, Warwick, Roberts, & Ritter, 2011) there appears yet to be data available on students outcomes. As well, however, while some of these schemes were described as focusing on rewarding international or intercultural activities, others focused not on intercultural competence but on language acquisition or participation in workshops focusing upon global issues. Additionally, the schemes appear to be voluntary and therefore impact a limited number of self-selecting students rather than the general student population.

Although there appears to be little research in this area from the UK, there are a number of papers from the US. Articles around intercultural development appear around the experiences of expatriates (e.g., Gertsen, 1990; Kealey & Protheroe, 1996), healthcare providers (e.g., Campinha-Bacote, 2011), adolescents (e.g., P. V. Pedersen, 1997), and teachers (e.g., DeJaeghere & Zhang, 2008). While such literature was useful to review in terms of better understanding how ICC was conceptualised and developed in different contexts, I concentrated my literature review on studies related to students in higher education.

Studies undertaken on home university campuses were a rarity. Most of them identified were PhD studies, most were conducted in the US, and most used the IDI (Hammer, et al., 2003) as the primary measure of intercultural development. The following summarises the most relevant studies reviewed.

Arevalo-Guerrero (2009) studied ten foreign language students taking an intercultural Spanish course at a US university. Results found that half of the students improved their IDI scores while half declined by the end of the course. However, the results are of limited value given the tiny sample size as well as the fact that the sample was probably biased towards those already demonstrating interest in foreign language.

Ayas's (2006) PhD study examined the IDI scores of 121 third-year medical students studying at George Washington University in the US which comprised 72% of the entire third-year cohort. IDI assessments were only done at one time point so could not be compared longitudinally. However, the mean IDI score was 93.4, still in the lower half of *minimisation* although these students had all previously completed a Bachelors degree and were in their third year of medical school. This was one of the few studies identified that shed some light on differences between home and international students. The findings were that there was not a significant difference between their group mean IDI scores and having previous international experience also did not make a significant difference in students' scores.

Riley (2007), administered the IDI to a group of US students at a single time point as well and therefore also did not collect longitudinal data. No significant correlations between the IDI and a variety of factors such as length of time at university were found although there were correlations with students' levels of engagement at university. About 15% of students in her sample were from abroad. While she did not compare students' scores by home and international status, a comparison of scores according to ethnicity found no significant differences between the developmental levels of white students and those from different ethnic backgrounds who may or may not have come from other countries.

Chen (2008) administered the IDI to 195 final year Taiwanese business students. While this study did not look at development over time, results indicate that the mean score for students was 79.03 placing them in the *defence* stage of development. Again no significant differences were found in relation to IDI scores and various factors including, for example, foreign language capability. However, IDI scores were higher for students who had more international experiences. Similar to previous studies described, sampling bias was a problem in this study since it was based upon volunteers making up a small proportion of the entire pool of students available.

Parson's (2010) PhD study measured the outcomes of internationalisation as a whole on students studying in two US and one Australian university. Parsons developed her own self-rated assessment instrument based on a variety of rating scales which measured foreign language proficiency, country knowledge, international knowledge, and international attitudes and skills. About 1300 students (4.6% of the total eligible) participated in some aspect of the study in which she compared the results of first year students with last year students. The study found that study abroad, contact with international students, and attendance at international events correlated with higher scores on many scales. Students who were older or had been in university longer tended to score higher. However, limitations of this study were that it used a newly developed instrument which, as noted by Parsons herself, may have had significant limitations. In addition, a minority of available students chose to complete the questionnaires introducing, once again, sampling bias.

A PhD thesis by Carter (2006) examined the impact of students' university experiences on intercultural development. Drawing a sample of 97 students, about 7% of the population at one US university, Carter administered the IDI to students at the beginning and end of their degree course. She found that after four years, a variety of factors seemed to predict increases in intercultural sensitivity such as study abroad, participation in cultural discussions, relationships with people different from self, exposure to a diverse campus and in particular international students. While overall students in the study experienced significant gains on the IDI, she noted that most were still in ethnocentric stages of development at the end of their four year degree course. While this study suggests that students did develop

over the course of their university degree, development was somewhat limited and the sample again was bias since it relied upon volunteers making up a very small proportion of the cohort.

As described, very few studies around the intercultural development of students have been carried out on home campuses and those that have generally suffered from sampling bias. However, the study abroad literature provided more of a rich source of relevant data. While many studies looked at the development of language students (e.g., A. D. Cohen, Paige, Shively, Emert, & Hoff, 2005), others have involved psychology (e.g., P. J. Pedersen, 2009), business (e.g., Chen, 2008), and nursing (e.g., Currier, Lucas, & Saint Arnault, 2010) students. A number of relevant papers appeared in 2004 in a special edition of the *Interdisciplinary Journal of Study Abroad* (Michael Vande Berg, 2004 Fall) and many others have followed. Similar to campus based studies, most of the research into study abroad originates in the US where the assessment of intercultural outcomes seems to be more widespread. Although the assessment tools used varied to some degree making comparisons across studies difficult, most studies reviewed used the IDI (Hammer, et al., 2003).

Researchers note that evaluation of study abroad programmes historically focused upon the numbers of students participating and student satisfaction rather than students' intercultural development (Sutton & Rubin, 2004). Providing an overview of study abroad practices in the US, however, Vande Berg (2009) suggests that a shift occurred in the early 2000's when study abroad educators began to realise that students who studied abroad were not realising the learning that educators believed would occur automatically by studying in a foreign culture. He and colleagues found through their experiences in working with students abroad that typically study abroad and local students interacted little and that many study abroad students tended to stay within their cultural groups – an issue that is not so dissimilar to what occurs on home campuses between home and international students today. Since that time, he notes, study abroad researchers have moved towards using a learning-centred paradigm which requires learners to engage in a variety of activities that are attached to specific learning outcomes as opposed to generally being left to their own devices.

A variety of studies have appeared in the literature over the last decade or so which attempt to examine students' intercultural development during study abroad – sometimes considering isolated groups of students (e.g., Engle & Engle, 2004), sometimes comparing students studying abroad with students taught on home campuses (e.g., T. R. Williams, 2005), and sometimes comparing students who have undergone intercultural training programmes and study abroad experiences with those who have studied abroad but not had such programmes (e.g., Paige, Cohen, & Shively, 2004).

Vande Berg (2009) stands out as an interesting paper because it summarizes the major conclusions of a four-year study assessing the intercultural development of over 1300 students enrolled in 61 different study abroad programmes with pre and post IDI administrations. While generally students who studied abroad underwent intercultural development compared to students who studied on home campuses, many students who studied abroad did not enhance their intercultural development or indeed seemed to decline. Vande Berg concluded that “being exposed to a different culture did not, for a very large number of students in this study, prove to be a sufficient condition for advancing their learning.” (p. S20).

Another interesting and recent study of psychology students was published by Pedersen (2010). Students in her study were divided into three groups, one that received intercultural training and then studied abroad for one year, a second group that had the same study abroad experience but did not receive training, and a third group that remained on the home campus and did not receive training. While each group started out with very similar IDI scores (90.34, 91.31, 88.69) the differences in the change scores were dramatic. The group that stayed on campus and the group who studied abroad with no intervention both averaged about a one point gain on their IDI scores whilst the group who studied abroad with the intervention had an average increase of more than 11 points. Pedersen concluded that without intervention, intercultural development may be limited for students whether they study on home campuses or abroad.

There is limited research regarding students' intercultural development on home campuses and psychology students in particular have rarely been studied. A

growing body of study abroad research suggests that intercultural learning does not happen automatically for university students – even for those that presumably are interested enough in other cultures to study abroad. If that is the case, then what can be expected for students studying on home campuses or international students who have chosen to study abroad for their entire degree course? It is difficult to say because of the very limited research available.

2.8 *Gaps in the literature*

The literature suggests that while universities tend to assume that their internationalisation efforts automatically produce interculturally competent graduates, the extent to which this is true is actually unclear. Research into contact theory and some limited research on international students suggest that more positive outcomes of intercultural contact are possible. However, themes describing cultural segregation and intercultural challenges between home and international students are re-occurring in the literature with authors suggesting that the intercultural development of students' is lost in the rhetoric of universities' internationalisation strategies.

While there is a slowly growing body of research around intercultural competence in university students, it largely stems from US study abroad programmes. One of the most recent and controlled studies to date (P. J. Pedersen, 2010) suggests that intercultural development may not occur automatically in students studying abroad or on home campuses while one of the largest studies to date by Vande Berg (2009) found that some students actually declined after abroad experiences. While such studies are relevant to home campuses, they do not focus on home campuses. In fact, relatively little research does and none of it emanates from the UK. As well, although some research gives the impression that there might be differences between home and international students' levels of intercultural contact and possibly intercultural development, only one study identified considered this issue although did so peripherally.

This study attempts to help fill these gaps in this literature in three ways. First, it examines the intercultural development of students studying on a UK

campus over time to determine the extent to which development occurs. Second, it investigates the extent to which development might differ between home and international students. Third, it investigates students' intercultural development alongside their experiences to identify intercultural experiences that might play a role in development or lack thereof. The remainder of this chapter presents the main theoretical model for this study.

2.9 *The Developmental Model of Intercultural Sensitivity*

The Developmental Model of Intercultural Sensitivity serves as the main theoretical framework for this study. This section serves three purposes in relation to the DMIS. First, it provides a justification for why I chose to use this model in my study. Second, it provides a description of the model to help readers understand its theoretical constructs. Third, it highlights the limitations of the use of this model in research.

The DMIS (M. J. Bennett, 1986b) was developed through the use of grounded theory

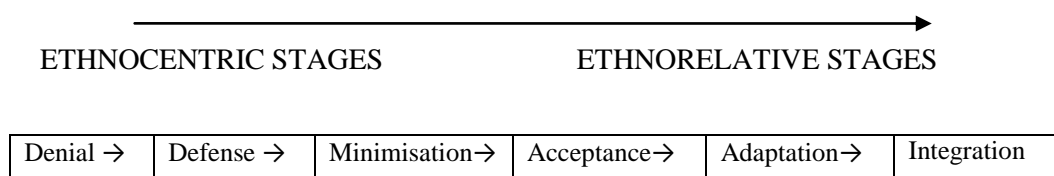


FIGURE 1: Developmental Model of Intercultural Sensitivity (Bennett 1993)

With so many ICC theories and models in use, an initial challenge was to identify one that would be useful for this study. I was initially drawn to developmental models because of my background in psychology. Within the sub-discipline of developmental psychology, Piaget's theory of cognitive development (1932) suggests a framework through which individuals attain, build, and make use of knowledge. According to the theory, cognitive development results from individuals organising and reorganising mental processes as they mature and gain experience. When individuals have new experiences that do not coincide with what they already know, their understanding of the world evolves. Piaget believed that such cognitive development was central to human life.

While Piaget influenced my conceptualisation of intercultural competence, other developmental psychologists played a role as well. Lawrence Kohlberg, for example, expanded upon Piaget's work by developing a stage model of moral development extending beyond childhood through which individuals' thinking about moral dilemmas moves from the simpler to more complex (Kohlberg, 1971).

Various authors suggest that the use of developmental models is valid and useful in intercultural contexts. Spitzberg and Changnon (2009) write that developmental models in the context of intercultural competence are useful because they draw attention to the idea that the development of intercultural competence is just that, a developmental process which occurs over time. Many leading intercultural authors have written about intercultural competence as involving such a developmental process whether or not they themselves theorise such models (e.g., Deardorff, 2006; Fantini, 2009; Spencer-Oatey & Franklin, 2009). Of the developmental models discussed in the literature, the Developmental Model of Intercultural Sensitivity (M. J. Bennett, 1993) rose to the top for a number of reasons not the least of which was that Spitzberg and Changnon (2009) note that the DMIS has been highly influential in training and research around ICC.

Considering the theoretical assumptions of the model itself, there is much to recommend it. First, the DMIS is centred on the concept of difference. Milton Bennett (1993), creator of the DMIS, suggests that intercultural contact is often characterised by conflict with prejudice, discrimination, oppression and war common results. He suggests that the concern today around developing intercultural relationships attempts to change human beings natural proclivity towards cross-cultural conflict and that research should strive to understand human behaviour in the presence of cultural difference as a means to discover how we might educate individuals to respond more positively to cultural difference. This approach is consistent with findings from social psychologists as described above which suggest that interactions between individuals from different groups tend to be challenging and that the way forward may be to understand those challenges.

Critics of Bennett's approach suggest that it is better to focus upon similarity as a means to foster intercultural development because it can serve as a basis for

interaction whereas difference can serve as a basis for rejection (e.g., Brislin, 1981; Hodges, 2005). While Bennett (1993) agrees that similarities can serve as a basis to some extent, he observes that challenges around intercultural learning and skill development tend to be related to *denial* of cultural difference as opposed to a lack of focus on similarity. As such, cultural difference is essential to conceptualising development. A variety of authors, even those with alternative theories, seem to concur with Bennett (e.g., Brewer, 2003; De Vita, 2005; Deardorff, 2006; Levine & Campbell, 1972; Stewart, 1972) and have written about the importance of difference in intercultural contact generally suggesting that each individual construes reality through the lens of their own cultural group and that differences in culture are important factors in understanding and communicating across cultures. Thus despite criticism, Bennett's orientation towards difference is well supported.

A second important assumption of the model is that it is based on the concept of ethnocentrism which is a construct that is clearly substantiated by various literature. Sumner (1906) first used the term ethnocentrism to describe the social psychological phenomenon of in-group preference described earlier in the chapter. He wrote:

A differentiation arises between ourselves, the we-group, or in-group, and everybody else... outgroups. The insiders in a we-group are in a relation of peace, order, law, government, and industry, to each other...Ethnocentrism is the technical name for this view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it...Each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities, and looks with contempt on outsiders. (Sumner, 1906, p. 12-13)

As described earlier in the chapter, the categorisation of individuals into groups is a normal phenomena and encounters with out-group members tend to be fraught with a variety of challenging thoughts and emotions (Brewer, 2003). Alternatively, encounters with in-group members tend to be more positive in nature. Preference for one's own national group has been experimentally demonstrated in individuals as young as six (Tajfel, Nemeth, Johoda, & Campbell, 1970). Studies have shown that just hearing in-group members with similar accents speak generates positive feelings (Ryan 1989) and individuals have been shown to act more cooperatively towards those in their in-groups (Prentice and Miller 1992). In group preference extends beyond the ethnic and national groups with for example, individuals in arbitrarily created laboratory groups having shown group preferences

(Brewer, 1979) and experiments generating unconscious positive reactions from participants around terms such as ‘we’ and ‘us’ (Perdue, Dovidio, Gurtman, & Tyler, 1990). Thus, the concept of ethnocentrism is well supported in the literature and suggests that contact between those from other cultures is impacted by in-group preference.

Beyond the evidence to support the concept of ethnocentrism and the role of difference in the DMIS, a third point is that the model is consistent with recent and generally agreed upon conceptions of intercultural competence in that intercultural sensitivity development includes cognitive, affective, and behavioural components. Bennett (1993) describes the relationship between these components as follows:

The separation of these dimensions [cognitive, affective, and behavioural] is not always clear for each stage [of the developmental model], nor should it be, since development is multidimensional. Nevertheless, a tentative sequence can be suggested. Initial development is cognitive – the generation of relevant categories for cultural difference. The reaction to this development is affective – a feeling of threat to the stability of one’s worldview. The developmental treatment for that response is behavioural – join activity toward a common goal – and the response to this treatment is cognitive – consolidation of differences into universal categories. Subsequent appreciation of cultural difference is affective and is combined with increased cognitive knowledge of differences. This change is followed by behavioural applications involving the building of intercultural communication skills. (p. 26)

While the DMIS incorporates cognitive, affective, and behavioural domains, it is described by Bennett and Bennett (2004) as being primarily a model of the development of cognitive structures. In their view behaviours and attitudes are manifestations of cognitive development or an individual’s underlying worldview. With this focus on cognitive development, the DMIS is similar to those of other developmental theorists. In addition to early theorists including Piaget (1932) and Kohlberg (1971) mentioned earlier, Perry’s (1970) Scheme of Cognitive and Ethical Development as described by Rappoport (2001), suggests that students move from a dualist view of the world (it is one way or another), to a multiplistic view of the world (there are many ways to think about things), to contextual relativism (context is important to making judgements), to relativism (people choose their own actions based upon the context). King and Baxter-Magolda’s (2005) Developmental Model of Intercultural Maturity also bears similarity to the DMIS partially oriented as it is around the development away from ethnocentric views as well as in how it describes students moving from simple cognitive, intrapersonal, and interpersonal realities to

more sophisticated understandings and actions. The DMIS, therefore, bears similarity to other respected cognitive developmental models both old and new.

While consideration of the theoretical constructs of the theory were most important, a more practical reason for choosing this model as the theoretical framework for this study is because of its association with a highly developed assessment tool, the Intercultural Development Inventory (Hammer, et al., 2003). As mentioned earlier in the chapter, the IDI is used extensively in higher education circles and is the most utilised tool in the research literature. Using the DMIS as my framework and the IDI as my primary assessment tool would allow the results of my study to be easily comparable to those in the research literature.

In summary, I chose the DMIS as the primary theoretical model for my study because it is developmental in nature, bears similarity to other respected developmental theories, is conceptually well supported by research, dovetails with popular conceptions of ICC, and is associated with a well-developed assessment used within higher education. Moreover, I chose it because it is grounded within a large body research from social psychology which finds that when people from different cultures interact, differences can hinder interactions and lead to negative outcomes. As such, a focus on individuals' orientation towards difference seems crucial to help people to move forward in developing intercultural competence.

The next section provides a description of the DMIS framework. It is included here to give the reader a thorough understanding of the framework so that the results of the study will be understood.

2.9.1 DMIS framework

As described above, the DMIS is a six stage model that assumes that as "one's experience of cultural difference becomes more sophisticated one's competence in intercultural relations increases" (J. M. Bennett & Bennett, 2004, p. 152). Each stage suggests a certain worldview composition that typically involves particular attitudes and behaviours. The first three stages (*denial*, *defence*, and *minimisation*) are thought to be ethnocentric in nature in that individual's experience their own culture as central in their perception of other cultures. Essentially ethnocentric stages

involve avoidance of cultural difference through denying that it exists, becoming defensive about it, or by trivialising its significance (J. M. Bennett & Bennett, 2004). The last three stages (*acceptance, adaptation, integration*), however, represent a shift to ethnorelativism where one's own culture is put into the context of other cultures so that other cultures are seen as equally valid (Bennett 1993). Ethnorelative stages involve looking for cultural difference by accepting that it is relevant, by adapting to it, or by integrating difference into one's own identity (J. M. Bennett & Bennett, 2004).

Bennett (1993) further describes each stage as having two or three forms or strategies which are essentially different expressions of these stages. The most up to date forms are described in Bennett (2011) and are illustrated in Figure 2. The following describes these stages and forms in more detail.

Ethnocentric Stages and Forms
<p>Denial – little awareness of difference</p> <ul style="list-style-type: none"> • Disinterest – isolation in monocultural groups • Avoidance – purposeful separation from those who are different
<p>Defense – threatened by difference</p> <ul style="list-style-type: none"> • Denigration – evaluate outgroups unfavourably • Superiority – evaluate in-group particularly favourably • Reversal – evaluate in-group unfavourably, evaluate outgroups favourably
<p>Minimisation – avoidance of difference through focusing on similarity</p> <ul style="list-style-type: none"> • Human Similarity – emphasise similarity of all people as human • Universal Values – emphasise similarity through values for all
Ethnorelative Stages and Forms
<p>Acceptance – differences are recognised and accepted as occurring in different cultural contexts</p> <ul style="list-style-type: none"> • Behavioural Relativism – recognition of variations in behaviour • Value Relativism – recognition of variations in values and beliefs
<p>Adaptation – consciously altering perspectives and behaviour to accommodate difference</p> <ul style="list-style-type: none"> • Cognitive frame-shifting – cognitive empathy or understanding from the others' perspective (empathy) rather than one's own perspective (sympathy) • Behavioural code-shifting – intuitive empathy or altering behaviour according to cultural context
<p>Integration – development of multicultural identity</p> <ul style="list-style-type: none"> • Constructive Marginality – identity based in more than one culture • Ethical Commitment – becoming committed to relativism

Figure 2: Stages and forms of the DMIS (Bennett, 2011)

2.9.1.1 Denial

As described by Bennett (1993) individuals in the *denial* stage of development tend to assume that their own feelings, attitudes, norms, and values are shared by all. For some individuals at this stage, cultural difference has no meaning and may be overlooked when it is encountered so that a single black person in an all white school, for example, may be perceived as just the same as everyone else. If individuals at this stage are aware of cultural difference, they may rely on stereotypes for understanding other cultures. For example, all individuals from Asian cultures may be viewed as the same without distinction between, for example, Japanese, Chinese, and Taiwanese people. It may be assumed that all Americans overeat or that all Africans see wild animals on a daily basis (M. J. Bennett, 1993).

Within the *denial* stage, there are two forms, *disinterest* and *avoidance* (M. Bennett, 2011). *Disinterest*, refers to an inability to notice differences perhaps due to limited experience with difference or a general lack of interest (M. J. Bennett, 1993). *Avoidance*, involves an inclination to avoid noticing or addressing cultural difference (M. J. Bennett, 1993).

Individuals in the *denial* stage of development might be heard to make statements such as “live and let live, that’s what I say” or “all big cities are the same – lots of buildings, too many cars, McDonalds” (M. Bennett, 2011, p. 1). Bennett and Bennett (2004) suggest that the main developmental task for individuals in the *denial* stage is to recognise cultural difference by learning about objective and subjective culture and becoming interested in cultural difference.

2.9.1.2 Defence

While culture could be overlooked or ignored for those in the *denial* stage, individuals in the *defence* stage of development, recognise cultural difference. However, difference is perceived as threatening to “one’s sense of reality and thus to one’s identity” (M. J. Bennett, 1993, p. 35). Individuals react to cultural difference by becoming defensive to “preserve the absoluteness of one’s own worldview” (M. J. Bennett, 1993, p. 35). Bennett describes three forms of *defence* including *denigration*, *superiority*, and *reversal*.

Denigration often manifested through negative stereotyping is common at this stage where negative characteristics are attributed to individuals who are members of particular groups. For example, all Arabs may be considered terrorist threats. Individuals or groups may be openly denigrated or may have conclusions drawn about them that advocate for restricted contact (M. J. Bennett, 1993).

Superiority, while not necessarily denigrating other groups, suggests that one's own group is superior (e.g., national pride focusing only on the positive). In this way the threat of cultural difference is countered by "implicitly relegating it to a lower-status position" (M. J. Bennett, 1993, p. 37). While still problematic, *superiority* represents developmental progress since there is less emphasis on negatively evaluating other groups.

The last form of *defence*, *reversal* involves the denigration of one's own culture while viewing as superior an alternative culture. Expatriates may for example, denounce their own culture and extol the virtues of their host cultures. While these individuals may be seen to be more sensitive, they are simply changing the focus of their ethnocentrism (M. J. Bennett, 1993).

Individuals in *defence* might be heard to make statements like "why don't these people speak my language" or "when I go to other cultures, I realize how much better my own culture is" or "I am embarrassed by my compatriots, so I spend all my time with the host country nationals" (M. Bennett, 2011, p. 3). Although each of these forms sound quite negative, advancement through these forms represents progress since individuals now more clearly recognise difference. A resolution of this stage involves individuals being able to recognise similarities between people from different cultures as opposed to focusing mainly upon differences (M. J. Bennett, 1993).

2.9.1.3 Minimisation

Individuals within the *minimisation* stage of development, attempt to preserve their worldviews by burying "difference under the weight of cultural similarities" (M. J. Bennett, 1993, p. 41). Cultural difference at this stage is acknowledged and is not negatively viewed but instead is trivialized. Bennett notes that *minimisation* is

alluring because it is associated with human sensitivity (e.g., do unto others, one world, one people, liberal). While many models are based on a focus on similarity, Bennett writes that it still ethnocentric as it naively asserts that despite difference, everyone is the same. Such assertions are usually made by those from the dominant culture who do not understand what it is to be a member of a non-dominant cultural group (M. J. Bennett, 1993).

The first form of *minimisation*, *human similarity*, focuses upon the physical similarity of humans (e.g., we all eat, procreate, die) (M. Bennett, 2011). Although generally accurate, in terms of intercultural interaction, focusing on human similarities is trivial because it does not address the “unique social context of physical behavior that enmeshes such behavior in a particular worldview” (M. J. Bennett, 1993, p. 43). Bennett argues that we must understand our social interactions, not just how physical human life is similar.

Universal values, the second form of *minimisation*, focuses upon universal laws or principles that join people (e.g. religion under one God) (M. Bennett, 2011). In this form, cultural difference is more accepted but is part of the overall plan for the universe and is usually based upon one’s personal worldview. Individuals view culture as more complex and may find culture interesting to learn about, however, they still tend to act in ethnocentric ways, by for instance, maintaining that it is best just to be yourself during intercultural encounters.

Individuals at this stage of development might be heard to make statements such as “I have this intuitive sense of other people, no matter what their culture” or “customs differ...but when you really get to know them they’re pretty much like us” or “if people are really honest, they’ll recognize that some values are universal” (M. Bennett, 2011, p. 5).

Recent research using the Intercultural Development Inventory, suggests that *minimisation* is a transition stage between *denial/defence* and *acceptance/adaptation* (Hammer, et al., 2003). However, Bennett maintains that this stage is ethnocentric because one’s own cultural patterns are still viewed as central to reality (J. M. Bennett & Bennett, 2004). Bennett notes that a developmental block at this stage is

“the belief that one can get by with *minimisation* behaviour in many intercultural situations” (Bennett, 1993, p. 44) with the main development task being for individuals to gain insight into their own culture and to experience it in the context of other cultures in order to overcome the assumption of cultural universality (Bennett 1993).

2.9.1.4 Acceptance

The first of the ethnorelative stages, individuals in the *acceptance* stage recognise and accept cultural difference on a deeper level and become more curious about difference. In this stage, “one’s own culture is experienced as just one of a number of equally complex worldviews” (M. Bennett, 2004, p. 6). Individuals progressing to this point view variation in behaviour as well as values as normal and part of cultural difference. They become, as described by Bennett (2004), able to understand culture-general categories. While they may or may not be experts in more than one culture, they can effectively determine general issues that are common across cross-cultural interactions.

In the first form of *acceptance*, *behavioural relativism*, individuals recognise that behaviours are relative to different cultural contexts. Individuals can more readily recognise cultural differences in verbal and non-verbal communication. In the second form, *value relativism*, individuals recognise the different beliefs and values that influence individuals’ worldviews (M. Bennett, 2011).

Acceptance, it is important to note, “does not mean that a person has to agree with or take on a cultural perspective other than his or her own” (M. J. Bennett, 1998). Instead individuals recognise that there is more than one legitimate way of thinking about things and that their own values and ways of behaving are not the only good ones (Bennett, 1998). For instance, a generalisation about Americans is that they tend to place a higher value on spending time with their children while a generalisation about the English is that they place a higher value on boarding school education. Each approach is different and is perhaps good and bad in different ways.

Individuals at the *acceptance* stage of development may be heard to say “I always try to study about a new culture before I go there” or “sometimes it’s

confusing, knowing that values are different in various cultures and wanting to be respectful, but still wanting to maintain my own core values” or “my homestay family and I have had very different life experiences, and we’re learning from each other” (M. Bennett, 2011, p. 7). The challenge to overcome at this stage as Bennett writes is for individuals to come to terms with conflicting cultural norms (M. J. Bennett, 1998).

2.9.1.5 Adaptation

Bennett (1993) describes individuals in the *adaptation* stage as incorporating their value and respect of other cultures with skills that allow them to effectively and appropriately communicate across cultures rather than relying upon unsophisticated ethnocentric views. During this stage, skills for working with individuals from other cultures can be enhanced as culture is seen as a process and individuals behave in ways that are appropriate to another culture without feeling that one’s own culture is threatened.

The two forms of *adaptation* include *cognitive frame-shifting* and *behavioural code-shifting*. *Cognitive frame-shifting* is considered the phase of development whereby an individual can empathise or shift their frame of reference to imagine another person’s experience, also called *cognitive empathy* (M. Bennett, 2011). *Behavioural code-shifting* is considered the phase in which individuals cognitively empathise but are also able to act in culturally appropriate ways according to an alternative cultural world view. Bennett (2011) notes that behaviour is most effective when individuals have a general understanding of the other culture.

Individuals at this stage may make statements such as “I greet people from my culture and people from the host culture somewhat differently to account for cultural differences in the way respect is communicated” or “to solve this dispute, I’m going to have to change my approach” (M. Bennett, 2011, p. 9).

Bennett writes that the main challenges at this developmental stage are to develop one’s ability to empathise and to “expand repertoire to allow a broader range of authentic behaviour” (M. Bennett, 2011, p. 10). While individuals at the *adaptation* stage are likely to be effective in intercultural interactions and may not

need to move beyond this stage, they may experience an “internal culture shock” as a result of internalising multiple worldviews (Bennett, 1993, p. 59) which can lead to the final stage, *integration*.

2.9.1.6 Integration

Bennett (1993) writes that individuals in the *integration* stage of development often view themselves and are viewed as multicultural. Quoting Adler (1977, p. 25) he notes that individuals who are truly multicultural are those for whom “essential identity is inclusive of life patterns different from his own and who has psychologically and socially come to grips with a multiplicity of realities (p. 59).” The marker of this stage of development is that individuals are always in the process defining their relationships to different cultural contexts by continuously reconsidering their identities. The difference between someone in *adaptation* and someone in *integration* is that while the former sees himself as interacting in different cultural contexts, he will still hold a primary cultural affiliation while the latter tends to have multiple frames of reference with the challenge of integrating them (M. J. Bennett, 1993).

In the first form of *integration*, *constructive marginality*, individuals’ identities are not based in a particular culture making them adept in cross-cultural contact situations. As well, often these individuals associate themselves with a *marginal reference group* made up of individuals who similarly lack a particular strong cultural affiliation (M. Bennett, 2011). *Ethical commitment*, the final form of *integration*, occurs when a person is able to develop ethics through which he or she commits to cultural relativism (M. Bennett, 2011).

Individuals at this stage of development might make statements like “everywhere is home, if you know enough about how things work there” or “in an intercultural world, everyone needs to have an intercultural mindset” or “I truly enjoy participating fully in both of my cultures” (M. Bennett, 2011, p. 11).

As mentioned in relation to the framing of the *minimisation* stage as transitional versus ethnocentric, Hammer using research based upon the IDI suggests that the *integration* stage should not be part of the developmental

continuum but should be considered a separate construct, that of cultural identity development (Hammer, 2011). Despite these criticisms, the DMIS remains generally as it was originally created. While it may be a matter of debate as to whether *integration* should be a DMIS stage or not, as is pointed out by Bennet himself, *adaptation* is likely all that is required for intercultural competence (Bennett 1993) and therefore, *integration* may be, relatively speaking, not that important.

2.9.2 Weaknesses of the DMIS

While I believe the DMIS to be a solid model and my rationale for choosing it sound, there are, of course, drawbacks to using this model as there would be to any approach. First, as pointed out by Spitzberg and Changnon (2009) the problem with developmental models is that they are “weak in specifying the interpersonal and intercultural competence traits that facilitate or moderate the course of such evolution” (p.24). As such while the DMIS can be a general indicator and can suggest tasks to enhance development, it is likely not to be able to illuminate the specifics of the attitudes, behaviours, and knowledge that might be missing. Despite this criticism, it seems that it could be used effectively as a diagnostic tool in helping students (and staff) to understand where they are developmentally. However, it might be useful to use alongside other tools that help students to understand the specific attitudes and behavioural outcomes that are considered part of intercultural competence.

Another concern regarding the DMIS is that it, as well as most models, originates from a Western country. It may not, therefore, seamlessly transfer across cultures (Spitzberg & Changnon, 2009). While models originating from other cultural contexts are developing (Manian & Naidu, 2009) they seem not to be widely used. While certainly Western perspectives are not definitive, as this research takes place in a Western country, and this model is widely used, it seems reasonable to use it as a theoretical framework. That said, the IDI itself has been normed on individuals from a variety of cultures and is advertised to be culturally neutral. While it may or may not truly be culturally neutral and this is addressed more in-depth in the research methods chapter, it may likely be the most culturally neutral instrument available.

Another concern might be that Bennett's theory uses the term intercultural sensitivity rather than intercultural competence, a danger when differing terminology is frequently bandied about. However, it still appears to be a valid approach to the study of intercultural competence if care is taken to understand what is meant by the term and how it is related to intercultural competence. Bennett describes the relationship between the two as follows:

Studies in communicative constructivism (e.g. Applegate & Syper, 1988; Delia 1987) show that people who are more cognitively complex are also more able to be "person-centered" and "perspective-taking" in their communication (although they may not always exercise the ability). These qualities are associated with more successful interpersonal communication. More successful intercultural communication similarly involves being able to see a culturally different person as equally complex to one's self (person-centered) and being able to take a culturally different perspective. Thus, greater intercultural sensitivity creates the potential for increased intercultural competence. (M. Bennett, 2004, p. 10)

Although some researchers use the terms intercultural competence and intercultural sensitivity relatively interchangeable (e.g., Hammer, 2011), it is important to make the distinction since they are obviously different albeit related constructs.

Chapter 3 Research Methodology

This chapter covers the methodological rationale and the design of this study. It reviews the aim of the study, research questions, overall design, population, sample, instruments used, data collection and analysis procedures, and the strengths and limitations of the study.

3.1 Aim and research questions

This study aimed to better understand the intercultural development of first year psychology students studying in a university in the north of England. Using a mixed-methods approach, this study contributes to the growing knowledge base around the intercultural development of students by measuring changes in ICC and exploring its relationship to participant characteristics and intercultural experiences prior to and during university. In addition, it explores students' intercultural experiences through the use of interview and questionnaire data. The questions guiding this study were as follows:

Are there differences between UK and non-UK university students' intercultural development?

- 1) *At what stage of intercultural development do students enter university?*
- 2) *Does intercultural development occur over the first two terms at university?*
- 3) *What student characteristics and intercultural background factors predict students' initial stage of intercultural development?*
- 4) *What factors are related to students' intercultural development during university? Factors to be explored include:*
 - a. *Student characteristics (e.g., age, sex, ethnic minority status).*
 - b. *Previous intercultural experiences (e.g., living abroad, international travel, previous intercultural relationships, foreign language study).*
 - c. *Intercultural experiences in the department.*
 - d. *Intercultural experiences on campus.*
 - e. *Intercultural experiences off-campus.*
- 5) *What are students' perceptions of their intercultural experiences and how might these contribute to intercultural development? Factors to be explored include:*
 - a. *Students' own intercultural backgrounds:*
 - i. *How do students characterise their intercultural experiences prior to coming to university?*
 - ii. *Did students view themselves as prepared to encounter diversity at university?*
 - b. *Students' intercultural experiences during university:*

- i. *What are students' experiences of their university and course as providing intercultural environments?*
- ii. *How do students characterise their closest friends?*
- iii. *What have been students' most significant intercultural experiences during university?*
- iv. *To what extent do students believe they have developed interculturally since beginning their course?*

3.2 Research design

For this study I used a longitudinal cohort mixed-methods approach in order to investigate initial levels of ICC, development over time and to gather data which would allow for the exploration of the relationship between students' intercultural development and student characteristics and intercultural experiences prior to and during university. The study included three waves of data collection. The first wave gathered quantitative data in October 2011 when I administered the Intercultural Development Inventory (IDI), a measure of intercultural sensitivity which served as an indicator of ICC, along with the Intercultural Background Questionnaire (IBQ) which I developed. The second wave of the study gathered primarily quantitative data in May 2012 when I again administered the IDI along with the Intercultural Experiences Questionnaire (IEQ) which I developed. The third wave of the study gathered qualitative data through one-on-one semi-structured interviews with a selection of the study participants. Data gathered during this final wave included participants' perceptions of their intercultural experiences prior to university, the extent to which they felt prepared to encounter diversity at university, their intercultural experiences during university, and the extent to which they thought they had changed interculturally.

Quantitative data are data that are numerically counted in some way while qualitative data focuses upon meaning and experience which is often verbally described by individuals. Coolican (2009) notes that the choice of collecting quantitative or qualitative data depends in part upon what is being studied. For example, if the aim of the study is to assess how accurately individuals detect changes in colour, then highly controlled quantitative experiments would probably be most appropriate. However, if the aim is to explore individuals' experiences around mourning then qualitative would probably be more appropriate.

While historically there has been a divide between quantitative and qualitative research, in recent years mixed methods approaches have gained in popularity (Bryman, 2006, 2008) and some suggest enhance results because of their eclectic approach (R. B. Johnson & Onwuegbuzie, 2004). Mixed methods approaches combine quantitative and qualitative research methods and are sometimes referred to as “multi-methods (Brannen,1992), multi-strategy (Bryman, 2004), mixed methods (Creswell, 2003; Tashakkori and Teddlie, 2003), or mixed methodology (Tashakkori and Teddlie, 1998) research” (Bryman, 2006, p. 97). Greene, Caracelli, and Graham (1989) identified five major rationales for utilising mixed-methods approaches which include triangulation, complementarity, development, initiation, and expansion (see Table 1).

Term	Purpose
Triangulation	seeks convergence, corroboration, correspondence or results from different methods
Complementarity	seeks elaboration, enhancement, illustration, clarification of the results from one method with the results from the other method
Development	seeks to use the results from one method to help develop or inform the other method, where development is broadly construed to include sampling and implementation, as well as measurement decisions
Initiation	seeks the discovery of paradox and contradiction, new perspectives of frameworks, the recasting of questions or results from one method with questions or results from the other method
Expansion	seeks to extend the breadth and range of enquiry by using different methods for different inquiry components

Table 3-1: Purposes for mixed-method evaluation designs, (Greene, et al., 1989, p. 259)

I chose to use a mixed methods approach in line with the above rationale with the view that the quantitative data would foster an understanding of group level similarities and differences and the qualitative data serving to triangulate quantitative findings as well as to add a level of depth in understanding students' unique experiences. In this study, I refer to quantitative data as data collected through closed survey questions while I refer to qualitative data as data collected through open ended survey questions and interviews. However, I am aware that

quantitative and qualitative data are not always mutually exclusive. For instance, qualitative data in this study is in some instances counted to ascertain how often a particular phenomenon occurs in the population which resulted in a quantitative assessment. However, I use the terms ‘quantitative’ and ‘qualitative’ in this study as a shorthand method to refer to the type of data collected.

The first two waves of the study collected data through quantitative instruments including the IDI, IBQ, and the IEQ which included mostly closed questions. The third wave of the study included the use of semi-structured qualitative interviews with participants chosen on the basis of IDI score and UK or non-UK status. I chose a mixed methods approach for several reasons. First, the research questions themselves suggest the type of data collected since they require quantitative data, such as background characteristics, as well as qualitative data such as perceptions of students’ experiences. Second, while there is no clear agreement regarding how ICC should be assessed, leading intercultural experts suggest that a mixed methods approach is one of the most effective assessment strategies (Deardorff, 2009a). Third, adopting a mixed-methods approach allows the triangulation of results so that qualitative interviews may corroborate quantitative findings. Fourth, qualitative results can serve to complement quantitative findings by highlighting experiences that might be common at different developmental levels. Fifth, exploring participants’ perceptions regarding the relationship between their levels of intercultural development and other factors expands the results by providing deeper understanding of participants’ experiences and what might help and hinder development. Sixth, quantitative data from the first phase of the study can be used developmentally in that it informs the later phase of the study by helping to identify participants to target for qualitative data collection.

3.3 Population

The collection of individuals under study are known as the population (Gorard, 2001). The population that I initially considered to draw upon for this study were psychology students in higher education institutions in the UK. Although ICC is relevant to all undergraduates, the intercultural development of psychology students as described earlier is under researched compared to some other disciplines and may

be of particular importance considering that many graduates go on to provide mental health and social care related services to an increasingly diverse client base (Reddy, et al., 2013) and in light of the recent development of more general student learning outcomes related to psychological literacy (Cranney & Dunn, 2011).

Since I wanted to look at development during university, I decided to focus upon first year students since they would have just arrived on campus and would have yet to have been influenced much by the university environment which would allow for identifying baseline stages of development compared with later development.

As I wanted to study both UK and non-UK student development, I required a university and department that had large numbers of students from other countries to ensure both the possibility for intercultural contact and non-UK student participation. International students are concentrated in some departments more so than others and studies into how home students perceive contact with international students suggest that 15% is the critical mass at which home student awareness of international students is raised (Ward, et al., 2005). This 15% cut off served as a guideline in other research studies (e.g., Dunne, 2009).

I finally committed to conducting my study in one psychology department located in north of England. I chose this university and department because they both had a relatively high concentration of non-UK students, (20%) and (35%) respectively, the department was amenable to having their students participate in my study, and the university was relatively close to my home making data collection easier to manage. As well, I believed that I would be able to more easily avoid sampling bias by concentrating my efforts to get the majority of students from one cohort to participate as described below.

Understanding the population from which the sample was drawn is important. A sample drawn from a single psychology department will not necessarily be representative of the wider population of university students or even the wider population of psychology students. Students interested in the study of psychology are likely to be different somehow than students in other disciplines.

Carter (2006), for instance, found that students who were enrolled in engineering or theatre courses scored significantly lower on the IDI than students enrolled in other courses. Similarly the percentage of students from other countries on campuses and in departments also impacts experiences as noted above so that institutions and departments with much higher or lower concentrations will not easily be comparable.

3.4 *University and department*

The following provides a brief review of the institution, department, students, and staff in relation to this study. It is provided here in order to illustrate the context of the study through which the reader can better understand the extent to which the findings may or may not generalise elsewhere and to judge the potential influence of relevant internationalisation strategies.

The population from which my sample was drawn included the cohort of 2011- 2012 first year students studying in a psychology department of a Russell Group university. The university itself has ranked among the top 20 in the UK over the past few years (Guardian, 2013) and the top 125 in the world (Times Higher Education, 2014). The internationalisation strategy of the institution focuses upon conducting world class research, promoting research internationally, turning out students ready to thrive in a global economy, and creating possibilities for international exchange among staff and students. The strategy is described as helping the institution to achieve benefits in business areas including facilitating cultural understanding between international partners. Approximately 20% of the students come from some 90 to 100 different countries.

According to the Subject Benchmarking Statement for Psychology, about 70,000 students study psychology in the UK (Quality Assurance Agency for Higher Education, 2010). Psychology is the most popular course of study aside from medicine for undergraduates with approximately 1.3 applicants for every UK university place making the applicants more highly qualified than many other disciplines (Wakeling, 2010). The particular course from which participants were drawn has been in demand and has had rigorous entry requirements attracting high

calibre students. The department's website over the past several years has suggested that offers have typically been made to those students with A-level results of A/A/A or A/A/B with at least one subject if not two in a science discipline. The department was one of the top 20 psychology departments in the UK over the last few years (Complete University Guide, 2014) and the top 50 in the world (QS Top Universities, 2013).

Informal enquiries made of three staff members during this research did not yield any information related to a departmental internationalisation strategy although one staff member commented that the department was interested in recruiting the best and brightest students from around the world. While international students receive specific support from a dedicated member of staff, it does not appear to make special efforts in relation to promoting the intercultural development of students. Understanding this contextual factor is important since specific promotion of intercultural skills could influence development.

Admissions data suggested that the vast majority of students in this particular cohort (98%) were of a traditional university age (i.e., 18 to 22), 33% were from outside the UK, and 79% were female. Based upon data from the Quality Assurance Agency for Higher Education (2010) the proportion of males to females in this cohort is typical of the discipline, however, it did not conform to national statistics in terms of age with 47% in the wider population of psychology students classified as mature. Although psychology courses tend to attract a relatively large number of international applicants (Wakeling, 2010) not all courses have as high a concentration of international students as this department. However, this university and department were chosen for their relatively high concentration rather than to be representative of all departments.

The department from which participants were drawn is large in comparison to some with just under 40 faculty members and about 450 undergraduates. While psychology staff across the UK are predominantly UK nationals, evidence suggests that recruitment of international staff is increasing among younger staff members possibly driven by attempts to recruit individuals who will boost institutional RAE ratings (Wakeling, 2010). As well as being predominantly from the UK, psychology

staff (excluding non-nationals) are largely from white British backgrounds (95%). The composition of the department from which the sample was drawn is similar to the national average and staff members have a variety of specialisations although none with stated interests in regard to students' intercultural development.

3.5 Sample

The participants that are drawn from a population are known as the sample (Gorard, 2001). Researchers sometimes rely upon individuals to respond to the call to participate in studies often called volunteer sampling (Cohen, Manion, & Morrison, 2007). Cohen and colleagues (2007) note that the problem with asking for volunteer participants is that the people who volunteer and those who do not, are likely to be different. Those who choose to participate in the study may be motivated by factors such as helping out, being interested in the research topic, and the desire to benefit society. While in volunteer sampling, participants may or may not be well intentioned, they do not necessarily represent the wider population resulting in a biased sample. While such bias could be a factor in many kinds of research projects, studies addressing intercultural issues may be particularly prone to encounter such bias because cultural difference can be a sensitive topic (see L. Cohen, et al., 2007, Chapter 5) and because some individuals may actively avoid such studies.

In order to avoid sampling bias, I decided to collect data that some describe more as a census (De Vaus, 2002) than a sample, in other words to collect data on an entire population of students (or close to it) which further defined this as a cohort study (Bryman, 2008).

3.6 Funding

This study was expensive to conduct considering the cost of individual IDIs, about £6 each, as well as the prize draw and payment to students who participated in interviews. The Higher Education Academy Psychology Network was a national organisation that aimed to support teaching and learning innovations within the discipline of psychology and their prioritisation of internationalisation related activities dovetailed easily with my research interests. I applied for and received a grant from the Psychology Network in the autumn of 2011 for £2500 to fund this

research. Upon receipt of funding, I agreed to disseminate findings through the Psychology Network newsletter, the Psychology Learning and Teaching Journal and by presenting at related conferences. I participated in one such conference on 12 February of 2014 and articles and papers will be forthcoming.

Accepting this funding was not in conflict with my study ethically since students were informed exactly why the study was being conducted, or practically since I had planned to ask questions related to the departmental curriculum anyway. As well, my relationship with the funder had no bearing upon the responses that I received and I would have sought to disseminate the findings through the above means anyway.

3.7 Instrumentation

The instruments used to collect data in this study included three primarily quantitative questionnaires as well as an interview. The following details each.

3.7.1 Intercultural Development Inventory

There are nearly 80 instruments used to assess ICC related constructs (Spencer-Oatey & Franklin, 2009). Because so many instruments already existed, rather than attempting to invent a tool myself, I decided to consider what was already available. Using Spencer-Oatey and Franklin's (2009) comprehensive list of instruments along with Fantini's (2009) more select list, I began to investigate possible instruments. In reviewing the lists I narrowed down the possible choices relatively easily by eliminating those that involved foreign language proficiency or took specific approaches that were inappropriate for my study (e.g., Cross-Cultural Counselling Inventory, Military Equal Opportunity Climate Survey). I reviewed or attempted to review instruments that were well known and more established such as the Intercultural Sensitivity Inventory, Assessment of Intercultural Competence, Cross-Cultural Assessor, and the Intercultural Competence Assessment (INCA Project). I eventually chose the Intercultural Development Inventory (IDI) for several reasons.

First, unlike most ICC related assessment tools, the IDI is theoretically grounded. It is based upon the Developmental Model of Intercultural Sensitivity

(DMIS). Developed by Milton Bennett (1986b), as described in the previous chapter the DMIS conceptualises intercultural sensitivity as existing as a progression from a mono-cultural worldview to one that is richer and more complex. The DMIS suggests that there are two general orientations, ethnocentric and ethnorelative, with six stages, three under each orientation. Ethnocentric stages include *denial*, *defence*, and *minimisation* while ethnorelative stages include *acceptance*, *adaptation*, and *integration*. Initially developed around this six stage model, the IDI attempts to gauge individuals' sensitivity towards cultural difference by determining their DMIS developmental stage, each of which indicates capability to exercise ICC.

Second, the IDI is one of the most widely used tools of its kind. While used in the corporate and not-for-profit arenas (e.g., Hammer, 2004; Shippy, 2008), of more relevance for this study was the fact that it has been used extensively in higher education. Several studies have used the IDI to explore university student intercultural development in study abroad (e.g., P. J. Pedersen, 2010), study in particular courses (e.g., Chen, 2008), and across institutions (e.g., Riley, 2007).

Third, the IDI is one of the most well-established and developed tools used as an indicator of ICC. As detailed below, it has undergone extensive reliability and validity testing and is now in its third edition having been refined with each study. As well, IDI scores were designed to be represented as single numbers which correspond to one of the developmental stages outlined above. Researchers developed this single score approach so that it could be correlated with other variables thought to be relevant to intercultural development such as years of foreign language study, educational attainment, and time spent abroad (Paige, Jacobs-Cassuto, Yershova, & DeJaeghere, 2003). I thought that this feature would be particularly useful for my study since I am investigating the way in which various factors are related to intercultural development.

Fourth, a somewhat unique property of the IDI compared to other tools is that it was developed and tested on individuals from a variety of cultures and is purported to be culturally neutral (Hammer, 2011; Hammer, et al., 2003). This is of particular importance to my study since my participants include individuals from many different countries.

Fifth, the IDI is a proprietary tool managed by IDI, LLC which requires that individuals be qualified prior to using it. While this is not a recommendation in and of itself, the fact that IDI, LLC provides training and requires a certain level of intercultural understanding of its administrators stands it in good stead for promoting informed research and practice in the field of intercultural development. Becoming an IDI Qualified Administrator requires attendance at a three day qualifying seminar. I attended this seminar which was delivered by IDI developer, Mitch Hammer, in Baltimore, Maryland in March of 2011.

3.7.1.1 IDI development

While there are many instruments purported to measure ICC, the IDI is one that has been developed through rigorous testing. To develop the IDI, researchers in the US began by conducting qualitative interviews with 40 individuals from diverse backgrounds. Interviewees were from 18 countries and reported living in the US for varying periods of time. Interviews were conducted in order to determine how individuals “made sense out of their experiences with cultural difference” (Paige, et al., 2003, p. 473). From the interviews, which centred around six questions relevant to the six stages of the DMIS, researchers generated 350 statements which were taken directly from the interviewees. These were pared down to about 200 statements using independent raters (inter-rater reliability $\geq .66$) who were asked to categorise statements according to DMIS stages. These items were then piloted with culturally diverse individuals to identify difficulty with a variety of matters including instructions, items, and response options resulting in further changes.

The next step in development included a review of the items by six intercultural experts familiar with the DMIS which resulted in the reduction of the number of items to 145 (inter-rater reliability $\geq .60$) (Hammer, et al., 2003).

Validation of the IDI involved another pilot administered to 226 individuals within the US who were diverse in terms of age, education level, and nationality with 30% from 28 from different countries. A within-stage factor analysis on the items determined their suitability for inclusion in the final version resulting in a reduction to 60 items (10 for each stage) (Hammer, et al., 2003).

A further study administered the 60 question IDI to 330 individuals to further investigate the empirical structure of the IDI (Paige, et al., 2003) and suggested directions for further refinement leading to another phase of development (Hammer, et al., 2003). Revisiting previous items during this next phase, researchers came up with a set of 122 items and administered them to 591 individuals from 37 countries. Participants varied in terms of age, education level, and time spent in the US. In addition to the IDI items, the Worldmindedness Scale, the Social Anxiety Scale and the short form of the Marlow-Crown social desirability scale were administered to participants. Using confirmatory factor analysis, the study further refined the model as well as the questions, resulting in a second version of the IDI which included 50 items (Hammer, et al., 2003). At the same time, construct validity testing was undertaken by comparing IDI scores with the aforementioned scales. Consistent with predictions, scores in the *denial/defence* stages were significantly related to lower scores on the Worldmindedness Scale and higher scores on anxiety. Researchers found there to be no relationship between IDI scores and gender, age, or education level (Hammer, et al., 2003). As well, correlations with the social desirability scale found that the IDI scores did not seem to be influenced by respondents' desires to provide socially appropriate answers (Hammer, et al., 2003).

The latest testing of the IDI detailed in Hammer (2011), included analysis of data from a very diverse group of individuals including 213 managers from a range of countries working in a non-government organisation; 150 US church members; 2693 US university students; 1850 US high school students including 114 from Austria, 181 from Brazil, 149 from Costa Rica and Ecuador, 564 from Germany, 94 from Hong Kong, 295 from Italy, 277 from Japan, and 175 from the US. This phase of testing led to changes to the IDI including the development of a perceived as well as a developmental score. Findings related to reading tests suggest that the IDI should be comprehensible to individuals beginning at age 14 to 15, assuming age appropriate mainstream educational achievement.

While the IDI is still grounded in the DMIS, it has evolved through the above research to reflect a categorisation of intercultural sensitivity slightly different from the DMIS. Specifically, *denial* and *defence* are considered ethnocentric stages of development, *minimisation* is considered a transition stage, and *acceptance* and

adaptation are considered to be ethnorelative stages. IDI developers dropped the term ‘*integration*’ in favour of ‘*cultural disengagement*’ which has been shown through statistical analysis to be a separate scale measured by the IDI related to “a sense of disconnection or detachment from a primary cultural group” and is therefore not considered an advanced developmental stage by Hammer (2011, p. 475). As well, the *defence* stage has been renamed *polarisation* although it refers to the same phenomena. That said, Milton Bennett, the original theorist behind the DMIS maintains that *minimisation* is an ethnocentric stage of development, representing as it does a view of cultural difference as being unimportant (M. Bennett, 2011) and it is interpreted in this study according to this guideline.

The IDI available today is a 50-item questionnaire that gauges individuals’ sensitivity towards cultural difference, considered to be an indicator of their capability to exercise ICC. Sample questions are available in Appendix A. In addition to the 50 questions, it includes a collection of items related to background characteristics (e.g. age, time spent living abroad) as well as context questions which are optional and can be used in the interpretation of results with individuals. The IDI is available online and as a paper and pencil assessment. Group and individual level computerised reports can be generated and these can be used by administrators for group and individual interpretations. Further, the IDI reports provide suggested developmental plans for individuals interested in developing interculturality.

3.7.1.2 IDI criticisms / limitations

Researchers have laid a solid foundation in terms of establishing the IDI as a valid and reliable tool for measuring intercultural sensitivity. They have developed and tested it with individuals from a wide variety of national backgrounds in order to ensure that it is useful across cultures. It is theoretically grounded in the DMIS and it is noted in key intercultural texts (Deardorff, 2009b; Spencer-Oatey & Franklin, 2009). Milton Bennett noted the IDI’s various advantages including its validity, usability in pre and post testing for research and practice, value in generating group scores and demonstrating group level change, and its use in statistical analysis alongside other variables (2009). While the IDI enjoys a prominent place among the tools used to

assess and develop ICC related qualities, it is not without criticism. As Bennett (2009) noted:

The disadvantage of the IDI is that it sacrifices ideographic data in favour of the nomothetic data necessary for group comparisons. What this means is that the instrument is not very sensitive to individual differences; it tends to overestimate the ‘normative’ condition – Minimisation – and underestimate the extent of more ethnocentric or more ethnorelative positions. For individuals, this tendency can be counteracted through individual interpretations taking into account the distribution of responses on the instrument. But for a group profile, individual variations are summarized as group data, and it is therefore not possible to counteract the over-attribution of Minimisation with the IDI data. Consequently, the IDI should be used cautiously and only with other measures, such as the qualitative data reported in descriptive studies, to discover the overall intercultural sensitivity of groups. (p56)

To address his first point, the arguments for and against ideographic and nomothetic data (qualitative and quantitative data respectively) has a well established history in psychological research as described by Hermans (1988). However, he notes that “it would be an oversimplification and even a misrepresentation of the ongoing controversy to pit the ideographic approach in some way or another against the nomothetic. The proponents of an ideographic type of research agree on the necessity of relating their research to the nomothetic type (Allport, 1937, 1962, Beck, 1953, Harris, 1980, Lamtell, 1981, Runyan, 1983)” (p. 790). Hermans further suggests that what is important is how the approaches can be combined which reflects the mixed methods approach recommended in research methods texts mentioned earlier.

The mixed methods approach which I initially planned for this study would seem to address the above criticism by collecting qualitative data to be analysed alongside quantitative data as was recommended by Bennett specifically in relation to the IDI and Hermans more generally.

One of the primary concerns in this particular research is the extent to which the IDI is portable across cultures since it is being used outside of the country in which it was developed and on students from a variety of countries. Hammer (2011) asserts that:

...unlike other instrument development approaches, the actual items of the IDI were originally generated in natural discourse by people from a wide range of cultures. This is in contrast to questionnaire items that are generated by researchers themselves. This original innovative approach to generating the item pool provides evidence for the content validity of

the items and counters possible criticism of systematic cultural “bias” being introduced by the researchers in the wording of the items themselves. (p. 476)

Such a claim is perhaps fairly made considering that most other tools have not been developed with such rigour. However, the IDI was developed and validated in the US. While participants came from a variety of countries, their decision to live in the US may indicate a more sympathetic view of Western culture; their socialisation while in the US may have resulted in their familiarisation with and / or preference for Western conceptions of cultural difference; they may also better understand English than those who have spent most of their lives in non-English speaking cultures. In short, they cannot be considered to be entirely representative of people who live outside of the US. Studies by Greenholtz (2005) and Yamamoto (1998) as described by Greenholtz lend support to the above argument and raise further concerns regarding the validity of the IDI with such cultures.

Greenholtz points out that participants initially interviewed to generate IDI items must have had a relatively sophisticated level of English in order to discuss their experiences with cultural difference and further suggests that their socialisation into a particular worldview may influence the way in which individuals view cultural difference. Yamamoto’s study, which interviewed Japanese students based on the IDI interview protocol, supported this view. Her results suggested that:

The definitions of each stage [of the IDI] may need some modification in order to understand intercultural sensitivity in the Japanese context. It might be possible to say that what Japanese perceive as difference/similarities or how they deal with difference/similarities are different from or not included in the stages of the model. These aspects need to be considered and added to the model in order to modify it to apply in the Japanese context. (p.77-78)

Greenholtz’s study, which undertook a translation of the IDI for use with Japanese students, raised similar concerns. Translators employed in the study all commented on the ‘foreignness’ to the Japanese mind of some of the concepts used in the instruments” (p. 76). For instance, one translator suggested that Japanese people do not conceptualise culture in the same way that the IDI defines culture but tend to view people as “*nihonjin* (Japanese) and *haijin* or *gaikokujin* (literally ‘outside’ people or ‘foreign-country’ people)” (p.87). Greenholtz points out concerns around the development process that could have led to such issues. For example, although the IDI was tested on culturally diverse individuals during pilots,

it looked specifically for “clarity of instructions, item clarity, response option applicability, and overall amount of time taken to complete the instrument” (Hammer, et al., 2003p. 428), but that it did not investigate “conceptual transferability” resulting in an instrument that may not easily cross cultures (Greenholtz, 2005, p. 84-85).

While the above research highlights issues related to content validity or whether the test measures what it is intended to measure, Greenholtz goes on to raise concerns regarding construct validity, a broader concept that asks whether an indicator effectively measures a particular construct (Coolican, 2009, p. 200). His component analysis of the data he collected on Japanese students found that IDI items corresponding with developmental stages did not clearly map onto the stages as defined by the IDI suggesting that the underlying theoretical constructs of the IDI may not readily transfer to Japanese students.

His final criticism of the IDI centres on the general claim of the developers that the IDI is a valid instrument for use in assessing intercultural sensitivity across diverse cultural groups. He raises this criticism by quoting from the work of Messick (1995).

Validity is not a property of a test or assessment as such, but rather of the meaning of the test scores. These scores are a function not only of the items or stimulus conditions, but also of the persons responding as well as the context of the assessment. In particular, what needs to be valid is the meaning or interpretation of the scores; as well as any implications for action that this meaning entails (Cronbach, 1971). The extent to which scores' meaning and action implications hold across persons or population groups and across settings or contexts is a persistent and perennial empirical question. This is the main reason that validity is an evolving property and validation a continuing process. (p.741)

The above criticisms suggest that the IDI cannot simply be considered a valid measure across populations but that it needs to be validated with different populations and within different contexts. While the research evidence critical of the IDI presented above is limited to studies conducted within the Japanese culture, they could conceivably be observed in other cultures. As I am conducting my study in the UK with university students from the UK as well as other countries, it could provide an interesting comparison to data collected on populations residing within the US and to some extent provide a test of its usability across national boundaries. However, while the UK is a different country, it is similar to the US in that it is a

Western English speaking country and according to Hofstede (2001) not too culturally distant from the US. It may therefore more easily transfer to UK audiences. However, international students from more dissimilar countries may be another matter.

Although questions have been raised regarding the IDI's transferability across cultures, it is still one of the most well developed tools and may be the most culturally neutral. It would be interesting to conduct a full validity study of the extent to which the IDI was appropriate for my population. However, due to the nature of the research and time constraints, my analysis of this will be restricted to assessing students' perceptions of the instrument as appropriate for individuals from their own cultures as a crude indicator of its transferability across cultures.

3.7.2 Intercultural Background Questionnaire

The IDI gathers some background data. As I wanted to include additional background questions, I developed and piloted an additional background questionnaire.

3.7.2.1 Development

The initial IBQ draft stated what the study was about and what students were asked to do on the questionnaire. I structured the questionnaire and questions based upon the advice outlined by De Vaus (2002) and Bryman (2008) which discusses question content (e.g., behaviour, belief, knowledge, attitude, characteristic), wording (e.g., using simple language, avoiding double-barrelled and leading questions), level of measurement (e.g., nominal, ordinal, interval), and questionnaire layout (e.g., use of space, order of questions). I considered these factors alongside the relevant research questions.

I considered the extent to which questions would be understandable to international students and in doing so contacted the head of the language studies department for recommendations. He recommended four things. Use short sentences without embedding and with limited subordination. Avoid phrasal verbs unless absolutely necessary. Avoid negative questions. Try out all questions in a pilot.

Based upon this guidance and the use of other relevant resources (e.g., Steffani, 2007) I edited the questions. However, I also decided to explicitly ask international students about the language used during the pilot.

Topic areas included in the pilot questionnaire are listed below along with a justification for including each.

First language: As Sercu (2010) notes, poor language skills can hinder intercultural development since they can reduce the success of intercultural interactions. Foreign language proficiency is considered by at least some, typically language educators, to be of primary importance to development and indeed models (e.g., Byram, 1997) and assessment tools (e.g., Assessment of Intercultural Competence (Fantini, 2009)) have been developed to explain and measure development along with language. However, many other models and assessments developed by researchers from disciplines include models and assessment tools that completely exclude language. Although there is no clear agreement on whether language should be included as a factor in intercultural development, I included a question regarding first language (English or non-English) on the pilot questionnaire as it seems reasonable that students who are not from the UK whose first language is English may have an easier time communicating than those whose first language is not English and that proficiencies may impact interactions and intercultural development.

Foreign language study: Some researchers (Olson & Kroeger, 2001) have found that for those whose first language is English, proficiently speaking languages other than English is related to increases in intercultural sensitivity. As well, other models and measures (e.g., Intercultural Competence Assessment (National Centre for Languages & Leonardo da Vinci European Training in the UK, 2004)) include years of foreign language study and/or number of foreign languages spoken as factors related to intercultural development. While it is doubtful that speaking proficiency in another foreign language for first language English speakers would impact communication ability with many non-first language English speakers since they are likely to speak a variety of other languages, it is an indicator of exposure to other languages and perhaps to some extent culture which could impact

development. Therefore, I included a second question regarding years of foreign language study aimed specifically at those who spoke English as their first language.

Number of countries visited: Some measures (e.g. Intercultural Competence Assessment (National Centre for Languages & Leonardo da Vinci European Training in the UK, 2004)) include the number of countries visited in their assessments. The literature suggests that neither number of countries visited nor length of time spent in other countries inevitably translates into interest in or interactions with individuals from other cultures or leads to intercultural development. People experience different levels of cultural contact based upon the interaction between their own interests, motivations, skills, etc., as well as those of their host cultures as discussed in the relational model outlined in Spitzberg and Changnon (2009). However, I included number of countries visited with the aim of assessing the breadth of travel experiences and potential correlation with development.

Pre-university contact with different racial, ethnic, or national groups: The literature suggests that previous intercultural experiences could have an impact on the extent to which individuals interact with people they encounter from other cultures. For instance, Neuliep, Chaudoir and McCroskey (2001) found that Americans who had extensive experience interacting with those from other countries had significantly reduced levels of ethnocentrism than those who did not. A more recent qualitative study in the UK found that students who were more comfortable with intercultural encounters were those who shared some elements of experience with non-UK students such as having a parent of another nationality or growing up in a multicultural area (Harrison & Peacock, 2009). Another study empirically demonstrated that a multicultural background predicts reduced levels of ethnocentrism (Harrison, 2011). I therefore included a question regarding pre-university contact with different groups as well as two additional questions regarding intercultural background experiences to ascertain the extent to which students came from multi-cultural or multi-national backgrounds and associated with individuals from other cultures.

Sexual orientation: Some participants may react negatively if they are forced to choose “male” or “female” for gender while they personally hold alternative views of themselves or believe that other options should be possible. The IDI training materials note that such concerns have arisen from previous studies. Including an item which allows participants to indicate sexual orientation may put some participants more at ease when completing the IDI and may therefore yield more reliable data. Alternatively, however, including a sexual orientation item may offend those with more conservative attitudes or those who might view such a question as irrelevant to the study or as sensitive information they simply do not wish to report which may adversely impact the way they answer further questions. As well, some may not answer this question honestly as they may see it as socially undesirable and this question may therefore yield unreliable data.

While no literature has been identified to date to indicate that sexual orientation is related to intercultural development, some literature suggests that those who may be more inclined towards intercultural development view themselves as different (Madison, 2006). Considering this research along with the above argument, I decided to include sexual orientation in the pilot.

3.7.2.2 Pilot procedures

In accordance with the guidance on piloting questionnaires on individuals who are most similar to the planned respondents (De Vaus, 2002), I piloted the IBQ on a group of first year psychology students from the department in which the study was being conducted.

To pilot the questionnaire, a lecturer sent an email on my behalf to all second year students inviting them to participate in the pilot for course credit. We offered students one hour of research credit (four per year are required by the department) for participating in the pilot. Six students responded to the email and agreed to meet at a prearranged room. Four of the six students turned up and completed the questionnaires. I later emailed the other two students to determine if they still wished to participate. One of the two students responded and agreed to participate

by reviewing and completing an electronic version of the documents. The student did this and returned them via email.

I administered the consent form and background questionnaire as a declared pilot along with the IDI background questions and a small selection of IDI questions for contextualisation. I asked participants to read the consent form and instructions, answer the questions, and to provide feedback on anything they found confusing, offensive or otherwise questionable.

3.7.2.3 Changes

Reflections on the pilot of the questionnaire, a review of the feedback provided by students, and initial review of the data collected raised a number of issues.

Ethnic minority status: One student was not sure how to answer this question commenting that she is half Arabic and half Norwegian. I added an additional question to the background questionnaire allowing students to indicate if they were from a bi or multi-national family.

Sexual orientation: One pilot participant commented on this question noting that additional options (e.g., pansexual, anthrosexual, asexual) should be included. As a result the question was rephrased to include “pansexual” or “other”.

Although the pilot did not suggest that students were offended by this question, I moved the question to the end of the background questionnaire. As noted by Cohen and colleagues, while issues of sensitivity may not be avoidable and could lead to dishonest reporting (2007), placing this question at the end of the questionnaire, could help to minimise negative impact. As an additional measure, I altered the background questionnaire so that students would not record their names on them and that they would be linked to their names only through a numerical identifier which enhanced confidentiality and may have decreased the chances of dishonesty.

Cultural fit: As noted earlier, some literature (Madison, 2006) suggests that a feeling of being different may be related to intercultural development. While

difference can be characterised in a number of ways (e.g., coming from an ethnic minority background, alternative sexual orientation) it might also be simply a feeling that one does not fit in one's own cultural group(s). After contemplating this concept of difference further, I added an additional question asking the extent to which respondents felt that they felt that did not fit into their home cultures.

Intercultural background: One student noted that she had attended an international school which may have led her to have experiences which were more multicultural than students in private schools. A recent article by Harrison (2011) provided ideas for questions regarding schooling and intercultural background in general. Additional questions were added to the survey which enquire about the diversity of school and neighbourhood, whether participants had many friends or spent time with individuals from other cultural backgrounds and whether parents or caregivers had friends from other cultural backgrounds. As well, I grouped these questions together and placed them on a Likert-type scale for simplification and comparability.

Foreign language: Determining how to best enquire about language was challenging as it can be associated with intercultural development in different ways depending upon whether English is a students' first language as well as whether students are UK or non-UK. The initial question simply asked whether or not English was the student's first language which would differentiate non-UK students on this factor and allow for separate analysis of data. However, non-UK students whose first language was not English may well have different levels of proficiency with English which could impact their ability to communicate with those from other countries. Therefore, I added an additional question aimed at students whose first language was not English enquiring about confidence speaking English.

For students who have studied another language, their learning about alternative languages may be interpreted in two ways. One, it could indicate exposure to other languages and presumably to some extent, other cultures. Two it could indicate interest in foreign language and potentially other cultures. Some studies (Kim & Goldstein, 2005) have found that interest in foreign language predicts positive expectations about contact with those from other cultures. The

Interest in Foreign Languages Scale (IFLS) as described by Kim and Goldstein (2005) was considered as a template for questions concerning interest in foreign language. However, as intercultural experience is more relevant to this study, I decided to include exposure as opposed to interest.

Further reading (Endicott, Bock, & Narvaez, 2003) identified other issues with regard to language as well as international travel and living abroad. Specifically, some questions such as number of countries visited or languages spoken are indicators of breadth while others such as fluency in another language and length of time spent living in another culture reflect depth. Therefore, questions were added to include breadth, number of foreign languages studied, as well as depth, languages spoken or read fluently.

I further altered question terminology by changing terminology from “native” language to “first” language which may be viewed as more politically acceptable.

Comments: Bryman (2008) notes that closed questions may lead researchers to miss out on interesting replies not addressed by fixed answers and to irritate respondents who believe that fixed categories do not apply to them. For this reason, I modified the questionnaire to provide opportunities for participants to elaborate upon their answers or to comment on the questions.

Socio-economic status: Although socio-economic status was not included in the pilot survey, upon further reflection, I thought that socio-economic status may relate to the ability to have intercultural experiences (e.g., travel extensively) and some research suggests that socio-economic status is linked to more frequent intercultural contact (Halualani, Chitgopekar, Morrison, & Dodge, 2004) so I added it.

I initially drafted questions regarding socio-economic status based upon the *National Statistics Socio-Economic Classification User Manual* (Office for National Statistics, 2005) which suggests enquiring about parents’ occupations. However, upon further reading, I eventually decided that questions regarding parental

education level would be more appropriate for three reasons. First, respondents are likely not to know the details of their parents' occupations. Second, the main research interest is intercultural learning and research suggests that parental education level is an effective proxy for cultural capital (Thomas & Quinn, 2006). Third, data around education would be easier to collect and code. I added two questions asking whether participants' mothers/female guardians and fathers/male guardians completed a bachelor degree or higher. See Appendix B for the final background questionnaire.

3.7.3 Intercultural Experiences Questionnaire

To explore students' intercultural experiences while at university, I developed and piloted a questionnaire, the IEQ, to be administered alongside the second administration of the IDI. I structured the questionnaire and questions based upon the research methods advice outlined earlier (Bryman, 2008; De Vaus, 2002) and consideration of the relevant research questions.

Based upon consideration of the research questions in the context of issues arising from an analysis of the literature, I divided the questionnaire into four sections. The first section, 'Intercultural interactions' asked students how many interactions they had during a typical week as well as the details regarding one specific intercultural interaction chosen by participants and occurring within the past two weeks. I included this section in order to develop a better understanding of the overall number of interactions, as well as to obtain richer details regarding an actual interaction. The second section, 'Departmental experiences' queried students' intercultural experiences within the department. I included this section in order to obtain a better understanding of students' interactions in the department but also other aspects of their experience that might relate to their intercultural development such as their experience of the curriculum as intercultural. The third section, 'Campus experiences' queried students' intercultural experiences on campus. I included this section in order to better understand students' interactions on the wider campus but also their experience of other aspects of the campus that might relate to intercultural development such as their experiences of student societies. The last section, 'Other experiences' queried experiences primarily off campus. I included

this section to better understand students' interactions beyond campus, such as working or weekend activities, and how they might relate to intercultural development.

3.7.3.1 IEQ Section 1: Intercultural interactions

While universities often assume that students studying on culturally diverse campuses automatically interact with one another and develop intercultural (Middlehurst & Woodfield, 2007; Toyoshima, 2007), research suggests that this may not be the case (Burnapp & Zhao, 2010; Ward, et al., 2005). Therefore, I included several questions to explore interactions that students had with students from countries other than their own. In addition to asking about frequency of intercultural interactions, I included questions designed to investigate the nature of students' interactions as various research studies suggest that while students may have interactions with students from other countries, interactions may range from brief to extended, superficial to deep, positive to negative, and so on and may therefore contribute in positive or negative ways to development.

To investigate the details of particular interactions, I adopted an approach similar to that of contact researchers Halualani, Chitgopekar, Morrison, & Dodge (2004) who examined intercultural interactions between university students to identify patterns of contact between students of different cultures. They collected data using a memory recall instrument of the type commonly used in contact research. It assessed intercultural interactions occurring within the past two weeks reasoning that such a time frame would capture interactional routines that are patterned and frequent and that asking about recent contact only would make it easier for respondents to estimate contact. They further enquired about the details of two particular interactions including duration, location, relationship context, frequency of interactions and topics discussed which helped to provide a better understanding of the depth of relationships. Such questions could be relevant to my study as depth of intercultural relationships may impact development.

In the pilot questionnaire, I included questions similar to Halualani, et al., (2004) with some modifications. Specifically, due to space limitations and the focus

of the research question, I included questions pertaining to only one interaction. As well, I omitted some of their contextualising questions and included some relevant to my study. For example, I asked whether interactions were with someone from within or outside the department to place the interactions in context according to my research questions (e.g. department, campus, off-campus).

While details of the actual interactions can be helpful in better understanding the frequency and nature of intercultural interactions, various studies suggest that the valence of interactions is also important (Voci & Hewstone, 2003). Although students may have frequent or even lengthily interactions, as discussed in the previous chapter, they may perceive them negatively which in turn may negatively impact development. Two studies published by Voci and Hewstone (2003) assessed the valence of intercultural interactions by asking participants to rate them in terms of being pleasant, cooperative, superficial, voluntary, and forced in order to develop an overall impression of how positive their contacts were. Incorporating questions from both studies, I included a similar stem-statement asking participants to rate the frequency with which they found their intercultural interactions in general to be pleasant, cooperative, superficial, or forced on a five point Likert-type scale.

Beyond the valence of the interactions, contact researchers have found that emotional factors impact the effects of contact which is consistent with the social psychological research discussed previously. As described by Pettigrew and Tropp (2006), for example, intergroup anxiety or feeling threatened or uncertain when confronted with individuals from different cultural groups can mediate contact outcomes. That is, the more anxious individuals feel when in intercultural contact situations, the less positive outcomes may be realised. Studies in the literature around intercultural interactions between students also highlight emotional issues as being problematic. For instance, a qualitative study examining home student perspectives found that students believed they lacked enough courage, motivation and skill to successfully engage in intercultural interactions (Harrison & Peacock, 2010). Another study by Dunne (2009) identified factors such as effort, self-esteem, and anxiety as factors interfering in intercultural interactions. Based upon the above research, I included a stem-statement asking participants to rate the frequency of experiencing various emotions during interactions on a five point Likert-type scale.

3.7.3.2 IEQ Section 2: Departmental experiences

The role of particular courses or departments in supporting students' intercultural development are perhaps most relevant to the term internationalised curriculum which Huang (2006, p. 522) broadly defines as a programme(s) "with an international name, content or perspective." While there are different ways to view internationalised curriculum, Leask (2009) makes the distinction between formal curriculum, or "the sequenced programmes of teaching and learning activities and experiences organised around defined content areas, topics, and resources" (p. 207); and informal curriculum, or optional campus activities. A variety of literature provides suggestions for departments and lecturers regarding internationalised curriculum. While not all can be highlighted and addressed by this research, I chose a few based on their prevalence in the literature, relevance to this study, and to provide particular insight into the support of intercultural development in psychology teaching and learning.

3.7.3.2.1 Providing opportunities for / facilitation of intercultural interactions

De Vita (2005) suggests that courses should provide opportunities for intercultural interactions and learning to take place through intercultural group work and that students should be supported in navigating the complexities of such intercultural interactions. Studies from applied research (such as Ippolito, 2007) emphasise the need for careful planning and facilitation of intercultural interactions which are complex and do not always result in positive outcomes. Along these lines, I developed statements which enquire about the extent to which students work in mixed cultural groups, the extent to which students view lecturers as putting students in mixed cultural groups, students' awareness of cultural challenges, and the general level of perceived intercultural contact.

3.7.3.2.2 Demonstration of cultural sensitivity and awareness

Hammer, Bennett and Wiseman define intercultural sensitivity as "the ability to discriminate and experience relative cultural differences" (2003, p. 422) which they describe as an indication of ICC. While internationalisation is in part about developing students who are interculturally competent, it can assume that staff members are themselves interculturally competent enough to foster such qualities in

students. However, if staff members are unable to recognise alternative views or disparage those views, they may not only fail to encourage the development but may alienate students. Pai, Adler and Shadiow in Nieto and Zoller Booth (2010) provide a discussion of this topic. As such, literature is developing around the intercultural development of teaching staff. One study by Nieto and Zoller Booth (2010) found that lecturers demonstrated greater intercultural sensitivity than students and ESL lecturers in particular demonstrated greater levels of intercultural sensitivity compared to lecturers from other disciplines. Another study of secondary school teachers in Hong Kong (Yuen, 2010) found teachers to be operating at a very low level of intercultural sensitivity while a US study found school teachers about average, in *minimisation*, in terms of IDI scores (DeJaeghere & Zhang, 2008). IDI research in general suggests that there is no correlation between IDI scores and education level calling into question not only the impact of undergraduate degree programmes on development but whether or not educators are indeed more advanced than students given their postgraduate degree statuses.

While the levels of intercultural sensitivity of staff members is beyond the purview of this study, a review of students' experiences should include an element considering students' views around the cultural sensitivity of staff members as it may impact ICC development. As such, I developed a statement which explores students' observation of sensitivity displayed by staff members as well as their impression of the sensitivity of the department as a whole.

3.7.3.2.3 Internationalised curriculum

While some may interpret an internationalised curriculum as one that incorporates a few examples from other countries, Webb (2005) suggests that "internationalisation of curriculum is more radical and refers to the integration of a global perspective to curriculum development. This means that content does not arise out of a single cultural base but engages with global plurality in terms of sources of knowledge." (p. 111). Given the importance placed upon an internationalised curriculum in the internationalisation literature, I developed several items to try to gauge the extent to which students' perceived their curriculum to be internationalised or to promote intercultural learning. The first of these items enquires about the extent to which course curriculum facilitates students in learning about psychology outside of the

UK. The second item enquires about the extent to which students' view staff members as encouraging students to take advantage of intercultural learning opportunities on campus. The third item enquires about the extent to which students' view staff members as encouraging students to take advantage of intercultural learning opportunities abroad. The fourth item enquires about the extent to which students' view intercultural learning as an important part of their course.

3.7.3.2.4 Intercultural friendships

Some research suggests that students may have intercultural interactions as part of their course requirements but that these interactions do not necessarily lead to the development of deeper intercultural relationships (Harrison & Peacock, 2010). I therefore developed two questions relevant to this. One enquires about the extent to which participants have friends from other cultures while the other enquires about friendship depth. The term 'good friend' was behaviourally defined as socialising outside of course requirements and including a level of depth in which thoughts could be expressed openly. These two elements of friendship were used in definitions from other contact research studies (Powers & Ellison, 1995; Sigelman & Welch, 1993).

3.7.3.3 IEQ Section 3: Campus experiences

While the role of particular courses or departments in supporting students' intercultural development is important, so too are the voluntary experiences offered by the wider campus environment which Leask (2009) suggests are part of the informal curriculum. To the extent possible, the questions included in this section mirrored those oriented towards the department.

3.7.3.3.1 Providing opportunities for and facilitation of intercultural interactions

While a diverse university provides the potential for intercultural contact, such contact may need to be both engineered and facilitated in order to increase the likelihood of positive outcomes as is suggested in current understanding around group work (e.g., De Vita, 2005; Ippolito, 2007). Along these lines, I developed statements which attempt to gauge the extent to which students agree that the

university provides opportunities for intercultural contact and the extent to which intercultural contact is supported. One question enquires about the extent to which students view activities and societies as welcoming students from all countries. Another question gauges the extent to which students interact with students from other countries through involvement in activities and societies. A final question enquires about cultural challenges occurring through such contact.

3.7.3.3.2 Demonstration of cultural sensitivity and awareness

Cultural sensitivity, as described above, is important for staff to demonstrate in order to facilitate such development in students and in the case of the wider campus, provide an environment that values cultural diversity. While, again, the levels of intercultural sensitivity of staff members is beyond the purview of this study, a review of students' experiences should include an element considering students' views around the cultural sensitivity of university staff members and the cultural inclusivity of the campus in general. As such, I developed a statement which explores students' observation of sensitivity displayed by staff members as well as their impression of the inclusiveness of the campus as a whole.

3.7.3.3.3 Internationalised campus

Internationalisation across a university campus can include the availability of study abroad opportunities, a campus culture that promotes intercultural learning or optional cultural courses or activities. Several UK universities, for example, offer optional global citizen type awards that reward culture related activities (Stout, et al., 2011). To explore perceptions of the nature of the campus curriculum, I developed a statement enquiring about the extent to which students view staff members as encouraging participation in intercultural activities and another enquiring about being encouraged to become involved in programmes such as study abroad.

3.7.3.3.4 Intercultural friendships

While students who work with students from different cultures as part of their course curriculum may not necessarily go on to develop deeper relationships with such students, some studies (e.g., Harrison & Peacock, 2010) have found that this may be the only kind of intercultural contact that some students have. This suggests

that relationship development among students from different countries on the wider campus is of interest. As such, I developed two statements to gauge the extent to which students developed intercultural friendships on the wider campus. One enquires about the extent to which participants have friends from other cultures on the wider campus while the other enquires about friendship depth. The term 'good friend' was behaviourally defined as noted earlier.

3.7.3.3.5 Student accommodation

Some literature (UKCOSA, 2004) flags up student accommodation as an issue. Specifically some universities place international students in accommodation with other international students leading them to be separated from home students. Some studies consider intercultural development concepts as being impacted through contact in university accommodation (e.g., Van Laar, Levin, Sinclair, & Sidanius, 2005). Although the campus on which the study took place provides options for mixed accommodation, students at the university are invited to choose from among several colleges each of which provides accommodation. Each college independently advertises itself and some have a more international flavour than others. This may result in higher concentrations of students from different countries or students who are interested in cultural diversity or development living in some accommodations more so than others impacting their intercultural contact opportunities and development. I therefore included a statement gauging the extent to which participants live in culturally mixed accommodation.

3.7.3.3.6 Societies

Some studies look at the development of ICC alongside student participation in campus societies and have found that participation levels in general (Riley, 2007) and in particular university societies (Carter, 2006) can impact intercultural development. Some societies that are geared toward particular cultures (e.g., Bulgarian Society) may be made up mainly of individuals from one country or culture while others, such as international student associations, may welcome many. Such societies may promote same culture contact or intercultural contact only among students from some countries. Literature suggests, for instance, that some home students report that they would not be interested in joining societies made up primarily of students from other countries (Dunne, 2009). Another study by Eller et

al (2004) discussed by UKOSA (2004) noted that only 17% of international students in their study reported getting to know British students through campus activities indicating that intercultural contact through activities may be low. To consider the relationship between ICC and students' involvement in campus activities, I developed two questions one of which enquires about the extent to which participants have been active in campus clubs and societies and another which asks them to list up to four societies, activities, or sports in which they have been most active.

3.7.3.4 IEQ Section 4: Off-campus experiences

While universities and departments may be most interested in what students do on campus that supports intercultural development, what students do off campus and the extent to which it involves those from other countries may influence intercultural development. A study by Eller et al (2004) discussed in UKOSA (2004), for instance, found that international students who spent more of their leisure time with British people had more positive attitudes towards them. I therefore included a series of questions that enquire about how participants spend their time off campus including how often they participate in activities that take them off campus, what these activities typically include, whether they volunteer or work off campus, and the extent to which each of these activities involve individuals from other countries.

Responses to the items included in this section can be correlated with the initial levels of ICC, may help to explain ICC development and were thought to be useful in better understanding intercultural contact occurring off campus. This section was not as comprehensive as those for the department and campus experiences because while off-campus activities may play a role in intercultural development, the research focuses more upon students' university experiences.

A final question asked students if they would be interested in being interviewed during the final phase of the study to help gauge their interest in follow-up. I included comment boxes at the end of each section of the questionnaire and at the end of the questionnaire inviting students to elaborate on their answers, comment on questions themselves or on the study as a whole.

3.7.3.5 Pilot procedures

Similar to the pilot of the IBQ, I piloted the IEQ on a group of second year psychology students from the department in which the study was being conducted. A departmental lecturer assisted me in scheduling two sessions and to advertise them to students via email offering them course credit. Ten students replied to the initial email. Five students attended the first session and three students attended the second. Three students were from the UK and the rest were from other countries.

I gave students a written brief which reviewed the study and provided my contact information. Once everyone arrived, I then briefly described my study, told students that their names would not be associated with their pilot data, and that their data would not be used for data analysis and would be destroyed at the end of the project. I then handed out questionnaires and gave them approximately 15 minutes to complete the questionnaires and to record any comments they had on a separate comment sheet. Once, everyone was finished completing the questionnaires, I asked them what if any comments they had about the questionnaire. I provided an opportunity for verbal as well as written comments as some students may not have felt comfortable volunteering information verbally but would be willing to write it down. As well, having students talk about the questionnaire in a focus group like setting might have helped to elicit more feedback. I concluded the sessions by giving students their credit slips. The pilot sessions lasted approximately 40 minutes.

3.7.3.6 Changes

This pilot, as described by De Vaus (2002), collected data on a limited number of individuals and focused primarily upon issues regarding coverage and format. I made a number of changes to the IEQ as a result of the pilot. The following list outlines concerns arising from student feedback, entry of data, analysis of data, and a closer inspection of the questionnaire questions.

1. Some students found that the small numbers included on some of the questions (for coding purposes) distracting. As noted by De Vaus (2002), when using paper questionnaires, pre-coding questions is useful. Attempting

to code while entering data easily leads to an increased number of errors. Instead of eliminating the codes, I added letters to each option with an instruction to circle the appropriate letter. I also made the codes less conspicuous by reducing the font.

2. One student thought that by asking students only about interactions in the last two weeks (Q1), I might generate inaccurate data. The student said that during the last two weeks she had been revising in the library every day for an exam so she had little intercultural contact compared to what she typically has during a two week period. I decided to rephrase the question to ask about a typical week instead of the last two weeks and rephrased the subsequent set of questions similarly.
3. Regarding the comment boxes, a few students noted that if I wanted students to comment, I should direct them to comment. However, the comment boxes were there to provide an option for students who wished to elaborate rather than to explicitly gather additional information. I reworded the comment boxes slightly to specify that they are optional.
4. The question asking about the topics discussed during the student's interaction did not yield very diverse responses and I thought that it would likely not yield very meaningful data. Therefore, I eliminated it.
5. One student thought that the Likert-type scale used for the departmental and campus experiences was problematic in that it did not provide enough options. In reviewing it, I found that response possibilities needed to be altered to reflect less extreme options. I changed the "mainly agree" and "mainly disagree" options to simply "agree" and "disagree".
6. One question asked about curriculum including material that comes from outside the UK. One student thought that instead I might wish to specify that the curriculum comes from outside Western English speaking countries like the UK and US since she thought the current curriculum mostly reflects such material. I reworded this question accordingly.
7. One question (Most of my good friends in the department are from my own country) was measuring a concept similar to another (I have become good friends with one or more psychology students from countries other than my own) although one measured breadth while the other measures depth. De Vaus (2002) notes that if questions are designed to measure the same thing

and they correlate over .8, one can be eliminated. I ran Spearman correlations as recommended by Field (2009) for non-parametric data, on each pair. The correlations were -.889 and .898 (one was positive and the other negative due to the reverse phrasing of one question) respectively. Since the questions measured similar concepts and were highly correlated, I eliminated the question assessing breadth.

8. One student suggested that the question asking if students from countries live in their accommodation could be a “yes” or “no” answer rather than answered by a Likert-type scale. I therefore moved the question so that it had only “yes” or “no” options.
9. The question that asked whether student societies welcomed students from all countries generated all affirmative replies and seemed unlikely to yield much meaningful data. Therefore, I eliminated it consistent with suggestions from De Vaus (2002).
10. Three students thought that students tend to be involved in fewer than three or four activities and that I should rephrase the relevant question to either ask for fewer activities or to ask students to list as many activities in which they have been involved. As I am most interested in activities in which students have been mainly involved, I rephrased the question to focus on this without giving a particular number.
11. I carefully compared the departmental questions with campus questions which resulted in the rewording and reordering of some questions as well as the addition of a campus related question in order to ensure consistency across these sections as much as possible.
12. Asking students about their most common off-campus activities yielded little diversity in terms of student answers (eating out; going out to town, clubs, pubs, visiting friends, working) and is unlikely to be meaningful in the analysis. I deleted it.

3.7.3.7 Second pilot

After piloting and finalising the IEQ, further reading and discussion with others in the field of ICC research led me to consider adding open ended questions which could serve as additional indicators of intercultural development. As is noted by

researchers (e.g., Deardorff, 2011) it is important to use more than one method to assess intercultural development. While methods such as diaries and portfolios are more often recommended, due to the limited access that I had to students, I thought that it would be most feasible to add questions to the survey which could be compared against the IDI as additional indicators of development.

With this in mind I began to think about potential indicators. *The Autobiography of Intercultural Encounters* is a toolkit developed by the Council of Europe (Byram, Barrett, Ipgrave, Jackson, & Méndez Garcia, 2009). It includes a reflective activity which enquires about a significant intercultural experience which can then be used by facilitators to explore cultural learning. This seemed like it could be both useful as an indicator as well as a springboard to use for discussion during interviews. Based upon ideas from the toolkit, I developed four additional open ended questions. As I had only two weeks until data collection, I piloted the questions only on two students. The answers provided by the students coupled with their feedback suggested that I could obtain the desired information in three questions. So I finalised these and added them to the questionnaire. In order to reduce the overall length of the questionnaire, I eliminated three comment boxes and included only a final comment box at the end of the questionnaire. The final questionnaire can be found in Appendix C.

3.7.4 Interview

In the spring of 2012, I developed a semi-structured interview protocol to use with a subset of the sample. As the majority of the data collected was quantitative, I conducted interviews to enhance understanding of students' experiences prior to and during university to obtain evidence that might corroborate their IDI scores and to better understand their experiences.

3.7.4.1 Protocol development

I chose interview topics and questions in line with the literature outlined in the development of the IBQ and the IEQ in order to answer the research questions. I structured the interview questions so that to some degree they mirrored the material covered in questionnaires but probed deeper into students' experiences and what

they learned from those experiences although some questions (e.g., terminology) were included for other purposes as described below. I developed the protocol in line with suggestions from Cohen, Manion, and Morrison (2007) and Bryman (2008). For instance, I tried to create a logical order of topics and to formulate questions that would be relevant to the research questions. Specifically, I asked about students' experiences sequentially beginning with their backgrounds, moving onto their experiences when they first arrived on campus, and then onto their experiences later on.

The protocol included 13 topic areas, 10 of which included more than one question. However, I used the questions as more of a guide so the interview could more accurately be described as semi-structured (Bryman, 2008). For instance, although "UK and non-UK student distinctions" was listed as a separate topic area, I did not ask questions under this heading if students spontaneously pointed out differences that they saw between UK and non-UK students.

The following lists the topic areas covered during the interviews. In addition to the main topics, at the end of the interviews I gave students the opportunity to provide any additional information they thought was relevant and to ask questions.

- **Terminology:** Under this topic, I asked about students' knowledge and understanding of culture and intercultural competence and the importance they place upon it. These questions served mainly as a means to get the conversation going and to ensure mutual understanding of the topics to be discussed.
- **Background:** I asked questions about their experiences with cultural difference prior to coming to university (e.g., family, neighbourhood, school, travel) and the extent to which they believed they were prepared to attend a diverse university. This mirrored the background questionnaire allowing for elaboration, particularly around the extent to which students' thought that their backgrounds were relevant to their experiences at university.
- **University:** I asked students to reflect upon their initial experiences at university (e.g., Freshers' week, International week) and their positive or negative experiences with culture difference on campus. As well, questions

asked students about the atmosphere on campus and the extent to which they viewed intercultural learning as being promoted. This mirrored the IEQ but allowed for elaboration upon their experiences and the atmosphere on campus.

- **Accommodation:** I asked students to reflect upon their experience living or not living with students from other countries. This allowed students to elaborate on their accommodation experiences based upon their IEQ data.
- **Department:** I asked students to reflect upon the modules, activities, or topics that addressed cultural difference and their positive or negative experiences with culture difference in the department including working in mixed cultural groups. This mirrored the IEQ but allowed for elaboration. As well, it specifically addressed the ways in which cultural difference was addressed within the curriculum.
- **Student societies:** Under this topic, I asked students about the activities that they listed as being most active in and the extent to which they provided opportunities to interact with those from other countries. As well, I asked if they participated in any cultural events. This allowed students to elaborate based upon the responses they provided on the IEQ.
- **Outside activities:** Under this topic, I asked students to talk more about their experiences with those from different countries off campus. This allowed for elaboration on the answers that they provided on the IEQ.
- **UK/Non-UK distinctions:** Under this topic, I asked students the extent to which they saw a distinction between UK and non-UK students on campus in terms of cultural openness, value differences, etc. This allowed students to expand upon their experiences and observations on campus.
- **Interactions:** Under this topic, I asked students to expand upon their answers regarding their intercultural interactions as they reported them on the IEQ allowing for elaboration on the answers previously provided.
- **Friendships:** Under this topic, I asked students to tell me more about the friendships that they had with students from other countries as they reported them on the IEQ. I further asked them to tell me about their two closest friends in order to better understand their friendship patterns and their

relationships to stages of intercultural development. This allowed for elaboration on the answers that they provided on the IEQ.

- **Significant interaction / experience:** Under this topic, I asked students to elaborate upon their most significant intercultural interaction or experience that they had reported on the IEQ. This allowed for elaboration on the answers that they previously provided.
- **Change:** Under this topic, I asked students to reflect upon the extent to which they changed the way they interact or relate to those from other countries since coming to university and if they changed, what contributed most to that change. This question moved beyond the quantitative questionnaires and focused specifically on students' perceptions of their experiences as impacting them which is of direct relevance to the final research question.
- **IDI:** Under this topic, I asked students the extent to which they perceived IDI questions as appropriate to individuals from their own culture. This question moved beyond the research questions to gather some evidence regarding the use of the IDI with this population of students.

3.7.4.2 Pilot

As is recommended by various authors (e.g., Silverman, 2010) I piloted the interview protocol to help to ensure that my questions generated desired data. I conducted the pilot on two second year students from the psychology department who I identified with the help of a lecturer. I gave £10 to the students who participated in the pilot interviews.

At the end of the pilot interviews, I asked students for their feedback on the interview questions. As well, I reviewed the transcripts myself to see if there were ways that I could improve upon the questions. I made only minor revisions after the pilot mainly to do with the order of the questions although I eliminated some of the sub-questions which yielded redundant information and were viewed by the students themselves to be redundant. See Appendix D for the final interview protocol.

3.8 Data collection and analysis

Data for this study was collected in three waves. Procedures and data entry and analysis for each wave of data collection are detailed separately below. Ethical considerations are dealt with in the following subsection (3.9).

3.8.1 Questionnaires Wave I - Autumn 2011

The first wave of data collection occurred in October and November of 2011. It included the administration of the IDI and the IBQ. The following details the procedures followed and the entry of the data.

3.8.1.1 Procedures

As noted by Gorard (2001), researchers must expect to lose participants along the way due to factors such as incomplete data and therefore must build in ways to prevent these losses. Drop out is a particular concern for longitudinal cohort studies since data has to be collected more than once on the same individuals and participants may drop out for various reasons (Bryman, 2008). Considering possible drop out along with issues related to sample size and volunteer bias, I developed a strategy to maximize the initial participation rate, to follow up to obtain data on non participants, and to review the data clerically to ensure completeness as much as possible.

The first step in this strategy, maximising the initial response rate, involved coordinating with the psychology department lecturer responsible for careers to append the initial data collection session for this study to a compulsory careers session where the majority of potential participants were present. While participants were still given the option not to participate in the study, I thought that such an approach would take advantage of a captive audience thereby capturing data on a larger and more representative range of participants. One concern with this approach was that students who did not wish to participate but did not withdraw during the data collection session might not have responded truthfully to the questions. Researchers note that truthfulness is a concern with data yielded from questionnaires

in general although it may be a particular concern with sensitive issues. However, some response bias is virtually unavoidable (L. Cohen, et al., 2007).

The compulsory session was held on 20 October, 2011 in the psychology department for all first year students. As students entered the lecture theatre, I gave them each an envelope with the consent form and the two study questionnaires. After several short presentations related to career topics, I was introduced. I gave a brief outline as to why a study of intercultural development was part of a careers session, what my role as a researcher was, and why the department was interested in students' intercultural development. I then outlined the procedures for the study and noted the incentives for participants which included: students being entered into a £300 prize draw if they completed both sets of questionnaires during the first two waves of data collection, students receiving a £20 gift voucher for participating in interviews, contributing to my study, and the wider understanding of ICC, and contributing to the department's understanding of the intercultural development of their students. However, I further noted that participation in the study was entirely voluntary, that non participation would not reflect poorly upon them and that anyone who did not wish to participate may leave at any time. Students then had the opportunity to ask questions. Following questions, I briefly reviewed the study documents including the consent form and the two questionnaires, provided a few instructions regarding completion, asked students to complete the forms and give them to me upon departure. I then stood at the door and collected forms from the students as they left the lecture theatre.

Out of the 158 first year psychology students, 130 attended the initial careers session and of that number 128 returned completed questionnaires. It is presumed that two simply did not turn in their questionnaires perhaps deciding not to participate or forgetting to hand in their forms. At this point 82.3% of psychology students had completed questionnaires.

Since not all students were in attendance, a second step to the enhance response rate involved following up with students who were not present. I identified students who did not attend the careers session or did not complete questionnaires by comparing the names from the list of completed questionnaires with the list of

student names from the department. I then emailed these students and encouraged them to register for one of two make-up sessions scheduled in the department in mid November. Although these sessions should have been scheduled sooner, consultation with the department revealed that these dates would be best in terms of students' schedules.

I conducted the two sessions independently and they focused only on this project. Again I outlined the study using the same protocol as the initial session. Fourteen students registered for one of the sessions. Out of that number three did not attend and one who did not register in advance attended. I collected an additional 12 complete sets of questionnaires during these sessions. I immediately emailed the three students who did not attend and asked if they still wished to participate. All three responded and a fourth student who has missed the announcement for all three sessions emailed to ask if she could still participate. I sent questionnaires to these students by post and all four were returned completed. I sent a final email to those students who were still not participating and invited them to a final data collection session or offered them the option to contact me to make other arrangements. No students responded to this email. The total response rate for the initial wave of data collection was 144 students or 91.1% of the cohort.

3.8.1.2 Data entry

I set up a database in version 18.0 of the Predictive Analytic Software (PASW) Statistics package on my password protected computer. I created variable labels and assigned numerical codes to variable values. I entered the background questionnaires that I initially collected into this database along with participants' first and last names.

The IDI data is collected on a scan form which is processed by IDI, LLC. If students do not clearly mark response options on the scan forms, for instance if a student puts 'x' across an option instead of filling in the response option box, the forms cannot be read by scanners which can result in incomplete data and potentially invalid IDI scores. Therefore, after the IDI questionnaires were collected but before they were posted to IDI LLC., I reviewed each form and transformed

inadequate marks such as 'x' into clear marks to ensure forms were readable. This was necessary on approximately seven questionnaires. One student did not complete the consent form and although he completed the questionnaires, he did not include any identifying information so I eliminated the data from these questionnaires.

I sent the IDI scan forms to IDI LLC. IDI LLC emailed the raw data in an Excel spread sheet on 28 October 2011. I then uploaded this data to the IDI web site where an electronic programme converted the IDI raw data into final scores. I then downloaded this data and merged it with data from the background questionnaires by matching the data on first and last name creating one SPSS dataset.

I processed the additional sets of questionnaires gathered during the follow up portion of the study following the same procedures and added the data to the dataset. All hard copies of the forms were placed in a locked file drawer once they had been processed.

3.8.2 Questionnaires Wave 2 - Spring 2012

The second wave of data collection occurred in May of 2012. It included the administration of the IDI and the IEQ. The following details the procedures followed and the entry of the data.

3.8.2.1 Procedures

Following the strategy as outlined above, data collection was scheduled to take place during a compulsory careers session held on 3 May, 2012 in the psychology department for all first year students. As students entered the lecture theatre, I gave them each an envelope with the two study questionnaires. After several short presentations related to career topics, I was introduced. I briefly reviewed the concept of intercultural development and why it was relevant to them, what my role as a researcher was and why the department was interested in fostering students' intercultural development. I reminded them of the questionnaires they completed in the autumn, outlined the benefits of participating in the study, and the procedures. I noted the fact that some of them may not have completed questionnaires in the autumn and while their data could not be included in the study and they would not

be eligible for the prize draw, they were welcome to stay and complete the questionnaires if they wished.

I reminded participants regarding the contents of the consent form that they had signed highlighting that their participation in the study was entirely voluntary, that non participation would not reflect poorly upon them, that anyone who did not wish to participate may leave at any time, and that confidentiality and anonymity would be protected. Students then had the opportunity to ask questions. Following questions, I briefly reviewed the study documents, provided a few instructions regarding completion, asked students to complete the forms and give them to me upon departure. I then stood at the door and collected forms from the students as they left the lecture theatre.

One-hundred and forty-three students attended the careers session on 3 May. Of that number, ten students who had completed questionnaires in wave I and were at the session opted not to complete questionnaires in wave II and so could not be included in the data set. Nine students that completed the questionnaires were not participants in the first wave of data collection and could not be utilised. By comparing my original list of participants with the sign in sheet and departmental records, I found that four students dropped from the course. The remainder I emailed encouraging them to sign up for a session during which they could complete the final two questionnaires. Of those students, only one attended one of the sessions and completed the questionnaires.

At the end of quantitative data collection, 144 students participated in wave I, 131 students participated in wave II. Of those students 122 completed both waves of data collection and generated usable data resulting in a 76.8% response rate.

3.8.2.2 Data entry

I added variables from the IEQ to the existing database. I then entered the questionnaires only for those students already in the database and destroyed those of non-participants.

To process the IDI forms, I followed the procedures outlined above for wave I. However, I ensured that wave II data was labelled accordingly.

The intercultural interactions (Q2 through Q6) on the IEQ proved to be occasionally problematic in that at times students circled more than one answer. When this occurred, I flipped a coin to select a final answer.

I initially entered qualitative data contained in the IEQ into an Excel spreadsheet along with first and last name of each student. I later transferred it to NVivo for analysis along with qualitative data collected during wave III.

The hard copies of all data collection forms were placed in a locked file drawer once they were processed.

3.8.3 Quantitative data analysis

I undertook data analysis using Predictive Analytic Software (PASW) Statistics software. Having somewhat limited experience with this software and various statistical tests, I undertook a week long suite of courses offered by the University of Manchester which included Understanding Statistics, Introduction to Survey Sampling, Foundation Skills for Data Analysts, and Introduction to Data Analysis. As well, I consulted with an academic member of staff within the Education Department and a statistics tutor at the Maths Centre to better understand the data analysis and interpretation. The following describes the preparation and analysis of the data collected during the first two waves of data collection.

3.8.3.1 Preparing data for analysis

For data collected during wave I, in addition to answering questions resulting in IDI scores, the IDI collected information from participants regarding gender, age, time lived in another country, education level, ethnicity and country of citizenship. The background questionnaire included additional questions including education of parents as a proxy for socio-economic status, whether participants were from bi or multi-cultural families, the number of countries visited over the past five years, first language, confidence in speaking English for those whose first language was not

English, number of languages studied, number of languages spoken fluently, number of languages read fluently, and sexual orientation. A collection of eight questions also asked participants to indicate on a 5 point Likert-like scale the extent to which they agreed with statements that provided indications of the intercultural contact they experienced prior to university including growing up in a large city, growing up in a multicultural area, attending a culturally diverse school, spending time with culturally similar people, having friends from other cultures, parents' friendships with those from other cultures, and neighbourhood diversity. As well, one question asked the extent to which participants felt that they did not fit in with people from their home countries as another indicator of difference.

I used the original data to create four new variables to enable group comparisons. Data for primary country of citizenship indicated that participants came from 31 different countries with two indicating that they had more than one home country. I used this variable to create an additional variable, 'Citizenship Status' that classified students as 'UK student', 'European Union student' or 'International student'. The participant who indicated coming from Great Britain, Hong Kong, and Portugal proved problematic in terms of coding. However, I coded the participant as international as she had an Asian name and indicated speaking more than one language from a young age which made it seem more likely that she came from Hong Kong rather than Portugal or Great Britain. To code this variable, I identified countries as EU or non-EU using a web resource listing country codes supplied from the International Organization for Standardization ("Country Codes ", n.d.). I created a second variable based again on country of citizenship which classified participants as either 'UK' meaning from the UK or 'Non-UK' meaning from any country outside the UK. I coded the participant with multiple countries of origin noted above as 'Non-UK'.

I created a third variable, socio-economic status, using two questions that asked about the occupations of students' mothers and fathers, or caregivers. These questions served as proxies for socio-economic status. I classified participants who reported that both parents were educated to degree level as high socio-economic status, those who reported that one parent was educated to degree level as middle, and those who reported that neither parent were educated to degree level as lower

socio-economic status. I also created another variable to distinguish between participants with two educated parents, participants with an educated mother, participants with an educated father, and participants with two educated parents.

To prepare wave II data for analysis, I discarded the IDI data that was redundant from the previous wave of data collection (e.g., gender, age). The IEQ included questions regarding the number of students' intercultural interactions during a typical week and the details surrounding a chosen interaction (e.g., length of interaction, relationship with the person). Questions asked students to rate their interactions on a five point Likert-like scale as pleasant, cooperative, superficial or forced. Students were asked to rate the extent to which they typically experienced various feelings during interactions (e.g., irritation, happiness) on a similar scale. Students were then asked a series of questions regarding their experiences within the department, on campus, and off campus.

One variable which asked students to list the societies in which they were most active. Based on this variable, I manually created four other variables which indicated whether or not students participated in religion specific societies, culture specific societies, psychology society, and the culture society. I also created a variable indicating the number of activities that students reported participating in. I used these variables to look for relationships with IDI scores.

Open ended questions asked students to describe their most significant intercultural experience at university and what they learned from it. I set aside the qualitative data generated from this wave for inclusion with the interview data.

3.8.3.2 Descriptive statistics

Research and statistics texts (e.g., De Vaus, 2002; Field, 2009) suggest beginning with descriptive statistics. Therefore, I began analysing the data from waves I and II by creating profiles of the participants on all of the nominal variables (e.g., gender, age, educational level, first language, etc.).

Prior to using statistical tests, it is important to examine continuous data to determine whether the distributions are normal in order to choose the appropriate

tests (Dancy & Reidy, 2011). For instance, if a distribution is skewed, data may either need to be transformed or non-parametric tests as opposed to parametric tests may need to be used (Dancy & Reidy, 2011).

To assess the normality of the data, I created histograms of interval data, specifically IDI scores. I examined the distributions of the interval data collected for this study to determine how high or flat the peak might be using the kurtosis statistic. Distributions that are perfectly normal (mesokurtic) have a value of zero while the more peaked the distributions (leptokurtic) have values greater than zero and flatter (platykurtic) distributions have a values less than zero. As well, it is important to review the skewness statistic to determine whether or not the distributions were normal. While symmetrical distributions can be identified by the skewness statistic equalling zero, simply looking at the statistics it is difficult to determine the actual skewness without upper or lower limits. Therefore, as suggested by De Vaus (2002), I also compared the standard error of skewness to the skewness statistic. If the skewness statistic is two times the size of the standard error of skewness, generally the distribution can be considered skewed (De Vaus, 2002). I also assessed normality statistically as suggested by Field (2009) using Shapiro-Wilk Tests and further used box plots to identify, examine, and when necessary to eliminate outliers.

3.8.3.3 Correlations

As the study was exploratory and based around factors highlighted in the literature potentially important in intercultural development, I ran correlations with background and experience variables in order to find which were associated with ICC levels and change. I explored the relationships between Developmental Orientation (DO1), the overall indicator of intercultural sensitivity from the first administration of the IDI; the (DO2), the overall indicator from wave II; the change score which is the difference between the DO1 and the DO2 and experience variables. I used one-tailed correlations as I assumed that higher levels of intercultural experience (e.g. increased time living in foreign countries) would coincide with greater levels of intercultural competence suggesting definite one way relationships. For correlations with the IDI scores and ordinal variables, I used

Spearman's non-parametric correlation which is appropriate for skewed as well as ordinal data while for comparisons between the IDI scores and continuous background variables (e.g., number of countries visited) I used Pearson's correlation (Coolican, 2009). I used pair-wise exclusion to deal with missing data.

3.8.3.4 Chi-Squares and Mann-Whitney *U* tests

To assess the differences between UK and non-UK students on a variety of variables, I used either Pearson Chi-Square or Mann-Whitney *U* Tests depending upon the data. For example, I used a Pearson Chi-Square which tests the association between categorical variables (Field, 2009) to determine if non-UK students were significantly more likely to come from a bi or multicultural family compared to UK students. To further quantify differences, I calculated odds ratios for such variables.

Alternatively, I used Mann-Whitney *U* Tests in order to determine if there were significant differences in the proportions of non-UK and UK students reporting numbers of intercultural interactions per week on an ordinal scale.

3.8.3.5 *T*-Tests

To determine if there was significant change in the IDI scores for the sample as a whole and whether there were significant differences between UK and non-UK student means, I used independent-samples *t*-tests, a parametric measure used with interval-level data to compare the means of different groups (Field, 2009). Before running *t*-tests, I checked to ensure that the assumptions of normal distributions and homogenous variances were met by visually examining the skewness and kurtosis statistics as suggested by Coolican (2009) but I also assessed normality statistically as suggested by Field (2009) using Shapiro-Wilk Tests.

3.8.3.6 Regressions

As this study focuses in part upon identifying factors which might predict stages of intercultural development and potential change, I used multiple regression which allows for the prediction of the dependent or criterion variable from a collection of explanatory or predictor variables (Coolican, 2009). I began with stepwise methods

since they are recommended to be useful for model building. However, I moved on to the enter method which is considered by some to be superior (e.g., Coolican, 2009) and ended using hierarchical regression to more accurately identify the contributions of individual variables. Prior to entering variables into regression models as predictors, I examined issues of multicollinearity by inspecting the variance inflation factors (VIF) to determine where redundant variables needed be eliminated.

3.8.4 Interviews Wave 3 – Summer 2012

The final wave of data collection included in-person interviews conducted in May and June of 2012 with 20 study participants. The following outlines the procedures used in data collection and the handling of the data.

3.8.4.1 Procedures

I used stratified random sampling (Coolican, 2009) to select 20 participants to be interviewed taking into account developmental stage and UK or non-UK student status in an effort to identify themes common among individuals at different stages and from within or outside the UK. To do this, I first removed from consideration those students who indicated that they did not want to be interviewed (22). Second, I separated the remaining students into groups according to their developmental stages at the second administration of the IDI. Third, I separated students into UK and non-UK students. In order to try to ensure that the students selected represented the population from which they were selected I used a random sampling method so that, as much as possible, students had equal chances of being selected to be interviewed (Hayes, 2000). I numbered the lists of all of the subgroups of students and located an online random number generator (Random.org, 2014) to use to select students in each group. I went through each subgroup using the random number generator to select numbers which corresponded with students who I then invited to interview. This did not work well for all of the subgroups. Every, or in some cases nearly every student within particular subgroups was invited to be interviewed because some subgroups were so small. For instance there were only two non-UK students in *acceptance* and three in *denial*.

Some students did not respond to my initial email request to interview (see Appendix E for sample interview request). When this occurred, I again used the random number generator as appropriate to select and invite other students until I identified 20 students who agreed to be interviewed. This method resulted in UK and non-UK students representing each developmental stage being selected in relatively equal proportions.

I held the interviews in a small room in the psychology department which I reserved for this purpose. Interviews lasted from 45 to 90 minutes. As students arrived for interviews, I greeted them and outlined the expectations for the interview which included audio recording using an MP3 recorder. I described that their interview data would be handled confidentially and that their names would not be associated with any published data. All interviewees agreed to have their interviews recorded. After receiving agreement to proceed, I then turned on the audio recorder and proceeded with the interviews according to the interview protocol. At the conclusion of the interviews, I gave them the opportunity to add additional information and ask questions. I then gave each £20 with the exception of one student who refused payment.

3.8.4.2 Data handling

I uploaded the MP3 files from the audio recorder for each interview to my password protected computer and also created back-up copies on an external drive which I maintained in a locked file drawer. I used transcription software and foot pedal to personally transcribe each interview into an MS Word document. While I considered hiring someone to undertake the transcription for me since it represented a lot of time and effort, as has been pointed out by other researchers (e.g., Bryman, 2008), transcribing the data provides another opportunity to become familiar with the data and to begin to analyse patterns so I decided to do it myself.

To prepare the transcripts for analysis, I applied formatting features included in Word (i.e., headings) in order to use auto coding in the NVivo software. I also anonymised the transcripts by assigning pseudonyms to the students, changing country and city names to regional areas (e.g., Canada became a North American) or

to be referred to using such phrases as “my country” or “where I came from”. I also changed the names of friends and societies that students participated in that identified their countries of origin and other details that may have made them easily identifiable.

I created brief bios of participants (see Appendix F) who were interviewed in the study to introduce them to the reader as well as to begin to analyse how their backgrounds and experiences whilst at university might have impacted their development. These bios highlight their background and experiences based on a combination of their interview transcripts and their quantitative data. In selecting information for the summaries, I highlighted those features that made them each distinguishable in relation to their experiences in particular with cultural difference.

I uploaded the edited transcripts into NVivo 10 software and merged in the qualitative data from the IEQ. Nodes were automatically created within NVivo during the upload process based upon section headings that I had assigned according to the interview protocol. However, I added additional nodes as I reviewed the data. For example, nodes and sub-nodes for “Department” and “Coursework” were automatically created while I added nodes for the different topics in which culture was incorporated into the curriculum (e.g., ‘Language’, ‘Social Psychology’). See Appendix G for a list of nodes.

3.8.5 Qualitative data analysis

As noted by Bryman (2008) “there are few well-established and widely accepted rules for the analysis of qualitative data” (p. 538). He suggests, however, that there are broad guidelines which can be useful in attempting to make sense of qualitative data. The approach I took to analysing the qualitative data can be broadly categorised as narrative analysis. Kohler Riessman (2003) describes narrative analysis as focusing upon examining what individuals say about their lives and events or the stories that they tell. She notes that this approach is suited to oral narratives of personal experiences. She further describes thematic analysis, a variety of narrative analysis, which emphasises what individuals say rather than how they say it as a means to interpret their narratives.

Thus in the qualitative analysis, I focused primarily upon students' descriptions of their experiences and attempted to identify themes. I analysed the transcripts according to the questions posed in the interviews. For example, one question asked whether students' backgrounds prepared them to encounter students from different cultures at university. Using the query feature of NVivo, I generated a list of responses from students regarding this question. I noted that some students reported that they were well prepared and outlined what they believed prepared them. Others answered by reporting difficulties that they encountered with cultural difference at university either predominantly or exclusively which directly or indirectly suggested that they were not well prepared. I then created codes, prepared or not prepared, to categorise their responses into clusters or themes based upon similar meanings.

In order to determine the reliability of my coding schemes, I gave anonymised statements from a sample of the questions that I coded to a PhD colleague within my department who was conducting a related project. I asked her to apply my coding scheme to students' statements. Nearly all of the codes that she assigned to students statements matched mine suggesting that my coding was reliable.

The main research questions also guided the analysis of the interview data. Specifically, I looked for students' descriptions of their experiences that might have helped or hindered intercultural development. To analyse students' backgrounds, I examined the way in which students described their backgrounds in regard to ethnicity, family attitudes about cultural difference, experiences of different cultures at home, school, neighbourhood, and through travel experiences, as well as their assessments of their preparedness. To analyse students' experiences at university I examined the way in which students described their experiences when first arriving on campus (e.g., settling into accommodation, Freshers' week, International week), and their ensuing experiences with those from different cultures (e.g., mixed cultural group work, participation in societies, friendships).

3.8.6 Integrative data analysis

Conducting the integrative analysis involved examining the quantitative data alongside the qualitative data to further explore how students' backgrounds and university experiences might explain their development. For this analysis, I displayed, compared and integrated the data in accordance with mixed methods approaches described by Onwuegbuzie and Teddlie (2003) which incorporate analytical concepts of data display, comparison, and integration. These approaches include consideration of the following.

- For data display, consider how significant variables found in the quantitative analysis aligned with the themes found in the qualitative analysis.
- For data comparison, consider how the findings from both sets of analyses compare.
 1. How can significant variables arising from the quantitative analysis be explained with interview data?
 2. How can the themes arising from the interview analyses be explored with survey data.
- For data integration, consider what findings can be triangulated using the two methods. Are there complementary inferences that can be clarified? Are there findings from one method not found by the other?

With this in mind, I developed the following questions to undertake this analysis.

1. Did students' backgrounds explain initial IDI scores?
2. Did students' backgrounds explain significant predictors of IDI scores?
3. Did students' backgrounds explain their IDI change scores?
4. Did students' university experiences explain their IDI change scores?
5. Did students' background and university experiences explain significant predictors of IDI change scores?
6. What themes arising from the qualitative data can be explored with quantitative data?

In answering these questions, I considered the findings in line with guidance from Erzberger and Kelle (2003) which suggests that an analysis of quantitative and qualitative data can result in three outcomes. First, results can converge or lead to the same conclusions; second results can be complementary by supplementing one another; third, results can be divergent or contradictory. In most cases the quantitative and qualitative data converged and complemented one another as will be seen in the integrative chapter.

Onwuegbuzie and Teddlie (2003) suggest reducing and simplifying data to identify patterns. In line with their suggestion, for each set of data to be considered, I placed important variables from the survey data with responses to the relevant open ended questions in one table which allowed for a visual comparison between students' developmental stages, significant survey variables, and relevant findings from the interviews. To provide a few examples, there appeared to be differences in whether or not students indicated feeling prepared to encounter diversity at university which to some extent coincided with IDI scores. As well, I found that students who scored higher on the IDI often described their experiences with those from different cultures in deeper or more open terms while lower scoring students described them in shallower or in more defensive terms.

3.9 Ethical considerations

As described by Hayes (2000), the ethics of working with human participants in research has been gaining ground since the 1970's. The British Psychological Society (2009) and the British Educational Research Association (2011) provide ethical guidelines which stipulate that researchers operate under such codes as gaining informed consent from participants, not withholding information or misleading participants, informing participants about their right to withdraw from studies, and treating data confidentially.

Based upon their guidance and that of other research texts mentioned above, I developed a set of ethical principles to guide this study (see Appendix H). As well, my research proposal was reviewed and approved by the Ethics Committee before any data collection occurred.

While I believe that I have executed my study with care and within standard ethical guidelines, below I address ethical issues that are particularly relevant to my study.

3.9.1 Informed consent

To obtain informed consent, I first developed a consent form in accordance with relevant guidance, see Appendix I. The consent form reviewed the study, outlined students' right to withdraw at any time, the benefits of participating, guarantees around confidentiality and anonymity (as far as possible), relevant contact information, and required a signature. To obtain informed consent, I explained the study to students during the first wave of data collection, and gave them the opportunity to ask questions. If they agreed to participate, I asked them to please complete the consent form which I distributed with the questionnaires during wave I of data collection. I reminded students about the consent form that they completed during the final two waves of data collection.

3.9.2 Voluntary nature of the study

A problem with voluntary research is that it conflicts with “the methodological principle of representative sampling” (De Vaus, 2002, p. 59). Specifically certain kinds of people will respond while others will not resulting in biased samples. While making studies compulsory is not possible or ethical and clearly my procedures do not reflect this, I recognise that my data collection strategy may raise ethical concerns given that data collection occurred in a large lecture theatre at the end of a compulsory session with a member of academic staff present. While I gave students the option not to participate, students who did not wish to participate may have felt uncomfortable leaving when most stayed or when a staff member was present. Despite the above concerns, I believe that avoiding selection bias and obtaining an adequate sample size outweighed them. As well, although I encouraged participation by highlighting the benefits of participation, I clearly stated that they could withdraw at any time – even after completing the questionnaires.

3.9.3 Payment for participation

Participation in this study was entirely voluntary as outlined earlier. However, participants were given an incentive to participate in the overall study by being entered in a £300 prize draw. As well, I offered students £20 for participating in interviews.

The Economic and Social Research Council's (ESRC) Framework for Research Ethics (2012) notes that "researchers should inform participants of their right to refuse to participate or withdraw from the investigation" and that "there should be no coercion of research participants to take part in the research" (p. 29). Providing incentives to participate in research can be seen as coercive or as pressuring individuals to participate when they might prefer not to. Those from lower socioeconomic groups might be of particular concern in this regard (University of Leeds, 2011).

While monetary incentives can raise concerns, the majority of students in this study were from higher or middle socio-economic backgrounds making it unlikely that they would feel pressured to participate for monetary gain. As well, however, the ESRC further states that "adult research participants may be given small monetary reimbursement for their time" and that "it may be justified to use techniques such as a free prize draw...to encourage survey responses" (p.29). Based upon this guidance, it would seem that a prize draw to encourage participation and a £20 reward for spending an hour or so in an interview would be reasonable and perhaps even needed to obtain adequate participation.

3.9.4 Confidential handling of the data

In terms of maintaining confidentiality, I have not and will not share with anyone the names of the students who did or did not participate in the study. In particular, I have not and will not inform psychology department staff of study participant names. While most students were present for the first two waves of data collection and are known to have participated, the students who were interviewed might be of greater concern because of detailed information that they provided. To help ensure confidentiality around their participation, I held interviews in a small meeting room

in the psychology department in which no other students or staff was present. As well, I scheduled interviews outside of normal lecture hours so that few people would be around the department.

I have maintained all original research questionnaires and interview transcripts in a locked file drawer and they will be destroyed when the project is complete and relevant papers published. I have maintained all electronic files on my personal computer which is password protected. I keep a backup on an external drive also in a locked file drawer. In terms of interview participant data protection, I have assigned pseudonyms to interview participants and changed the names of friends and home locations on the transcripts. As well, the university and department in which the study was conducted have not been identified other than being located in northern England.

3.10 Strengths and limitations of the study

This study is bolstered by several factors. First it uses a mixed methods approach which as outlined above generates and combines empirical and qualitative data to gain a broader understanding of the research topic. Second, the study is rooted within an established theoretical model of human development, the Developmental Model of Intercultural Sensitivity (M. J. Bennett, 1993) which not only is well researched but dovetails with other models of human development (e.g., King & Baxter Magolda, 2005). Third, the study makes use of an established and well researched instrument, the IDI, which has been carefully developed and extensively tested in terms of reliability and validity (Hammer, 2011). Fourth, the study broadens the scope of students' intercultural development by studying students in an under researched discipline, psychology, and by studying the development of both home and international students. This is in contrast to most other studies which tend to focus upon students from particular countries who are studying abroad and/or students who are studying a foreign language.

Although the study has several strengths, it also suffers from some weaknesses. First, the sample size was relatively small (122) limiting confidence in the quantitative results. Second, because the study was focused upon students in one

discipline and within one institution, results cannot be easily generalised to the wider population of students. Third, ideally the study would have been executed over the entire degree course rather than over just two terms although this time frame is valid when considering the time frame of other such studies. Fourth, I conducted all student interviews which could be seen as a benefit since the characteristics of interviewers can have an impact upon interviewees' responses (Bryman, 2008) and different interviewers could generate data that is not as comparable across cases. However, as students were likely to view my status as an educator rather than a peer, this may have led them to present their experiences in a more positive rather than realistic light. Fifth, I analysed the interview data independently. While I worked to reduce the influence of my own bias within the study by having an outside person apply my coding methods to transcripts, it is unlikely that I completely eliminated all instances of bias.

3.11 Conclusion

This study was designed to explore the intercultural development of a cohort of psychology students studying on one UK campus. This chapter attempts to provide an account of the study design and the way in which the study was carried out. By using a mixed methods longitudinal approach to data collection, I aimed to identify factors surrounding the intercultural development or lack thereof in this group of students. The study has a number of limitations as outlined above. Despite these limitations, I believe that this study makes some contribution to the limited body of research in this area from around the world but in particular from the UK. Perhaps one of the most important contributions is that it highlights possible problems around the assumption that intercultural contact will automatically lead to the intercultural development of students from home and abroad studying psychology on UK campuses.

Chapter 4 Quantitative Findings

Internationalisation has led to the creation of campuses often rich in cultural diversity. Such environments can be helpful in promoting understanding across cultures and developing intercultural skills amongst students (Volet & Ang, 1998). While a few studies suggest that some students, specifically international students, may have a lot of intercultural contact and that those experiences may enhance development (e.g., Montgomery & McDowell, 2009), generally research suggests the opposite. Researchers argue that university policy and practice typically are not aligned to support students' intercultural development (e.g., Middlehurst & Woodfield, 2007); researchers find that intercultural contact between students can be limited and fraught with challenge (e.g., Harrison & Peacock, 2009; Thom, 2000); and the limited studies of students' intercultural development that do exist call into question the extent to which they develop.

The purpose of this study was to explore these issues by studying a cohort of UK and non-UK first year psychology students studying in a university in the north of England. The primary measure used in this study was the Intercultural Development Inventory (IDI), a standardised assessment of intercultural sensitivity used as an indicator of intercultural competence. Questions that guided the study considered initial levels of intercultural development in study participants, intercultural development over the first two terms at university, and factors related to intercultural development including student characteristics and intercultural experiences prior to and during university. Quantitative survey data was collected on 122 first year psychology students using the IDI administered at the start of the first term and the end of the second term; and two locally designed instruments: the Intercultural Background Questionnaire (IBQ), administered at the start of the first term and the Intercultural Experiences Questionnaire (IEQ), administered at the end of the second term.

The purpose of this chapter is to present the findings from the analysis of the quantitative data collected as part of this study. The analysis of quantitative data was guided by the research questions for this portion of the study which were as follows:

Are there differences between UK and non-UK university students' intercultural development?

- 1) *At what stage of intercultural development do students' enter university?*
- 2) *Does intercultural development occur over the first two terms at university?*
- 3) *What student characteristics and intercultural background experiences predict students' initial stage of intercultural development?*
- 4) *What student characteristics and intercultural experiences prior to or during university are related to students' intercultural development whilst at university?*

The results suggest that students in this study entered university at a range of developmental stages although most arrived in the *minimisation* stage. There was no statistically significant difference between the mean IDI scores of UK and non-UK students. The best predictors of initial developmental stages appeared to be time lived abroad for all students with having friends from other cultures also a predictor for UK students and growing up in cities a predictor for non-UK students.

Students generally reported that they had a lot of intercultural contact during their time at university and were generally positive about these experiences. However, a comparison of the mean IDI scores for both groups at the first and second administrations found that on average UK and non-UK students' scores in both groups remained approximately the same. A closer look at the data found that while most students remained at the same developmental stage, more than one-quarter decreased one or more stages while about half that proportion increased a stage. The findings suggest that while students are studying in a culturally rich environment and having some positive intercultural experiences, only a minority seem to have benefitted while most declined or stayed the same.

Although many students reported high levels of intercultural contact during university, particularly non-UK students, and some reported extensive intercultural experience prior to coming to university, no contact or background related variables were identified as good predictors of change in students' IDI scores. However, two non-contact related variables were found to have some predictive ability for IDI change scores. These included 'feelings of not fitting in' for which a small negative relationship with IDI change scores for UK students was found and 'being increasingly active in clubs and societies' for which a small negative relationship

with IDI change scores for non-UK students was found. Both of these findings will be discussed later in the chapter but should be viewed with caution as they are not well substantiated by other research studies and may represent spurious results.

4.1 Population and sample

The two administrations of the surveys resulted in different rates of response (see Table 4-1). Wave I included responses from 144 (91.1%) of the cohort of first year psychology students. Wave II yielded responses from 131 (82.9%). However, only 123 (77.8%) completed questionnaires during both waves. Using box plots, I found two of these students' scores to be outliers and upon further investigation described later, deemed one of the two scores to be unreliable. For this reason, I excluded that student's data which brought the total number participating in both waves to 122 (76.7%). The quantitative data analysis in this chapter focuses primarily upon the 122 participants with those who participated in wave I but not wave II included mainly for comparison to ensure that those who dropped out were similar to those that remained in the study.

Instruments	Response
IDI wave I and background questionnaire (Oct 2011)	144 (91.1%)
IDI wave II and intercultural experiences questionnaire (May 2012)	131 (82.9%)
Completed both waves of data collection	122 (76.7%)
<i>Note: There were 159 first year psychology students.</i>	

Table 4-1: Response rates for wave I and II

4.2 Analytic procedures

I began with a univariate analysis of the data for several reasons. First, it allows for the checking and correction of inaccurate or missing data, consideration of the need for recoding, (e.g. if there are too few respondents indicating “Strongly Agree” or “Strongly Disagree” they should perhaps be folded into “Agree” or “Disagree”), and for the assessment of various features of the data such as normal distribution which suggests appropriate statistical tests (Field, 2009). As I undertook this analysis, I also considered the following three things in order to identify variables that were related to intercultural development to include in the final analysis.

1. In reviewing the frequencies, I looked for variables that had little variability in order to identify those that should be excluded from further analysis.
2. In examining correlations between the dependent variable and independent variables, I identified variables that had low associations in order to identify those that might prove to be of little value in the analysis.
3. In reviewing correlations between independent variables, I looked for those that were highly correlated in order to identify those for which multi-collinearity might be a concern and variables might need to be eliminated or combined.

The following presents the analysis for each of the research questions sequentially with each addressing differences found between UK and non-UK students. The first research question is addressed by analysing the distributions and means of the initial IDI scores (DO1) of the cohort for wave I. It further includes the frequencies of actual developmental stages (i.e., denial, polarisation, minimisation, acceptance) for the entire cohort to better understand developmental levels in absolute terms. It then provides separate distributions and means for UK and non-UK students and determines if there are significant differences using a paired sample *t*-test.

The second research question is addressed by analysing changes in the DO score from wave I to wave II for the entire cohort using a paired sample *t*-test. It also compares change between UK and non-UK students separately using an independent sample *t*-test. It further includes the frequencies of actual developmental stages for the entire cohort and each group separately to better understand how developmental levels shifted in absolute terms.

The third research question is addressed by reporting the analysis of the frequencies or means for student characteristics, considering the use of these variables in further analysis, analysing the drop out of participants between waves I and II, and analysing the differences in these variables between UK and non-UK students using Mann Whitney *U* tests. Next, it provides the results of a similar analysis regarding students' intercultural backgrounds before reporting the results of correlation and multiple regression analyses designed to predict students' initial levels of intercultural development by identifying variables related to the DO1.

The fourth research question is addressed by reporting the frequencies or means for students' experiences during university. This is divided into six subsections. The first five sub-sections are as follows: students' intercultural experiences in general; students' experiences within the department; students' experiences around campus; students' experiences off campus; students' willingness to be interviewed. Each sub-section considers the use of the variables contained in that section in further analyses, analyses differences in the responses between UK and non-UK students and reports the results of Mann Whitney *U* tests to determine if differences were significant.

The sixth sub-section reports the results of correlation and multiple regression analyses designed to predict students' intercultural development over the first two terms at university by identifying which factors (e.g., student characteristics, experiences during university) were relevant to the change in students' IDI scores from wave I to wave II of data collection. The chapter ends with a discussion of the overall results.

4.3 At what stage of development do students enter university?

The IDI generates a number of numerical scores related to intercultural development. The Developmental Orientation (DO) score is the overall score that gauges where participants fall on the developmental continuum and is the primary dependent variable for this study.

I initially began exploring the data by looking at the means and distributions (see Figure 1). The DO1 mean score for study participants (91.54) in the first wave of data collection (N=123) suggested that generally students entered their first year of study at the *minimisation* stage. While a similar median and mode (91.52, 86.48) suggested that the mean was a fairly good representation of the group score overall, an inspection of a histogram of scores along with more detailed statistics showed that there was substantial variation in scores, ranging from 51.49 (denial) to 124.42 (acceptance), SD=12.86.

Exploring the data using box plots, I found that there were two outliers in the data which included two particularly low scores for UK students. Neither score was the result of a data entry error since data was electronically scanned and calculated. One of the scores seemed to be genuine in that the participant's score the second time was very similar to her score the first time. As well, she happened to be a student that I interviewed and her interview was consistent with someone who was in an early developmental stage. The second low score, however, belonged to a student who had a substantially higher DO2 score. In fact, she had the largest jump in score of any student, increasing by 59% with the next closest increase 33%. Based on this information, I deemed that for whatever reason, her original score was likely to be invalid. I therefore excluded her data from further analysis. This change resulted in a slightly altered DO1 mean (91.83) and standard deviation (12.52). See Figure 4-1 for the distribution.

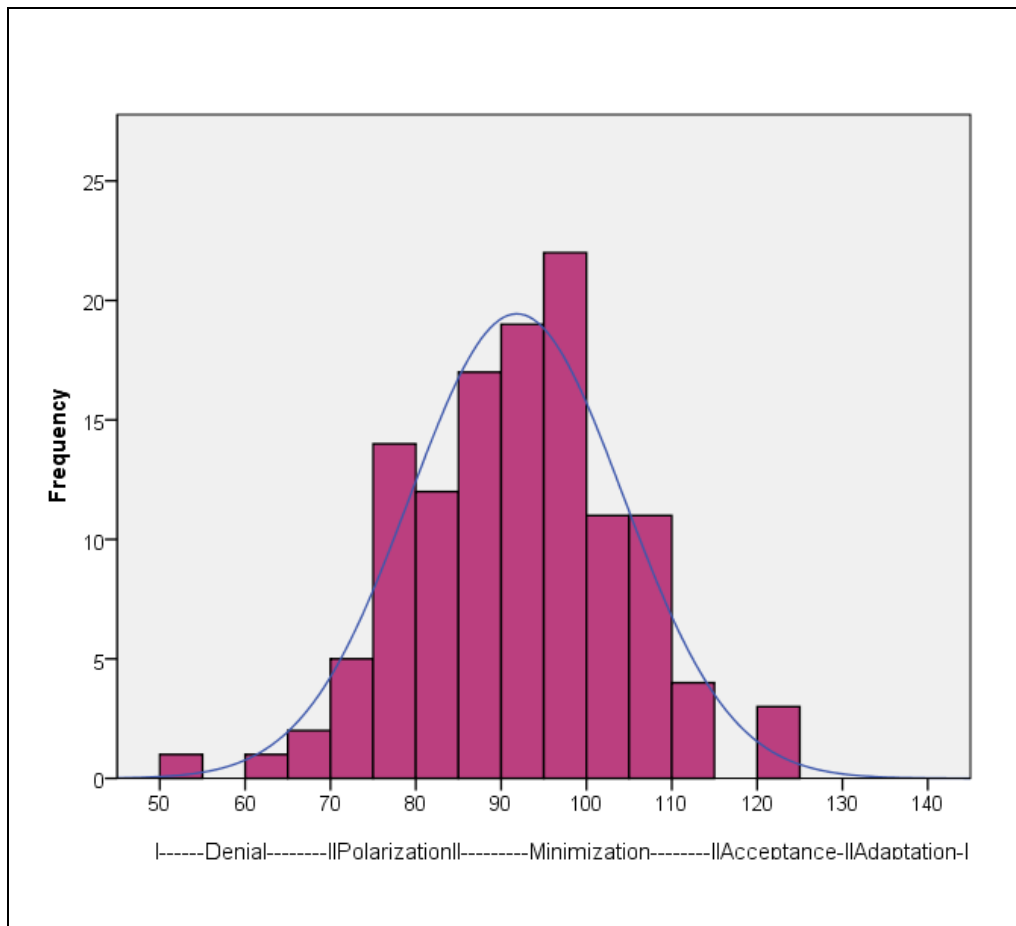


Figure 4-1: Distribution of DO scores – wave I

Looking at where scores placed students on the developmental continuum, while more than two-thirds of students fell in the *minimisation* range (see Figure 4-2), a substantial minority of the remaining students fell into the lower developmental stages of *polarisation* and *denial* with only a few students in a higher stage, *acceptance*, and none in *adaptation*.

The mean score is consistent with other studies on university students such as Riley (2007) who studied US university students from a variety of disciplines, Ayas (2006) who studied third-year US medical students, and Arevalo-Guerrero (2009) who studied advanced level US foreign language students. However, Chen (2008) found the scores of Taiwanese business students to be on average in the *defence* stage.

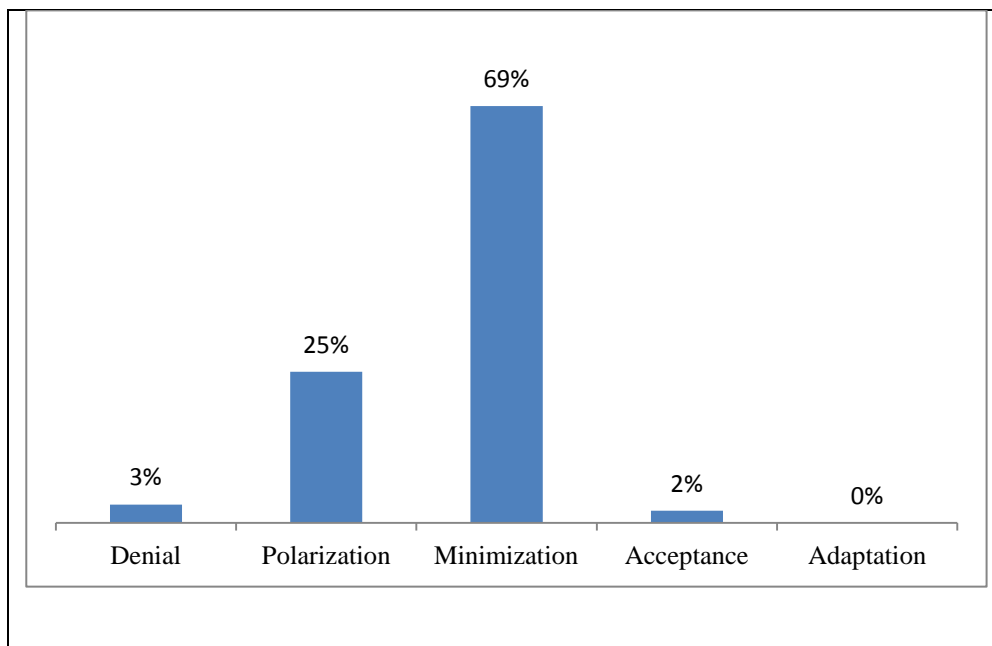


Figure 4-2: IDI developmental stages wave I

4.3.1 UK and Non-UK student differences

A comparison of the DO1 scores between UK (N=79) and non-UK (N=43) students found that non-UK students' scores were slightly higher ($M=92.35$) than UK students ($M=91.55$). Although these means were slightly different, they both fell into the same IDI developmental stage suggesting that there was not a substantial difference between their mean scores. However, to ensure that there was not a statistically significant difference, I used an independent-samples *t*-test which is a parametric measure that can be used with interval-level data to compare the means of different groups. When using *t*-tests, it is important that the distributions are normal and the variances are homogeneous (Field, 2009). Therefore, prior to running this analysis, I checked that these assumptions were met for the DO1 distributions of the two groups.

To evaluate their distributions, I inspected plots of the DO1 scores on histograms. While, the curves generally appeared to be normal, Coolican (2009) suggests evaluating the skewness and kurtosis statistics in accordance with some general rules. Specifically, if the skewness or kurtosis statistics are more than two times the size of their standard errors, a distribution may not be normal. Using this criteria the distributions for both groups, although showing some kurtosis and skewness, would be classified as normal (see Table 4-2).

	N	Range	Min	Max	Mean		SD	Var	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	SE	Stat	Stat	Stat	Std Error	Stat	Std Error
UK DO1	79	72.93	51.49	124.42	91.55	1.37	12.21	149.12	-.280	.271	.714	.535
Non-UK DO1	43	59.89	62.11	122.00	92.35	2.01	13.19	174.02	.128	.361	-.133	.709

Table 4-2: DO means for UK and Non-UK students – wave 1

While an examination of the statistics and distributions suggested that the distributions were normal, Field notes that for smaller samples (less than 200) it is better to use statistical tests to determine how likely the values are to occur by chance to make a final determination regarding the normality of the data. Laerd (2012) suggests using the Shapiro-Wilk test to assess normality. If the resulting p value is greater than .05, the data can be thought to be normally distributed. Using this guideline, the results of the Shapiro-Wilk Tests were as follows: UK, $W(79) = .99, p = .58$; non-UK, $W(43) = .99, p = .98$; suggesting that the distributions did not deviate significantly from normal.

To assess the homogeneity of variance for dependent variable groupings, I used Levene's Test for Equality of Variances which tests whether the variances in different groups can be considered equal (Field, 2009). With this test if the significance level is greater than .05, the group variances are assumed to be approximately equal. Results of this test suggested that group variances were equal: $F(120) = .672, p = .414$.

Since the data met the required assumptions, I ran an independent-samples t -test on the DO1 scores to determine if the mean difference between UK and non-UK students was significant. Results indicated no significant difference between the DO1 of the two groups $t(142) = -.337, p = .737$ suggesting that both UK and non-UK students in this study entered their first year of university with very similar IDI scores.

Based on the above analysis, students in this study began their first year of university in lower *minimisation*, 91.83, although scores did range somewhat: 3%

denial, 25% polarisation, 69% minimisation, 2% acceptance. Statistically there was no difference between UK students' mean 91.55 and non-UK students' mean 92.35.

4.4 Does intercultural development occur over the first two terms of university?

To determine if intercultural development occurred over the first two terms at university, I began by considering changes in the mean IDI scores between wave I and II. The mean DO declined slightly from 91.83 in wave I to 90.48 in wave II. Although these means were slightly different, they were obviously very close and both fell into the same IDI developmental stage suggesting there was no change. However, to determine if there was a statistically significant difference, I used a paired samples *t*-test to compare the mean scores since both the DOs were continuous variables and the data was longitudinal. As previously described, I checked for outliers and found none in the second wave of data collection with the exception of a similarly low score by the student who was an outlier in wave I.

I checked for normality of the distributions by inspecting plots of DO scores from waves I and II. I also ran Shapiro-Wilks tests to determine normality statistically. Both distributions appeared to be normal: DO1, $W(122) = .99, p = .89$; DO2, $W(122) = .99, p = .24$. As paired samples *t*-tests do not require equal variances (Field, 2009), I did not run Levene's Test of Equality of Variances.

The means for the developmental scores for waves I and II were significantly correlated $r = .68, p < .000$ as would be expected with a repeated measure. While the DO1 mean was slightly higher ($M = 91.83, SE = 1.13$) than the DO2 mean ($M = 90.48, SE = 1.37$) the results indicated that this difference was not statistically significant, $t(121) = 1.31, p = .19$.

While overall, the change according to mean scores was not significant, there are other ways to consider change in DO scores. An analysis of the change from the DO1 and DO2 found that each student's score changed. The mean change in the DO was $-1.34 (SD = 11.27)$. The largest gain seen was approximately 28 points with the largest decline seen more than 27 points.

It could be argued that meaningful change in DO scores result from the movement from one development stage to another. Looking at the data in this way, more than half (57.4%) of students remained at the same developmental stage, slightly more than one-quarter (27.9%) shifted down one or more developmental stages and the rest (14.8%) moved up one or more stages. This data suggests that a relatively small proportion of students advanced during the first two terms at university while most stayed the same and a substantial proportion regressed to an earlier developmental stage.

Figure 4-3 displays the proportion of students at each stage of development in the first and second waves of data collection. This figure more clearly illustrates the limited change seen in the developmental stages of students between waves I and II.

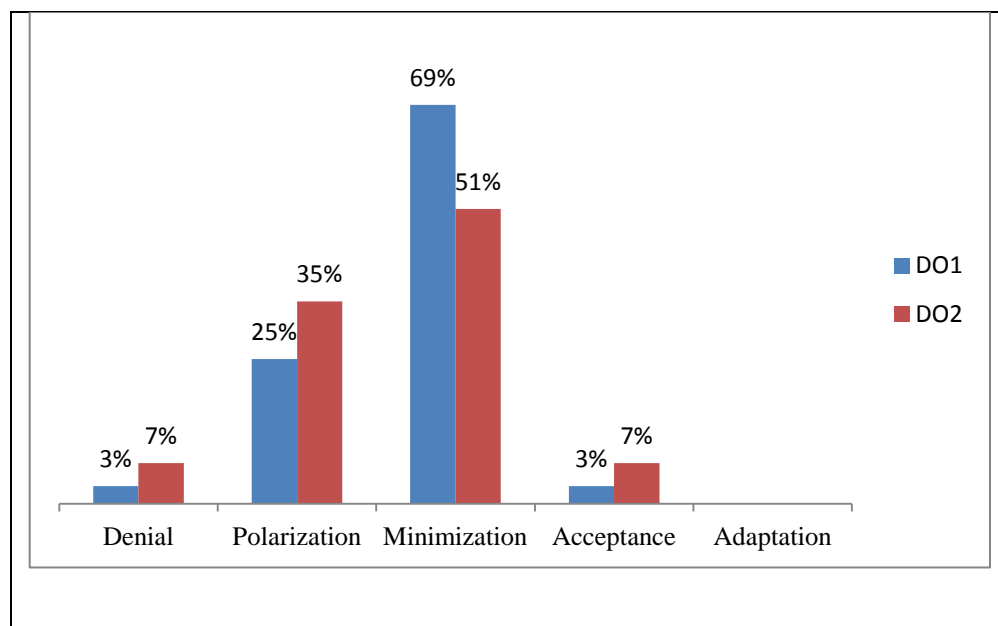


Figure 4-3: IDI developmental stages at wave I & wave II

4.4.1 UK and Non-UK student differences

The next step in this portion of the analysis was to look more closely at whether there were differences in the extent to which UK and non-UK students' experienced changes in their DO scores. UK students' DO scores declined by somewhat less than a point from 91.54 to 90.5 with the mean change -1.05 while non-UK students' DO scores declined by closer to two points from 92.35 to 90.46 with a mean change of -

1.87. While again there does not appear to be a meaningful difference in scores, I tested for statistical significance.

As I already tested for normality of the DO1 score, I ran normality tests only for the DO2 scores. The only outlier in both sets of data was the student who had scored particularly low the first time who again scored particularly low the second time. Both distributions appeared to be normal according to Shapiro-Wilks tests: UK DO2, $W(79) = .98$, $p = .34$ non-UK DO2, $W(43) = .99$, $p = .93$. Paired samples t -tests found that changes to the DO scores for both groups were not significant, UK $t(78) = .82$, $p = .42$; non-UK $t(42) = 1.12$, $p = .27$. As well, an independent samples t -test comparing the DO change scores between UK and non-UK students found that the difference in the scores between the two (-1.05, -1.87) was not significant $t(120) = .382$, $p = .703$.

While a slightly larger proportion of UK students experienced an increase in their DO scores compared to non-UK students (48.1% cf. 41.9%), a chi-square test analysing differences between UK and non-UK students on this variable found that this difference was not significant $\chi^2(1, N=122) = .437$, $p = .57$.

Coding the DO scores in terms of developmental levels allowed for a categorical view of the way in which students improved or declined. Looking at the data in this way, a larger proportion of UK students moved up a developmental level (19%) compared to non-UK students (7%). Very similar proportions experienced downward movements (27.8% cf. 27.9%) while a slightly larger proportion of non-UK than UK students remained at the same developmental level (65.1% cf. 53.2%).

Comparing the data categorically between groups found similar trends to that of the entire cohort in terms of students shifting away from the mean stage to the more extreme stages. However, while only 1% of UK students were in the *acceptance* stage at wave I, this proportion increased to 8% at wave II while the proportion in this category did not change at all for non-UK students. See Figure 4-4.

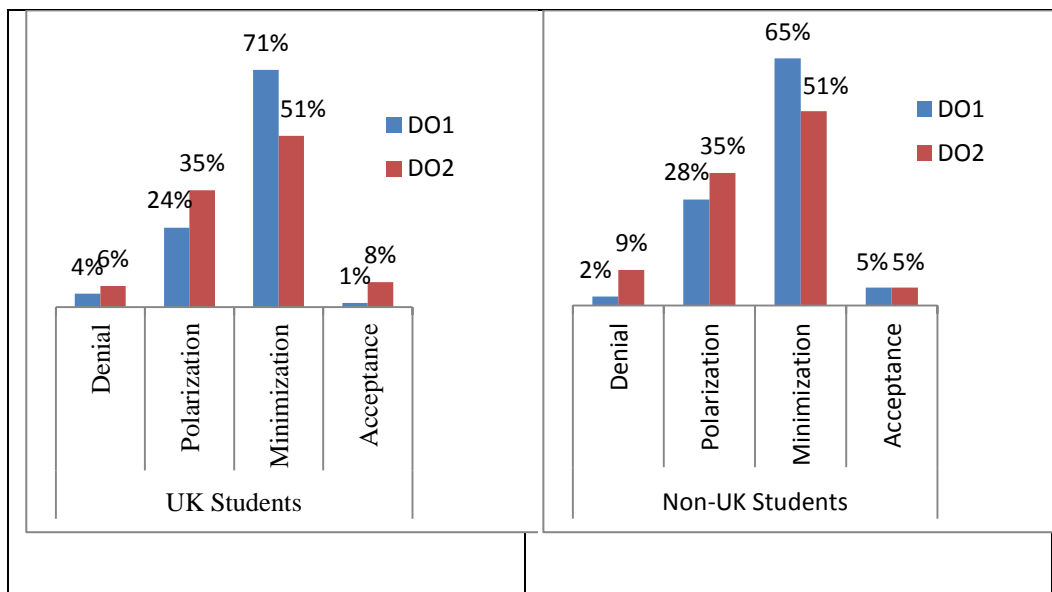


Figure 4-4: UK & Non-UK student developmental stages, wave I & II

The above analysis suggests that on average, students did not experience much of a change in terms of their DO scores, although all students' scores changed to some extent. Looking at change in terms of shifts from one developmental stage to another (57.4%) of students remained at the same developmental stage, slightly more than one-quarter (27.9%) shifted down one or more developmental stages and the rest (14.8%) moved up one or more stages suggesting a shift away from the mean, typically downward but for some upward.

There was no statistically significant difference in the change scores for UK students (91.54 to 90.5) and non-UK students (92.35 to 90.46). In terms of developmental stage shifts, more UK students moved up a stage while more non-UK students declined.

4.5 What student characteristics and intercultural background experiences predict students' initial stage of intercultural development?

The above analysis suggests that generally students started out their first year of university at the *minimisation* stage of development. However, there was some variation. To better understand how initial developmental levels might be predicted, I explored the relationship between DO1 scores and student characteristics and intercultural background variables.

4.5.1 Student characteristics

Both the IDI and the IBQ included demographic information. The IDI included six demographic items including: gender (male or female in forced choice format), age category (17 and under, 18-21, 22-30, 31-40, 41-50, 51-60, 61 and over), education level (did not complete secondary school, secondary school graduate, post-secondary school graduate, MA or equivalent graduate, PhD or equivalent graduate, Other), region of the world primarily lived in to age 18 (North America, Central America, South America, Middle East, Africa, Australia, Asia Pacific, Western Europe, Eastern Europe, Other), ethnic minority group membership (yes or no forced choice) and country of citizenship (passport country, selected from a comprehensive list). It included a further question regarding total time lived in another country which I classed as an intercultural background variable and included in the intercultural background profile section below.

The IBQ included six questions that I classed as demographic in nature. These included mother or primary female caregiver degree status, and father or primary male caregiver degree status. Other questions asked if students were from a bi or multicultural family (yes, no or unsure), what participants' first language was (English, English and another language, non-English), confidence in speaking English for non-English as first language speakers (on a five point scale ranging from very confident to not confident at all), and whether participants identified with an alternative sexual orientation such as lesbian, gay, bisexual, pansexual (with choices of no, yes, and do not wish to answer). Frequencies are shown in Tables 4-3 and 4-4.

Around 80% of participants were female which is typical for the psychology discipline which tends to attract about this ratio of males to females (Higher Education Statistics Agency, 2011). Most of the participants reported being educated only to the secondary school level with few reporting an additional undergraduate, postgraduate or other qualification. Statistics from the admissions office are consistent with these data although some overseas student qualifications were listed as unknown or other which accounts for those who reported having some other kind of qualification. Participants in this study were more traditional university-aged

students with the vast majority of respondents between 18 and 21 years of age and just a few indicating that they were between 22 and 30 or 17 and under. Again, these statistics were consistent with admissions data for the department which included five students coded as 17 or under and six coded as mature at 21 or over. Due to a lack of variation in age and educational status and the very small numbers of participants included on either end of the spectrums, I considered these variables to be relatively constant and did not analyse them further.

A little more than half of respondents indicated that their mothers or primary female caregivers were educated to degree level with approximately the same proportions reporting that their fathers or primary male caregivers were educated to degree level and about two-fifths reporting that both were educated to degree level. From these two variables, I created two additional variables. One variable, parents' combined degree status, indicated whether or not students came from a family in which at least one parent was educated to degree level. This variable suggested that more than two-thirds of students had at least one parent who had a degree.

I extrapolated socioeconomic status (SES) from the educational levels of parents. About two fifths of participants I classified as being from the upper socio-economic backgrounds (both parents were educated to degree level), about one-quarter I classified as being from the middle socio-economic backgrounds (one parent was educated to degree level), and the rest I classified as being from lower socio-economic backgrounds (neither parent was educated to degree level).

Nearly 90% of participants reported that they did not belong to an ethnic minority group and more than 80% indicated that they were not from a bi or multicultural family. Since these numbers were fairly small, I collapsed these two variables to create a third variable identifying participants as belonging to an ethnic minority group or coming from a bi or multi-cultural family which then created a single category with a slightly larger number of participants. I used this variable for further analysis and excluded the other two.

Participants indicated coming from 31 different countries or combinations of countries with about two-thirds from the UK, a little over one-tenth from other EU

countries, and nearly one-quarter international, classed as countries outside the EU. In terms of world region, while most, of course, indicated that they were from Western Europe, about 20% indicated that they were from Asian Pacific countries with the rest falling into other regions. The only citizenship classification that I used in further analysis was UK and non-UK.

About two-thirds of participants reported that English was their first language, about one-quarter indicated that it was not and about one-tenth reported speaking English and another language from an early age. Of the respondents whose first language was not English, about two-thirds indicated that they were confident or very confident in speaking English whilst the remainder reported being somewhat or not so confident. I retained these variables for use in analysing non-UK student data since all but one UK student indicated that their first language was English or English and another language.

Nearly nine out of 10 participants reported a heterosexual orientation with the remainder either reporting an alternative sexual orientation or declining to answer. Although a relatively small number of participants (7) reported an alternative sexual orientation, I included the variable in initial correlations in case differences were found to be substantial.

I compared the statistics from those participants in wave I (N=143 excluding the outlier) with those participants in both waves (N=122) and found very similar proportions in terms of demographic data (see Table 4-3 and 4-4) suggesting that those who dropped out of the study at wave II were similar demographically to those who remained in the study.

Category	Wave I		Wave II	
	N	%	N	%
<u>Sex</u>				
Male	28	19.6%	23	18.9%
Female	115	80.4%	99	81.1%
Total	143	100.0%	122	100.0%
<u>Age</u>				
17 and under	2	1.4%	2	1.6%
18-21	135	94.4%	117	95.9%
22-30	6	4.2%	3	2.5%
Total	143	100.0%	122	100.0%
<u>Education Level</u>				
Secondary (high) school grad	138	96.5%	118	96.7%
Postsecondary (university) grad	4	2.8%	4	3.3%
MA or equivalent	1	0.7%	0	0.0%
Total	143	100.0%	122	100.0%
<u>Mother Degree Status</u>				
Has degree	74	51.7%	66	54.1%
Does not have degree	63	44.1%	51	41.8%
Don't know, other or missing	6	4.2%	5	4.1%
Total	143	100.0%	122	100.0%
<u>Father Degree Status</u>				
Has degree	81	56.6%	72	59.0%
Does not have degree	54	37.8%	44	36.1%
Don't know, other or missing	8	5.6%	6	4.9%
Total	143	100.0%	122	100.0%
<u>Parents Degree Status</u>				
Neither	43	30.1%	35	28.7%
Father only	22	15.4%	19	15.6%
Mother only	15	10.5%	13	10.7%
Both	59	41.3%	53	43.4%
Unknown, other or missing	3	2.1%	2	1.6%
Total	143	100.0%	122	100.0%
<u>Parents Combined Degree Status</u>				
Degree	96	67.1%	85	69.7%
No degree	43	30.1%	35	28.5%
Missing	4	2.8%	2	1.6%
Total	143	100.0%	122	100.0%
<u>Socioeconomic Status</u>				
Lower	44	30.8%	35	28.7%
Middle	37	25.9%	32	26.2%
Upper	59	41.3%	53	43.4%
Missing or Unknown	3	2.1%	2	1.6%
Total	143	100.0%	122	100.0%

Table 4-3: Participant characteristics part I

Category	Wave I		Wave II	
	N	%	N	%
<u>Ethnic Minority in Home Country</u>				
Ethnic Minority	10	6.9%	9	7.7%
Non-ethnic Minority	128	89.5%	108	88.5%
Missing	5	3.5%	5	4.1%
Total	143	100.0%	122	100.0%
<u>Bi or Multi-cultural Family</u>				
Yes	19	13.3%	16	13.1%
No	119	83.2%	103	84.4%
Unsure/Other	5	3.5%	3	2.5%
Total	143	100.0 %	122	100.0%
<u>Bi or Multi-cultural Family or Ethnic Minority in Home Country</u>				
Yes	24	16.8%	20	16.4%
No	119	83.2%	102	83.6%
Total	143	100.0%	122	100.0%
<u>Primary Citizenship</u>				
UK	92	64.3%	79	64.8%
EU	17	11.9%	15	12.3%
International	34	23.8%	28	23.0%
Total	143	100.0 %	122	100.0%
<u>Primary Citizenship UK / Non-UK</u>				
UK	92	64.3%	79	64.8%
Non-UK	51	35.7%	43	35.2%
Total	143	100.0%	122	100.00%
<u>World Region</u>				
North America	1	0.7%	0	0.0%
South America	1	0.7%	1	0.8%
Middle East	2	1.4%	2	1.6%
Asia Pacific	29	20.3%	25	20.5%
Western Europe	96	67.1%	81	66.4%
Eastern Europe	10	7.0%	9	7.4%
Other	4	2.8%	4	3.3%
Total	143	100.00%	122	100.0%
<u>First Language English</u>				
English	93	65.0%	79	64.8%
English & another language	14	9.8%	14	11.5%
Non-English	35	24.5%	29	23.8%
Missing	1	0.7%	0	0.0%
Total	143	100.0%	122	100.0%
<u>Confidence speaking English</u>				
Not so confident	2	5.7%	2	6.9%
Somewhat confident	9	25.7%	9	31.0%
Confident	17	48.6%	12	41.4%
Very confident	7	20.0%	6	20.7%
Total	35	100.0%	29	100.0%
<u>Alternative Sexual Orientation</u>				
No	125	87.4%	105	86.1%
Yes	7	4.9%	7	5.7%
Do not wish to answer	8	5.6%	8	6.5%
Missing	3	2.1%	2	1.6%
Total	143	100.0%	122	100.0%

Table 4-4: Participant characteristics part II

4.5.2 UK and Non-UK student differences

In comparing the characteristics of UK and non-UK students for the 122 students that participated in both waves, some differences emerged. A higher proportion of non-UK students came from bi or multicultural families or ethnic minority groups (27.9% cf. 10.1%). As well, a higher proportion of non-UK students fell into the high socioeconomic category as a result of having both parents educated to degree level (58.5% cf. 36.7%).

To determine if these differences were statistically significant, I used a Pearson Chi-Square which is used to test the association between categorical variables (Field, 2009). The results found a significant relationship between citizenship and socio-economic status ($\chi^2(2)=7.442, p=.02$) and coming from a bi or multicultural family ($\chi^2(1)=6.42, p<.01$). Based on calculations of the odds ratio, non-UK students were 2.4 times more likely to have come from a high socioeconomic group and 3.4 times more likely to have come from a bi or multicultural family or ethnic minority group than UK students.

All but four (94.9%) of UK students' first language was English, only four (9.3%) of non-UK students listed English as their first language with another 11 (25.6%) indicating learning English and another language from an early age. While the vast majority (90.1%) of UK students indicated growing up in Western Europe, only nine (20.9%) non-UK students indicated growing up in Western Europe.

Proportional differences between UK and non-UK students for all those participating in wave I (N=143) were similar to the 122 participating in both waves of data collection.

4.5.3 Previous intercultural experiences

Both the IDI and the IBQ contained questions relevant to participants' intercultural backgrounds. The IDI included one question; total time lived in another country which provided ordinal-level data. The intercultural background questionnaire included 13 questions relevant to students' intercultural backgrounds. Length of time lived outside home country was again asked, however, at the interval level with

the idea that a parametric rather than a non-parametric test could be used to analyse data. Other questions included the number of countries visited in the last five years, number of languages studied other than first, number of languages spoken fluently other than first, and number of languages read fluently other than first (all fill in the blank). Seven of the remaining questions were indicators of experience with individuals from different cultures and were on a five point Likert-like scale ranging from 'strongly agree' to 'strongly disagree' with a 'don't know' option. One additional question included as an exploratory variable as described earlier, also on the Likert-like scale, asked the extent to which respondents sometimes felt as if they did not fit into their home culture. Frequencies are shown in Tables 4-5 and 4-6.

Category	Wave I		Wave II	
	N	%	N	%
<u>Total time lived in another country</u>				
Never lived in another country	76	53.1%	67	54.9%
Less than 3 months	12	8.4%	11	9.0%
3-6 months	6	4.2%	5	4.1%
7-11 months	4	2.8%	3	2.5%
1-2 years	12	8.4%	9	7.4%
3-5 years	11	7.7%	9	7.4%
6-10 years	5	3.5%	2	1.6%
Over 10 years	14	9.8%	14	11.5%
Missing	3	2.1%	2	1.6%
Total	143	100.0%	122	100.0%
<u>Grew up in a city</u>				
Strongly Disagree	41	28.7%	35	28.7%
Mainly Disagree	27	18.9%	23	18.9%
Neither Agree nor Disagree	7	4.9%	6	4.9%
Mainly Agree	22	15.4%	17	13.9%
Strongly Agree	44	30.8%	41	33.6%
Missing	2	1.4%	0	0.0%
Total	143	100.0%	122	100.0%
<u>Grew up in a multicultural area</u>				
Strongly Disagree	22	15.4%	20	16.4%
Mainly Disagree	38	26.6%	34	27.9%
Neither Agree or Disagree	14	9.8%	8	6.6%
Mainly Agree	32	22.4%	29	23.8%
Strongly Agree	36	25.2%	31	25.4%
Missing	1	0.7%	0	0.0%
Total	143	100.0%	122	100.0%
<u>School was culturally diverse</u>				
Strongly Disagree	24	16.8%	22	18.0%
Mainly Disagree	39	27.3%	31	25.4%
Neither Agree or Disagree	17	11.9%	14	11.5%
Mainly Agree	27	18.9%	25	20.5%
Strongly Agree	32	22.4%	28	23.0%
Missing	4	2.8%	2	1.6%
Total	143	100.0%	122	100.0%
<u>At school mainly spent time with those from own culture</u>				
Strongly Disagree	17	11.9%	15	12.3%
Mainly Disagree	22	15.4%	17	13.9%
Neither Agree nor Disagree	19	13.3%	16	13.1%
Mainly Agree	45	31.5%	40	32.8%
Strongly Agree	40	28.0%	34	27.9%
Total	143	100.0%	122	100.0%
<u>At home have friends from other cultures</u>				
Strongly Disagree	16	11.2%	14	11.5%
Mainly Disagree	19	13.3%	15	12.3%
Neither Agree nor Disagree	16	11.2%	15	12.3%
Mainly Agree	41	28.7%	30	24.6%
Strongly Agree	50	35.0%	47	38.5%
Don't Know	1	0.7%	1	0.8%
Total	143	100.0%	122	100.0%
<u>Parents have friends from other cultures</u>				
Strongly Disagree	14	9.8%	12	9.8%
Mainly Disagree	24	16.8%	18	14.8%
Neither Agree nor Disagree	19	13.3%	18	14.8%
Mainly Agree	36	25.2%	28	23.0%
Strongly Agree	42	29.4%	38	31.1%
Don't Know	8	5.6%	8	6.6%
Total	143	100.0%	122	100.0%

Table 4-5: Participants' intercultural backgrounds part I

Category	Wave I		Wave II	
	N	%	N	%
<u>At home had few neighbours from other cultures</u>				
Strongly Disagree	24	16.8%	23	18.9%
Mainly Disagree	24	16.8%	21	17.2%
Neither Agree nor Disagree	10	7.0%	9	7.4%
Mainly Agree	43	30.1%	33	27.0%
Strongly Agree	39	27.3%	33	27.0%
Don't Know	3	2.1%	3	2.5%
Total	143	100.0%	122	100.0%
<u>Number of languages studied other than first</u>				
0	2	1.4%	2	1.6%
1	31	21.7%	27	22.1%
2	65	45.5%	56	45.9%
3	31	21.7%	27	22.1%
4	8	5.6%	5	4.1%
5	3	2.1%	3	2.5%
6	1	0.7%	1	0.8%
Missing	2	1.4%	1	0.8%
Total	143	100.0%	122	100.0%
<u>Number of languages spoken fluently other than first</u>				
0	82	57.3%	72	59.0%
1	36	25.2%	30	24.6%
2	17	11.9%	13	10.7%
3	6	4.2%	6	4.9%
Missing	2	1.4%	1	0.8%
Total	143	100.0%	122	100.0%
<u>Number of languages read fluently other than first</u>				
0	77	53.8%	68	55.7%
1	42	29.4%	37	30.3%
2	17	11.9%	12	9.8%
3	5	3.5%	4	3.3%
Missing	2	1.4%	1	0.8%
Total	143	100.0%	122	100.0%
<u>Countries visited in the last 5 years</u>				
0	2	1.4%	1	0.8%
1	6	4.2%	5	4.1%
2	16	11.2%	14	11.5%
3	18	12.6%	16	13.1%
4	22	15.4%	19	15.6%
5	16	11.2%	13	10.7%
6	8	5.6%	6	4.9%
7	12	8.4%	9	7.4%
8	13	9.1%	13	10.7%
9	3	2.1%	3	2.5%
10	12	8.4%	10	8.2%
12	3	2.1%	3	2.5%
15	3	2.1%	2	1.6%
20	2	1.4%	2	1.6%
Missing	7	4.9%	6	4.9%
Total	143	100.0%	122	100.0%
<u>Sometimes feel I don't fit in</u>				
Strongly Disagree	75	52.4%	64	52.5%
Mainly Disagree	32	22.4%	26	21.3%
Neither Agree nor Disagree	17	11.9%	14	11.5%
Mainly Agree	16	11.2%	15	12.3%
Strongly Agree	2	1.4%	2	1.6%
Don't Know	1	0.7%	1	0.8%
Total	143	100.0%	122	100.0%

Table 4-6: Participants' intercultural backgrounds part II

Participants' intercultural backgrounds were varied. As described above, students were asked to indicate the length of time they had lived abroad in a question on the IDI using an ordinal scale and on the IBQ on an interval scale. The ordinal level question suggested that a little over half of the students reported that they had no experience living in another country while the interval level question suggested that two-thirds did not have experience living abroad. This is likely to be due to the fact that the interval level question asked students to exclude the time they had been at university while the ordinal question did not. A Spearman correlation, of these two variables found that they were highly correlated $\rho=.855, p<.000, N=143$. Although I initially thought to eliminate the ordinal level variable and retain the interval variable to allow for more sophisticated analysis, I eliminated the interval level variable instead for two reasons. First, the distribution of the interval level variable was significantly skewed according to the Shapiro Wilk Test: $W(44) =.52, p=<.000$ as most students had never lived abroad. This fact would preclude the use of parametric tests as was originally intended. Second, the ordinal level variable from the IDI has been used extensively in other studies and use of it in my study would allow for straightforward comparisons across these studies.

Approximately equal proportions of students either strongly or mainly agreed or strongly or mainly disagreed with several intercultural background indicators with relatively few indicating a middle level of agreement: growing up in a city, growing up in a multicultural area, and attending a culturally diverse school. Close to 60% agreed that they had few neighbours from other cultures. As well, while close to 60% mainly or strongly agreed that they had friends at home from other cultures as did their parents, at school the same proportion reported spending time mostly with people from their own cultures.

When asked how many languages they had studied other than their first language, all but two students reported studying at least one foreign language with most reporting that they studied two although some reporting studying up to six. This data was significantly skewed according to a Shapiro-Wilk Test $W(141) =.88, p<.000$.

Although nearly all students had studied one or more languages, when asked the number of languages they could speak fluently other than their first, over half reported not being able to speak any second language fluently. Of those who could speak another language, most reported speaking just one although some reported speaking up to three second languages fluently. Similar proportions reported being able to read other languages fluently. A Spearman correlation of these two variables found a very strong and significant correlation $\rho=.88$, $p<.000$. As they were so closely related in terms of what they measured and were as well, highly correlated, I considered them to be similar enough to exclude number of languages read fluently from further analysis.

Running another correlation with number of languages studied, I found a significant, $p<.000$, but weak Spearman correlation, $\rho=.23$. However, because the correlation was significant and there was not a lot of variability in number of languages studied with only two not studying another language, I eliminated number of languages studied from further consideration and focused instead on language fluency as a possible predictor.

When asked how many countries they had visited in the past five years, nearly all students reported visiting at least one other country with most reporting between two and five but some reporting visiting up to 20. The mean number of countries visited was 5.62 ($SD=3.6$). Number of countries visited was not normally distributed with Shapiro-Wilk results indicating a significant skew $W(136)=.90$ $p<.000$.

One question included in the background questionnaire asked the extent to which participants agreed that they sometimes felt as if they did not fit in. About three quarters of respondents strongly or mainly disagreed with just a little over one-tenth strongly or mainly agreeing and a similar proportion ambivalent. Although there was not a lot of variability in the responses to this question, I retained this variable for further analysis.

A comparison of the descriptive statistics for the participants in both waves compared with the original 143 participants (see Tables 4-5 and 4-6) showed similar

statistics for each group suggesting that those who dropped out at wave II were similar to those who remained in the study.

4.5.4 UK and Non-UK student differences

Dividing students into UK and non-UK students found substantial differences in relation to three intercultural background factors. While 44 participants indicated that they lived abroad for some period of time (according to the interval variable which was deemed to be more accurate for this analysis since it excluded time spent as an international student in the present department), only 13 (29.5%) of these were UK students while 31 (70.5%) were non-UK students. To determine if this difference was statistically significant, I used a Pearson Chi-Square which is used to test the association between categorical variables (Field, 2009). The results found a significant relationship between citizenship and living abroad ($\chi^2(1)=37.96, p<.000$). Based on a calculation of the odds ratio, the odds of a non-UK student having lived abroad (other than while they were at university) is 13.3 times more likely than a UK student.

While most UK students (83.9%) indicated that they could not speak any additional languages fluently, only 10.2% of non-UK students reported that they could not speak another language fluently with nearly half (49%) speaking one additional language and the rest (40.8%) speaking two or more additional languages fluently. The difference between UK and non-UK students' second language fluency was found to be highly significant according to Chi-Square Test results ($\chi^2(1)=67.46, p<.000$). While this difference in second language fluency is profound, it is perhaps not unexpected given that most non-UK students are likely to have been required to have learned English in order to study abroad.

Comparing the means of other intercultural background factors (e.g., growing up in a multicultural area, having friends from other cultures, visiting larger numbers of foreign countries) non-UK students reported more intercultural experiences. However, the only other intercultural background variable reaching a statistically significant difference between UK and non-UK students according to

the results of a Mann-Whitney Test was growing up in a city ($U(123) = 875$, $z = -4.75$, $p < .000$, $r = -.428$).

The above suggests that significantly higher proportions of non-UK students in this study lived outside of their home countries prior to starting university, spoke one or more additional languages fluently, and grew up in cities compared to UK students.

4.5.5 Predicting initial stages of intercultural development

To create a model for predicting initial stages of intercultural development, I used correlation and regression analyses. I began with correlations between the dependent variables and independent variable to identify variables that might be important in later regressions. I also correlated dependent variables with one another to check for instances of multicollinearity. I then conducted a series of multiple regressions using student characteristics and intercultural background variables to determine which might be used to predict initial stages of intercultural development.

4.5.6 Correlations

4.5.6.1 DO1 and student characteristics

I explored the correlations between the DO1 scores and student characteristics including sex, coming from a bi or multicultural family or ethnic minority group, citizenship (UK or non-UK), parents' educational status (whether at least one had a degree or not), sexual orientation, and socioeconomic status. I correlated first language, English proficiency, and English confidence, only in the analysis for non-UK students since these variables for the most part did not apply to UK students. I used one-tailed correlations for all the variables since theory or previous research suggested the direction of relationships.

As all of the variables were dichotomous or ordinal, I used Spearman non-parametric correlations which is appropriate for skewed as well as ordinal data (Coolican, 2009). I used pair-wise exclusion as suggested by Field (2009) to deal with missing data so that cases were only excluded for the analysis for which they

had a missing value. In terms of student characteristics, only one variable, sex, correlated with the DO1 ($r_s = -.221, p = .007$) with women having higher DO1 scores than men similar to what has been found in some studies although not others. Other characteristics thought to be potentially related to initial DO scores did not correlate or even approach significance. Splitting the dataset by sex as well as UK or non-UK citizenship and rerunning the correlations found no other significant correlations although sex lost significance for non-UK students by a narrow margin ($r_s = -.244, p = .058$).

Although only one correlation existed, I retained all of the variables for further analysis on theoretical grounds with the exception of sexual orientation since it did not correlate with the DO1 score and there were so few who reported being other than heterosexual. However, before doing this I looked for significant differences between those who reported being heterosexual and those who did not, even though the number in the latter group was very small, by conducting a Mann-Whitney Test. The results found no significant differences between the DO1 scores of students who reported that they were heterosexual versus those that did not ($U(112) = 365, z = -.030, p = .976$).

4.5.6.2 DO1 and intercultural background variables

I explored the correlations between the DO1 scores and intercultural background variables over which students would have had little control including: growing up in a city, growing up in a multicultural area, attending a culturally diverse school, parents having friends from other cultures, having few neighbours from other cultures, time lived abroad, and number of countries visited in the last five years. I also explored the relationship between the DO1 and intercultural background variables over which students were likely to have at least some control including number of languages spoken fluently, having friends from other cultures, and spending most of their time with those from the same cultures. I also compared it to the degree to which students agreed that they sometimes felt as if they did not fit in.

All of these variables, except the DO1, were either ordinal variables or were interval variables that were not normally distributed. I therefore used Spearman

correlations (Coolican, 2009). I used pair-wise exclusion as mentioned earlier and as well used one-tailed tests on these variables since literature or theory suggests the direction of relationships.

In terms of students' intercultural backgrounds, the DO1 correlated with five of the variables over which students were likely to have little control including growing up in a city ($r_s = .189, p = .018$), growing up in a multi-cultural area ($r_s = .248, p = .003$), attending a culturally diverse school ($r_s = .263, p = .002$), parents having friends from other cultures ($r_s = .168, p = .037$), and time lived abroad ($r_s = .219, p = .008$). Having few neighbours from other cultures and number of countries visited were not correlated with the DO1. The DO1 also correlated with two variables over which students were likely to have had some control including spending the majority of time with those from one's own culture ($r_s = -.158, p = .041$), and having friends from other cultures ($r_s = .248, p = .003$). The DO1 did not correlate with language fluency nor did it correlate with the extent to which students felt as if they did not fit in. See Table 4-7 for a list of all significant correlations.

Although most of these relationships would be classified as weak according to Dancey and Reidy (2011), with none higher than $r_s = .263$, they did show consistency in the expected direction of relationships across variables suggesting that experiences with cultural diversity, chosen or not, may go some way towards predicting initial DO levels with attending a culturally diverse school and having friends from other cultures showing the strongest relationships.

To explore potential differences between UK and non-UK students, I ran correlations again on the intercultural background variables splitting the data by citizenship. UK students' DO1 scores correlated significantly but weakly with only three variables: having friends from other cultures ($r_s = .219, p = .026$), parents having friends from other cultures ($r_s = .235, p = .023$) and time lived abroad ($r_s = .237, p = .018$) with growing up in a multi-cultural area ($r_s = .280, p = .057$) and attending a culturally diverse school ($r_s = .155, p = .088$) approaching but not quite reaching significance. Non-UK students' DO1 scores correlated significantly with more variables and with noticeably greater strength than UK students. Significant correlations included: time lived in another country ($r_s = .414, p = .003$), having

friends from other cultures ($r_s = .278, p = .037$), growing up in a city ($r_s = .439, p = .002$), growing up in a multi-cultural area ($r_s = .332, p = .015$), attending a culturally diverse school ($r_s = .462, p = .001$), spending time with those from the same cultures ($r_s = -.310, p = .021$), and number of languages spoken fluently other than first ($r_s = .292, p = .030$). This analysis suggests that different factors may be relevant to predicting initial DOI scores of UK and non-UK students or it simply may be that because non-UK students had more of these experiences, they were found to be significant.

Variables	Correlations		
Characteristic	Cohort	UK	Non-UK
Sex	$r_s = -.22, p = .007$	$r_s = -.211, p = .031$	$r_s = -.244, p = .058$
Intercultural Background – Little Control			
Time lived in another country	$r_s = .22, p = .008$	$r_s = .237, p = .018$	$r_s = .414, p = .003$
Grew up in a city	$r_s = .19, p = .018$		$r_s = .439, p = .002$
Grew up in a multicultural area	$r_s = .25, p = .003$	$r_s = .180, p = .057$	$r_s = .332, p = .015$
Attended a culturally diverse school	$r_s = .26, p = .002$		$r_s = .462, p = .001$
Parents have friends from other cultures	$r_s = .17, p = .037$	$r_s = .235, p = .023$	
Intercultural Background – Some Control			
At school spent time with those from own culture	$r_s = -.168, p = .041$		$r_s = -.310, p = .021$
At home have friends from other cultures	$r_s = .25, p = .003$	$r_s = .219, p = .026$	$r_s = .278, p = .037$
Number of languages spoken fluently			$r_s = .292, p = .030$

Table 4-7: Significant or nearly significant correlations: DOI and student characteristics and intercultural background variables

4.5.6.3 Multicollinearity

To examine instances of multicollinearity, I correlated all of the dependent variables with one another. A review of the correlations between these variables found that a number of relationships were highly significant at $p < .000$. While many correlations were highly significant, most of the correlations were weak to moderate although a few stronger correlations did appear with the strongest .844. The intercultural background variables (e.g., growing up in a multicultural area, growing up in a city) in particular were highly correlated. However, I decided to retain all of the variables in the initial analysis with the plan of checking tolerance and the variance inflation factors (VIF) statistics in the regression analyses and to eliminate variables as necessary.

4.5.7 Regressions

This research is in part focused upon identifying factors which might predict stages of intercultural development according to the IDI. As multiple regression allows for the prediction of one variable, the dependent or criterion variable, from a collection of others (known as explanatory or predictor variables) (Coolican, 2009), I chose it as the means to determine what if any background and characteristic variables were related to initial IDI scores. In Field's (2009) overview of multiple regression, he notes that there are a number of methods through which variables can be entered into a regression. Stepwise methods involve entering variables into the model and allowing an algorithm to determine, based on mathematical calculations, which variables are included in the final model. As stepwise methods were suggested to be most useful for model building, I began with them to identify those variables that seemed to best predict the DO1.

4.5.7.1 Predicting the DO1 for the entire cohort

In multiple regressions there are some basic guidelines for deciding what variables should be entered as predictors. Ideally predictors should be chosen based upon previous research; following this upon theoretical importance (Field, 2009). All of the variables included in this study were thought to have a relationship to initial developmental stages either from previous research or common sense. Therefore, I began by including all of the variables previously described except for variables with low variability (e.g. age, sexual orientation, number of languages studied), those that appeared to be redundant (e.g. fluency in reading foreign languages), and those that did not apply to the entire cohort (e.g., English confidence).

Field (2009) describes backward regression as a stepwise method in which all predictor variables are placed in the model. In the first step, SPSS calculates the extent to which each of the variables contributes to explaining the variance of the dependent variable and eliminates the one that contributes least according to a set removal criteria. It then repeats this process eliminating the next variable that contributes least while rechecking the variables already omitted. SPSS ends its calculations when the variables left in the model all contribute significantly to explaining the variance in the dependent variable. Of the stepwise methods,

backward is preferred because it is less likely to exclude predictors that involve suppressor effects (Field, 2009). Using the backwards method the most parsimonious model produced included four variables: citizenship, time lived in another country, growing up in a multicultural area, and having friends from other cultures. All of these variables were significant at the $p < .05$ level, with the exception of growing up in a multicultural area ($p = .08$), and the variance explained was 23%. See Table 4-8.

Backwards – all variables: $R=.47$, $R^2=.23$, $Adj. R^2=.19$, $SE=11.47$, $F=6.60$, $p<.000$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>
Constant	77.44			
Citizenship	-6.10	2.98	-.23*	-2.46
Total time lived abroad	1.42	.59	.28*	2.39
Grew up - multicultural area	1.51	.86	.17	1.76
Friends other cultures	2.18	.90	.24*	2.4
Forwards –all variables: $R=.41$, $R^2=.17$, $Adj. R^2=.15$, $SE=11.72$, $F=9.62$, $p<.000$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>
Constant	77.23			
Grew up - multicultural area	1.77	.86	.21*	2.06
Friends other cultures	2.51	.91	.28**	2.76
Enter - all variables: $R=.54$, $R^2=.29$, $Adj.$ $R^2=.15$, $SE=11.72$, $F=2.08$, $p=.02$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>
Constant	75.49			
Total time lived abroad	1.87	.72	.37**	2.60
Friends other cultures	2.6	1.26	.29*	2.06
Enter – penultimate model: $R=.42$, $R^2=.17$, $Adj. R^2=.15$, $SE=11.59$, $F=8.04$, $p<.000$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>
Constant	81.80			
Total time lived abroad	1.20	.43	.24**	2.78
Friends other cultures	2.11	.78	.24**	2.70
Sex				
Enter – hierarchical – step 1: $R=.37$, $R^2=.14$, $Adj. R^2=.13$, $SE=11.77$, $F=9.42$, $p<.000$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>
Constant	80.59			
Total time lived abroad	1.18	.44	.24**	2.68
Friends other cultures	2.17	.79	.24**	2.74
Enter – hierarchical – step 2: $R=.42$, $R^2=.17$, $Adj. R^2=.15$, $SE=11.59$, $F=8.04$, $p<.000$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>
Constant	81.80			
Total time lived abroad	1.21	.43	.24**	2.78
Friends other cultures	2.11	.78	.24**	2.70
Sex	-6.03	2.79	-.18*	-2.16

Table 4-8: Regression results for entire cohort predicting DOI scores

Another step-wise method, as described by Field (2009), forward regression begins only with the constant. SPSS then searches for the variable that best predicts the dependent variable by choosing the variable with the highest individual correlation. Once it finds this predictor, it then searches for the next variable with the largest semi-partial correlation. Using this method, two of the variables that

appeared in the final model of the backwards regression appeared in this model: having friends from other cultures and growing up in a multicultural area. Using this method, both were significant predictors and together they explained 17% of the variance (see Table 4-6).

Upon further reading, I found that a number of authors were highly critical of stepwise techniques. Cohen, Cohen, West, and Aiken (2003) believe that advancements in research are more likely to occur when theory guides the entry of variables. They note a variety of concerns such as the fact that “because the significance tests of the IV’s contribution to R^2 and associated confidence intervals proceed in ignorance of the large number of other competing IVs, there can be very serious capitalization on chance and underestimation of confidence intervals” (p.161). As well, although Fidell and Tabachnick (2007, p. 140) note that step-wise techniques can be useful in screening out independent variables and identifying promising dependent variables, they similarly criticises them as capitalising on chance since “decisions about which variables to include are dependent on potentially minor differences in statistics computed from a single sample, where some variability in the statistics from sample to sample is expected.” After outlining similar concerns, Field suggests that the enter method of multiple regression is the only viable method (2009).

I, therefore, continued the analysis using the enter approach. In the forced entry or enter method, all variables are placed in the regression simultaneously and their individual contributions to explaining the variance are provided in the SPSS output. Using the enter method, allowed me to see the contributions of each variable and to eliminate those that were least important in explaining the variance. Using this approach, there was a moderate multiple correlation with 29% of the variance explained – a higher proportion but not unexpected given the large numbers of variables in the regression. An analysis of the t values, however, found only two variables were significant predictors, time living in another country and having friends from other cultures. These results were reassuring as they overlapped with variables identified by other methods as important.

In initially considering what variables might be eliminated in the model, I first checked for multicollinearity. Field (2009) suggests that a VIF statistic greater than 10 and tolerance values below .1 or even .2 suggest problems. The initial regression indicated that low socio economic status (tolerance=.120, VIF=8.368), high socioeconomic status (tolerance=.094, VIF=10.586) and parental degree status (tolerance=.039, VIF=25.877) all had issues of multicollinearity. In rechecking the correlations, socioeconomic status and parental education were highly correlated ($r=.844$, $p<.000$). This was unsurprising given that they were derived from the same variables. I therefore eliminated parental degree status. The resulting tolerance and VIF statistics for the socioeconomic variables, as well as all of the others, were then all in an acceptable range and the two variables identified as significant in the initial regression remained significant.

While no other variables were significant individually using the enter method, there were substantial differences in their predictive ability with some showing much stronger relationships to the dependent variable than others. Therefore, I reran the regression using the enter method multiple times. Each time I ran it, I omitted the variable from the last run that had the least predictive ability (i.e., the one with the lowest significance) until I reached the point where all variables left in the model were significant. The final model included three variables; time lived abroad, having friends from other cultures and sex. Together these explained approximately 17% of the variance. See ‘penultimate model’ in Table 4-8.

As a final step, I ran a hierarchical regression entering time living abroad and having friends from other cultures in the first block since they were most significant, and sex in the second block, since it could be viewed primarily as a control variable, to determine the exact contribution of the explanatory variables. The first block accounted for the majority of the variance (14%) while the addition of sex increased the variance explained by only about 3%. See Table 4-8 ‘hierarchical steps I and II’ for results.

Having friends from other cultures seemed to be the best predictor of the DO1 since it appeared across all methods of analysis although time lived abroad was

also a highly significant predictor appearing across all but one method. Although the stepwise methods identified other variables as significant in predicting the DOI, growing up in a multicultural area and citizenship, these variables may have become significant as a result of SPSS reducing the number of cases included in the analysis due to missing data. Re-estimating the model using the enter method and systematically removing variables that proved to be less significant made use of the maximum number of cases resulting in variables that earlier appeared to be significant becoming insignificant. However, it should be noted that those variables identified as significant using the stepwise methods, were the last to be removed from the model using the enter method and systematic elimination indicating that they may indeed be related and prove to be significant with larger sets of data (see Table 4-9 for the order of elimination). Although some variables that were highly correlated with the DOI did not appear in the final model, this may be due to the fact that they were also highly correlated with other predictor variables and did not therefore explain enough new variance to be included in the model. Finally, while sex was seen to be a significant variable and the difference between the scores of males and females was significant, sex can be considered a moderator in that it impacts the strength of the relationship between the predictor variables and the dependent variable.

Variables	Order
Attended a culturally diverse school	1
Number of languages spoken fluently	2
Number of countries visited in the last 5 years	3
Parents have friends from other cultures	4
At home few neighbours are from other cultures	5
Bi /multicultural family/ethnic minority group	6
Grew up in a city	7
At school spent time with those from own culture	8
Low socioeconomic status	9
High socioeconomic status	10
Feelings of not fitting in	11
Grew up in a multicultural area	12
Citizenship UK / Non-UK	13
Time lived in another country	*
At home have friends from other cultures	*
Sex	*

Table 4-9: Order of elimination of variables in regression

To check the impact of excluding the outlier, I reran the analysis excluding the data from this person. The results were similar. A forward regression identified having friends from other cultures as the only significant variable (growing up in a multicultural area did not appear). The backward regression ended with three significant predictors, time lived abroad, friends from other cultures and citizenship (growing up in a multicultural area again did not appear). In the initial regression using the enter method, time lived abroad was the only significant predictor.

Finally, I reran the analysis using the enter method with just those variables that were highly correlated with the DOI to determine if the results would be any different. The results, however, were exactly the same.

4.5.7.2 Predicting the DOI for UK and non-UK students

As there were significant differences in the extent to which UK and non-UK students had experienced living abroad, growing up in multi-cultural areas, and learning languages, it seemed appropriate to determine whether these differences might result in different predictors for these groups. Although the numbers of UK and non-UK students as separate groups were relatively small (79, 43), I ran regressions separately for each group. I used the variables outlined in Table 9 with the exception of the citizenship variable because I was grouping by citizenship and sex since it is a moderator rather than an explanatory variable. I also tested an additional variable, language confidence with the non-UK student group. I followed the same procedures as outlined above, running the regressions several times each time eliminating the variables at each step that were least significant.

The resulting models matched on the most significant variable, total time lived in another country but differed on the second most significant variable. For UK students the second most significant variable was having friends from other cultures whereas for non-UK students it was growing up in a city. These models explained quite different amounts of variance. For non-UK students, these two variables explained 31% of the variance while for non-UK students they only explained 12% of the variance. See Table 4-10.

UK Students					
<i>Model</i>	<i>B</i>	<i>Std Error</i>	<i>Beta</i>	<i>T</i>	<i>Sig</i>
(Constant)	81.86	3.77		21.72	.000
Total time lived in another country	1.50	.75	.22	2.00	.050
At home have friends from other cultures	1.93	.98	.22	1.97	.053
<i>Model Summary: R=.34, R²=.12, Adj. R²=.09, SE=11.69, F=4.97, p<.009</i>					
Non-UK Students					
<i>Model</i>	<i>B</i>	<i>Std Error</i>	<i>Beta</i>	<i>T</i>	<i>Sig</i>
(Constant)	69.35	6.05		11.46	.000
Total time lived in another country	3.65	1.37	.37	2.67	.011
Grew up in a city	1.75	.73	.33	2.42	.020
<i>Model Summary: R=.55, R²=.31, Adj. R²=.27, SE=11.25, F=8.57, p<.001</i>					

Table 4-10: Models best predicting DOI for UK and non-UK students

In summary, the above analyses suggest that time lived abroad and having friends from other cultures were the best predictors of the DOI across the entire group accounting for about 14% of the variance. Sex was found to be a moderator with women scoring significantly higher than men. Significantly more non-UK than UK students in this study lived outside their home countries prior to starting university and for longer periods of time, spoke one or more additional languages fluently, came from a high socioeconomic group and grew up in cities compared to UK students. For non-UK students, time lived in another country and growing up in a city seemed to be the best predictors of initial IDI scores explaining 31% of the variance. For UK students, total time lived in another country and having friends from other cultures seemed the best predictors but explained only 12% of the variance.

4.5.8 Validity of results

In his chapter ‘What can go wrong with multiple regression’, Allison (1999) suggests a variety of cautions applicable to this analysis. While the results of the regression found time lived abroad and having friends from other cultures were significant predictors, as Allison (1999) points out, it is important to consider not just statistical significance but the meaning of the regression coefficients. With this in mind, the impact of these variables on actual IDI scores is still reasonable. With each increase in the extent to which students agree that they have friends from other cultures, there is only a 2.17 increase in their DO score. However, the difference

between those who strongly disagree that they have friends at home from other cultures and those that strongly agree would be about 10 points which is a considerable shift in IDI terms and could result in movement from one developmental level to another. A similar impact can be seen in considering total time lived abroad. When time lived abroad increases by one increment, there is a 1.17 increase in the DO score. As time lived abroad is on an 8 point scale, the difference in IDI score between someone who had never lived abroad and someone who had lived abroad for over 10 years would be a little less than 10 points. That said, time lived abroad has much better predictive ability for non-UK students probably because a greater proportion (88.4% cf. 19%) have lived abroad and for longer periods of time. A non-UK student's score would increase 3.65 points for each increment increase which would make a difference of nearly 30 points between someone who never lived abroad and someone who lived abroad for 10 years or more, a difference that would result in a shift of one or more developmental levels. Although such a shift is not as clear for UK students, findings suggest that total time lived abroad still is the best predictor of DO scores for UK students and a study with greater numbers of UK students who had lived abroad for longer periods may result in similar findings.

Of course, the above analysis assumes a linear relationship between variables. While their relationship may be linear, it may also be non-linear (Field, 2009) which would impact the predictive ability of the variables.

Another issue raised by Allison, is that of sample size. Specifically, small sample sizes provide limited information and can make correlations somewhat unreliable. Additionally, most statistical tests are approximations that work well for large but not small samples. Therefore p values of, for example .02, might actually be .07 suggesting that more conservative guidelines are merited to allow for underestimated p values. With this caution in mind, total time lived in another country ($p=.008$) and having friends from other cultures ($p=.007$) still would appear to be significant predictors because they are highly significant. However, other variables that appeared as not significant may still be related to the dependent variable and may become significant with a larger sample. Similarly, because of the sample size, the standard error is quite high for the entire group (*Std. Error*=3.09)

resulting in wide confidence intervals (74 to 87) and this is even more pronounced when dividing the cohort into smaller groups (UK: *Std. Error*=3.77; non-UK: *Std. Error*= 6.05). Again this could be addressed with larger sample sizes.

4.6 What student characteristics and intercultural experiences are related to students' development at university?

This section addresses the fourth research question. The above analysis suggests that time lived abroad, having friends from other cultures, and growing up in cities were associated with students' initial IDI scores. To better understand how students then developed intercultural, I explored the relationship between change scores, the DO1 minus the DO2, in comparison with students' intercultural experiences whilst at university.

4.6.1 Intercultural experiences in general

The IEQ included forty-two questions. The first six questions focused on students' intercultural interactions in general. It began by asking students how many times in a typical week that they had intercultural interactions. The next five questions then asked students to recall a typical interaction and to answer questions about this interaction (e.g., the length of time it lasted, their relationship with the person interacted with). The next two questions asked students to rate the extent to which they experienced their interactions as pleasant, cooperative, superficial or forced and the extent to which they felt confident, irritated, awkward, happy, etc. These questions were on a five point Likert-like scale ranging from 'very frequently' to 'very infrequently'.

When asked how many times in the average week they had intercultural interactions, about half of students reported a high level of contact, having 11 or more interactions per week. About 15% noted that they had relatively few interactions (1 to 3) per week and the rest suggested a medium amount of contact having four to 10 interactions per week.

Participants were asked to think of a typical intercultural interaction. When asked how long this typical interaction lasted, answers varied with some being less

than one minute to some lasting hours. However, most reported that their interactions lasted between five and 60 minutes. When asked where the interaction took place, over half of students indicated that they took place in or around accommodation, with a little more than one-quarter taking place around tutorials or lectures, and the rest taking place elsewhere. When asked what their relationship was with the person with whom they interacted, only two said a stranger with roughly equal proportions reporting that the person was an acquaintance, casual friend or good friend and somewhat fewer reporting that the interaction was with a very good friend or boy or girl friend. When students were asked if the person they interacted with was a student or not, over half reported that the person was a student from another course with the majority of others reporting that the person was a psychology student and a few that the person was from outside the university. When asked how many times they interacted with the person in a typical week answers were fairly evenly divided between one to three times per week, four to seven times per week, and eight or more times per week with about 10% indicating less than once per week. See Table 4-11 for a full break down of the responses.

Category	N	%
<u>Number of interactions per week</u>		
1 to 3	18	14.8%
4 to 6	22	18.0%
7 to 10	17	13.9%
11 to 14	13	10.7%
15 or more	51	41.8%
Missing	1	0.8%
Total	122	100.0%
<u>Frequency of typical interaction</u>		
< 1 x per week	15	12.3%
1 to 3 times per week	35	28.7%
4 to 7 times per week	37	30.3%
8 or more times per week	34	27.9%
Missing	1	0.8%
Total	122	100.0%
<u>Length of typical interaction in minutes</u>		
<1	3	2.5%
<5	14	11.7%
5 to 15	29	23.8%
16 to 30	19	15.6%
31 to 60	24	19.7%
61 to 90	9	7.4%
91- to 120	8	6.6%
> 120	16	13.2%
Missing	1	0.8%
Total	122	100.0%
<u>Place of typical interaction</u>		
Around tutorial or lecture	33	27.0%
Accommodation	64	52.5%
Library or common area	5	4.1%
Pub or restaurant	1	0.8%
Elsewhere	18	14.8%
Missing	1	0.8%
Total	122	100.0%
<u>Relationship to interactor</u>		
Stranger	2	1.6%
Acquaintance	29	23.8%
Casual friend	34	27.9%
Good friend	34	27.9%
Very good friend	17	14.8%
Boy or girl friend	4	3.3%
Missing	1	0.8%
Total	122	100.0%
<u>Student status of interactor</u>		
Psychology student	48	39.3%
Other student	69	56.6%
Person outside university	4	3.3%
Missing	1	0.8%
Total	122	100.0%

Table 4-11: Intercultural interactions at university

When asked how they found their intercultural interactions to be (referred to as interaction valence), most participants evaluated them positively, indicating they were frequently or very frequently pleasant and cooperative and infrequently or very infrequently superficial or forced. However, about one-third indicated an in-

between, frequent or very frequent feeling that interactions were superficial. See Table 4-12.

Interaction valence	Pleasant		Cooperative		Superficial		Forced	
	N	%	N	%	N	%	N	%
Very Infrequently	0	0.0%	0	0.0%	40	32.8%	58	47.5%
Infrequently	2	1.6%	6	4.9%	41	33.6%	37	30.3%
In between	6	4.9%	12	9.8%	31	25.4%	18	14.8%
Frequently	43	35.2%	57	46.7%	5	4.1%	3	2.5%
Very Frequently	70	57.4%	46	37.7%	4	3.3%	5	4.1%
Missing	1	0.8%	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%	122	100.0%

Table 4-12: Valance of intercultural interactions

When asked about emotions felt during intercultural interactions, students' responses were generally positive with the majority indicating that they tended to feel confident and happy during their interactions. However, substantial proportions reported self-consciousness (21.3%) and awkwardness (17.3%) as frequent feelings and many more reported an in-between amount of self-consciousness (29.8%) and awkwardness (23.8%). These data suggest that self-consciousness and awkwardness might be more common in intercultural interactions than the other more negative feelings enquired about on this questionnaire. See Table 4-13 for frequencies.

	Confidence		Irritation		Awkwardness	
	N	%	N	%	N	%
Very Infrequently	1	0.8%	43	35.2%	24	19.7%
Infrequently	0	0.0%	46	37.7%	47	38.5%
In between	26	21.3%	20	16.4%	29	23.8%
Frequently	61	50.0%	11	9.0%	18	14.8%
Very Frequently	33	27.0%	1	0.8%	3	2.5%
Missing	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%
	Stress		Happiness		Self-consciousness	
	N	%	N	%	N	%
Very Infrequently	67	54.9%	0	0.0%	28	23.0%
Infrequently	33	27.0%	3	2.5%	31	25.4%
In between	12	9.8%	21	17.2%	36	29.8%
Frequently	6	4.9%	63	51.6%	21	17.2%
Very Frequently	3	2.5%	34	27.9%	5	4.1%
Missing	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%
	Impatience		Frustration		Defensiveness	
	N	%	N	%	N	%
Very Infrequently	58	47.5%	64	52.5%	52	42.6%
Infrequently	44	36.8%	36	29.5%	45	36.9%
In between	15	12.3%	14	11.5%	18	14.8%
Frequently	4	3.3%	5	4.1%	5	4.1%
Very Frequently	0	0.0%	2	1.6%	1	0.8%
Missing	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%

Table 4-13: Feelings experienced during intercultural interactions

Using feelings and valances described above, I created two composite variables. One variable which I labeled ‘positive affect’ combined scores for pleasant, cooperative, confident, and happy. The other which I labeled ‘negative affect’ combined scores for the remaining variables. The mean score for positive affect was 12.77 on 16 point scale, with a score of 16 being entirely positive (SD=2.37) indicating that generally students were positive about their interactions. There was a highly significant negative skew with the results of the Shapiro-Wilk Test: $W(121) = .93$, $p < .000$ suggesting some although not that many students felt that their interactions were not particularly positive. The mean score for negative affect was 8.89 this time on a 36 point scale, with a score of 36 points being entirely negative, indicating that generally students were not negative about their interactions. There was a highly significant positive skew to the data with the results of the Shapiro-Wilk Test: $W(121) = .933$, $p < .000$ suggesting that some although not that many students felt that their interactions were quite negative.

4.6.2 UK and Non-UK student differences

Differences were found in students' reports of their intercultural experiences in general. Higher proportions of non-UK than UK students reported having more intercultural interactions during a typical week than UK students. For example, about 40% of UK students reported having between one and six intercultural interactions during a typical week while less than 20% of non-UK students reported the same. To determine if there was a statistically significant difference between the numbers of interactions reported, I used a Mann-Whitney U test which is suitable for ordinal-level data. The one-tailed Mann-Whitney U test found a statistically significant difference between groups ($U(121) = 1092$, $z = -3.32$, $p = .001$, $r = -.302$). It is perhaps inevitable that many non-UK students would experience more intercultural interactions during a typical week since they attend a university in another country. This is especially true for those students who are one of the few on campus from particular countries (e.g., Argentina) than those who are one of the many (e.g., China).

The locations of interactions reported differed little between UK and non-UK students. Similar proportions reported interactions occurring in accommodation but a larger proportion of UK students reported that they occurred around lectures or tutorials. When asked to identify what their relationships were with the people they had interacted with, nearly one-third of UK students identified the person as a stranger or acquaintance compared to about 15% of non-UK students who more often identified the person as a very good friend / boy or girlfriend. The results of a one-tailed Mann Whitney U test found again that there was a significant difference between groups on this variable, $U(121) = 1198$, $z = -2.67$, $p = .006$, $r = -.24$.

Students were asked the extent to which they found their intercultural interactions in general to be pleasant, cooperative, superficial, and forced. As noted earlier, overall much larger proportions of all students reported mostly positive rather than negative experiences during interactions. However, a visual inspection of cross-tabs suggested that there might be differences between UK and non-UK students. In particular, close to 50% of UK students indicated that they found interactions to be cooperative 'very frequently' while only one-fifth of non-UK

students said the same. A one-tailed Mann-Whitney U test found that non-UK students reported that their interactions were less cooperative $U(121) = 1235$, $z = -2.61$, $p = .009$, $r = -.24$. Both UK and non-UK students responded similarly regarding the extent to which they found interactions superficial, forced, and pleasant.

Students were asked the extent to which they felt confident, happy, irritated, awkward, impatient, frustrated, stressed, self-conscious, and defensive during their intercultural interactions in general. As noted above, overall much larger proportions of students reported more positive than negative feelings during interactions. However, again visual inspections of the cross-tabs suggested some group-level differences between non-UK and UK students. Mann Whitney U tests found that non-UK students could encounter significantly more feelings of self-consciousness, irritation, stress, defensiveness, frustration, and impatience. See Table 4-14. No significant differences were found in the extent to which UK and non-UK students felt confident, happy, or awkward during interactions.

Self-consciousness	$U(121) = 943$	$z = -4.1$	$p < .000$	$r = -.37$
Irritation	$U(121) = 1152$	$z = -3.01$	$p = .003$	$r = -.27$
Stress	$U(121) = 1123.5$	$z = -3.33$	$p = .001$	$r = -.30$
Defensiveness	$U(121) = 1104.5$	$z = -3.33$	$p = .001$	$r = -.30$
Frustration	$U(121) = 1264.5$	$z = -2.46$	$p = .014$	$r = -.22$
Impatience	$U(121) = 1348.5$	$z = -1.94$	$p = .05$	$r = -.18$

Table 4-14: Mann Whitney U test results indicating significant differences in the extent to which UK and non-UK students experienced negative feelings during intercultural interactions

Comparing composite scores (i.e., positive and negative affect) between UK and non-UK students found that the means for the groups were not significantly different (12.87, 12.58). However, unsurprisingly there was a highly significant difference between the groups on negative affect (7.59, 11.26). A one-tailed Mann-Whitney U test found that non-UK students overall rated their interactions more negatively $U(121) = 1040$, $z = -3.46$, $p = .001$, $r = -.32$.

In summary, the above analysis suggests that generally students had a lot of intercultural interactions in a typical week although some experienced few

interactions. The length of typical interactions ranged substantially as did the closeness of the person interacted with three-quarters being good friends, casual friends or acquaintances. Overall students rated their interactions positively although substantial proportions could find them superficial and could feel self-conscious, and awkward.

Non-UK students had more intercultural interactions and these interactions tended to be with individuals with whom they had closer relationships. However, more non-UK than UK students also evaluated their experiences during interactions significantly more negatively.

4.6.3 Intercultural experiences in the department

Students were asked 11 questions about their intercultural experiences within the department. Three questions gauged students' levels of intercultural contact (how much intercultural contact students had, having good friends in the department from other cultures, and working in mixed cultural groups), one asked if students' believed that intercultural learning was important in the course, and the remaining seven gauged students' perceptions of the department in terms of their encouragement / support for intercultural learning. All questions were on a five point Likert-like scale ranging from 'strongly agree' to 'strongly disagree'. Response frequencies are shown in Table 4-15.

	A lot of Intercultural Contact		Rarely Work in Small Group Mixed Cultural Groups		Good Friends from other cultures		Believe Intercultural Learning Important in Course	
	N	%	N	%	N	%	N	%
Strongly Disagree	0	0.0%	39	32.0%	9	7.4%	3	2.5%
Disagree	10	8.2%	51	41.8%	32	26.2%	3	2.5%
Neither Agree nor Disagree	18	14.8%	15	12.3%	7	5.7%	29	23.8%
Agree	49	40.2%	12	9.8%	38	31.1%	55	45.1%
Strongly Agree	44	36.1%	4	3.3%	35	28.7%	31	25.6%
Missing	1	0.8%	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%	122	100.0%
	Students placed in Mixed Groups		Challenges Not Addressed		Sensitivity of Staff Observed		Recognises Cultural Events & Issues	
	N	%	N	%	N	%	N	%
Strongly Disagree	17	13.9%	20	16.4%	7	5.7%	5	4.1%
Disagree	25	20.5%	42	34.4%	23	18.9%	33	27.0%
Neither Agree nor Disagree	43	35.2%	30	24.6%	31	25.4%	41	33.6%
Agree	30	24.6%	27	22.1%	51	41.8%	37	30.3%
Strongly Agree	6	4.9%	2	1.6%	9	7.4%	5	4.1%
Missing	1	0.8%	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%	122	100.0%
	Curriculum Reflects Non-Western Cultures		Encourages International Programmes		Encourages Intercultural Learning			
	N	%	N	%	N	%		
Strongly Disagree	2	1.6%	3	2.4%	4	3.3%		
Disagree	27	22.1%	18	14.8%	37	30.3%		
Neither Agree nor Disagree	29	23.8%	37	30.3%	47	38.5%		
Agree	46	37.7%	49	40.2%	28	23.0%		
Strongly Agree	17	13.9%	14	11.5%	5	4.1%		
Missing	1	0.8%	1	0.8%	1	0.8%		
Total	122	100.0%	122	100.0%	122	100.0%		

Table 4-15: Intercultural experiences in the department

Students' responses suggest that about three-quarters have a lot of intercultural contact within the department and often work in mixed cultural groups and nearly two-thirds indicated having good friends from other cultures within the department.

Close to three-quarters of students agree that intercultural learning is an important part of the course. Their views regarding the department's support of intercultural learning were somewhat varied. When asked the extent to which they agreed that lecturers intentionally put students into mixed cultural groups, over one-quarter agreed and less than one-quarter disagreed with the rest neither agreeing or disagreeing. When asked if there were sometimes challenges brought about by

culture within the department that were not recognised by staff, approximately half of respondents disagreed, one-quarter neither agreed nor disagreed and the rest agreed to some extent. When asked if they had noticed staff members displaying sensitivity towards the needs of students from diverse cultures, again similar proportions were seen. When asked if the department recognises national diversity by, for instance, acknowledging concerns or events of other nations, responses were relatively evenly divided between those who agreed to some extent, disagreed to some extent, or did not agree or disagree. When asked if the curriculum reflected non-Western cultures, half of students agreed while the rest were divided between neither agreeing nor disagreeing or disagreeing. One question asked about the extent to which staff members encourage students to get involved in international programmes while a similar question asked the extent to which staff encourages students to engage in intercultural learning. While a little over half of the students agreed that international programmes were encouraged, less than one-third agreed that intercultural learning was encouraged. See Table 4-15.

4.6.4 UK and Non-UK student differences

In comparing the departmental experiences of UK and non-UK students, there were significant differences in UK and non-UK student responses on three variables. Differences were analysed using Mann-Whitney U tests. More non-UK than UK students agreed that they had friends from other cultures within the department $U(121) = 911, z = -4.31, p < .000, r = -.39$. As well, more UK than non-UK students agreed that the department encourages international programmes, $U(121) = 1307, z = -2.11, p = .035, r = -.19$. This, perhaps, stands to reason since non-UK students are already having international experiences. Finally, UK students indicated that they were less likely to work in mixed cultural groups than non-UK students $U(121) = 1285, z = -2.25, p = .025, r = -.25$. This also stands to reason since there are more UK than non-UK students in the department and some non-UK students may be one of the few individuals from their home countries in the department making working in mixed cultural groups more common for them.

4.6.5 Intercultural experiences on campus

Students were asked ten questions about their intercultural experiences on campus. These questions mirrored the questions asked about the department although they did not include questions related to the curriculum and small group work but instead included questions regarding campus activities and accommodation. Two questions gauged students' levels of intercultural contact (how much intercultural contact students had, having good friends on campus from other cultures), one asked if students believed that intercultural learning was an important part of their university experience, one question asked about students' involvement in activities and whether they lived in mixed cultural accommodation. Five questions gauged students' perceptions of the university in terms of encouragement / support for intercultural learning. Response frequencies for Likert-like scale questions are shown in Table 4-16. The remainder can be found in the text.

	A lot of Intercultural Contact		Good Friends from other cultures		Believe Intercultural Learning is Important on Campus	
	N	%			N	%
Strongly Disagree	1	0.8%	3	2.5%	1	0.8%
Disagree	17	13.9%	21	17.2%	4	3.3%
Neither Agree nor Disagree	11	9.0%	19	15.6%	16	13.1%
Agree	47	38.5%	33	27.0%	51	41.8%
Strongly Agree	45	36.9%	45	36.9%	49	40.2%
Missing	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%
	Very Active in Clubs, Societies, or Sport		Cultural Challenges on Campus		Sensitivity of Staff Observed	
	N	%	N	%	N	%
Strongly Disagree	6	4.9%	13	10.7%	6	4.9%
Disagree	20	16.4%	45	36.9%	30	24.6%
Neither Agree nor Disagree	18	14.8%	32	26.2%	42	34.4%
Agree	41	33.6%	29	23.8%	37	30.3%
Strongly Agree	36	29.5%	2	1.6%	6	4.9%
System	1	0.8%	1	0.8%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%
	Recognises Cultural Events & Issues		Encourages International Programmes		Encourages Intercultural Learning	
	N	%	N	%	N	%
Strongly Disagree	2	1.6%	4	3.3%	4	3.3%
Disagree	14	11.5%	9	7.4%	13	10.7%
Neither Agree nor Disagree	18	14.8%	23	18.9%	38	31.1%
Agree	61	50.0%	62	50.8%	58	47.9%
Strongly Agree	26	21.3%	21	17.2%	8	6.6%
System	1	0.8%	3	2.5%	1	0.8%
Total	122	100.0%	122	100.0%	122	100.0%

Table 4-16: Intercultural experiences on campus

About three-quarters of students agreed or strongly agreed that they had a lot of intercultural contact around campus and about two-thirds agreed or strongly agreed that they had good friends from other cultures around campus. This suggests that students' good friends from other cultures are as common from the wider campus as they are from within the department and again that the majority have both a fair amount of intercultural contact and degree of depth in intercultural relationships.

When asked if they thought that intercultural learning was an important part of their campus experience, more than four-fifths agreed to some extent, with most of the remainder neither agreeing nor disagreeing and only five disagreeing to some

extent. This suggests that slightly more students view intercultural learning on campus as more important than intercultural learning within the department.

When asked if there were, at times, challenges resulting from cultural or language differences, nearly one-half disagreed or strongly disagreed while about one-quarter neither agreed nor disagreed and the remaining quarter agreed or strongly agreed. This suggests that while many students were not aware of challenges, many were ambivalent and many others did see challenges.

When asked the extent to which they were very involved in societies, two-thirds of students agreed or strongly agreed that they were very involved while the remaining one-third were relatively divided between neither agree nor disagree or disagree to some extent. When asked to list those activities they were most involved in, the number of activities reported varied with nearly 20% of students not listing any activities, most listing one or two with some listing between three and seven. The mean number of activities listed was 1.8 ($SD=1.37$, $Variance=1.88$). Skewness was found to be equal to .887 ($SE=.220$) while kurtosis was equal to 1.07, ($SE=.437$). This measure was used as an indicator of campus involvement in later analysis.

Students indicated being involved in a wide variety of activities. While a detailed analysis of all activities was not feasible or merited, I created a Psychology Society variable since the number of students who listed the Psychology Society was fairly high. I also created a variable for Cultural Activity which for students who listed the International Students' Association or the Culture Society as activities since they promote cross-cultural contact. As well, I created a variable for students participating in mono-cultural groups (e.g., Hellenic Society) which could be seen as decreasing rather than increasing cross-cultural involvement. Finally, I created a Religious Activity variable since religion could potentially impact intercultural development. Only seven (5.7%) students reported being involved in the International Students Association or Culture Society, 12 (9.8%) reported being involved in religious activities, and 13 (10.7%) reported being involved in culture specific activities. Over one-quarter (27%) reported being involved in Psychology

Society. Because so few students participated in mono or multicultural or religious societies, I omitted these variables from further analysis.

The vast majority of students (86.1%) agreed that they lived with students from other countries or cultures in their accommodation. Although few reported not living with students from other cultures, I retained this variable for further analysis. All but six students reported living on campus; therefore I excluded this variable from further consideration.

When asked if campus staff members displayed sensitivity towards the needs of students from different countries, responses were relatively evenly divided with about one-third agreeing to some extent, one third disagreeing to some extent and the others neither agreeing nor disagreeing. When asked whether the campus recognises cultural events and issues, nearly three-quarters of students agreed to some extent. More than two-thirds agreed to some extent that campus staff encourage students to broaden their cultural experience through, for example, international exchange programmes, with about two-fifths neither agreeing nor disagreeing and the remaining one-tenth disagreeing to some extent. More than half of students agreed to some extent that campus staff encourages students to become involved in activities that foster their intercultural learning, with about one-third neither agreeing nor disagreeing

4.6.6 UK and Non-UK student differences

In comparing the experiences of UK and non-UK students on campus, differences were noteworthy in regard to two variables. Non-UK more so than UK students agreed that they had friends from other cultures around campus $U(121) = 1228$, $z = -2.54$, $p = .001$, $r = -.23$, and that they had a lot of intercultural contact around campus, $U(121) = 1043$, $z = -3.65$, $p < .000$, $r = -.33$.

In terms of levels of involvement in campus activities, a greater proportion of UK students agreed that they were very active in clubs, societies or sports, $U(121) = 1333$, $z = -1.94$, $p = .05$, $r = -.18$, than non-UK students. However, a t -test comparing the mean number of activities listed by UK and non-UK students ($M = 1.83$, $SE = 1.3$ cf. $M = 1.7$, $SE = 1.5$) did not find a significant difference, $p = .42$. All of the students

indicating that they participated in the ISA or Culture Society were non-UK students and all but one who indicated participating in culture specific societies were non-UK students. Both of these differences, of course, were highly significant but not unexpected.

To summarise, similar to what students experience within the department, they have a lot of intercultural contact on campus with about the same proportions reporting that they have good friends from other countries. Slightly more students view intercultural learning on campus as more important than intercultural learning within the department. Students reported similar levels of awareness of cultural challenges in the department as on campus.

Non-UK more so than UK students agreed that they had friends from other cultures and that they had a lot of intercultural contact around campus. UK students were more often involved in campus activities although non-UK students were more often involved in culture related campus activities.

4.6.7 Intercultural experiences off-campus

The IEQ included seven questions related to students' off campus activities. When asked if they engaged in activities off campus, all but ten students (8.2%) indicated that they did to some extent. When asked if their off campus activities involved those from other countries or cultures, well over one-third indicated that they did often or regularly, a little less than one-third indicated that they did sometimes and the remaining one-quarter indicated that their off-campus activities rarely or never involved those from other countries or cultures. See Table 4-17 for frequencies.

	Engage in Activities Off Campus		Off Campus Activities Involve Contact with Those From Other Cultures	
	N	%	N	%
Never	10	8.2%	5	4.1%
Rarely	8	6.6%	26	21.3%
Sometimes	40	32.8%	33	27.0%
Often	35	28.7%	17	13.9%
Regularly	28	23.0%	30	24.6%
Not Applicable			9	7.4%
Missing	1	.8%	2	1.6%
Total	122	100.0%	122	100.0%

Table 4-17: Off-campus activities

When asked if they volunteered off campus, more than two-thirds of students reported that they did not (or did so rarely) while the other one-third reported that they did sometimes, often, or regularly. When those who volunteered were asked if volunteering involved contact with individuals from other cultures, over one-third reported that volunteering involved intercultural contact often or regularly with a little over one-quarter reporting that it did sometimes and over one-third indicating that it did rarely or never. See Table 4-18.

	Engage in Off Campus Volunteering		Volunteering Involves Contact with those From Other Cultures	
	N	%	N	%
Never	65	53.3%	6	10.3%
Rarely	19	15.6%	14	24.1%
Sometimes	13	10.7%	16	27.6%
Often	16	13.1%	11	19.0%
Regularly	8	6.6%	10	17.2%
Missing	1	0.8%	1	1.7%
Total	122	100.0%	58	100.0%

Table 4-18: Volunteering off-campus

When asked if they were in paid employment, all but 22 students reported that they were not. Of those that were in paid employment, all but two worked exclusively off campus. When those who did have a job were asked if their job involved contact with individuals from other cultures, over one-half indicated that it did often or regularly with the other half indicating that it did sometimes or rarely.

4.6.8 UK and Non-UK student differences

In comparing the experiences of UK and non-UK students in regard to off campus activities, UK students reported engaging in activities off campus more than non-UK

students, $U(121) = 1303.5$, $z = -2.1$, $p = .036$, $r = -.19$. However, a greater proportion of non-UK students noted that when they are off campus, their activities often or regularly involve individuals from other cultures compared to non-UK students, $U(121) = 867.5$, $z = -3.24$, $p = .001$, $r = -.30$.

Most students participated in off-campus activities with about two-thirds of these indicating that they at times involved those from other countries. About two-thirds of students volunteered off-campus and two-thirds of these reported some intercultural contact. Less than 20% of students worked off-campus with most of these students reporting some intercultural contact.

While there were some differences in the extent to which non-UK and UK students engage in off-campus activities, this analysis suggests that intercultural contact is more common for non-UK students when they are off campus which is unsurprising.

4.6.9 Openness to be interviewed

While I included a question asking students if they were willing to be interviewed mainly as a means of more easily identifying students to interview; I thought that this question could serve as an indicator of openness to discussing topics related to intercultural development which could correlate with IDI scores. However, this variable should be viewed with caution considering that students were aware that I was offering a £20 incentive to be interviewed which may have influenced who indicated interest in being interviewed and who did not. When asked if they were interested in being interviewed for the project, the majority of students ($N=71$, 58.2%) said yes, about one-fifth ($N=27$, 22.1%) said maybe and the rest ($N=22$, 18.0%) declined. More than twice the proportion of UK students compared to non-UK students indicated that they would not want to be interviewed (26.3% cf. 9.3%). A Chi-square test found this difference significant although weak, $\chi^2(1, N=123) = .201$, $p = .026$.

4.6.10 Predicting intercultural development

As already described above, although all students' scores changed from wave I to wave II, looking at the group overall there was no significant change. However, as some students did experience substantial change, I undertook further analysis to determine if there were variables that were associated with change, either negative or positive.

4.6.11 Correlations

The change score is the DO2 score minus the DO1 score. Prior to undertaking further analysis, I looked at the distributions of the change scores to assess normality. The mean change in the DO was -1.34 ($SD=11.27$) and the mean percent change was -1.14 ($SD=12.59$). There was one outlier in the percent change distribution. The student's score did increase substantially, by 33%, which may have been the result of an invalid test on the first occasion. However, her score was only three percentage points higher than the next highest percent change and was 26 percentage points lower than the outlier that I omitted from the earlier data analysis, therefore it seemed reasonable to leave the outlier in the dataset. Otherwise, the distributions appeared to be normal with Shapiro-Wilks tests results as follows: Change, $W(122) = .99, p = .78$; Percent Change, $W(122) = .99, p = .39$. See Figure 4-5 for distribution of change score.

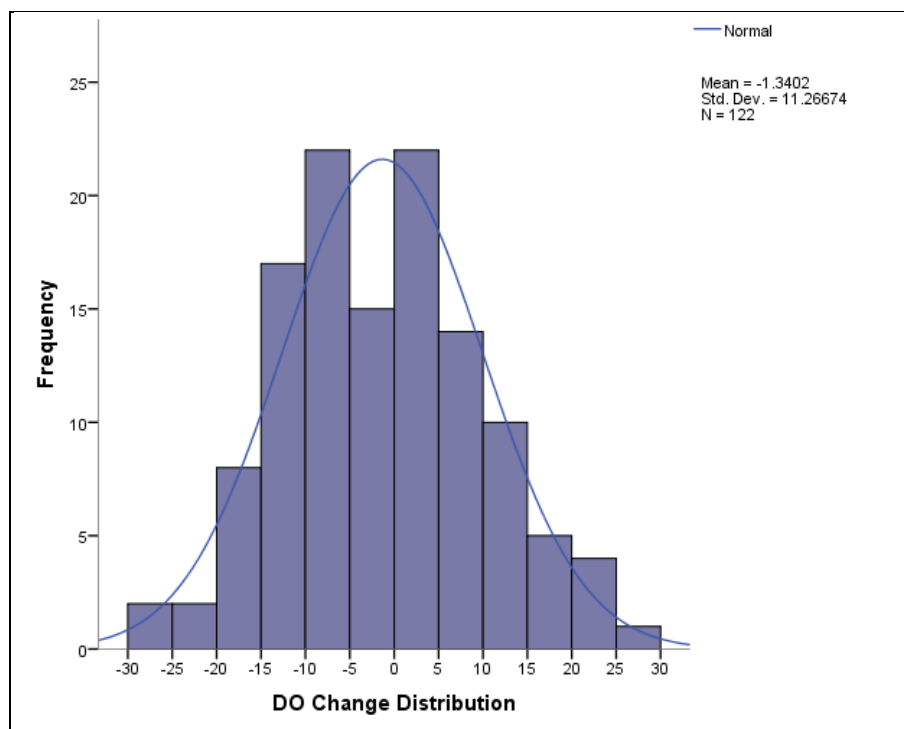


Figure 4-5: Change in DO from wave I to wave II

For the analysis I used the change score as well as a Percent change score. I correlated these variables with the student characteristics and intercultural background variables as previously described and the intercultural experience variables related to predicting change. Variables related to students' perceptions of the department and university were excluded from this analysis as I decided that they were indirectly relevant to change and were more useful for better understanding students' perceptions of the campus and department. Table 4-19 includes a list of variables included in this analysis.

Pre University Variables
Characteristics: Sex, Bi /multicultural family/ethnic minority group, High socioeconomic status, Low socioeconomic status. First language and English confidence -included for non-UK student analysis only.
Intercultural Background-Little Control: Time lived in another country, Grew up in a city, Grew up in a multicultural area, Attended a culturally diverse school, Parents have friends from other cultures, At home few neighbours are from other cultures, Number of countries visited in the last 5 years.
Intercultural Background- Some Control: At school spent time with those from own culture, At home have friends from other cultures, Number of languages spoken fluently, Feelings of not fitting in
University Intercultural Experience Variables
Valence of experiences: Pleasant, Cooperative, Superficial, Forced (Composite: positive)
Feelings about experiences: Confident, Irritated, Awkward, Impatient, Frustrated, Stressed, Happy, Self-conscious, Defensive (Composite negative)
Experiences in general: Number of interactions, Length of interactions, Relationship to interactor
Experiences in the department: Rarely work in small groups, A lot of contact in the department, Good friends in department from other cultures, Believe intercultural learning in dept important
Experiences on campus: A lot of contact on campus, Good friends on campus from other cultures, Believe intercultural learning important at university, Number of activities, Activity PsycSoc
Experience off campus: Engage in activities off campus, Off campus activities involves other cultures, Off campus volunteering involves other cultures, Off campus job involves other cultures
Interest in being interviewed

Table 4-19: Variables entered into regression with IDI change score

Spearman correlation results indicated that there were no significant correlations between any of the student characteristics and the change score or the percent change score. The only significant correlation found with intercultural background variables was with ‘sometimes feel I don’t fit in’ ($r_s = -.20$, $p = .026$ / $r_s = -.19$, $p = .033$). Although significantly correlated, the correlations were weakly negative suggesting a downward movement in change score with increased feelings of not fitting in. There were no significant correlations with interactions in general, the valence of interactions, feelings about interactions, experiences in the department, on campus or off campus. Willingness to be interviewed was also not correlated with the change scores.

4.6.11.1 UK and Non-UK student differences

Dividing the dataset by UK and non-UK student status, results were somewhat similar in that few correlations existed. The variable ‘feelings of not fitting in’ was the only correlation for UK students that was significant ($r_s = -.335, p = .003$ / $r_s = -.317, p = .005$). For non-UK students, significant correlations included ‘active in clubs and societies’ ($r_s = -.371, p = .014$ / $r_s = -.367, p = .015$) which indicated a negative relationship (i.e., the more active students had been, the more their scores declined), and ‘off campus activities involve those from other countries’ ($r_s = .344, p = .037$ / $r_s = .316, p = .057$).

4.6.12 Regressions – Predicting change in DO scores

The lack of significant correlations coupled with the fact that the mean change was so minimal suggested that further analysis would not be fruitful. However, I continued to explore the data using regression focusing only upon the change score. Running a regression with all of the variables using the enter method yielded a result indicating that no variable significantly contributed to explaining the variance (i.e., there were no t values for any of the variables). A backwards regression ended with no variables left in the model. A forwards regression resulted in the inclusion of two variables, the feeling that interactions tend to be forced and attending a culturally diverse school. While these two variables explained more than 60% of the variance ($R = .827, R^2 = .684, Adjusted R^2 = .614$), considering the large number of variables entered into the regression, this may have simply been a spurious result. To test this further, I reran the forward regression randomly selecting 70% of the cases as recommended by Tabachnick and Fidell (2007). The final result explained 95% of the variance ($R = .984, R^2 = .969, Adjusted R^2 = .959$) but included three entirely different variables (engaging in culture specific activities, having good friends on campus from other cultures, and feeling that interactions tend to be cooperative) suggesting that the results were indeed spurious.

As a final step, I ran regressions with just those variables that appeared to be correlated for the individual groups. Using the enter method, only two of the three variables had significant predictive ability with the final model including two variables (feelings of not fitting in and being active in clubs and societies) and

accounting for 9% of the variance and ($R=.295$, $R^2=.087$, $Adjusted R^2=.071$).

Rerunning this regression with 70% of randomly selected cases, the final model included just one variable (feelings of not fitting in) and accounted for just 3% of the variance ($R=.213$, $R^2=.045$, $Adjusted R^2=.034$) suggesting that this variable might be a predictor although a weak one.

4.6.12.1 UK and Non-UK student differences

Continuing the analysis, I split the data by UK and non-UK student status. Running a regression with just those predictors that were significant for each group using the enter method produced improved results. A single variable (feelings of not fitting in) appeared to be the only significant predictor of UK students' change score ($R=.343$, $R^2=.118$, $Adjusted R^2=.106$). See Table 4-20. A random sample of 70% of the cases produced a similar result.

A single variable (being active in clubs and societies) appeared to be the only significant predictor for non-UK students' change score ($R=.393$, $R^2=.154$, $Adjusted R^2=.134$) but again the relationship was negative. See Table 4-20. Backwards and forwards methods produced the same finding. A random sample of 70% of the data produced a similar result.

Method					
Group	Method	Significant Variables	Variable results	Model results	Constant
UK	Enter / Forward / Backward	Sometimes feel I don't fit in	$B=-3.8$ $SE B=1.19$ $\beta=-.343$ $t=-3.19$ $p=.002$	$R=.343$ $R^2=.118$ $Adj R^2=.106$ $SE=10.82$ $F=10.14$ $p=.002$	5.79
Non-UK	Enter / Forward / Backward	Active in clubs, societies, activities	$B=-3.93$ $SE B=1.44$ $\beta=-.393$ $t=-2.74$ $p=.009$	$R=.393$ $R^2=.154$ $Adj R^2=.134$ $SE=10.24$ $F=7.48$ $p=.009$	7.74

Table 4-20: Regression results for predicting IDI change scores

To summarise, identifying predictors of students' intercultural development whilst at university through multiple regression across the entire group was not

productive. However, separating UK and non-UK students was slightly more interesting as it identified predictors for each (UK: feelings of not fitting in; non-UK: active in clubs and societies) that explained somewhat more variance.

However, the results may simply reflect random variations in the data and should be viewed with scepticism especially considering that they have not been identified in other studies.

4.7 Summary

The results suggest that students in this study entered university at a range of developmental stages although most arrived in the *minimisation* stage. There was no statistically significant difference between the mean IDI scores of UK and non-UK students. Initial stages were best predicted by time lived abroad for all students with having friends from other cultures also a predictor for UK students and growing up in cities also a predictor for non-UK students.

Students generally reported that they had a lot of intercultural contact during their time at university. However, a comparison of the mean IDI scores for both groups at the first and second administrations found that on average UK and non-UK students' scores in both groups remained approximately the same. A closer look at the data found that while most students remained at the same developmental stage, more than one-quarter decreased one or more stages and about half that proportion increased a stage. This suggests that although students are studying on a culturally heterogeneous campus and department and having intercultural contact, most students experienced no change, only a minority of students seemed to have benefitted while many more seemed to have declined.

Although generally students reported high levels of intercultural contact during university, particularly non-UK students, and some reported extensive intercultural experience prior to coming to university, no contact or background related variables were identified as good predictors of change in students' IDI scores. However, two non-contact related variables were found to have some predictive ability for IDI change scores. These included feelings of not fitting in for which a small negative relationship with IDI change scores for UK students was

found and being increasingly active in clubs and societies for which a small negative relationship with IDI change scores for non-UK students was found. Both of these findings should be viewed with caution as they are not well substantiated by other research studies and may represent spurious results. Additional research around these variables would be useful.

4.8 Discussion

To follow is an initial discussion related to the quantitative results outlined above. However, the findings will be more fully discussed in the integrative chapter.

4.8.1 Background and students' initial IDI scores

The IDI stage at which students entered university is consistent with other similar studies (e.g., P. J. Pedersen, 2010; Riley, 2007; Stallman, 2009). The best predictors of initial stages appeared to be time lived abroad for all students with having friends from other cultures also a predictor for UK students and growing up in cities also a predictor for non-UK students. These predictors make sense from a theoretical point of view, having and/or taking advantage of intercultural contact opportunities is likely to contribute towards higher initial developmental levels. However, it also raises an issue. Specifically, it is somewhat surprising that non-UK students did not start out at higher developmental levels compared to UK students considering that interest in studying abroad would seem to suggest interest in other cultures and that the majority of non-UK students already had experience living abroad and reported more intercultural experiences in general. There are at least two possible explanations for this. One is that when the IDI was initially administered, several weeks after students had first arrived on campus, the campus environment may have already impacted students and may have driven down non-UK students' scores perhaps because of the initial shock of being in a new cultural context. Another possibility is that while non-UK students lived abroad for longer periods of time which this research suggests would elevate their scores, other factors not measured by the surveys might have counteracted this contribution. For example, non-UK students might have come from religious families more so than UK students which may have driven down their IDI scores. The extent to which either of these explanations is valid cannot be deduced from the data. However, taken at face value,

the results of the existing data analysis suggest that contrary to what some might think UK and non-UK students may enter university displaying approximately the same range and proportions of IDI developmental levels.

4.8.2 Predicting change in IDI scores

A comparison of the mean IDI scores of UK and non-UK students at the first and second administrations found that on average individuals in both groups remained approximately the same. While changes in IDI scores averaged out across the group, a closer look at the data did find that about two-fifths of students' scores changed enough to alter their developmental levels. The majority of these changes represented downward movement while far fewer represented an upward movement. Why would so many students' scores remain the same and why would a substantial proportion decline while few made advances?

In terms of the variables that were correlated with students' change scores very few were shown to have predictive ability. This is perhaps not surprising given that the mean suggests that on average little change occurred in scores. However, given that some students' scores did increase and others decreased, it would seem as if some variables would be shown to be predictors. The answer may be that as there were relatively few students in the study and few changed, there was not enough statistical power to determine what variables might have predicted change. However, it is worth speculating on why change did or did not occur in order to set the stage for the qualitative and integrative analyses to follow.

4.8.3 The immersion assumption

As described earlier, universities tend to assume that diverse campuses lead students to develop interculturally (e.g., Koutsantoni, 2006a; Middlehurst & Woodfield, 2007), referred to by some as the 'immersion assumption' (Hammer, 2012). Yet while students in this study were studying in one of the more diverse departments on a diverse campus and generally reported that they had quite high levels of intercultural contact with more than half reporting frequent contact and / or indicating that they had good friends on campus from other countries or cultures, on average development did not occur, suggesting that cultural immersion may not

enhance intercultural learning, at least over this time period. Findings from some other studies support this finding. For example, the study by Pedersen (2010) described earlier found that students studying on a home campus did not advance at all interculturally over a one year period compared to students who studied abroad and received specific intercultural training. As well, Vande Berg's (2009) study of 1300 study abroad students found that home students did not advance interculturally compared to study abroad students. While the extent to which the cultural composition of the campuses in these studies compares to this study is unclear, they nevertheless suggest that such findings are not altogether surprising.

4.8.4 Explaining declines in IDI scores

Whilst the myth of the immersion assumption may go some way towards explaining stagnating IDI scores, also perplexing is that so many students' scores declined. Such findings again are found in the literature even amongst those that are immersed in other cultures through study abroad (e.g., Michael Vande Berg, 2009). While there are many possible explanations for this, one is that students may be having experiences that negatively impact their scores. Spencer-Rodgers (2001) suggests that international students provide the most diverse collections of individuals that will be encountered anywhere. Coming into contact with such diverse groups must be a challenge for any young person whether from the UK or elsewhere. Students may experience a shock when having to negotiate cultural differences which they may find uncomfortable, challenging, or not aligned with their value systems. Such experiences may lead some students to become, for instance, more protective of their own culture (defensive) rather than more open and accepting of others.

4.8.5 Differences between UK and non-UK student change scores

As described earlier, there was no significant difference in the change scores of UK and non-UK students. This is somewhat surprising given that many non-UK students had more extensive intercultural backgrounds and more intercultural experiences at university.

One explanation might be that non-UK students may be particularly vulnerable to having negative experiences by virtue of studying in a foreign culture.

While actual numbers are small, less than half the proportion of non-UK students in this study moved up a developmental stage compared to UK students (7% cf. 19%). As well, while non-UK students reported more intercultural contact, they also tended to evaluate their experiences somewhat more negatively than UK students. These findings suggest that the intercultural experiences of non-UK students may have a more negative than positive impact compared to UK students. Such issues will be more closely considered in the following chapters.

4.8.6 Validity Issues

The immersion assumption and the existence of more negative intercultural experiences may help to explain why scores did not change or declined, however, validity may be another concern. The validity of the answers provided by students and of the validity of the instrument itself are two points to consider. Students may have provided inaccurate answers for a variety of reasons. As well, while IDI developers suggest that the instrument has been developed in such a way as to eliminate socially desirability (Hammer, 2011), some questions obviously appear to have more socially desirable answers. See Appendix A for sample questions. As well, although the IDI has been touted as a culturally neutral instrument (Hammer, 2011), it may not have crossed cultures as easily as the developers suggest or may simply not be the most effective method of assessing intercultural development. These concerns will be further examined in upcoming chapters.

4.8.7 Other variables found to relate to IDI change scores

Running correlations and regressions with the data found that the variables that were expected to predict intercultural change (e.g., intercultural contact) did not. However, there were two indirectly related variables that appeared to have a relationship to the IDI change scores. For non-UK students, participating in student societies seemed to be a predictor of change although higher participation was associated with lower IDI scores. This is perhaps in conflict to what might be expected. Specifically, students who participate in more activities have more intercultural contact opportunities and therefore should in theory increase rather than decrease their IDI scores. Although if societies tended to involve those from students' national cultures, the opposite impact could be expected.

For UK students, 'feelings of not fitting in' was associated with declines in IDI scores. This is inconsistent with what some literature (e.g., Madison, 2006) suggests, specifically that those who do not fit in might be more apt to seek out those who are culturally different perhaps in order to find individuals that they feel comfortable with. However, this data suggests that the opposite might be true at least for UK students. The significance of these two variables will be considered further alongside the qualitative results.

4.9 Conclusion

It would seem then that studying on a diverse campus may have no impact on most students, may work for a few, but may have a counter effect for many others. Putting these data in the context of research which suggests that students' scores tend to stagnate unless they are supported in their intercultural development lends validity to these results and may help to better understand what can be done to support students' development. Research around students' negative intercultural experiences may help to explain why some students' scores declined. However, students' experiences and scores will be explored more fully in the chapters to follow. The next chapter considers the qualitative data mostly collected during 20 student interviews whilst the subsequent chapter integrates the quantitative and qualitative findings.

Chapter 5 Qualitative Findings

As highlighted in previous chapters, internationalisation initiatives often create highly diverse university campuses in which students from a variety of countries are represented. It is often assumed that students who study on such diverse campuses will automatically mix and enhance their intercultural skills (e.g., Koutsantoni, 2006a; Middlehurst & Woodfield, 2007). While some research suggests that non-UK students may enhance their skills since they appear to interact more extensively across cultures than UK students (e.g., Montgomery, 2010), typically research suggests that university policy is not translated into practice to support students' intercultural development (e.g., Middlehurst & Woodfield, 2007). As well, contact between home and international students can be at times limited and challenging (e.g., Harrison & Peacock, 2009; Thom, 2000) with research from study abroad calling into question whether or not students develop interculturally even during immersion experiences (P. J. Pedersen, 2010).

This study was designed to explore the immersion assumption (Hammer, 2012) by studying a cohort of UK and non-UK first year psychology students studying in a university in the north of England. Questions that guided the study considered initial stages of intercultural development in study participants, intercultural development over the first two terms at university, and factors related to intercultural development including student characteristics and intercultural experiences prior to and during university. To address these questions, I collected quantitative survey data on 122 first year psychology students using the Intercultural Development Inventory (IDI) administered at the start of the first term and the end of the second term, a period of seven months; and two locally designed instruments: the Intercultural Background Questionnaire (IBQ) administered at the start of the first term and the Intercultural Experiences Questionnaire (IEQ), administered at the end of the second term. The results of this analysis were presented in the previous chapter.

This chapter focuses upon the analysis of qualitative data that was obtained on a selection of 20 students during semi-structured interviews which included questions related to their intercultural experiences prior to and during university

focusing mostly upon their contact with those from different countries. This chapter also includes an analysis of qualitative data from the 20 students interviewed which resulted from open ended questions included on the IEQ. These questions asked students to describe the details around their most significant intercultural interaction or experience that they had during university and what they learned from these experiences.

The main questions guiding this portion of the study stemmed from the fifth main research sub-question which is presented below with the overarching research question.

Are there differences between UK and non-UK university students' intercultural development?

- 5) *What are students' perceptions of their intercultural experiences and how might these contribute to intercultural development? Factors to be explored include:*
 - c. *Students' own intercultural backgrounds:*
 - i. *How do students characterise their intercultural experiences prior to coming to university?*
 - ii. *Did students view themselves as prepared to encounter diversity at university?*
 - d. *Students' intercultural experiences during university:*
 - i. *What are students' experiences of their university and course as providing intercultural environments?*
 - ii. *How do students characterise their closest friends?*
 - iii. *What have been students' most significant intercultural experiences during university?*
 - iv. *To what extent do students believe they have developed interculturally since beginning their course?*

In terms of students' intercultural experiences during university overall, students' comments suggest that some have a variety of positive experiences which may contribute to their intercultural development. However, this seems not be the case for all students. From the analysis, four themes emerged which may in particular hinder students' intercultural experiences. First, comments from students in the study indicate that cultural clustering, students grouping themselves according to culture, often occurs which may limit intercultural learning opportunities. Second, administrative segregation, room assignments sometimes made on the basis of nationality or UK / non-UK student status and somewhat separate welcoming activities, again may limit contact opportunities. Third, most students described

cultural challenges covering a variety of topics which some reported had a negative impact upon their cultural learning and may have enhanced cultural clustering. Fourth, UK students' intercultural backgrounds seem to impact their intercultural experiences at university with students with less extensive intercultural experiences reporting more superficial and negative cross-cultural encounters. Although generally non-UK students had more extensive intercultural experience prior to coming to university, this seems to have an equivocal impact on their experiences during university with some reporting positive experiences and others reporting more negative experiences.

The first section of this chapter provides an overview of the students interviewed for this study as well as brief 'bios' of a selection of students representing each IDI developmental level as a means to introduce the students to the reader. The remaining bios are included in Appendix F. The second section of this chapter details the results of the analyses undertaken of the interview transcripts in addition to analyses of the open ended questions asked on the IEQ of the twenty participants organised by research question. The third section provides a summary of findings and identifies four emerging themes. The fourth section discusses the emerging themes. The fifth section provides conclusions.

5.1 Interview participants

I chose students to interview for this portion of the data collection using a stratified random sampling technique (Coolican, 2009) described in the methods chapter (see Section 3.8.4.1). Of the twenty students who were interviewed for this study, four scored in *denial*, six in *defence*, six in *minimisation*, and four in *acceptance* at the second administration. No student in the study scored in the *adaptation* stage. Of the students interviewed, 18 were female and 11 were UK citizens although two of the 11 had dual nationality and had lived abroad most of their lives. Of the nine students categorized as non-UK, three were from the EU, and six were from non-EU countries. Four students dropped one or more developmental stages between the first and second administrations of the IDI, 12 students remained at the same developmental stage and four increased one stage, all going from the upper *minimisation* stage to *acceptance* (see Table 5-1).

Name	DO1		DO2		Change	Residency	Sex
Leila	51.49	Den	53.18	Den	1.69	UK	F
Serena	91.52	Min	68.03	Den	-23.49	UK dual nat.	F
Faline	83.32	Def	69.86	Den	-13.46	Non-UK	F
Matilda	77.47	Def	69.99	Den	-7.48	Non-UK	F
Patrick	85.98	Def	71.78	Def	-14.2	UK	M
Sally	80.33	Def	75.07	Def	-5.26	Non-UK	F
Kendra	73.72	Def	77.36	Def	3.64	UK	F
Corinne	86.48	Min	77.52	Def	-8.96	Non-UK	F
Renata	77.9	Def	81.43	Def	3.53	UK	F
Sang	79.48	Def	83.07	Def	3.59	Non-UK	M
Anna	88.01	Min	88.13	Min	0.12	UK dual nat.	F
Geneva	99.33	Min	90.71	Min	-8.62	Non-UK	F
Candace	110.15	Min	91.32	Min	-18.83	UK	F
Tamara	100.33	Min	102.34	Min	2.01	Non-UK	F
Rosy	88.36	Min	104.68	Min	16.32	UK	F
Miranda	104.99	Min	114.01	Min	9.02	Non-UK	F
⁺ Jill	111.18	Min	118.54	Acc	7.36	UK	F
⁺ Jade	107.51	Min	120.78	Acc	13.27	UK	F
⁺ Francesca	108.40	Min	121.53	Acc	13.13	UK	F
⁺ Hillary	109.07	Min	121.76	Acc	12.69	Non-UK	F

Note: A '-' indicates students who moved down one or more developmental stage. A '+' indicates students who moved up one developmental stage. Students not flagged remained in the same developmental stage although their scores did change to some extent.

Table 5-1: Summary of interviewees

5.2 Sample bios of interviewees

The following bios provide brief overviews of four of the participants interviewed for the study. Bios provide highlights from the interviewees reflecting four different developmental stages to give the reader a sample of students at different stages.

5.2.1 Leila – UK (51 Denial/ 53 Denial)

Leila described herself as coming from a white British family and growing up in a small city which had little diversity. She described her parents' attitudes towards cultural difference as not having racist views but noting that they joke about those from other cultures. She described her holidays abroad as all inclusive family holidays or involving caravanning and seeing sites. Her major experience with someone from a different culture seemed to be getting to know an exchange student who she later visited in Germany. Of her visit she noted the following:

I went to this crazy culture festival thing and everyone was wearing masks and it was kind of scary... A lot of children in cages were being carried through the streets... I don't know what it was about. She gave me a book about it but I don't know. It was very strange.

Neither Leila nor her parents had friends from other cultures. When asked how her background prepared her for meeting people from different cultures at university, she noted:

I suppose my German friend influenced me. But I was thinking like oh there is going to be a lot of, I don't mean to be stereotypical, but a lot of Chinese people and there's going to be a lot of other people and like how would I get on with them?

Leila's contact with those from other cultures seemed to be limited. She had no good friends from other countries or cultures and had just one to three intercultural interactions per week which she found to be frequently pleasant and cooperative and very frequently forced, awkward, stressful and frustrating. She reported that her closest friends on campus were from the UK.

She described her most significant experience during university as follows:

During group work I worked with an international student, she was very abrupt and didn't want to change her ideas. The group of non-international students found this uncomfortable. [I learned] that some people have strong opinions and find it hard to accommodate to others views.

Leila's IDI scores were more than three standard deviations below the mean and were the lowest scores of any student putting her in very early *denial*.

5.2.2 Sally – Non-UK (80 Defence/75 Defence)

Sally is from a Southeast Asian country. When asked about her parents' attitudes towards cultural difference, she said:

...when I say conservative, I mean it because we are Muslim so they are very close minded. Well not closed minded but yeah they are conservative... You can socialise with other cultures, that's fine but you have to know your limits kind of thing. It's more like you can't, I can say this but it sounds a bit, my family would be like well don't socialise how like the Westerners socialise.

She further described her parents as holding some prejudices with her father, for example, when he sees a bad driver saying "oh I bet it's a Chinese." She indicated that the family moved to China for four years with her father's job. During that time she attended an international school and she said that this experience made

her more open minded than her parents. She learned English and another language from childhood and is fluent both.

When asked how her background prepared her for meeting people from different cultures at university, she noted:

I think it helped being in an international school because I had been exposed to diversity but I was kind of sad when I came here at first because I couldn't really relate to the English which was kind of weird because I do have English friends...I relate better with the international students here than the English even though I can understand their cultures it's fine but I just can't really, I just find the relationships quite superficial between the English.

Sally indicated that she has more than 15 intercultural interactions every week. When asked about her experiences around her interactions, while she reported that they were positive at times she also indicated that they were very frequently superficial and sometimes forced. As well she indicated feeling at times awkwardness and irritation, frustration, stress, and self-consciousness. Her closest friends on campus were from France and Germany.

When asked to describe her most significant experience and what she learned from it, she wrote:

In choosing to live between two groups, one group of just girls from England except for me, and another group with more cultural diversity. I decide to choose the more diverse group. I am more comfortable in a more international environment. I would prefer to interact with people from different countries rather than just one. I am much more comfortable with internationals, being an international student myself.

Sally's initial score was one standard deviation below the mean changing little between administrations.

5.2.3 Tamara – Non-UK (100 Minimisation/ 102 Minimisation)

Tamara and her parents are from a non-EU Northern European country. When she was two she moved with her parents to China until she was 13. Then she moved back to her home country and then to another Asian country and then back to her country before starting university. She described her identity as mixed when it comes to culture.

For a few years in China she went to a Chinese school. As the only white person she felt she was treated differently. She said that she mainly noticed the differences between cultures when she changed schools. She attended an international school in China and also spent time in a local school back in her home country. She learned English and another language from childhood, studied five other languages, three of which she reported to be able to speak fluently.

When asked if her international background prepared her for experiencing cultural difference at university, she agreed that it did although said “I don’t think it has to be ‘cause you do meet people in England who might never have been abroad but are still very open.”

Tamara indicated that she has more than 15 intercultural interactions every week. She reported positive feelings about her interactions only noting that they can at times be superficial. Her closest friends at university are non-UK students, one from an Islamic country and the other from an Asian country.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it she wrote the following:

I don't think I've had a particularly significant intercultural experience which shocked/surprised me, which is probably because my entire life has been one big intercultural experience. I've grown up knowing of different cultural differences because I experienced it at a young age, so I think am able to cope and understand cultural differences in a different way... I do think my cultural understanding of others still develops as I grow older and mature.

Tamara’s IDI scores were about one standard deviation above the mean with little change in score over the two administrations.

5.2.4 Jade – UK (107 Minimisation/ 120 Acceptance)

Jade described her mother as white British, very open and having many friends from other cultures. Her step father was from the Middle East. She described her biological father as having ‘old fashioned views’ and said that he would not be friends with black people. She spent her early years in a school that was 50% non-white and lived in a very diverse neighbourhood in a large city in the Midlands

where she had many friends and neighbours from different countries. Her family then moved to a city in the north of England that Jade described as follows:

It was probably one of the least multicultural places I have ever been in...I didn't enjoy having people around me that were so closed minded about everything when I'd been brought up to be really open minded about everything...I remember a girl standing up in an English lesson ... and said well all Muslims are terrorists so I hate them all and that was a massive shock to me because I knew some people weren't as open minded but I didn't realise that they were actually just downright quite racist.

When asked how her background prepared her for meeting people from different cultures at university, she highlighted the time she spent immersed in the Middle East while visiting her step-father's family as being important.

Jade indicated having 15+ intercultural interactions per week. She reported generally positive feelings about her interactions only noting that at times they could be awkward. One of her closest friends on campus is from an EU country and the other is from the UK.

When asked to describe her most significant intercultural interaction or experience during university she wrote:

I haven't had any significant intercultural experiences that I can remember. I assume this is because I view intercultural experiences in the same way as interactions with people from the same country as my own.

Jade initially scored towards the top of the *minimisation* stage well over one standard deviation above the mean. Her score increased to by 13 points placing her in the *acceptance* stage and more than two standard deviations above the mean. She was one of only eight participants to score in the *acceptance* stage.

5.3 *Qualitative analysis*

The following provides an analysis of the interview transcripts and the open ended survey questions organised by research question. Each begins with a summary of the findings related to that research question followed by a more detailed description of the data.

5.3.1 How do students characterise their intercultural backgrounds and experiences before university?

The school and living experiences of the students interviewed varied quite widely, however, some patterns were evident. First, more than half of the UK students described school and living situations that provided limited opportunities for contact with those from other cultures owing to growing up in small villages or segregated areas and attending relatively mono-cultural schools. Six UK students did not fit this pattern. Four grew up in more diverse areas and/or chose to be friends with individuals from other cultures while two had dual nationality and had lived abroad all or most of their lives.

The majority of non-UK students had experience living abroad and/or attending international schools prior to coming to university with only three not having lived abroad. Only one who had only lived in her home country described having some experience with those from other cultures while the other two indicated having little experience with cultural diversity.

Both UK and non-UK students who studied at international schools typically described their environments as seemingly rich in cultural diversity. However, they also suggested that a blending of cultures occurred leading to what some referred to as an experience of a third culture.

Of the UK and non-UK students who did not live abroad, many described short term study abroad or travel experiences most of which seemed to provide mainly exposure to cultural difference although a few described more in-depth intercultural contact.

In terms of students' reports about their parents' attitudes towards cultural difference, there were no obvious differences between the responses of UK and non-UK students. Three-quarters of the students provided some evidence that their parents, most often mothers, were open to cultural difference. Most provided tacit examples demonstrating openness (e.g., working with those from other cultures). About half of the students provided some evidence that their parents, most often

fathers, had difficulty with cultural difference. Their descriptions primarily included evidence of negative stereotyping.

5.3.1.1 Neighbourhood/school diversity

When asked to describe the diversity that they experienced growing up in terms of their neighbourhoods and schools, students' answers varied significantly. Of the eleven UK students, three (Jill, Kendra, Leila) described themselves as spending all or most of their early years in small English villages and attending (generally) mono-cultural schools.

I live in a very rural part of the south so it is extremely white... Sort of it was quite a religious area so there were a lot of Protestant church going people... It's quite insular... there were two Muslim girls in the year above for one year who moved there and then moved away and then I had one friend who was of mixed race but she was adopted by two white parents. So that was the extent of the diversity in terms of my experience with school. And all the local villagers are sort of similar very very little diversity of any kind. – Kendra, UK student, Defence

Three other UK students (Renata, Rosy, Patrick) indicated growing up in cites of varying sizes which while could be multicultural were described as providing somewhat segregated experiences with people from different ethnic groups clustered in certain neighbourhoods and schools.

My school was not so diverse. It was a Catholic school. We had mostly like white people. Everyone was like British but the only people we really had were a few people like black people... I don't feel like the fact that I went to a non-diverse school affected me... Strangely, it seems to me that it actually, the fact that we didn't go to one made, like cause people who went to these ones that did have massive cultural diversity tended to like have worse views on like the other cultures around them... – Patrick, UK student, Defence

Three other UK students indicated experiencing more diversity. Although Candace grew up in a predominantly mono-cultural area and attended a relatively mono-cultural school, she became good friends with the few individuals in her school and at work from other cultures. While Francesca grew up in a predominantly white neighbourhood, her school did have some diversity and she noted having friends from other cultures. Finally, Jade described contrasting experiences spending her early years in a highly diverse metropolitan area where she had many friends from different cultures and later years in a very mono-cultural city.

Where I was born, it was a fairly big city...My best friend, her parents were from Jamaica. In my school...I would say that the majority, more than 50% of them, would not have been

white British...the people that lived opposite were from New Zealand...downstairs and across they were an Indian family...then we moved to a town in Northern England and that is probably one of the least multicultural places I have ever been in... It's as if the town is sort of a couple of decades in attitude behind the rest of the country because...a lot of people are a lot less open minded... I didn't enjoy having people around me that were so closed minded about everything... – Jade, UK student, Acceptance

Two other UK students (Serena, Anna) were bi-cultural, each having one parent from a different country. Anna spent about half of her time living in London and half in the capitol city of her other country and attended local schools in both countries. Serena spent all of her early years living abroad in various countries and attended both local and international schools where she was exposed to both students from host countries as well as students from a variety of other countries.

... I went to local schools at first and then I went to an international European school... I think the new term is third culture kid and I mean I think my family classifies pretty well as that... I think it is a lot less like that whole patriotism idea because ...everyone is so different when it comes to the third culture so what we celebrate is the fact that it's not just one thing it's a lot of traditions that can be combined...– Serena, UK dual nationality student, Denial

Of the nine non-UK students, six of them lived abroad prior to university for extended periods of time. Four of them (Tamara, Sally, Corrine, Hillary) lived abroad with their parents and spent time in both local and international schools. Their experiences indicate encountering cultural difference, however, also suggest that international school students form their own subcultures similar to what Serena described above.

So in Chinese school...I was kind of treated differently because you are the only white child. But going to Chinese school wasn't that different for me. But then when you move between the two, that's when you start to notice the differences so when I did go back to Europe and attended a local school, that was really different...But I found it easier to integrate back into an international school because I guess it was more what I was used to like being around a lot more Americans or British people or Asians and so it was easier because a lot of people at the international school have all grown up abroad and so you are all in kind of the same situation. – Tamara, non-UK student, Minimisation

Corrine, who attended an international school, also undertook UK A-levels as did Sang and Faline who only lived abroad whilst undertaking UK A-levels. Sang and Faline came from very mono-cultural areas that provided limited contact with those from other cultures. Their experiences with A-levels were in contrast with each other in that Sang's answers suggested that he stayed among those from his home country while Faline, attending a school with few non-English students, became more involved with those from those from the local culture.

I really did find it positive. And it really helped me because I think living in a boarding school you are living with other people and I think I learned a lot about British culture because it was a boarding school... But there were a couple of people who were not as welcoming and as friendly... – Faline, non-UK student, Denial

The other three non-UK students who did not live abroad prior to attending university (Geneva, Miranda, Matilda) described experiencing differing levels of diversity during their time growing up.

Well the country itself has a very large Russian population. But there isn't much interaction between the people from my country and Russians because there are Russian schools, there is Russian trainers so even if you do sports you won't really meet them... most interaction probably occurs on public transport or in the streets really. They also tend to live in certain parts of town I think. I know that there is one part of town where there is a large Russian population. They even built their church there. – Matilda, non-UK student, Denial

5.3.1.2 International travel / school related experiences

The students that did not have experiences living abroad (nine UK and three non-UK) talked instead about their experiences with diversity at school or during travels. For some, these were the most important experiences with encountering those from other cultures while for others they seemed to be relatively unimportant.

Four UK students (Leila, Jill, Renata, Kendra) described some involvement with study abroad programmes or exchange students. The impact of these experiences ranged but students seemed to mainly describe them as providing exposure to different cultures rather than providing particularly transformative experiences. Below, Kendra described doing volunteer work in Africa.

I spent the summer holiday in Kenya volunteering on a project. That was wonderful...I really enjoyed it...it was a sort of sense of different ways of life. We spent a lot of time working with the children in the villages and that was wonderful...I don't know if my perspective changed but it strengthened my interest in it and my appreciation of the colour and beauty of different places. – Kendra, UK student, Defence

Five UK students (Jade, Candace, Francesca, Jill, Rosy) and one non-UK student (Matilda) described holidays abroad which exhibited vastly different levels of engagement with cultural others. While Rosie's appeared to provide little more than exposure, Jade, Candace, and Francesca described experiences getting to know individuals from different countries which they described as impacting their views of cultural difference.

Just been on holidays...We didn't really do culture we just sunbathed. We went to Cyprus twice, Spain, Menorca, Portugal, France. – Rosy, UK student, Minimisation

We went to Turkey and I met this Turkish guy...I enjoyed speaking to him about his family and like what he likes to do and just listening to him like his life..he would take me on a walk and... if you saw anybody walking past he would be 'pull your skirt down, pull your skirt down' so I would cover my legs more... I got more of an insight maybe into their culture which was more interesting than some other holidays. – Candace, UK student, Minimisation

5.3.1.3 Parental attitudes

Fifteen students provided some positive description of their parents being accepting of cultural difference. Evidence for this varied widely and nearly always focused upon the openness of mothers rather than fathers. Some students provided a variety of evidence while others provided minimal. Ten students talked about one or both parents' working with people from different cultures. Seven students talked about them having friends from different cultures, often through work, and two noted that their parents hosted international guests. Two students highlighted their parents' experiences living either abroad or in different places within their home countries as evidence, and two noted their parents' interest in travelling. Two noted that their parents encouraged them to study abroad while two said that they were encouraged to watch television programmes and read books representing diverse cultures. Three students noted that their parents had discussions with them around cultural difference.

But they are both extremely open which is one of the reasons why I think growing up in such a non-diverse area hasn't negatively affected me... they used to get us to watch programmes and read books that were to do with other cultures. Because of my Mum I've got a massive interest in world literature and I think that is one of the ways that they got me engaged in it ... – Kendra, UK student, Defence

And I think my Mum is more open. She... works with deprived children ...she knows a lot about other cultures and bringing children up in different ways. So like she tries to... find out a lot about different cultures ...have a look at research and things...I think she knows a lot more about looking at different backgrounds and how they influence you so I think she would be a lot more open to changing ways if it was like shown or anything.- Jill, UK student, Acceptance

While the majority of both UK and non-UK students provided descriptions of openness regarding their parents' attitudes, nine students provided examples of more negative views held by their parents, typically their fathers mainly including evidence of negative stereotyping.

He would find it rude that they would just be speaking in the national language all the time whereas we would see it as ‘well you’re in South America, you should be learning the language’... And then he would just see it as everyone else not making an effort which is quite bad...Then not queuing, not please and thank you... – Anna, UK bi-cultural student, Minimisation

5.3.2 Were students prepared to encounter diversity at university?

I asked students the extent to which their backgrounds prepared them to encounter people from different countries at university which allowed for an interesting range of responses regarding both their preparation and experiences. In answer to this question, about half provided more positive accounts of their preparation with more of these being non-UK students. Most noted more simplistic exposure to cultural difference or educational opportunities as being most helpful, with a few providing more sophisticated accounts describing how getting to know people from different cultures helped them to appreciate cultural difference.

While about half of students felt that they were reasonably well prepared, the other half provided more negative accounts of their preparation with more of these being UK students. Their answers focused not on preparation or lack thereof, but on their worries or difficulties around encountering cultural difference which typically focused on encounters with Asian (for British students) or British (for non-UK or UK students who had lived abroad) students.

5.3.2.1 Preparation

When asked how they felt their backgrounds prepared them to encounter diversity at university, answers varied. Nine students commented that their backgrounds prepared them for encountering individuals from different cultures at university. Three UK students (Jade, Francesca, Candace) provided perhaps the most sophisticated answers by highlighting their experiences in getting to know people from other cultures which they indicated was important in helping them to understand and accept cultural difference.

I think being in the Middle East and being fully immersed in another culture and behaving in the same ways that they did, I mean we were treated as guests but, we were also treated as family so everyone was very respectful and nice to us but also, it was kind of well we’re doing this so you do it too. So you become fully involved and I found it really interesting learning about other peoples’ ways of life. I think that it is great that not everybody does it in

the same way and I don't think that one way is particularly better than another. I think that they are just different. – Jade, UK student, Acceptance

One other UK student and six non-UK students described how various experiences prepared them. Jill believed that travelling made her more interested in other countries and more open minded. Matilda said that having some intercultural contact, hearing news and learning about other countries made her aware of cultural differences.

I think because my parents put me in an English medium school so language was not a barrier for me to mingle with the people here. Other than that, my parents always taught me to tolerate others and like differences and stuff like that. – Faline, non-UK student, Denial

Five UK students (Renata, Patrick, Leila, Anna, Serena,) and two non-UK students (Geneva, Sally) provided generally more negative evaluations regarding the extent to which they were prepared to encounter cultural difference. Students providing more negative answers tended to focus not upon their preparation or lack thereof, but on their reactions to encountering those from different cultures. Patrick noted that he found it difficult relating to students from Asian cultures while Renata and Leila were both worried that they would find it difficult to relate to those from other, particularly Asian cultures.

Well, I kind of had the view before I came that like people from other cultures, particularly like people from Eastern cultures were more kind of reserved ... so part of me was thinking okay then would I want to go there, not because I have anything against them but just I had the impression that people wouldn't be as sociable and willing to like make friends if they are from other cultures and I felt like that would kind of be a cultural barrier especially if like there was a lot of foreign students and me as an outsider like if they had a little group. – Renata, UK student, Defence

Geneva and Sally, two non-UK students, found their backgrounds did not prepare them for encountering British culture which they both found to be challenging. Similar to Sally and Geneva, two bicultural British students, Anna and Serena who have lived abroad extensively also focused on their reactions to encountering British students.

I think it helped being in an international school because I had been exposed to diversity but I was kind of sad when I came here...because I couldn't really relate to the English...I relate better with the international students...I just find the relationships quite superficial between the English. – Sally, non-UK student, Defence

I think it almost becomes frustrating ... I do have conversations with people and like England is not the only country, there is so much out there and then they still refuse to accept that. They're like 'no but England is so good' and ... they'll be like 'yeah the world is

big and there's lots out there but I'm really comfortable here and I like it that way' and I try to say but it's so amazing that you need to have a bit of an experience because otherwise you're cutting yourself off from the rest of the world... but it's yeah like 'come on people you have to travel, you have to see the world to be able to judge, you can't just say other cultures aren't as good if you haven't been there. – Serena, UK dual nationality student, Denial

Two UK students provided somewhat different answers. Rosy said that because she mainly spent time with people who were like her, she found it different being in contact with people who were different, although she did not find it problematic. Kendra noted that she didn't really see cultural differences and so didn't think her background was relevant.

5.3.3 What are students' experiences of their university and course as providing intercultural environments?

I explored students' experiences on campus by asking them to reflect back on their first few weeks at university and to describe their experiences around encountering cultural difference. The majority of the students eligible to participate in international week enjoyed it finding it very useful for meeting people from different backgrounds and making new friends. Non-UK students were significantly less positive about the way in which Freshers' week led to experiences with those from different cultures. Both UK and non-UK students mentioned a cultural divide between UK and non-UK students, in particular students from the West and East, around Freshers' that mainly centred around differences in alcohol consumption. While it did not hinder the participation of some non-UK students who seemed to accept it as part of British culture, for most, Fresher activities created cultural barriers that they did not cross.

Although there were some positive evaluations of mixed accommodation, generally students' responses highlighted challenges. While some students seemed to really enjoy it, most mentioned some kind of cultural divide which was sometimes enunciated by a physical divide. Specifically some in mixed accommodation felt that people from certain cultures would bunch together resulting in less cultural mixing. For others, there were also physical barriers created by students from particular cultures being grouped together on particular floors or blocks or in particular rooms leading to less mixing than there might otherwise have been. Additionally, students mentioned various points of contention that could occur

when living in close proximity. While some described them as learning experiences which were eventually resolved, for others they resulted in changes in living situations.

Participation in clubs and activities provided a more even balance of reviews. More than half of the students, a relatively equal balance of UK and non-UK, said they participated in some activity that involved some substantial contact with students from other cultures. Some of these encounters were described positively with one student saying that it helped to improve her view of British culture and another saying it was the main vehicle through which she interacted with students from outside the UK. While some activities that were described by students as leading to encountering cultural difference in a positive way, some mentioned specifically that particular activities tended to draw non-UK rather than UK students (e.g., language classes) suggesting that UK students may not as often benefit from culturally mixed activities. As well, while some highlighted a degree of cultural mixing in activities, some of these descriptions seemed to involve very limited contact with a few individuals (e.g., a few non-Islamists attending Islamic lectures sponsored by the Islamic Society).

While half of the students mentioned cultural mixing through societies in a positive way, others focused more on the divisions that they see as perhaps exacerbated by students having their own societies (e.g., Chinese Christian Union), being advertised to specific groups of students, or people sticking together with others they know which hindered their participation in activities where they might meet people from other cultures.

During the interview, I asked students a variety of questions in order to get them to talk about their experiences encountering cultural difference. We discussed both tutorial and lecture situations as well as the way in which the course itself highlighted or brought about discussions around cultural difference. The positive aspects of group work according to the students seemed to be the benefits of drawing on diverse perspectives and getting to know those from other cultures. This was more often noted by UK than non-UK students. However, all but three students

reported challenges regarding group work with both language and cultural difference playing a role as well as the problem of some groups being culturally unbalanced.

More than half of the students commented that during lectures students typically segregated themselves along cultural lines, in particular UK and non-UK students sitting in different areas although some non-UK students clustering in particular cultural groups. While all students mentioned some coverage of material having to do with cultural difference in the curriculum, the examples provided highlighted cultural differences around topics such as language acquisition provided during lectures. No mention was made of addressing topics that raised discussions around handling cultural difference in everyday life. As well, one student highlighted a concern regarding whether material was presented in a culturally sensitive way, another noted a concern about a student being singled out to provide an example from her culture, while a third student repeated an ethnic joke told by a lecturer.

5.3.3.1 International week

Seven of the non-UK students and the two UK students who had lived aboard participated in International week to some extent. Most generally thought it was good, enjoyed meeting people from other countries, and made friends.

Well international kids come before the English kids. I think that was good because you get to meet people from different backgrounds and interact before English kids came. I made a lot of friends during that week. We had dinner together...we went out to town and explored York. – Hilary, non-UK student, Acceptance

While Hilary and many other students found international week quite a positive experience, others were not quite as positive reporting that there were not many students around (Tamara), believing EU students were not invited (Matilda), or simply not wanting to participate (Sang).

5.3.3.2 Freshers' week

Freshers' week had mixed reviews from non-UK students. Sally and Faline said they participated little feeling that all the events were centred on alcohol consumption which did not appeal to them.

...during Freshers' week that's the time when people sort of bond. But the activities during Fresher's week, people usually drink together. And I can't even stand the smell of alcohol. I get really dizzy so I didn't even join in the activities... – Faline, non-UK student, Denial

Celia did not mention specifically whether she participated in Freshers' or not although she said she was aware of the drinking culture and did not participate in parties because of it. Matilda said she only participated in the more educational oriented opportunities available during Freshers'. Miranda and Hilary mentioned being surprised about the fact that events included a lot more drinking than they were accustomed to, however, both participated.

Yeah it was something new so I was excited. I also made a lot of new friends during Fresher's week. It was a good way to meet people, to interact and get to know others even though most of the people were drunk. –Hilary, non-UK student, Acceptance

Six of the UK students interviewed mentioned participating in Freshers' week. Leila commented that she did not see non-UK students participating and Jade thought that it did not cater for non-UK students. Serena (UK student who had lived abroad) said she did not participate in Freshers' also because of the focus on alcohol consumption.

The international students get to arrive a week earlier... I quite enjoyed that first week...as soon as the local students arrived it was, like it changed a lot. It was suddenly back to the focus on the British culture I think because I don't know maybe it is just student culture of like, Freshers' week was all like drinking activities... And yeah, as soon as the international week was over, it was pretty full on the whole British culture... – Serena, UK dual nationality student, Defence

None of the other UK students that participated commented on the extent to which they met students from other cultures during Freshers' week.

5.3.3.3 Accommodation

Fifteen of the students interviewed said they lived in some kind of mixed accommodation although the ratios of UK to non-UK students that lived within these accommodations varied widely. Eleven students, five UK and six non-UK, mentioned enjoying some aspects of living in mixed accommodation.

... there's like about six or seven rooms with just international students so and they'd already been here when we moved in so they knew what was going on. So it was just like really cool, seeing where they're from and they brought foods from their home countries and stuff that was really nice ..I wouldn't want to be in accommodation which was just entirely British... – Francesca, UK student, Acceptance

Fifteen students, about equal proportions of UK and non-UK, mentioned cultural differences that could make living in mixed accommodation difficult. These ranged from minor issues that were eventually resolved to situations in which students led parallel lives or chose to change their accommodation arrangements.

In my accommodation it is a bit mixed but I know we had like two or three foreigners like from European countries but they've decided to move out. I met one of them a while back and she is now living in an accommodation with an Italian girl who is from her same country and so I guess she moved over there and is hanging out with her instead. She just didn't like our accommodation in general like the people and everything so...we still have a girl from Hong Kong but she doesn't hang out with us. I met her during the international orientation but then during actual Freshers' she met other people from Hong Kong so then a lot of Chinese students would come around. So yeah she doesn't talk much at all... And we had a French girl and she left as well. It's really sad we didn't even know her name... – Tamara, non-UK student, Minimisation

Five students mentioned some type of segregation within their accommodation or neighbouring accommodation which for some led to little contact with one commenting that segregated accommodation might be for the best.

That was the strangest thing about it was how the top floor had a lot of Chinese students and then the other two had none so it was sort of like put them together and then the rest didn't have any...I thought they would integrate them a bit more. ..But I find it quite hard at times to communicate with people. I don't know what it is 'cause they seem like, they seem to keep themselves to themselves a lot more. Like hang out in, with people from their own cultures. – Patrick, UK student, Defence

Yeah, but maybe because their lifestyles are different and they don't go out as much as we do, maybe it is okay to be separate...because if they live differently to us, then maybe putting us together would cause more problems. – Leila, UK student, Denial

5.3.3.4 Societies

All but three students indicated participating in some society or activity on campus. Eight students mentioned some sort of division along cultural boundaries where clubs and societies were concerned.

The Christian Union...you do get a bit of a mixture of cultures but there are a lot of British people and again a lot of the international students don't always want to come along. I think quite a few of them because there is a cultural difference ...but a lot of them don't always feel completely comfortable being among like that many British students. I know with a lot of the Singaporeans it's the banter, the banter really puts them off...Also like quite a lot of the Chinese students have their own like mini Christian Union going on outside of it and because that is in like Chinese or Cantonese they feel more comfortable and because also I think it is easier to communicate. – Tamara, non-UK student, Minimisation

Although some students mentioned divisions along cultural boundaries, ten mentioned that they do encounter people from different cultures to some extent in

societies and activities which for some students was important and altering their views of particular cultures.

Yes but there are a few people from Britain as well who are not Muslims but are interested to learn more about Islam. Or they are interested in the Arabic language. Some are even planning to visit Muslim countries or probably work there cause most Islamic nations they are rich with oil... So I see them there [at the Islamic Society]...we are always excited to explain to them about our way of life. – Faline, non-UK student, Denial

... I joined Nightline which also helped me to realise that there are really really good people in Britain as well. Not just unaware shallow people... – Geneva, non-UK student, Minimisation

5.3.3.5 Tutorial group work

I asked students to describe their experiences in working in mixed cultural groups. Twelve students said that mixed cultural group work was beneficial mainly for increasing awareness and knowledge of other cultures but also because of the ability to draw on diverse perspectives or improving English skills. Most (8) were UK students.

I have had quite varied groups actually which is nice. Just because sometimes the way that they approach work might be different. So I think it has been really good and I think it is something that the university should consider when they are doing groups is making sure that it is diverse and it is not segregating people. – Jill, UK student, Acceptance

While many students noted the benefits of group work, all but three pointed out challenges. Eleven students noted that non-UK students contribute less to discussions. Seven of these were non-UK students. The reasons provided for why non-UK students contributed less centred around language fluency although some alluded to cultural differences playing a role.

...it is difficult again because of the language thing. Like the one girl in our tutorial she never really speaks up and maybe that is because most people in there are native English speakers so she must not have the confidence because she probably, I don't know, I've never really spoken to her that much but maybe because she does not have the confidence to speak out if everyone else is very comfortable with the language ... – Patrick, UK student, Defence

Yes, that's a first year project group. And it is made up of all British students and then me.... I don't think they make the effort to try to understand me... if they would be aware of how it is difficult to be the only person around who is from another country, they probably should make the effort... but sometimes I just can't express my thoughts and that's when I remain silent for a while. Or let's say a debate is going on and everyone is talking quite fast and just almost shouting on top of one another and I can't really do that because I have to take my time to say something... Also, the cultural difference also kind of shut me up sometimes because I am not sure if what I am going to say is an appropriate thing to say at that moment. Let's say during the tutorial group sessions, if I have some problem let's say I can't see the slides or something, in my country I would say that liberally and I know that nobody

would look at me strangely but here it seems to be quite inappropriate to say if anything is wrong. – Geneva, non-UK student, Minimisation

Other students cited other challenges including being the only person from a UK/non-UK background in a group, cultural references creating barriers, domination of the group by someone from a particular culture, or the use of a foreign language among non-UK students.

I think everyone else there is British and that is a very permanent group... I think I would prefer if other internationals were in the group because I do feel a little bit left out...It is like when they tell us to gather into or split into pairs or groups of three and discuss, especially if there is groups of three or four, I tend to be on the sides and they don't actually talk to me. I don't know why that it is. That's something I've been wondering. Why is it that some people want to talk to you and other people don't and some people seem to outright ignore you? – Matilda, non-UK student, Denial

5.3.3.6 Lectures

Both UK and non-UK students mentioned the lecture theatre as a place where they noticed segregation between students of different cultures.

You can see it in lectures cause international students sit in front more and like they all sit together whereas home students sit more towards the back. That's culture. Like stereotypical things, Eastern cultures are more hard working and then Western cultures are lazier so they sit in the back.... – Patrick, UK student, Defence

5.3.3.7 Curriculum

I asked students what part of the course might have led to debates or discussion about cultural difference. Seventeen students mentioned the Development and Language course as drawing attention to cultural difference. Most students described it addressing language acquisition and the way in which it impacts thinking. The descriptions were mostly conveyed in neutral terms although one student highlighted a positive and another a negative aspect of the way in which material was covered.

We talked about languages and how they are different. And I think that tutorial everybody felt pretty good because they could talk about their language, they could compare their language with other languages. – Geneva, non-UK student, Minimisation

...we did have one where we talked about the order of words in sentence and how that can affect how you look at things and the tutorial leader did ask people that they could see were from other cultures, how do they do this in your language? ...maybe some felt a bit singled out by that cause one of the girls when she was asked sort of panicked when she was asked something specifically about her language. – Jade, UK student, Acceptance

Ten students mentioned the Social, Personality and Abnormal Psychology course as having addressed cultural difference in some respect. Seven students mentioned particular topics including lectures on group thinking, collectivism/individualism, stereotyping, and the obedience study by Stanley Milgram. Other students thought it was highlighted but could not give specific examples. Most students described the inclusion of the content in neutral terms. However, one student raised a concern regarding how one topic was addressed. When asked this question, another recounted a cultural joke told around the topic of stereotyping and her final statement indicated that coverage of this topic may have served to reinforce rather than break down stereotypes.

We had a practical about interdependence and independence and we talked about that a bit in our tutorials...I don't think it made the Asian people in our group feel that good. The experiment kind of proved that there is a fundamental difference about how we perceive ourselves and other people whether we are Asian or European and I think that kind of made a barrier between Europeans and Asian people in our group...The research was suggesting that Asian people were more dependent on others and that they value things like family and rules and everything like that more than we do. Europeans value goal seeking and personal success. – Geneva, non-UK student, Minimisation

... in the social psychology strand we had a lecture about stereotypes. It was a lecture so just presentation...I just remember the joke at the beginning of it. That how in hell you have the Italians as the police and the Swiss as lovers and so on. That the Germans should be the police. And the French were the bankers 'cause they were always on strike. That is one thing that I heard from my friend in France that they are always on strike. – Matilda, non-UK student, Denial

While all of the students indicated that cultural difference was addressed in some way through one or more of their courses, their responses suggested that this occurred in more of a lecture format or in tutorials which sometimes drew on the experiences of students relevant to language learning rather than raising discussions or debates relevant cultural difference, handling day to day situations, or students' intercultural development.

Like in language lectures, people who speak different languages just kind of help the lecturers along like if they are like phoning boundaries differ between languages and then say like a Mandarin speak might say like yeah, that's the case for me and give an example kind of thing. So there is no real like conflict or disagreement. – Francesca, UK student, Acceptance

5.3.4 How do students characterise their closest friends at university?

During the interviews I asked students to tell me about their two closest friends including whether or not they were from their home countries, how they knew them,

what their differences and similarities were. The majority of UK students identified other UK students as their closest friends while the majority of non-UK students and UK students who had lived abroad identified non-UK students as their closest friends. Students reported that most of the close friends they made through accommodation first, the course second, and then various campus activities.

All students noted having things in common with their friends including common activities, interests, and backgrounds as well as similar qualities. Although most students mentioned differences between themselves and their friends, these differences tended to be discussed neutrally or in positive ways highlighting the learning that can take place when people from different cultures become friends.

5.3.4.1 Friendships

Students described their two closest friends in terms of how they knew them and how they were similar and different to them. All non-UK students and both UK bi-cultural students indicated that one or both their close friends were from countries other than their own. The exception was Sang, a student from China who indicated that all of his friends were from China. For UK students, seven out of nine indicated that both of their close friends were from the UK while two indicated that one of their two close friends was from a different country.

Unsurprisingly, friendship formation occurred mainly because of students' proximity to one another with all but one student describing at least one of their two closest friends as being from their accommodation (13) their course (9) or both (5). Five students described one or more of these friendships as originating from a university related activity (e.g., Nightline, language course).

I would say my Indian housemate. I think when we first started talking quite intimately that was when she told me that she is going to be on medication, on antidepressants and I was already on them. We just started talking more about ourselves. She has quite similar interests just like me... – Geneva, non-UK student, Minimisation

All students highlighted things that they had in common with friends whether these were interests or activities, common backgrounds, or similar qualities.

I think the one thing we have in common [besides studying psychology] is that we don't go to socials that involve drinking. – Faline, non-UK student, Defence

Although some students talked about differences between themselves and their friends, differences were typically described in neutral or positive terms.

...she's from Poland. She is really different from me but I like that difference. She is really outspoken, strong minded, and opinionated. But I guess that helps me to become more outgoing and independent as well. She is a good influence on me... – Hilary, non-UK student, Acceptance

... I'm going to Germany this year. So that was quite good having someone to tell me about it and he like cooked German meals like sauerkraut and stuff and then he was like majorly into like the British experience. So he was like can you cook me scones kind of thing and things like that. It was kind of a bit of both like he showed me things from his culture and I'd show him stuff from mine. And he introduced us to a German board game...I think it was a bit of both like from both cultures. – Francesca, UK student, Acceptance

5.3.5 What were students' most significant intercultural experiences or interactions during university and what did they learn from them?

Ten students highlighted a cultural conflict or challenge as their significant experience, six indicated that they had not had any significant experiences, two described positive yet superficial experiences, and two described deeper experiences with friends from other cultures. Eight students described learning something more negative from their encounters; seven described learning something more positive; and five, all UK students, indicated that they did not learn anything new. There were no apparent differences between UK and non-UK students' answers with the exception that all non-UK students indicated learning something from their interactions while all five of those that indicated that they learned nothing from their interactions were UK students.

5.3.5.1 Significant interactions or experiences

When asked to describe the most significant intercultural experience that they had at university, half of all of the students (four UK, six non-UK) described some sort of cultural conflict or challenge that they had experienced some of which referred to specific encounters and others which reflected a general experience with cultural difference.

In a tutorial; two Chinese classmates began speaking together in their native language. I found this very uncomfortable because I had no idea if the conversation was about work or people in the room... – Candace, UK student, Minimisation

It was a talk between my housemate and me. He is always surprised by the way that I'm cooking, so he asked me few questions about the reason why I cooked in a different way as his. The differences between cultures made me think, and honestly I found it difficult to explain when the person you were interacting with said something rude... – Corrine, non-UK student, Defence

Six students (UK: Anna, Rosy, Jade; non-UK: Tamara, Miranda, Hilary) indicated having intercultural experiences but not having any that they felt particularly stood out. Typically, although not always, they indicated that this was because they did not view them as being different from interactions with individuals from their own culture.

I don't think I've had a particularly significant intercultural experience which shocked/surprised me, which is probably because my entire life has been one big intercultural experience. I've grown up knowing of different cultural differences because I experienced it at a young age, so I think am able to cope and understand cultural differences in a different way. – Tamara, non-UK student, Minimisation

Not applicable. People conform to the English culture and way of life while living here. – Rosy, UK student, Minimisation

Two UK students (Jill, Francesca) described interactions that they had with friends as significant.

Talking to a friend from Singapore about their experience when conscripted into the police force. I didn't realise how brutal and small you can be made to feel and the harsh reality that you are forced to live away from your family and have no contact with them... I often don't realise how different others' lives have been. – Jill, UK student, Acceptance

Two students (Serena, Patrick) highlighted positive and yet seemingly superficial experiences.

Went to an international society association event, where the theme was Africa. Felt very out of my element but pleasantly welcomed. The warm exciting stereotype of African themed parties was definitely present... – Serena, UK bi-cultural student, Denial

5.3.5.2 Intercultural learning

After describing significant intercultural experiences, students were asked what they learned from those experiences. Five non-UK and three UK students all of whom described a more negative experience also described their learning in more negative terms including feeling their language skills were poor, not understanding those from other cultures, feeling that people from their cultures are not well liked, finding intercultural interactions difficult, valuing their own culture more, and wanting to spend more time with people from their own culture.

The drinking culture in Britain taught me a lot about relationships and friendships among people here. Although not directly involved in these activities, I witness pre or after moments of those drinking activities. They bring a lot of negative impacts on people and waste a lot of students' time and money. It makes me appreciate my cultural beliefs and values more. – Faline, non-UK student, Denial

I learned that some people are very closed-minded and have little interest or awareness of other countries and cultures which are not their own. – Geneva, non-UK student, Minimisation

Seven students, three UK and four non-UK, indicated that more positive learning took place.

All intercultural interactions are important and through them I learn how people from different cultures behave and what they think about different situations and how they respond to them. – Miranda, non-UK student, Minimisation

I learned that cultural boundaries don't prevent friendships, it normally cinches them. – Francesca, UK student, Acceptance

The other five UK students, all of whom felt they had no particularly significant experiences or described more shallow experiences, either did not answer this question or noted that they did not learn anything new.

5.3.6 Do students believe they have changed interculturally since beginning their course?

I asked students how they thought they had changed the way in which they interact with those from other cultures since coming to university. Twelve students described some type of positive change (e.g., increased cultural awareness), five students described some type of negative change (e.g., becoming more reserved with non-UK students). A greater proportion of non-UK to UK students (4:1) described a negative change.

5.3.6.1 Intercultural change

Twelve students, four of them non-UK, highlighted some type of positive change. Six students indicated that they had increased their knowledge or become more aware of cultural differences. Three indicated that they became more open due to significant friendships with those from other cultures or being in a more open environment. Two said that they became less concerned about being around those from other cultures. One said she became less apt to stereotype people from different

cultures and another focused upon the fact that she had improved her English rather than any particular intercultural change.

I am more open minded. At home there weren't that many students from different countries as well so I did learn a lot of things being around so many people from different countries.... I've never really had a close friend from a European country so that was different. Because I have always had friends from different Asian countries but never like European or American or anything like that. Like it makes me realise that I could be friends with foreigners. I always thought maybe I can't get along with them because I am so used to being around Asian culture... – Hilary, non-UK student, Acceptance

I probably know more about other cultures now than I did at the start and am probably able to relate to them better because of that... – Rosy, UK student, Minimisation

Five students highlighted change that could be construed more negatively. The four that were non-UK students (Matilda, Sally, Geneva, Tamara) noted that they either lowered their expectations in regard to relating to students from other cultures, mainly British students, or reduced the time they spent with British students. The fifth student, Renata, who was from the UK indicated that she became more reserved with non-UK students.

I'd probably say I was more reserved in like making connections with people from other cultures...obviously it's a lot harder than I anticipated...I would probably be more inclined to spend time with people from the same country...A lot of the time I feel like I'm in England but I'm surrounded by no one else from England...I'm like not prejudice but... – Renata, UK student, Defence

...I thought it would just be easy to come here and like 'okay get to know the English culture and stuff'... it is quite hard to understand ...because ... they don't really share much about themselves. It is very superficial. That's really how I feel. I was just not expecting that... I get on better with the international students. – Sally, non-UK student, Defence

5.3.6.2 Contributors to intercultural change

When I asked students what most contributed to their perceived change in terms of their backgrounds and university experiences they cited a variety of factors, both positive and negative, and some cited more than one factor. Generally students mentioned meeting or getting to know students from other countries at university to be the most influential factor. For some this occurred in accommodation while others mentioned the department and societies as being the main place where they got to know people from different cultures although most did not specify. Two students believed that their parents' attitudes provided an important influence and two students noted that a variety of factors contributed. There were no discernible differences between UK and non-UK student responses.

I think all of the relationships I have made with everyone. I think also from my family, I have learned to be quite accepting of different people...I can understand people are different between them but I mean it's not a bad thing, it's quite interesting actually. – Miranda, non-UK student, Minimisation

I think it is like mostly activities because during lectures we don't really have any intercultural contact, it is more like up to the lecturer and who you are sitting around. I think it is very good that they promote the whole join a society, do something because that is where people with a common interest will get together and they will be different kinds of people. – Serena, UK bi-cultural student, Denial

5.4 Summary

The qualitative analysis suggests that the intercultural background experiences of students varied widely. Half of the students in the sample felt that their backgrounds prepared them well to encounter students from different countries or cultures. Most of the remaining students provided more negative evaluations focusing upon the difficulty they faced in encountering those from different cultures rather than the extent to which they were prepared. UK students seemed to fall into two approximately even groups: those with more substantial prior intercultural experience who viewed themselves as prepared and those without much experience who focused upon the challenges they faced. Further, their answers suggested that those who were prepared seemed to spend more time with those from other cultures whereas those who were not tended towards cultural clustering or staying more within their own cultural groups.

While more non-UK students had more extensive intercultural experiences prior to university; their experiences at university were rather mixed with some reporting feeling prepared and integrating well and others focusing more on the problems they experienced particularly with UK students. However, most made friends and generally seemed to engage more with those from different countries although these tended to be with other non-UK students.

Both non-UK and UK students who had lived abroad were generally positive about the way in which International week helped them to meet those from other cultures and to make friends. Most non-UK students were more negative about Freshers' week typically noting that activities involved heavy alcohol consumption which they were unaccustomed to. UK students as well noted that non-UK students were not well represented during Freshers' week activities. Responses from both UK

and non-UK students suggest that these activities might foster a tendency towards cultural clustering.

Many students evaluated their experiences in mixed accommodation positively. However, most also noted cultural challenges or conflicts occurring which may have enhanced tendencies noted earlier towards cultural clustering. This may have been further exacerbated by the administrative segregation (i.e., grouping students along cultural lines in accommodation). While more than half of the students participated in some student societies or activities that involved intercultural contact, many also noted that activities could be culturally segregated to some extent.

In terms of their experiences in the department, most students reported working in culturally mixed tutorial groups. While many saw the benefits of this, all but three reported challenges such as students from particular cultures dominating discussions or remaining silent. Students commented on cultural clustering in lecture theatres with non-UK students at the front, sometimes sub-segregated into national groups, and UK students towards the back.

The majority of UK students identified other UK students as their closest friends while nearly all non-UK and UK students who had lived abroad extensively identified students from other countries as their closest friends.

When students were asked what their most significant intercultural interaction or experience was during university, half described a cultural challenge or conflict, six indicated that they had not had any significant experiences, while only four described positive experiences. Eight students described learning something more negative from their intercultural encounters, seven described learning something more positive, and five indicated learning nothing. When asked how they had changed in terms of how they interacted with those from other countries or cultures, the majority of students indicated some positive change (e.g., becoming more open to different cultures) while five students indicated negative changes (e.g., avoiding contact with students from particular cultures).

In terms of students' intercultural experiences during university overall, some students' seem to have a variety of positive experiences potentially contributing to their intercultural development. However, this may not be the case for all students. From the analysis, four themes emerged which may hinder students' intercultural experiences. First, students indicated cultural clustering, students grouping themselves according to culture, often occurs. This may be a problem since cultural clustering may limit intercultural learning opportunities. Second, administrative segregation (i.e., room assignments sometimes made on the basis of nationality or UK / non-UK student status and somewhat separate welcoming activities) again may limit intercultural learning opportunities. Third, most students described cultural challenges covering a variety of topics (e.g., socialising, alcohol consumption, group work). Some reported that their experiences had a negative impact upon their cultural learning and appeared to have enhanced cultural clustering. Fourth, UK students' intercultural backgrounds seem to impact their intercultural experiences at university with students' with less extensive intercultural experiences reporting more superficial and negative cross-cultural encounters. While generally non-UK students had more extensive intercultural experience prior to coming to university, this seems to have had an equivocal impact on their experiences during university with some reporting positive and others reporting negative experiences. These findings are discussed in more detail in the next section.

5.5 *Emerging Themes*

As outlined in the Research Methods chapter, I reviewed students' responses to open ended questions focusing upon identifying those experiences that might have a negative impact. While these themes may not be the only ones present in the data, I concentrated on these in particular in order to identify experiences that could limit or negatively impact development.

5.5.1 Students' backgrounds

Students' intercultural background experiences seemed to have some bearing on the intercultural experiences reported during university but seemed to have differential impact on UK and non-UK students' reported experiences. UK students tended to fall into two fairly distinct groups based upon their backgrounds. The first group had

more limited experience with cultural difference prior to university and indicated that they were not well prepared for encountering diversity at university. These same students seemed to have less intercultural contact on campus with all reporting that their closest friends were also from the UK. All but one of these students reported that their most significant intercultural experiences were negative, with the final student indicating that she had no significant experience. These students tended to experience difficulties with non-UK students in general although some specifically mentioned students from Asian cultures.

The second group of UK students tended to have wider experience with cultural difference prior to university because of living situations, cross-cultural friendships, and/or travel experiences. While Serena and Anna could be classified in this group, they actually bore more similarities to non-UK students not just in terms of having lived abroad but in their answers to interview questions. For the final qualitative analysis, I therefore grouped them with non-UK students despite their passport status. UK students with more experience of diversity therefore included Jade, Jill, Francesca, and Candace. These students indicated that they were prepared to encounter diversity at university, engaged in more activities involving those from other countries, indicated that one of their closest friends at university was from another country, and /or noted that their most significant intercultural experience on campus was positive.

Non-UK students and UK students who had lived abroad seemed to comprise more of a mixed bag. All but three had experience living abroad and most of these attended international schools leading to greater cultural exposure prior to coming to university. Some even completed UK A-levels and therefore were not new to the UK culture. While cross-cultural friendships at university and interactions across cultures were much more common across this group, about half of these students seemed not to be well prepared to encounter diversity at university and described the difficulties that they faced with encountering cultural difference rather than their preparation and reported that their most significant cultural experiences during university were negative. However, these experiences were all in relation to UK students rather than other non-UK students. UK students were more often perceived to stay within their own cultural groups, were harder to get to know,

and were viewed as having more superficial relationships. Although they also suggested that some non-UK students could cluster by culture and were difficult to get to know, these students were not the focus of any negative experiences.

The above analysis implies that wider intercultural background can lead to more positive intercultural experiences at university for UK students. However, findings are much less clear for non-UK and UK students who had lived abroad. While they seem to engage more with students from different cultures and have friends from other cultures, the extent to which this provides positive learning experiences is questionable given that both preparation to meet people from diverse cultures at university and intercultural experiences during university were often described in negative terms. It would seem, however, that it is the experience with the UK culture that these students find difficult rather than experiences with other international students.

Findings related to UK student backgrounds were consistent with findings from some related research that suggests that previous experience of diversity predisposes individuals to engage more with cultural difference. Harrison (2011), for example, found that UK students who came from a multicultural upbringing were more likely to engage with international students. Findings related to non-UK student backgrounds were consistent with findings from some other studies which suggest that non-UK students tended to engage more extensively in cross-cultural relationships particularly with other non-UK students during university (Montgomery & McDowell, 2009) but to have fewer relationships and difficulties with UK students (UNITE, 2006).

5.5.2 Cultural clustering

A tendency towards self-segregation was reported by a variety of students as occurring amongst themselves as well as the wider student population. Evidence for this was described by students as occurring throughout various aspects of student life. In addition to friendship choices, students often reported sitting in lecture theatres and tutorials according to cultural groups, participating in student activities with national or ethnic orientations, and making culturally influenced

accommodation arrangements. Such phenomenon is well recognised in the literature and is often referred to as a form of ‘ghettoisation’ particularly amongst international students (e.g., Brown, 2009). However, the phenomenon is equally relevant to home students who, similar to international students, are reported to self-select into mono-cultural groups (e.g., Sovic, 2008). In addition to being reported in the literature around home and international student interactions, as described in the literature review, such phenomena is a normal part of the human experience with individuals tending to segregate themselves into groups based upon perceived similarities (Brewer, 2003).

5.5.3 Administrative segregation

A tendency towards cultural clustering can reduce intercultural learning opportunities. Learning opportunities may be further reduced by administrative segregation which occurs when students are placed in certain blocks, on certain floors or in certain rooms based upon cultural background or UK / non-UK student status. Again this type of ‘ghettoisation’ is recognised in the literature (Bailey, 2006) although a tendency towards cultural clustering and administrative segregation are at times conflated.

Most of the students in this study reported that students are at times culturally segregated in accommodation. As well, however, students’ comments suggest that welcoming activities may enhance segregation since international week includes only non-UK students and Freshers’ week tends to focus upon activities not popular with non-UK students. While segregated accommodation and separate welcoming activities for non-UK students may have their place in helping non-UK students to adjust to university life, they can create additional barriers that can enhance rather than diminish cultural clustering.

5.5.4 Cultural conflicts

Analysing the challenges arising from the intercultural experiences that students had can help to identify factors that may contribute to students’ tendencies towards cultural clustering and serve as barriers to intercultural learning. Table 5-2 lists challenges raised by students about their intercultural experiences arising from a

review of their answers across interview questions. An analysis of this list suggests that cultural difference is at the heart of these issues with students reacting to cultural difference in ways that can demonstrate:

- in-group preference as evidenced by cultural clustering;
- feeling uncertain about what is culturally acceptable seen for example in uncertainty around what is acceptable during tutorial group work;
- ethnocentric views seen for example in students viewing particular behaviours as rude in accordance with their own expectations and a lack of empathy for the challenges faced by students from different cultures;
- subtle prejudice (Meertens & Pettigrew, 1997) seen for instance in the exclusion of non-UK students from group discussions;
- mindless stereotyping seen for instance in the way in which non-UK or UK students can be viewed as a uniform group;
- verbal communication challenges due to language differences.

Issues described by students in general	Cultural clustering by UK / non-UK student status limits contact opportunities
	Differences in alcohol consumption
	Differences in behaviour around socialising
	Issues with language / accents
Issues described by non-UK students concerning UK students	Behaviour of students from particular cultural groups seen as rude
	Disapproval of common cultural practices, specifically alcohol consumption and friendships patterns which are seen by some as superficial
	Uncertainty or misunderstanding around banter / humour
	Uncertainty around culturally appropriate behaviour
	Being excluded during group activities in which UK students dominate
	Insensitivity to the challenges experienced by non-UK students
Issues described by UK students concerning non-UK students	UK students' tendencies to view non-UK students as one group with little recognition of cultural and individual variation
	Feeling threatened / left out by the presence of large numbers of non-UK students
	Issues with non-UK students during group activities (silence/non-participation, domination, unwillingness to recognise English language limitations, use of foreign languages being spoken in tutorials/lectures)
	Anti-British attitudes

Table 5-2: Issues impacting experiences as identified by students

The issues highlighted by students in this analysis echo those found in other studies from Western countries around home and international students. For instance, Spencer-Rodgers (2001) found that home students tended to view international students as one homogenous group; Williams and Johnson (2011) found that international students have great difficulty forming friendships with host nationals; Harrison and Peacock (2009) found that UK students can perceive non-UK students as threats and that communication and stereotyping can be problematic (Harrison & Peacock, 2010).

Consistent with other studies, findings from this study suggest that interactions across cultures can be challenging for students. While university policy makers often assume positive learning experiences will result from students studying on diverse campuses, the above evidence suggests that students' experiences can at times be negative and can result in negative rather than positive learning outcomes as is summarised in Table 5-3.

Positive learning
Learned about other cultures and / or how to respond to them
Be relaxed around cultural difference
Cultural respect and curiosity
Friendships can form around cultural difference
Negative learning- Non-UK students
Appreciate own cultural beliefs more after seeing UK drinking culture
Don't understand British humour
British students are closed-minded
Prefer to hang out with other non-UK students
Friendships across cultures take a lot of effort
Own English ability is insufficient
Negative learning- UK students
People from other cultures can be opinionated
Some people are anti-British
UK and non-UK students may be better off staying apart

Table 5-3: Learning experiences around cultural difference

5.6 Conclusions

The above analysis suggests that although some students appear to be learning and developing through their contact experiences, others may not be reaping such benefits. Administrative segregation appears to limit contact to some extent. The difficulties that individuals can face when in cross-cultural situations are evident and appear to enhance cultural clustering which can further diminish contact and learning opportunities. While UK students with more extensive intercultural experiences prior to university describe more positive experiences, those with less seem to experience heightened challenges and less contact. While non-UK students have more extensive intercultural experiences prior to university and have more intercultural experiences during university, their reports of their university experiences are often mixed with many reporting difficulty in particular with British students. The next chapter attempts to compare and integrate the qualitative and quantitative findings from this study to better understand the intercultural changes that occurred over the course of this study and the factors impacting such change.

Chapter 6 Integrative Analysis

As described in earlier chapters, the increasing diversity of university campuses as a result of internationalisation provides opportunities for students to develop intercultural understanding and skills (Volet & Ang, 1998). Universities often assume that such development occurs as a matter of course when students study on internationalised campuses (Middlehurst & Woodfield, 2007). Although a few studies seem to suggest that international students may have considerable cross-cultural contact and positive experiences (e.g., Montgomery & McDowell, 2009), research typically suggests that university policy does not translate into practice that supports the intercultural development of students (e.g., Middlehurst & Woodfield, 2007); tends to highlight challenges occurring between home and international students (e.g., Harrison & Peacock, 2009; Thom, 2000) as opposed to positive learning experiences; and research emanating from study abroad casts doubt on the extent to which students develop interculturally even while immersed in other cultures (P. J. Pedersen, 2010).

This study attempts to make a contribution to clarifying these debates by studying a cohort of UK and non-UK first year psychology students studying on a UK university campus. Questions that guided the study looked at students' initial stages of intercultural development on entry to university, intercultural development over the first two terms at university, and the intercultural experiences that students had prior to and during university.

Quantitative data for this study were collected from 122 first year psychology students who completed the Intercultural Developmental Inventory (IDI) at the start of their first term and the end of their second term at university, a period of seven months. This data provided a longitudinal quantitative assessment of the extent to which they had developed interculturally during that time. In addition, the Intercultural Background Questionnaire (IBQ) was administered at the start of the first term and the Intercultural Experiences Questionnaire (IEQ) was administered at the end of the second term to collect additional information regarding their intercultural experiences.

Qualitative data for this study were collected mainly via semi-structured interviews with a selection of 20 study participants and conducted over a two month period following the administration of second set of quantitative surveys. Two open ended questions included on the IEQ gathered additional qualitative data asking students to write about their most significant intercultural experience since coming to university.

The research questions guiding the study were as follows.

Are there differences between UK and non-UK university students' intercultural development?

1. *At what stage of intercultural development do students enter university?*
2. *Does intercultural development occur over the first two terms at university?*
3. *What student characteristics and intercultural background experiences predict students' initial stage of intercultural development?*
4. *What student characteristics and intercultural experiences prior to or during university are related to students' intercultural development whilst at university?*
5. *What are students' perceptions of their intercultural experiences and how might these contribute to intercultural development? Factors to be explored include:*
 - e. *Students' own intercultural backgrounds:*
 - i. *How do students characterise their intercultural backgrounds and experiences prior to coming to university?*
 - ii. *Did students view themselves as prepared to encounter diversity at university?*
 - f. *Students' intercultural experiences during university:*
 - i. *What are students' experiences of their university and course as providing intercultural environments?*
 - ii. *How do students characterise their closest friends whilst at university?*
 - iii. *What have been students' most significant intercultural experiences or interactions during university?*
 - iv. *To what extent do students believe they have developed interculturally since beginning their course?*

The findings from the analysis of the quantitative and qualitative data were described in the previous two chapters. This chapter integrates the results of both of these analyses. The chapter is organised into six sections. The first section includes summaries of the quantitative, qualitative, and integrative analyses to remind the reader of the previous findings as well as the findings that will be presented in the chapter. The second section provides a description of the analytic procedures used to integrate the data. Within this section, the results of the integrative analyses are

described organised by the integrative questions. Each begins with a summary of the findings related to that research question followed by a more detailed description of the data. The third section discusses the integrative findings. The fourth section draws some conclusions from this study.

6.1 Analytic summaries

6.1.1 Quantitative summary

The results of the quantitative analyses suggest that students in this study entered university at a range of developmental stages although most arrived in the *minimisation* stage. There was no statistically significant difference between the mean IDI scores of UK and non-UK students. Initial stages were best predicted by time lived abroad for all students, with having friends from other cultures also a predictor for UK students, and growing up in cities also a predictor for non-UK students.

Most students reported that they had a lot of intercultural contact during their time at university. However, a comparison of the mean IDI scores for both groups at the first and second administrations found that on average UK and non-UK students' scores in both groups remained approximately the same. A closer look at the data found that while most students remained at the same developmental stage, more than one-quarter decreased one or more stages and about half that proportion increased a stage. This suggests that although students are studying in a culturally heterogeneous university and department and that the majority reports having a lot of intercultural contact (see Tables 4-11, 4-12, 4-13), only a minority of students advanced a developmental stage with just eight students (6.6%) reaching an ethnorelative stage of development.

Although generally students reported high levels of intercultural contact during university, particularly non-UK students, and some reported extensive intercultural experience prior to coming to university, no contact or background related variables were identified as good predictors of change in students' IDI scores. However, two non-contact related variables were found to have some predictive ability for IDI change scores. These included 'feelings of not fitting in'

for which a small negative relationship with IDI change scores for UK students was found and ‘being increasingly active in clubs and societies’ for which a small negative relationship with IDI change scores for non-UK students was found.

6.1.2 Qualitative summary

In terms of students’ intercultural experiences during university overall, students’ comments suggest that some have very positive experiences but this seems not be the case for all students. From the analysis, four themes emerged which may in particular hinder students’ intercultural development. First, comments from students in the study suggest that cultural clustering, (i.e., students grouping themselves according to culture), often occurs which may limit intercultural learning opportunities. Second, administrative segregation (i.e., room assignments sometimes made on the basis of nationality or UK / non-UK student status and somewhat separate welcoming activities) may limit contact opportunities. Third, most students described cultural challenges covering a variety of topics (e.g., socialising, alcohol consumption, group work) which some reported had a negative impact upon their cultural learning and may have enhanced a tendency towards cultural clustering. Fourth, students’ intercultural backgrounds seemed to impact their intercultural experiences at university. UK students’ with narrower intercultural experiences reported more superficial and negative cross-cultural encounters at university while those with wider experiences reported the opposite. Non-UK students more often had wider intercultural experiences prior to coming to university. However, this seemed to have an equivocal impact on their experiences during university. Some reported quite positive experiences while others reported more negative experiences although these tended to focus on experiences with the British students rather than other non-UK students.

6.1.3 Integrative summary

Total time lived abroad was a significant predictor of initial IDI scores for all students in the quantitative analysis. Additionally, having friends from other cultures was a significant predictor for UK students’ scores and growing up in a city was a significant predictor for non-UK students’ scores. A comparison of the qualitative and quantitative findings suggests that higher scoring UK students reported having

friends from other cultures, had wider or more in-depth experience with diversity, and reported being better prepared to encounter diversity at university compared to lower scoring UK students. While non-UK students reported having a wider range of cultural experiences (e.g., lived abroad, attended international schools, had cross cultural friendships) compared to UK students, overall this was not as clearly reflected in their IDI scores. However, similar to higher scoring UK students, higher scoring non-UK students were able to provide more in-depth reflections on their cultural experiences compared to lower scoring students. Overall results suggest that while having a wide variety of cultural experiences can support intercultural development, they do not always translate into higher stages of development and that it may be the reflection upon such experiences that leads to development.

There was some qualitative evidence to suggest that the backgrounds of students who were interviewed were related to both their IDI scores and their IDI change scores. Generally, students who scored higher on the second administration of the IDI and had greater gains in their scores, reported backgrounds that included more and deeper experiences with culture. These same students also viewed themselves as more prepared to encounter diversity at university. Alternatively, students who typically started out with lower scores and did not advance their scores or indeed had declining scores, tended to have less experience with diversity or were unable to reflect deeply upon their experiences and appeared to be not as prepared to encounter diversity at university.

There is also some evidence to suggest that students' experiences during university are related to both their IDI scores and their IDI change scores. Higher scoring students and those who advanced their scores most tended to describe their significant intercultural experiences at university as positive and/or deep, indicated that they had learned something positive from their experience, and indicated undergoing a positive intercultural change during their time at university. Lower scoring students and students who did not advance as much reported more mixed results. Many reported negative and/or shallow experiences, said that they learned something negative from their experiences and reported undergoing more negative intercultural changes than higher scoring students. While the drivers of change scores cannot be clearly deduced from this data, it appears that students who were

interviewed who started out at higher stages of development and advanced tended to have more positive and deeper cultural experiences and to learn something positive while those who did not had more negative and shallower experiences and learned something more negative.

In the quantitative analysis, higher levels of participation in activities and societies significantly predicted declines in IDI scores for non-UK students. Students' descriptions of societies and activities may help to explain this finding in that societies can be organised around national or cultural lines fostering mono-cultural contact. As well, certain activities despite not being oriented around particular nationalities or cultures can cater more towards and draw students from particular cultures. Further, although students from different cultures participate in non-culturally oriented societies, they sometimes stay within their own cultural groups while participating.

The quantitative analysis found that feelings of not fitting in significantly predicted declines in IDI scores for UK students. However as only one student who agreed with this statement participated in interviews, little could be gleaned from this analysis that might explain this result.

6.2 *Integrative analysis*

6.2.1 Students' backgrounds and initial developmental stages

As described in the research methods chapter, in accordance with suggestions from Onwuegbuzie and Teddlie (2003), I attempted to reduce and simplify the data to identify patterns by placing important variables from the survey data in tables alongside responses to certain open ended questions.

Table 6-1 displays students' IDI results from the first administration, background data was taken from the quantitative surveys, identified as (quant), and qualitative data was based upon student interviews or opened ended questions on surveys, identified as (qual). The qualitative variables include whether students described experiencing a lot of diversity growing up, attending international schools, undertaking UK A-level study (for non-UK students), studying abroad (only coded

for those who did not attend international schools abroad or undertake UK A levels). One variable that I then created based on the interview data was whether students described their experiences in ways that demonstrated deeper reflection upon difference or in ways that demonstrated more openness to cultural difference. The variable 'well prepared' indicated whether students thought they were well prepared to encounter students from different cultures at university. The presence of a dot in a square indicates that students reported the experience. The column 'cumulative culture' is a count of the dots and represents wider experiences with culture. The top of Table 6-1 displays non-UK and UK students with dual residency and the bottom of the table displays UK students.

Name	Citizenship	DOI	Months lived abroad (quant)	Had friends other cultures (quant)	Grew up in a city (quant)	School was culturally diverse (quant)	International school (qual)	UK A-level (qual)	Study abroad (qual)	Deep / open reflections on - past experiences (qual)	Cumulative culture	Well prepared? (qual)
Matilda	Non-UK	77	2						•		1	y
Sang	Non-UK	79	25					•			1	
Sally	Non-UK	80	48	•	•	•	•				4	
Faline	Non-UK	83	26	•				•			2	y
Corinne	Non-UK	86	24				•	•			2	
Anna	UK dual	88	108	•	•	•	•			•	5	
Serena	UK dual	92	223	•	•	•	•			•	5	
Geneva	Non-UK	99	0	•	•						2	
Tamara	Non-UK	100	156	•	•	•	•			•	5	y
Miranda	Non-UK	105	0	•	•	•	•			•	5	y
Hillary	Non-UK	109	96	•	•	•	•			•	5	y
Leila	UK	51	0						•		1	
Kendra	UK	74	0						•		1	
Renata	UK	78	0		•				•		2	
Patrick	UK	86	0		•						1	
Rosy	UK	88	0	•	•						2	
Jade	UK	108	0	•	•	•				•	4	y
Francesca	UK	108	0	•	•	•				•	4	y
Candace	UK	110	18	•						•	2	y
Jill	UK	111	0	•					•	•	3	y

Table 6-1: DOI scores and intercultural background factors

6.2.1.1 Did students' descriptions of their backgrounds explain initial IDI scores?

Generally students who scored higher on the IDI had a wider range of background experiences, seemed to reflect upon their experiences in deeper and more open terms and viewed themselves as more prepared to encounter diversity at university.

Conversely, lower scoring students more often had a much narrower range of

background experiences, did not seem to reflect as deeply or openly and did not view themselves as prepared to encounter diversity at university. There were exceptions. A few higher scoring students had a narrow range of experiences which they nevertheless seemed to take advantage of and learn from. Some lower scoring students had quite a wide range of experiences, however, they were not able to reflect upon them in ways that suggested deeper learning. Overall these findings suggest that access to those from other cultures prior to university may lead to intercultural learning and enhance initial scores but this is not always the case. Deeper reflections upon culture most often made by higher scoring students may indicate that reflection upon experiences with cultural difference are what lead to development as opposed to the experiences in and of themselves.

An analysis of Table 6-1 shows some patterns for UK students. In particular, higher scoring UK students had close friends from other cultures and two of the four described growing up in cities and attending culturally diverse schools as contributing to their intercultural understanding. Although the other two highest scoring UK students, Candace and Jill, did not grow up in particularly diverse areas or attend diverse schools, both described experiences that they felt contributed to their intercultural understanding. Candace described becoming friends with the very few people in her school who were from different ethnic groups as well as becoming friends with local people during her family's trips abroad. Similarly Jill indicated becoming friends with those from other cultures through her parents' friends and through her holidays abroad. Three of the four women described their experiences in somewhat deeper and more open terms compared to lower scoring students. For example, Francesca reflected positively upon differences she noticed in her Turkish friends: 'They're more open...not so reserved...they just kind of say things they think...which is good...I like it...'

Jade insightfully compared Westernised areas in the Middle East that draw a lot of tourists with areas that she viewed as reflecting a more realistic Middle Eastern culture:

Because people forget that it's a third world country because they go to [resort] places ... and they think oh it's really nice and everywhere it's beach ... and it's not ... there are slums ... I

think I prefer the actual areas where real people live 'cause otherwise it was just like being in England...

In addition to reflecting more deeply regarding cultural difference, these higher scoring students also saw themselves as prepared to encounter cultural difference at university and tended to have higher 'cumulative culture' scores – although not always.

In contrast, most of the UK students who were lower on the developmental scale did not have friends from other cultures and seemed to have fewer and shallower cultural experiences. Although some lower scoring students indicated growing up in cities, they noted that they lived in culturally segregated areas or areas where there was simply little diversity. While their lower scores might be explained in part by having more limited access to those from other cultures, they all still reported holidays or study abroad experiences but they seemed not to have capitalised on these experiences in the same way that higher scoring UK students did. For example, of her holidays abroad, Rosy noted: “We didn't really do culture we just sunbathed...” Although some students made more of an effort to explain their experiences with those who were culturally different, they still typically lacked a depth of understanding and in some cases a lack of interest or judgemental attitudes. Of her experience in Germany Leila noted:

...we went to this crazy culture festival thing and everyone was wearing masks and it was kind of scary... a lot of children in cages were being carried through the streets... I don't know what it was about. She [host German friend] gave me a book about it but I don't know. It was very strange.

In addition to their more limited experiences, these lower scoring students gave indications that they were not well prepared for encountering diversity at university and had lower 'cumulative culture' scores indicating that they had a narrower range of cultural experiences.

For non-UK and UK bicultural students, Table 6-1 shows some patterns although they are not as evident. The top three scoring non-UK and dual nationality students reported living in cities, encountering a lot of diversity, attending international schools, and having friends from other cultures. Two of the three had lived and studied abroad for long periods of time and all described their cultural

experiences in deeper and more open terms. For instance, Miranda who was on the cusp of *acceptance* noted the difference in humour between cultures:

I can understand that people are different. Like if something, for example, is funny for me it won't be funny for someone else because it is a totally different way of thinking...

They also described themselves as being well prepared to encounter diversity at university and had higher 'cumulative culture' scores.

Lower scoring non-UK and dual nationality students could be said to fall into two groups. There were those who had a narrow range of experiences (Sang, Matilda) and were not very dissimilar to lower scoring UK students and those who had a more extensive range of experiences (Serena, Anna, and Sally) but who still scored relatively low. Similar to lower scoring UK students, most of these students did not reflect particularly deeply or openly on their experiences, tending instead to use more concrete terms (e.g., "I was born in China...three years ago then I came to England to do my A-level course and then during the holidays time...I go back home"), and relying more on stereotypes (e.g., "I have heard things about Singapore that is mostly confirming the well-known fact that they are very competitive.") and exhibiting polarisation (e.g., "We don't like Western people..."). That said, Anna and Serena provided deeper analyses of cultural difference, with Anna describing belonging to two different cultures and Serena describing belonging to a third culture, although their DO1 scores reflected lower *minimisation*. Perhaps most marked regarding the lower scoring non-UK and dual nationality students is that only two of these eight students described themselves as well prepared to encounter diversity at university while the others described the difficulties that they had with students from the UK.

The findings as noted above could be described to some extent as both convergent and complementary. The table suggests particularly for UK students, that the higher scoring students had a wider range of cultural experiences and/or engaged more with people from different cultures, often described their experiences in deeper terms, and viewed themselves as well prepared to encounter diversity at university which was in contrast to lower scoring students. Higher scoring non-UK and dual nationality students did appear to have wider cultural experiences, describe

experiences in deeper terms, and view themselves as well prepared. However, while some lower scoring non-UK and dual nationality students had narrow experiences similar to lower scoring UK students others had quite a range of experiences although these did not translate into higher IDI scores.

In terms of the way in which the qualitative and quantitative data supplement one another, understanding students' experiences with cultural diversity helps to explain factors that might lead scores to be higher or lower or to explain why quantitative predictors can be useful in understanding IDI scores but are not ideal. For example, in the quantitative analysis, length of time lived abroad was the best predictor of IDI scores. Sang lived in the UK for two years while undertaking UK A-levels, an experience that would seem to lead to a score higher than his initial score of 79. During his interview, he explained that all of his friends at school were from China and suggested that his cross-cultural interactions were quite limited. Thus, his interview data helped to explain why living in the UK for two years might not have led to a higher initial score and why time lived abroad is not an ideal predictor.

6.2.1.2 Did students' descriptions of their backgrounds explain significant predictors of IDI scores?

Similar to the above findings, the qualitative data helps to explain why predictors that were significant in the quantitative analysis have some predictive ability in regard to initial IDI scores but do not explain all of the variance. Although prior experiences with diversity whether experienced through particular friendships, living in diverse communities at home, or living abroad provide more opportunities for engaging with and learning from those from different cultures, opportunities are not always taken up or reflected upon at deeper levels and do not automatically lead to cultural learning.

For UK students, the quantitative data suggests that having friends from other cultures was an important predictor of IDI scores as was total time lived abroad. Not a lot could be gleaned from time lived abroad in relation to UK students. One UK student lived outside the UK for 18 months, however, she was quite young and remembered little of the experience. Two other UK students with

dual nationality lived abroad extensively. However, neither of these students scored particularly highly with both about one standard deviation below the mean on their initial score. Interestingly, both focused more upon the difficulties that they experienced with having a dual identity and in particular with their difficulty with the UK student culture. This suggests again that living abroad does not automatically lead to development and suggests that there is some complexity involved in navigating dual identities.

In terms of friendships, higher scoring students more often talked about their friends from other cultures helping them to learn about cultural differences than lower scoring students. As well, the way in which they discussed those friendships demonstrated a more accepting and deeper understanding of cultural difference and sometimes a disdain for closed views. For instance, of her friendship with one of the five people in her school from another ethnicity, Candace, initially one of the highest scoring UK students, described how her attitude towards those from other cultures changed:

I think I was quite racist myself... I didn't really understand why I was like feeling that towards people... [then I became friends with Rona] ...she was bullied... some horrible girl decided to start calling her 'the curry pot queen'... then my attitude...started changing cause I guess you just realise that there is no difference between people.

Although lower scoring students sometimes reported having friends from other cultures, their experiences seemed more superficial perhaps reflecting a more distant friendship or a lack of reflection upon what they might have learned from particular relationships. For instance, while Patrick described his family as being friendly with some neighbours with Italian heritage, he described them in superficial and somewhat stereotypical terms: "...an Italian family we are friends with, big Italians and stuff."

Such evidence suggests that having friends from other cultures can allow students to reflect upon cultural difference which can lead to development although it does not always do so. So while people may indicate that they have 'friends' from other cultures, the depth of these friendships and the extent to which learning takes place seems not to be a given.

For non-UK students time lived abroad and growing up in cities were found to be significant predictors of initial IDI scores. Looking at the students' scores who were interviewed, there is a general trend for higher scoring students to have lived abroad longer although there are exceptions. One of the highest scoring students, Miranda, never lived abroad. However, she described coming from a family with ties in England and attending an international school as helping her to become more interested in different cultures. Interestingly, several lower scoring students who were interviewed lived abroad for two to four years with three undertaking UK A-levels. Whilst having experiences abroad might enhance intercultural development by providing opportunities to experience cultural difference, again these experiences may not always lead to intercultural growth. This may be because students remain separate, as exemplified by Sang who had only Chinese friends at school. It may be because relationships with those who are culturally different are more superficial. It may also be that while individuals may appear to be in an international environment such as an international school, the environment may constitute more of an experience of its own third culture rather than a multicultural experience. As Tamara described:

...an international school it kind of becomes its own culture because you are all coming from different cultures but with the same kind of background of having lived abroad and stuff.

For non-UK students the quantitative data also suggested that growing up in a city predicted higher IDI scores. Consistent with this, of the students who were interviewed, a greater number of higher scoring students grew up in cities than lower scoring students. Cities can house culturally diverse communities and can provide more opportunities to meet and get to know people from different cultures and nearly all of the non-UK students who grew up in cities also indicated that they had more experience with diversity while most of the students who did not grow up in cities indicated having less experience with diversity. However, some students also described how the cities where they lived were not particularly diverse or they lived in segregated areas suggesting that integration in cities is not a given and may not necessarily lead to intercultural experiences.

6.2.2 Students' backgrounds and university experiences and IDI change scores

To consider students' backgrounds and university experiences alongside their IDI scores, similar to the above procedure, I placed relevant variables from the survey data with responses to the relevant open ended questions. Table 6- 2 displays students' IDI results from the first and second administrations along with their IDI change scores.

Name	Citizenship	DO1	DO2	IDI change score	Months lived abroad (quant)	Had friends other cultures (quant)	Grew up in a city (quant)	School was culturally diverse (quant)	Deep / open reflections on past experiences (qual)	International school (qual)	UK A-level (qual)	Study Abroad (qual)	Cumulative culture	Well prepared?
↓Serena	UK dual	92	68	-23.49	92	•	•	•	•	•			5	
↓Faline	Non-UK	83	70	-13.46	83	•					•		2	y
↓Matilda	Non-UK	77	70	-7.48	2							•	1	y
Sally	Non-UK	80	75	-5.26	48	•	•	•	•	•			4	
↓Corinne	Non-UK	86	78	-8.96	24				•	•	•		2	
Sang	Non-UK	79	83	+3.59	25						•		1	
Anna	UK dual	88	88	+0.12	108	•	•	•	•	•			5	
Geneva	Non-UK	99	91	-8.62	0	•	•						2	
Tamara	Non-UK	100	102	+2.01	156	•	•	•	•	•			5	y
Miranda	Non-UK	105	114	+9.02	0		•	•	•	•			5	y
↑Hilary	Non-UK	109	122	+12.69	96	•	•	•	•	•			5	y
Leila	UK	51	53	+1.69	0							•	1	
Patrick	UK	86	72	-14.2	0		•						1	
Kendra	UK	74	77	+3.64	0							•	1	
Renata	UK	78	81	+3.53	0		•					•	2	
Candace	UK	110	91	-18.83	18	•	•		•				2	y
Rosy	UK	88	105	+16.32	0	•	•						2	
↑Jill	UK	111	119	+7.36	0	•			•			•	3	y
↑Jade	UK	108	121	+13.27	0	•	•	•	•				4	y
↑Francesca	UK	108	122	+13.13	0	•	•	•	•				4	y

Note: A '↑' indicates an upward shift in developmental stage. A '↓' indicates a downward shift.

Table 6-2: IDI change scores and intercultural background factors

Variables from the survey data also exhibited in Table 6-1 are repeated in Table 6-2 as are the other variables derived from the interview data. The top of Table 6-2 displays non-UK students and UK students who had dual nationality status and the bottom of the table displays UK students. Each section is ordered by DO2 score.

6.2.2.1 Did students' backgrounds explain IDI change scores?

In some cases students' prior experiences helped to explain IDI change scores but in other cases they did not. Most of the students with higher initial scores who advanced viewed their backgrounds as being important in facilitating their development. The data generally confirms this since the majority of students who initially scored higher and progressed generally had wider prior cultural experiences and / or reflected more deeply upon their experiences. As well, they more often described themselves as well prepared to encounter diversity at university.

The IDI scores of students who were interviewed for this study all changed. However, the extent to which they changed varied widely. At the second administration, five of the six highest scoring students increased their IDI scores from seven to 13 points pushing them from upper *minimisation* into, or nearly into, the *acceptance* stage. The only surprising exception among the top scoring UK students was Candace who dropped more than 18 points from upper to lower *minimisation*. When asked why her score might have dropped so substantially, Candace was unable to explain this. One possibility might be that while at home she described having very close friends from other cultures, at university she did not. Further she described her experiences with those from other cultures at university as more distant:

...at home...my friends...they were really close to me, but I didn't have anyone from other cultures that I had a more distant...more professional relationship with. Cause working and tutorials and stuff, obviously I like everybody but then I don't really talk to them outside the tutorial. And so like working with people from other cultures without that safety net of friendship...

As well, she noted that her most significant experience at university was more negative:

In a tutorial; two Chinese classmates began speaking together in their native language. I found this very uncomfortable because I had no idea if the conversation was about work or people in the room...

Exhibiting a contrasting change, the students who initially had lower IDI scores tended to have scores that were relatively stable or declined -- with four students dropping one or more developmental stages. The only exception was Rosy whose score climbed more than 18 points from lower to upper *minimisation*. This change was similarly difficult to explain. However, Rosy noted that her exposure to students from other countries helped her to learn more about other cultures and she did not highlight any particularly negative experiences regarding cultural difference. As well, she saw international students as conforming to the British culture:

I think obviously people bring their own culture with them when they move to England but they have to become, to adapt to our culture when they're living here because people just expect them to...blend in and become Westernised.

Generally however, higher scoring students who had wider previous experiences with diversity and/or reflected on these experiences at deeper levels improved their IDI scores while lower scoring students, even those who had wide experiences of diversity, generally had scores that declined or stayed about the same. It should be noted that while those students who developed may have developed because they were already at higher developmental stages, students originally at higher stages were not the only ones to undergo positive developmental change. As shown in Figure 4-5. Some students at lower developmental stages also progressed. However, as these students were not interviewed, it is impossible to say how their experiences might have differed from those at lower stages who did not undergo positive development.

When I asked students during the interviews whether they had changed interculturally since coming to university, the majority (12) indicated that they had changed with four (Francesca, Jade, Jill, and Miranda all of whom advanced or very nearly advanced to *acceptance*) indicating that their backgrounds were important in facilitating that change. Jill said:

... Having open minded parents is useful and also cause my dad has a close friend from India, I never really thought of them as different. They had a different way of life but they were still good friends and lovely people.

Miranda commented:

...from my family, I have learned to be quite accepting of different people...I just I think when I came at the beginning from home I was thinking with an open mind like meet anyone and accept anything and you get to know about different cultures. And I think I have kept this mentality still.

6.2.2.2 Did students' university experiences explain IDI change scores?

The qualitative data goes some way towards explaining advancing, declining, and stagnating scores. Students who scored highest initially and advanced tended to have experiences that differed from lower scoring students in terms of the friends they made, activities they participated in, what they identified as their most significant experiences, what they learned from these experiences, and how they perceived themselves to have developed interculturally. While the drivers of change cannot be clearly deduced from this data, it appears that most students who advanced their scores tended to report positive experiences occurring on deeper levels and were better able to clearly identify positive change. Most of the students who did not advance often reported negative or positive yet shallow experiences.

To consider students' answers to interview questions about their campus and departmental experiences alongside their IDI change scores, I created two additional tables listing relevant variables. Table 6-3 lists the variables from the previous tables and includes whether or not students participated in International week, only relevant to non-UK and UK dual nationality students, whether or not students mentioned participating in Freshers' week, whether students made positive or negative comments about mixed accommodation and group work, and whether their first and second closest friends were from different cultures. Also listed is 'positive self-rated change' derived from an interview question that asked students whether they thought they had improved in terms of their intercultural awareness or skills. Tamara, for instance described how she had changed in a more negative way:

I think at the start of the year I was probably hanging out a bit more with British people and then I naturally just started to hang out more and more with internationals... a lot of them [British students] focus more on going out at night... a lot of the internationals are not as comfortable with like going out every single night...

Name	Citizenship	DO1	DO2	Change	Self rated change	International week	Freshers' week	Accommodation positive	Accommodation negative	Group work positive	Group work negative	First closest friend different	Second closest friend different
↓ Serena	UK	92	68	-23.49	+	●		+	-	+		●	●
↓ Faline	Non	83	70	-13.46	+	●			-	+	-	●	●
↓ Matilda	Non	77	70	-7.48	-		●				-	●	●
Sally	Non	80	75	-5.26	-	●		+	-			●	●
↓ Corinne	Non	86	78	-8.96	+	●		+	-	+	-	●	●
Sang	Non	79	83	+3.59					-		-		
Anna	UK	88	88	+0.12		●		+	-			●	●
Geneva	Non	99	91	-8.62	-	●		+	-		-	●	●
Tamara	Non	100	102	+2.01	-	●		+	-	+	-	●	●
Miranda	Non	105	114	+9.02	+	●	●	+	-		-		●
↑ Hillary	Non	109	122	+12.69	+	●	●	+		+	-		●
Leila	UK	51	53	+1.69	+		●		-	+	-		
Patrick	UK	86	72	-14.2			●	+	-	+	-		
Kendra	UK	74	77	+3.64	+				-	+	-		
Renata	UK	78	81	+3.53	-		●		-		-		
Candace	UK	110	91	-18.83	+			+		+	-		
Rosy	UK	88	105	+16.32	+		●		-		-		
↑ Jill	UK	111	119	+7.36	+		●	+	-	+	-		
↑ Jade	UK	108	121	+13.27	+		●			+	-	●	
↑ Francesca	UK	108	122	+13.13	+			+	-	+	-	●	

Table 6-3: IDI change scores and experiences at university

Miranda provided an example of how she changed in a more positive way:

Well, I just I think when I came at the beginning from home I was thinking with an open mind like meet anyone and accept anything and you get to know about different cultures. And I think I have kept this mentality still. But I just I think that you cannot judge someone just by looking at him. The girl that is from Singapore and now she's my best friend at the beginning, I didn't think that we would connect at all. And then we connected which is something really like I need to not judge without knowing the other person.

As is exhibited in Table 6-3, the two highest scoring non-UK students, Hilary and Miranda, both noted that they had one close friend from their home culture and one from another culture whereas the other students' closest friends were from other cultures. These two students also reported participating in Freshers' week whereas all but one of the other non-UK students did not participate or did not comment on Freshers' week. Of note was that Hilary and Miranda were also both

less critical of Freshers' week than some lower scoring students with both noting that Freshers' could be fun and a good way to make friends. This is very much in contrast to some other lower scoring non-progressing students who avoided Freshers' activities and/or exhibited more judgemental attitudes towards it. While not a lot can be assumed on the basis of two students, such cases might demonstrate both openness to integrating with those from other cultures while still prioritising relationships with co-nationals, an integration strategy that some (e.g., Berry, 1997) suggest reflects positive adjustment.

In terms of UK students' experiences at university, those who scored lower on the IDI and in most cases did not progress reported that both of their closest friends were from their own country while two of the highest scoring UK students (Jade, Francesca) who had scores that progressed the most reported having one close friend from another country. These students' choices to befriend those from other countries may indicate a particular interest in those from other cultures or it may simply be a reflection of their previous experiences which included having friends from other cultures. In either case they both advanced by more than 13 points.

On the IEQ students were asked to describe their most significant intercultural experience since coming to university and what they learned from the experience. Table 6-4 provides students' IDI scores along with the ratings of their significant experiences and what they learned from them. I coded their answers accordingly: those that involved some sort of cultural conflict, those that said they had no significant experience, those that said they had a positive yet superficial experience, and those that described a positive experience showing deeper reflections or openness towards other cultures. I then coded their learning in accordance with their responses as positive, negative, or neutral. A shallow experience coded as neutral for example, was provided by Patrick who noted:

My flatmate is from a different culture and I first met her in the kitchen. She was very nice and introduced herself. I've not learnt much due to the fact that we are all human and I took away just as much as I would with a conversation with someone from my own culture.

A response exhibiting deeper engagement and positive learning was provided by Miranda who said:

There is no specific intercultural interaction that is very important to me, because all of them are important. I enjoy all of them and get experience from all ... equally. ..through them I learn how people from different cultures behave and what they think about different situations and how they respond to them.

Faline's answer provided an example of an experience coded as a conflict with a negative learning outcome:

The drinking culture in Britain taught me a lot about relationships and friendship among people here. Although not directly involved in these activities, I witness pre or after moments of those drinking activities. They bring a lot of negative impacts on people and waste a lot of students' time and money. It makes me appreciate my cultural beliefs and values more.

Rosy provided an example of a student who indicated not having any significant experiences and learning nothing:

Not applicable. People conform to the English culture and way of life while living here.

Name	Citizenship	DO	DO2	Change	Significant experience	Learning		
						Positive	Negative	Neutral
↓Serena	UK dual	92	68	-23.49	Superficial			•
↓Faline	Non-UK	83	70	-13.46	Conflict		•	
↓Matilda	Non-UK	77	70	-7.48	Conflict		•	
Sally	Non-UK	80	75	-5.26	Conflict		•	
↓Corinne	Non-UK	86	78	-8.96	Conflict	•		
Sang	Non-UK	79	83	3.59	Conflict		•	
Anna	UK dual	88	88	0.12	Conflict		•	
Geneva	Non-UK	99	91	-8.62	None			•
Tamara	Non-UK	100	102	2.01	None	•		
Miranda	Non-UK	105	114	9.02	Deep	•		
↑Hillary	Non-UK	109	122	12.69	None	•		
Leila	UK	51	53	1.69	Conflict		•	
Patrick	UK	86	72	-14.2	Superficial			•
Kendra	UK	74	77	3.64	Conflict		•	
Renata	UK	78	81	3.53	Conflict		•	
Candace	UK	110	91	-18.83	Conflict	•		
Rosy	UK	88	105	16.32	None			•
↑Jill	UK	111	119	7.36	Deep	•		
↑Jade	UK	108	121	13.27	None			•
↑Francesca	UK	108	122	13.13	Deep	•		

Table 6-4: IDI change scores and significant experiences at university

While I found no differences between UK and non-UK students in regard to their significant experiences, comparing the data with IDI results found that students lower on the developmental continuum and who had advanced less, either described a conflict or superficial experience while students higher on the developmental continuum generally reported positive cultural experiences occurring on deeper levels or said that they had not had any particularly significant experiences. Higher scoring students tended to express their experience in more abstract terms and seemed to view cultural differences on deeper levels (e.g., “All intercultural interactions are important and through them I learn how people from different cultures behave and what they think about different situations and how they respond to them”). Lower scoring students tended to use more concrete terms and seemed less engaged with cultural difference (e.g., “I met her in the kitchen. She was very nice...”), seemed to rely on more stereotypes and to exhibit some polarisation (e.g., [...the UK drinking culture] “makes me appreciate my cultural beliefs and values

more.”) or a desire to remain separate (e.g., “I am more comfortable in a more international environment.”).

When asked what they learned from their significant experiences, eight students described learning something more negative and interestingly they were all lower on the developmental continuum, 88 and below. In contrast, all but one of those that described learning something more positive from their experiences scored higher on the developmental continuum, 91 and above. Those that indicated that they had learned nothing were spread across the developmental stages as Table 6-4 illustrates.

No patterns were evident regarding students’ positive or negative comments regarding accommodation or group work with students at all developmental levels reporting both positive and negative features relatively evenly. This may simply indicate that students are aware of both positive and negative situations occurring in both situations.

When I asked students if they had changed the way they interact with people from different cultures since coming to university and what contributed to that change, twelve said that they had changed in a positive way and five said that they had changed in a more negative way; while the rest thought they had not really changed. As noted previously, some students mentioned their backgrounds as being important in facilitating their perceived change. Three students (Francesca, Hilary and Miranda) all within or very near *acceptance* noted that university friendships were particularly important in facilitating their perceived change. As Hilary noted:

I’ve never really had a close friend from a European country [until now]... I always thought maybe I can’t get along with them because I am so used to being around ...Asian people.

Jade, also in *acceptance*, felt that while she had not changed a lot, she was able to openly express her more liberal views on diversity because the university campus provided a more open environment compared to her home town. Jill, also in *acceptance*, felt that meeting a range of students from different countries helped her to recognise the wide range of experiences that different people have which made her more curious about culture.

Students who thought they had changed in a positive way but actually declined or stayed about the same noted a variety of things that they saw as facilitating them including societies, diversity in the department, mixed accommodation and general exposure. Some answers from students in this group focused more upon overcoming difficulties as illustrated by Kendra:

...being in a department which is more diverse... it forces you to interact and it forces you to make that effort and to get used to it...

Others descriptions seemed to be more superficial as illustrated by Corrine:

I think it is the mixing accommodation. Because in the house we share a kitchen and bathroom so sometimes there will be some funny things happen. Some people will not shut the door when they have a bath and that is sometimes funny.

Considering the above analysis, the quantitative and qualitative data again both converge and complement one another to some extent. The two UK students who scored highest on the second IDI administration and who moved up a developmental stage identified one of their closest friends as being from another culture whereas all of the other students did not. The two most advanced and advancing non-UK students both participated in and viewed Freshers' week more positively compared to their lower scoring counterparts. As well, they identified one of their closest friends at university as being from their home country with a second from another country. Higher scoring UK and non-UK students saw themselves as advancing interculturally which was consistent with their IDI change scores. They often cited their backgrounds and/or the relationships they developed with others at university as being important in facilitating this change. They also tended to describe their significant experiences as more positive and in deeper or more neutral terms which they viewed as resulting in similar learning.

Alternatively, lower scoring UK students all identified their two closest friends as being from the UK while non-UK and dual nationality students identified students from other countries as their closest friends. Some lower scoring students felt they had changed in ways that represent declines and cited various negative experiences as influencing these changes. While other lower scoring students thought they underwent a positive change, their perceptions were typically inconsistent with changes in their IDI scores and the facilitators of change were

often perceived to be related to overcoming challenges or reflected somewhat shallow explanations. On a similar note, most of these students' significant experiences were more negative or superficial and the resulting learning was also more negative or neutral.

6.2.2.3 Did students' background and university experiences explain significant predictors of IDI change scores?

For UK students, the only variable found to significantly predict UK students' change scores was 'feelings of not fitting in'. This was a negative relationship suggesting that the more students felt they did not fit in, the more their IDI scores declined. Table 6-5 lists whether or not students felt they did not fit in alongside IDI scores. Only one UK student interviewed indicated feeling as if she did not fit in. Her interview responses suggested that this was related to the fact that she adopted more open views towards cultural difference than those maintained by her family and British friends which would actually be inconsistent with the predictive direction of this variable and cannot help to explain the potential significance of this variable in relation to IDI change score.

Name	Citizenship	DO1	DO2	Change	Don't fit in	Activities
↓Serena	UK dual	91	68	-23.49	●	Christian Union, Yoga Society
↓Faline	Non-UK	83	69	-13.46		Asian Society, Islamic Society, Malaysian York Society
↓Matilda	Non-UK	77	69	-7.48		Philosophy, People & planet, Sci-fi & fantasy, NGS, Atheist, Pantomime, Dance Society
Sally	Non-UK	80	75	-5.26		Minds in motion
↓Corinne	Non-UK	86	77	-8.96		PsycSoc, Culture Society, YSIS
Sang	Non-UK	79	83	3.59		
Anna	UK dual	88	88	0.12		Boxing club
Geneva	Non-UK	99	90	-8.62	●	PsychSoc, Pole exercise, Atheist & agnostic
Tamara	Non-UK	100	102	2.01	●	Christian Union, Culture Society
Miranda	Non-UK	104	114	9.02	●	PsycSoc, Hellenic Society
↑Hillary	Non-UK	109	121	12.69		PsychSoc
Leila	UK	51	53	1.69		College badminton, Duke of Edinburgh, PsychSoc
Patrick	UK	85	71	-14.2		PsychSoc, LGBT
Kendra	UK	73	77	3.64		Book group, YSIS
Renata	UK	77	81	3.53		Catholic Society, Concert orchestra
Candace	UK	110	91	-18.83	●	
Rosy	UK	88	104	16.32		Volunteering
↑Jill	UK	111	118	7.36		Dance society, Fusion
↑Jade	UK	107	120	13.27		Badminton, Nightline
↑Francesca	UK	108	121	13.13		Green party, Ballet

Table 6-5: IDI change scores and significant quantitative analysis variables

For non-UK students, the only variable found to significantly predict change scores was the extent to which they were active in clubs and societies. This was a negative relationship suggesting that the more active students rated themselves as being, the more their change scores declined. As noted in the qualitative analysis close to half of the students interviewed mentioned that activities could be divided along cultural lines although for others their activities were places where students from other cultures readily participated. While some societies are oriented along cultural or national lines (e.g., Hellenic Society) perhaps encouraging divisions, students reported that even general clubs can be divided. For example, one student commented that the Psychology Society draws mainly British students because it tends to organise a lot of nights out that are not appealing to non-UK students.

Another noted that during badminton, Chinese students tend to play together rather than integrate with students from other countries.

The activities that students who were interviewed participated in are listed in Table 5. No clear patterns were evident. Some activities suggest clearer cultural divisions than others. While some activities may transcend national culture (e.g., orchestra) it is difficult to speculate on the extent to which they draw students from different countries.

The above analysis provided little value in terms of better understanding the relationships between feelings of not fitting in and declining IDI scores. However, qualitative data in this case supplemented the quantitative data by suggesting reasons why declining IDI scores might be associated with being active in clubs and societies. While being active in clubs and societies may provide opportunities through which to get to know people from other cultures, the extent to which this happens is questionable for two reasons. First, some activities are orientated around particular nationalities or cultures and are likely to perpetuate mono-cultural interactions. Second, although some activities may seem to transcend culture there still appear to be cultural divisions either because students tend to stay within their own cultural groups while participating or because students may not participate in certain clubs or societies because they do not appeal to students from particular countries.

6.2.2.4 What themes arising from the qualitative data can be explored with quantitative data?

During the qualitative analysis, four themes were identified which might hinder students' intercultural development while at university which were as follows:

1. Students' more limited intercultural background experiences seem to be related to their experiences while at university with students with narrower or more superficial experiences having more superficial and negative experiences at university.

2. Students reported that cultural clustering, students grouping themselves according to culture, often occurs and can limit intercultural learning opportunities.
3. Students reported that administrative segregation (i.e., room assignments sometimes made on the basis of nationality or UK / non-UK student status and somewhat separate welcoming activities) occurred which could limit interactions or create additional divisions.
4. Nearly all students interviewed reported that challenges around cultural difference do occur and can have negative impacts upon learning. The recognition of cultural challenges by students was also found to some extent in the quantitative data although to a lesser degree.

The above themes are explored below in relation to the quantitative data.

In terms of students' backgrounds, the integrative analysis revealed that students with wider and/or deeper prior experiences were higher scoring students who advanced more. As well, these higher scoring students were more inclined to note the importance of their backgrounds in facilitating intercultural change. These findings are consistent with quantitative findings which found that a number of background variables (e.g., time lived abroad, having friends from other cultures, growing up in a city, parents having friends from other cultures) are correlated with students' IDI scores and three were found to have predictive ability using regression analyses. No other quantitative variables could be used to further explore this qualitative finding. However, these findings complement one another by suggesting that more prior experience with cultural difference can support intercultural development.

In terms of the cultural clustering reported by students during interviews, there was no quantitative variable that asked specifically about observing cultural clustering or engaging in cultural clustering. The statistical variables that might be said to be loosely related to cultural clustering were 'having a lot of intercultural contact in the department', 'having a lot of intercultural contact on campus', 'having good friends from other cultures in the department', 'having good friends from other cultures on campus', 'spending time off campus with those from other cultures'.

While students agreed with the above statements to varying degrees, none of these variables were related to IDI scores as described in the quantitative chapter and no further exploration in regard to cultural clustering was possible. As well, even if students reported having contact and friends from other cultures themselves, they might still observe cultural clustering amongst other students. The qualitative finding that students can cluster by culture may therefore be seen to primarily supplement the quantitative data by offering an explanation for a lack of developmental progression amongst most students.

In terms of administrative segregation, during interviews students noted that students from particular cultures often seemed to be grouped on particular floors or in particular rooms on campus. As well, a separate international week was noted by some to create divisions. The only quantitative variable relevant to administrative segregation was ‘students from other countries live in my accommodation’. The initial analysis found that most students reported that they had at least some students from other cultures living in their accommodation (86%). Although this could be considered inconsistent with what students reported, it could be that only some non-UK students are grouped together in accommodation while others are spread out. It may also be that some students have self-segregated by changing rooms of their own accord to be closer to students from their own cultures. Again the qualitative data in this case can supplement quantitative data by noting that students may be administratively segregated offering another explanation for diminished levels of contact and potentially a lack of developmental progression.

The qualitative analysis revealed that students at all developmental stages recognised that challenges could arise between students from different cultures in group work, in accommodation, or otherwise with most students reporting challenges of one sort or another. Two statistical variables were related to whether or not students were aware of cultural conflicts including ‘cultural challenges occur in the department’ and ‘cultural challenges occur on campus’. The quantitative responses from students suggest that many did notice challenges although not as high a proportion reported them as in the interviews. This may be because interviews allowed for more probing and elaboration of potential problem areas. As well, students might have felt more comfortable expressing their views one on one

in a private interview than on a survey form that was completed in a lecture theatre in the company of other students. In this case the data complemented one another although the qualitative data did provide supplementary information, not only regarding the proportion of students that recognise challenges occurring but in what those challenges were. No other quantitative variables could be used to further explore these findings.

6.3 Discussion

The results of the quantitative, qualitative, and integrative analyses help to provide some insights into the intercultural development of students studying on one UK campus. The following reviews the important findings and discusses those that are most relevant to the research questions in context of the literature review.

The overarching research question for this study asked the extent to which students are developing interculturally over their first two terms at university and whether there are differences between the development of UK and non-UK students. Although non-UK students appeared to have a wider range of cultural experiences prior to university, there was no significant difference between the mean IDI scores of the two groups at the first administration. Further, although most students reported that they had a lot of intercultural contact (see Tables 4-15 and 4-16) during their time at university, particularly non-UK students, there was no significant difference between the mean IDI scores at the first and second administrations for either student group suggesting that overall little development occurred. These data suggest two things. First, contrary to what universities' policy makers may assume and what contact theory research suggests, mere contact may not be enough in itself to foster intercultural development during the first two terms at university for most students. Second, despite the fact that many non-UK students had more intercultural experiences prior to and during university, this did not seem to translate into higher initial IDI scores or lead them to advance more than UK students by the end of the second term at university.

The above findings raise two main questions. First, why are students generally, not developing? Second, if non-UK students generally seem to have more

intercultural experiences prior to and during university, why were they not more advanced initially and why did they not develop more so than UK students?

Although few students in this study appeared to undergo positive development, it might also be useful to consider what if anything can be learned from these students in comparison with other students.

6.3.1 Why did development not occur for most students?

While this study cannot definitively say why development did not occur for most students, the quantitative and qualitative data along with existing research into student development allows some speculation.

6.3.1.1 Relevance of intercultural background

The quantitative data analysis found that a number of background variables related to experience with cultural diversity (e.g., time lived abroad, having friends from other cultures, growing up in a city, parents having friends from other cultures) were correlated with higher initial IDI scores and three were found to have predictive ability using regression analyses. Although the same variables were not associated with IDI change scores, this is perhaps unsurprising given that change was minimal for the group overall making it difficult to detect relevant change factors. However, the qualitative data analysis found that higher scoring students who advanced were those that had wider experiences with cultural difference in most cases although what seemed more important was that students had at least some experience with cultural difference and were able to reflect upon it at deeper levels. The qualitative data on lower scoring students corroborated this finding suggesting as it did that generally lower scoring students had narrower cultural experiences and were not able to reflect as deeply or openly upon these experiences. While there were exceptions with some lower scoring students having a wide range of cultural experiences, these students similarly did not reflect deeply on their experiences.

Such evidence suggests that having more and deeper previous experience with culture can be important in students' development during university. These findings coincide to some extent with contact theory (Allport, 1954) suggesting that

increased contact can improve attitudes towards culturally different others. It is also consistent with Milton Bennett's theory (1993) which suggests that some at lower developmental stages may be at lower stages because they have had little experience with cultural difference leading them to hold more ethnocentric attitudes. However, as can be seen from the students who were interviewed, prior opportunities for contact do not always translate into higher or lower developmental stages. Helping to explain this finding are researchers who note that individuals do not learn simply by being in the vicinity of events occurring (G. A. Kelly, 1963). For learning to occur experiences must be made sense of (J. Bennett, 2012) through a process of experience, reflection, conceptualization and experimentation (Gregersen-Hermans & Pusch, 2012). If this is true, it is possible for individuals to live abroad for extended periods of time or to spend time amongst those from other cultures without translating these experiences into intercultural learning (M. J. Bennett, 1993) just as it is possible for individuals to speak a foreign language fluently but not be interculturally fluent (M. J. Bennett, 1997).

In summary, while the data suggests that development might not have occurred for most students in this study because they may have lacked enough prior experience with cultural difference, it also suggests that while contact can lead to higher initial stages of development and intercultural growth, it can be insufficient in the absence of a reflective process that facilitates learning from those experiences.

6.3.1.2 Challenges of cultural contact on campus

As described above, students who had limited experience or understanding of cultural difference prior to university may have been ill prepared to encounter cultural difference at university. Indeed while higher scoring students noted during interviews that they were prepared to encounter diversity at university, lower scoring students more often gave indications that they were not by citing the cultural challenges that they experienced.

Both the quantitative and qualitative data suggest that students notice cultural challenges occurring on campus and in the department. However, also emerging from the qualitative analysis were descriptions of challenges that students face and

the fact that they seemed to not only be observed but to occur in particular for lower scoring students. Issues raised by UK students included non-UK students keeping to themselves, being less interested in socialising and more apt to focus upon studies. Some viewed a lack of good English skills as a barrier, others viewed certain behaviours as rude, some felt threatened by large numbers of non-UK students and others detected anti-British attitudes. Issues raised by non-UK students included UK students keeping to themselves, socialising and consuming alcohol excessively and rude behaviour. Some reported being excluded by UK students during group activities, others reported trouble in being able to keep up with conversation because of difficulties with language or accents, and others at times refrained from interactions because they were unsure of what was culturally appropriate in the UK context. Several lower scoring students in the study (UK and non-UK) not only highlighted challenges but reported that challenges were their most significant intercultural experiences during their time at university and some viewed themselves as changing in more negative ways.

The challenges reported by students in this study are not new and are documented by a variety of studies (e.g., Dunne, 2009; Harrison & Peacock, 2009; C. T. Williams & Johnson, 2011) suggesting that intercultural learning on diverse campuses is not always easy. As previously discussed, Milton Bennett's (1986a, 1993) suggests that cross-cultural encounters are typified by difficulty and often result in a variety of negative outcomes. Again as previously discussed, a substantial body of research from social psychology (see Brewer, 2003) supports this view. Cross-cultural interactions, for example, place demands on cognitive resources leading to negative mood states and to individuals focusing more upon negative aspects of interactions and to relying on stereotypes so that individuals encountered are categorised rather than seen as individuals which in turn negatively impacts communication. In addition, knowledge of one's in-group and unfamiliarity with out-groups can lead to feelings of superiority enhancing ethnocentric attitudes and increasing a tendency to avoid those from outside groups.

The above research helps to normalise the cultural challenges and clustering seen amongst students in this and other studies. However, it and the accompanying evidence also suggests that intercultural contact can indeed be challenging and that

students may be ill prepared to cope with it leading to stagnating or declining scores. Indeed some students interviewed did admit to avoiding those from other cultures and/or holding increasingly negative attitudes towards them.

6.3.2 Why are UK and non-UK students' scores approximately the same?

Non-UK students had much wider cultural experiences than UK students which would seem to have promoted their intercultural development. For example, more non-UK than UK students lived abroad (70.5% cf. 29.5%), learned a second language (89.8% cf. 15.1%), grew up in cities and multicultural areas, had friends from other cultures, and they tended to have more intercultural experiences during university. Why non-UK students did not start out at higher developmental stages and advance more during university is a question that was addressed in the previous section. Specifically, they may have had experiences which they did not reflect upon and learn from. However, there are some other possible explanations.

First, while students generally identified a variety of challenges in intercultural interactions, it is likely that non-UK students experienced more because of studying in a foreign culture. UK students were studying in their home culture and could more easily stay within their cultural group and / or perhaps explore relationships with those from other cultures from the safety of being situated within their own culture. Alternatively, non-UK students were studying in a foreign culture and were immersed to greater or lesser extents depending upon the presence of co-nationals placing increased demands upon them. Data from my study did find that non-UK students evaluated their intercultural experiences at university somewhat more negatively than UK students. However, a variety of other literature suggests that international students can experience a variety of difficulties in studying abroad (e.g., Chapdelaine & Alexitch, 2004; Yuefang, Jindal-Snape, Topping, & Todman, 2008). Such difficulties may have driven down initial scores so that they were lower than they would have been had students been assessed prior to coming to the UK. Alternatively, the ongoing challenges of studying in a foreign culture may have diminished potential gains.

Another possible explanation for why a wider range of cultural experiences did not translate into higher IDI scores for non-UK students relates to the concept of third culture kids (TCK). TCK's are defined as those individuals who during their formative years generally spend a great deal of time outside their parents' home countries, often have relationships with those from several other cultures, and feel most connected to those with similar backgrounds (Pollock & Van Reken, 2009). Six non-UK and one UK dual nationality student in my study who were interviewed attended international schools and their experiences did seem consistent with TCK's and suggested that they had far more experience with different cultures than most other students (UK and non-UK).

It is argued that TCK's and students who attend international schools are more interculturally advanced. In fact, one study of international school students found that 97% of students surveyed were in the DMIS *acceptance* stage of development (Straffon, 2003). Interestingly, TCK students in my study had IDI scores ranging from the top *acceptance* score of 122 to a denial score of 68. Some TCK students with lower IDI scores clearly demonstrated some ethnocentrism by evaluating UK students' cultural differences negatively, avoiding them, and consciously interacting more with 'internationals' who they viewed as more similar to themselves. Although these students may have been more experienced with cultural difference and even advocate that cultural difference is something to be valued and celebrated, when confronted with home students many of whom may not share their more cosmopolitan views, these students may have been challenged and could perhaps have become more ethnocentric. Thus some students may have become ethnocentric ethno relativists – a true oxymoron but one that may have resulted from confronting individuals with more provincial views. If this is the case, then again students' scores may have been driven down initially or stagnated.

The lack of difference between UK and non-UK student scores could, as well, lie in the diversity of non-UK students or in other unidentified factors. For instance, although many UK students in my study grew up with little diversity around them, the UK society as a whole is increasingly multicultural and overtly supports tolerance of cultural difference perhaps more so than some other countries and this may have enhanced UK students' scores. Conversely, it is possible that

more non-UK students were from backgrounds, for example conservative religious backgrounds, which may more openly promote ethnocentric values which may have diminished some non-UK students' scores. That said non-UK students came from a very wide variety of countries and cultural backgrounds providing a variety of influences making it generally difficult to identify and speculate on group level differences that may have impacted scores.

A final point is that while the IDI was normed on individuals from a variety of countries who were living in a Western society, the IDI has not been used extensively with international student groups who undoubtedly represent higher levels of diversity. Therefore, its validity for use with the population has to be questioned.

The above speculation provides some explanations as to why non-UK and UK students IDI scores were approximately the same. The extent to which any of these explanations are valid is unclear. However, the findings tentatively suggest that UK and non-UK students may be more similar developmentally than might be thought, at least in this context, and that students who take up the challenge to study for a degree in a foreign culture do not necessarily initially possess or later develop higher levels of intercultural competence than home students.

6.3.3 What are students doing who are developing?

Although generally students in this study did not advance interculturally and many regressed according to their IDI scores, about 14% of students did advance at least one developmental stage. Five students who were interviewed advanced from upper *minimisation* to *acceptance*, or very nearly *acceptance*, and it is these students we turn to for insight into what experiences they seem to have had that led to development.

Higher scoring students interviewed during this study seem to be doing what universities assume students would do. The qualitative data demonstrates that generally students in or approaching *acceptance* are making friends with those from other cultures, having deeper and more positive intercultural experiences, and learning from these experiences. A movement into *acceptance* involves a major

cognitive shift from ethnocentrism to ethnorelativism whereby difference is recognised as important (J. M. Bennett & Bennett, 2004). Students interviewed who were in *acceptance* seemed to demonstrate more that they recognised cultural difference, were accepting of it, and were interested in it.

I have learned to be quite accepting of different people ... I can understand people are different between them but I mean it's not a bad thing, it's quite interesting actually. – Miranda, non-UK student

I'd say ... that you realise they have different kind of ways of behaving so like in Turkey they are less reserved and will just say what they think like ... whereas we would probably hold back and not say it. And you kind of realise that it's not rude it's just them behaving like they would. - Francesca, UK student

Although in some cases these students still minimized cultural difference as would be expected amongst those transitioning into *acceptance*, they did not appear to be defensive and did not denigrate different cultural practices which was in contrast to lower scoring students. Instead they were more open and accepting.

As noted by Bennett, it is important not only to recognise and accept cultural difference but to understand the importance of it in influencing interactions in order to alter behaviour as necessary (M. J. Bennett, 1993). Although the highest scoring students were only in *acceptance*, some demonstrated that they were beginning to recognise the impact that culture can have on interactions and the need to adapt their behaviour which would suggest an approach towards the adaptation stage.

...because there just aren't people from other cultures. I have to interact with them [people from home] slightly differently to kind of accommodate for their beliefs, the way they think about different people. - Jade, UK student

Perhaps the most pronounced difference between these and lower scoring students was that they indicated that they felt prepared for the cultural variation that they encountered at university. As noted by Fowler and Blohm (2004), intercultural contact can be useful in facilitating development because it provides intensive learning experiences which allow for immediate testing of knowledge skills and attitudes. These students evidently were ready for such cultural contact compared to others.

While the students who were interviewed and who advanced a stage all advanced from upper *minimization*, it should be noted that students advancing from

minimisation to *acceptance* made up only one-third of the students who advanced. Most of the others who advanced moved from *polarisation* to *minimisation* with a couple moving from *denial* to *polarisation*. This suggests that some, although still few lower scoring students were able to advance in a diverse university environment. However, little can be said regarding how these students' experiences might be different than students who did not advance since they were not interviewed.

6.4 Conclusion

This research suggests that generally UK and non-UK students in this study entered university at the same developmental stage with most in *minimisation*. Despite the fact many reported experiencing a lot of intercultural contact during university, most students were at the same developmental stage seven months later with about one-quarter regressing and about fourteen percent progressing developmentally. The complex nature of intercultural development makes it difficult to speculate upon this lack of progression. However the data do suggest some possible explanations. In particular, students reported that intercultural contact could be challenging and students who scored lower and had limited previous experience with cultural difference seemed to find it more challenging although some with extensive experience with cultural difference also found it difficult. The challenging nature of intercultural contact may have furthered students' tendencies to cluster by culture, a normal and even expected phenomena, limiting developmental opportunities. Administrative segregation might have further hampered development by limiting contact opportunities

A novel finding was that although non-UK students had wider cultural experiences prior to and during university, on average their initial scores and developmental progress were no different to UK students. This may be because they experience heightened challenges through studying in a foreign culture and find the attitudes and behaviours of UK students somewhat at odds compared to those in the international student community. This may be because there are other factors at work that equalise development although it is difficult to speculate given the diversity of students that comprise the non-UK student community.

Whatever the explanation for why most students did not advance, this research suggests that the cultural contact as provided by this department and university seems to help only a minority of students to develop interculturally over the first two terms at university. While it is useful to consider more closely the students in this study who advanced, since so few students did advance the larger and perhaps more important question is, what can usefully be done to support the development of greater numbers of students? This will be the subject of the final chapter.

Chapter 7 Conclusions and Recommendations

This chapter summaries the main findings and conclusions of this study, will address the limitations of the study, provides recommendations, and suggests avenues for further research.

7.1 Summary of findings and conclusions

The quantitative analysis found that UK and non-UK students in this study started their first year at university at the same developmental stage with most in lower minimisation (91.83). Although generally students reported high levels of intercultural contact over their first two terms at university, there was no significant change in the mean score for either group (90.48) with only about 14% of all students moving up a developmental stage and about one-quarter regressing one or more stages.

The reasons behind the lack of development in students overall are complex making it difficult to make generalisations, however, the quantitative and qualitative data provide some possible indications. Cultural challenges, according to students' reports, seemed to be prevalent and these may have negatively impacted development particularly for lower scoring students with less experience of cultural diversity although even students with extensive experience with diversity could experience cultural challenges. The difficult nature of intercultural contact may have led students to cluster by culture further limiting contact and potential learning opportunities. As well, the administrative segregation reported by some students may have further limited intercultural contact and learning opportunities.

Interestingly there were no significant developmental differences between non-UK and UK students which is somewhat surprising given that non-UK students had much wider cultural experiences prior to and during university. There may be many explanations for this such as the likelihood that international students experience heightened challenges through studying in a foreign culture. They may have found the attitudes and behaviours of UK students difficult to contend with although the sheer diversity of non-UK students makes it somewhat difficult to speculate upon group level differences.

Overall the findings from this study suggest that while the increasingly multicultural university campuses of today such as the one provided for these students can provide atmospheres through which students can engage with and learn from cultural difference, intercultural development may not occur through contact alone for most students. This suggests that if promoting students' intercultural development is truly a priority, then more effort may need to be made on the part of departments and universities to manage students' contact and facilitate development.

7.2 *Limitations*

While this study provides a valid snapshot of the intercultural development of a cohort of first year psychology students studying at one university, it does have a number of limitations.

7.2.1 *Sampling*

The sample sizes for the quantitative and qualitative portions of the study were somewhat limited. Gorard (2001) suggests that samples must be large enough to yield the analytical results desired and therefore, generally be as large as possible. While this sample was large enough to enable statistical analysis, a larger sample would have generated more statistical power and confidence in the results particularly regarding the analyses dividing UK and non-UK students into subgroups which created smaller group numbers. As well, while the data generated from the 20 student interviews was useful, more interviews could have provided more insight into the varieties of students' experiences. For instance, interviewing lower scoring students who advanced a developmental stage would have helped to shed light on the experiences they had that might have led to development. However, time and monetary limitations necessitated restricting the sample.

Because a non-probability sampling strategy was used the results have limited generalisability. They are mostly relevant to this particular psychology department and this institution but might also be of some relevance to similar departments in similar UK institutions. Although this sampling method has its limitations because it cannot be seamlessly generalised to the wider population of

university students, I chose it to avoid the self-selection bias that is common in other studies and because psychology students were of particular interest to me.

7.2.2 Instrumentation

7.2.2.1 Social desirability

A problem with collecting data directly from individuals such as through questionnaires and interviews is that some people may provide answers which are socially desirable in order to appear in a positive light (Bryman, 2008). Although the IDI is said to have designed out social desirability (Hammer, 2012), interview responses from the students indicate that it was an issue.

I remember at the time thinking that some of them [the questions] were a bit racist..... Nobody would put down totally agree [to certain questions] because nobody wants to be seen as that person even if they are and they do believe the British culture is better than everyone else's. We are very PC in England so even if you do have different beliefs, you hide them. You don't tell people that you hate other cultures. – Anna, UK bicultural, Minimisation

This student also noted that the sensitive nature of the questions combined with the setting in which the data was collected (see below) may have also led students to choose more socially desirable answers.

You don't tell people that you hate other cultures....students were sitting in a lecture theatre when completing the questionnaires so their answers might be observed by other students. – Anna, UK bicultural, Minimisation

7.2.2.2 Cultural and language differences

As described by Tayeb (2001) cultural and language differences can have a major impact on an individual's ability to complete questionnaires so that assessment results are valid and answers are comparable. Although the IDI is said to be designed to be culturally neutral (Hammer, 2011; Hammer, et al., 2003), it was developed in a Western country and around a Western conceptualisation of intercultural development calling into question the extent to which it is portable across cultures. Some literature suggests that it does not seamlessly transfer (e.g., Greenholtz, 2005) and some students' comments from this study also call this into question.

I did wonder if some of the questions apply to me because I am not British. For instance, one question [refers to “our stronger culture”]... I don’t really get that. Because it seems to me that it is directed just to British people...because they kind of have more opportunities... it assumes that my culture has more opportunities although it doesn’t. – Geneva, non-UK, Minimisation

Pointing to a question that mentioned expressing emotions, another student noted:

I can’t understand why people would do that, would express their emotions because it would be rude. – Sang, non-UK, Defence

While interviews with most students proceeded in a fairly smooth fashion, one student had more limited English abilities making communication challenging. Questions often had to be repeated and long pauses ensued during which the student had to check his pocket translator to both understand questions and formulate answers. While it seemed as if understanding was reached during the interview, the clear meaning behind various questions and answers might have been somewhat lost in translation during the interview and may have impacted his responses to questionnaire questions as well.

7.2.2.3 Intercultural Development Inventory

I chose the IDI as the major assessment tool for this study because it is a well developed tool with high levels of reliability and validity and has been used widely with university students. However, it is just one of many tools available and may not necessarily be an ideal indicator of ICC. In addition to being developed in a Western culture, the IDI is a rather broad tool providing an overall indication of ICC. Other measures may have provided more detailed assessments of ICC attitudes, skills, and knowledge leading to a better assessment of individual ICC indicators.

Fantini (2009) suggests that multiple assessment methods should be used to get a more accurate picture of ICC. As well, he suggests that indirect measures (e.g. observation of interactions, students’ views of their own learning) be used along side of direct measures such as the IDI – although the literature is equivocal as to which the IDI is, direct or indirect. Although the qualitative data collected during this study provided an additional point of comparison that could be considered indirect, the use of an additional tool would have been useful to ensure the validity of results and

more accurately assess change. However, limited time and resources resulted in the choices made.

7.2.3 Length of study

Another factor limiting this study is that it was conducted over just two terms. Due to the duration of a PhD study, the time frame was limited although conducting the study over two terms is certainly valid when considered in the context of studies which assess students' intercultural development over much shorter periods for instance weeks or just one term (e.g., Anderson, Lawton, Rexeisen, & Hubbard, 2006; A. D. Cohen, et al., 2005). However, to assess the intercultural development of students over an entire university degree course, a longitudinal study over three years would undoubtedly provide a better indication of intercultural change. One US study (Carter, 2006) found that there was a significant improvement in students' development over a four year university course suggesting that a longer study might indeed show that students' progress more. However, this study did find that actually very few students moved beyond ethnocentric stages of development and it suffered from substantial sample bias with only 5% of the students included in the initial wave of data collection self-selecting into the final wave of data collection. Another study, while not longitudinal, found that third year medical students who had already completed undergraduate degrees also had not moved beyond ethnocentric stages with the mean score in lower minimisation (93.4) (Ayas, 2006) which is quite similar to students in this study. Therefore, although a longer study would have been preferred, such literature still calls into question the extent to which intercultural development occurs over degree courses and moves students into ethnorelative stages of development.

7.2.4 Other issues

The IDI is a relatively long instrument. Adding to that the length of the locally designed instruments, completing the forms took more than half of an hour. As well, the data collection was appended onto two hour and a half long sessions during which students were lectured. Because of these factors, students' answers to questionnaire questions might have been impacted by fatigue or impatience as described by one student during her interview.

The questionnaire is just too long. Sometimes my friends say they make mistake, like answering the second question but they might put the answer for the third question. – Corrine, non-UK, Defence

Further, data collection occurred as part of two mandatory sessions and although students were given the option to leave prior to data collection, some might have felt that they didn't really want to participate but that they should not leave which may have impacted their answers. As well, some students may have participated more because of the incentive they were offered (prize draw) which may call into question their motivations for participating and therefore their answers. However, I adopted the strategy to collect data from a captive audience in an attempt to survey the majority of a student cohort to avoid selection bias that seems to occur in many studies of this kind.

7.3 *Recommendations for practice*

A variety of recommendations can be made for enhancing students' intercultural learning on home campuses.

7.3.1 Adopt policies that facilitate intercultural learning

One of the main findings of the study was that most students seemed not to make positive intercultural gains despite studying in a culturally diverse department and university. While there is a shortage of studies conducted on home campuses, limited research that is available (e.g., Ayas, 2006; Carter, 2006) similarly suggests that the advances of students on home campuses may be limited. However, additional evidence comes from the study abroad literature which has shown that students immersed in other cultures often do not automatically develop but need to be facilitated (Vande Berg, 2009). As well, some educators specialising in language and cultural learning have recognised for years that students' intercultural development typically requires facilitation and have generated detailed frameworks through which it might be cultivated and assessed (e.g., Byram, 1997).

While additional research around the intercultural development of students on home campuses would be useful to build a greater evidence base, generally the above research suggests that institutions and departments would do well to recognise that intercultural development may not be occurring as a matter of course for most

students studying on home campuses and that policies aimed at managing contact and helping students to get the most of their intercultural contact experiences may need to be adopted.

7.3.2 Address the challenges associated with intercultural learning

A second major finding of the study was that some students, particularly students at lower stages of development, found intercultural contact challenging and were not prepared for it. For some this resulted in negative rather than positive learning outcomes. As well, most of the students interviewed observed cultural segregation among students, some reported clustering with those in their own cultural groups, and some suggested that this might be a preferred method of dealing with cultural difference.

The challenges of intercultural contact and segregation among home and international students have been well documented in the literature (e.g., Harrison & Peacock, 2009, 2010; Peacock & Harrison, 2009). As well, other studies have found (e.g., Ingraham & Peterson, 2004) that student learning can be negatively impacted by a lack of preparation to confront cultural difference and suggest that students who are not prepared may react negatively to it or may never actually confront cultural difference. The above research suggests that facilitation of learning may need to focus more upon preparing students to encounter cultural difference and addressing the challenges that student are likely to experience during intercultural encounters.

7.3.3 Consider administrative policies that support integration

Related to the challenges that students experience at university and their tendency to cluster by culture, findings from this study highlight administrative practices that can encourage segregation (e.g., separate welcoming activities, culturally divided accommodation). As well, student societies oriented around particular cultures may promote mono-cultural interactions.

The company of compatriots can provide important support for individuals and is thought to contribute towards the effective adjustment of individuals living outside of their home cultures as discussed by Berry (1997). However, overreliance

on such support systems may hamper students' development by limiting opportunities to learn from those from other cultures (Sovic, 2009) and some studies (e.g., Carter, 2006; Pascarella & Terenzini, 2005) have found that membership in certain societies is related to lower levels of intercultural development. Thus considering policies that ensure more culturally mixed accommodation and considering methods of welcoming students that encourage more cultural integration, and not just among international students, might be helpful. As well, mono-cultural student societies might be further supported in better integrating students from other cultures.

7.3.4 Treat UK and non-UK students individually

Some literature suggests that international students are more advanced because they have wider experiences with individuals from different cultures (e.g., Montgomery, 2010; Montgomery & McDowell, 2009). However, an important finding in my study was that non-UK students appeared to be no more advanced than UK students despite their wider cultural experiences. This finding is consistent with at least one other study on a home campus (Ayas, 2006).

Some non-UK and UK bi-cultural students in this study described themselves as 'international', some also described themselves as preferring the company of other 'internationals', and reported difficulty relating to home students. What perhaps they are demonstrating is the ability to bond with other international students around particular commonalities which could be being from other countries, could be holding cosmopolitan views, or could be other factors. However, clustering with other internationals and looking upon local student culture with disdain reflects ethnocentric attitudes and to varying degrees a level of intercultural incompetence. It would seem therefore that although one can have experiences such as living abroad, travelling abroad, learning about other cultures, having friends from other cultures, and learning other languages, such experiences cannot be assumed to increase ICC. Byram (1997) and others have made the distinction between individuals who are open and interested in culture and those who could be described more as cultural tourists, simply collecting unusual experiences, as well as those interested in culture from an employability standpoint neither of which

effectively support intercultural development (p. 50). As well, from a learning and development standpoint, again to highlight the work of George Kelly (1963), one must be more than present at an event in order for learning to occur. Experiences must be made sense of through a reflective process which may or may not occur when individuals have experiences with cultural difference.

Thus, although many international students may appear to be more ‘international’ their cultural experiences may be overvalued and they may hold ethnocentric attitudes and have lower levels of ICC to the same degree that local students can. The above finding suggests two things. The first, is that the word ‘international’ may be itself problematic in that universities and students themselves to some degree regard only international students as international. In reality, all students can be international and need to be international in order to positively contribute in an increasingly interconnected and highly diverse world. Second, rather than make assumptions about home and international students’ levels of intercultural development, what might be more helpful is to view ICC on an individual basis recognising that while international experience can bolster intercultural development and may even contribute to particular skills with particular cultures, such experience does not necessarily equate to high levels of ICC. Milton Bennett (1986b) highlighted this when outlining the original Developmental Model of Intercultural Sensitivity. Further, he advocated then and does so now (M. J. Bennett, 2009) for an individualised approach to facilitating development which suggests particular activities for individuals based upon developmental stages (M. Bennett, 2011) rather than assuming that the same approach will work for everyone.

7.3.5 Use disciplinary knowledge to facilitate student learning

As discussed in the introduction, the discipline of psychology has made extensive contributions to understanding culture, cross-cultural interactions, challenges that often occur when individuals from different cultures interact, and models of cultural development. However, little such disciplinary knowledge seemed to be brought to bear in regards to helping students to develop interculturally in this study and it is questionable the extent to which this occurs in UK psychology departments elsewhere.

More could be done to explore the use of disciplinary knowledge to foster students' intercultural development as part of the agenda to pursue psychological literacy for psychology graduates (e.g., Cranney & Dunn, 2011; McGovern, et al., 2010; Trapp, et al., 2011). Moreover, it could perhaps be used more broadly to inform policy and practice around the internationalisation activities of universities in general and to address the challenges that are found to occur between students.

7.3.6 Summary of practice recommendations and methods of facilitation

The above recommendations suggest the following: that universities and departments adopt policies to facilitate intercultural development beyond providing mere contact opportunities; that the challenges of intercultural contact in particular need to be addressed to break down barriers to development; that administrative policies and practices which encourage more integration be considered; that ICC development be addressed on an individual basis and not assumed on the basis of 'international' experience; and that psychology departments consider the extent to which disciplinary knowledge can be used to foster psychology students' intercultural development as well as to inform university policy and practice more broadly.

Various methods of facilitating intercultural development emanate from the field of intercultural education which has advanced in recent years to address the challenges of domestic diversity as well as challenges individuals experience through working, living, or studying abroad (Pusch, 2004). A variety of frameworks exist to facilitate understanding of this complex and still developing concept (e.g., J. M. Bennett & Bennett, 2004; M. J. Bennett, 1986b; Byram, 1997; Deardorff, 2006). Fowler and Blohm (2004) review educational methods used to facilitate its development (e.g., case studies, critical incidents, cultural assimilators, role playing). Paige (2004) provides an overview of tools used to assess intercultural development which can be used to assist learners in self-reflection, to assess groups and customise training, and to measure learning outcomes. A recent example of one reflective tool, the *Autobiography of Intercultural Encounters* (Council of Europe, 2012), includes a freely available suite of tools that help students to reflect upon and learn from their intercultural experiences.

The above methods and tools may be useful in the contact related schemes outside of the curriculum but can also be useful within it. Responses from students from this study indicate that while cultural comparisons are sometimes made within the curriculum and related concepts covered, they did not directly address intercultural development. Given the nature of the psychology discipline and the fact that it is one of the disciplines that has contributed most to the intercultural field, it is particularly well placed to integrate intercultural learning outcomes for students. Social psychology, cross-cultural psychology, global psychology, intergroup relations, developmental psychology, organisational psychology, and individual differences are just some of the modules within psychology which could directly address aspects of intercultural competence. Work experiences, common within the discipline, might also incorporate intercultural learning goals.

Killick (2006) developed curriculum review guidelines that departments can use to integrate ICC type learning outcomes into their curriculum. The psychology department at Leeds Metropolitan University has used Killick's guidelines to infuse global perspectives across their curriculum (Reddy, et al., 2013). For example, one core module requires students to investigate the ethnocentrism of the discipline as it is underpinned by Westernised ideology and their final project requires reflection upon their own cultural attitudes (Reddy, et al., 2013).

Intercultural contact provides a powerful if not essential element for promoting ICC because it provides opportunities for intensive learning experiences that allow students to gain first hand cultural experiences and test their skills (Fowler & Blohm, 2004). There are some emerging practices in the UK and abroad that encourage learning through intercultural contact (Lantz & Davies, In press). Examples include culturally oriented buddy schemes (e.g., Devereux, 2004; Pain, 2011), volunteering in local ethnic communities, foreign language learning that integrates intercultural learning (Sercu, 2002), creating culturally mixed groups of students to undertake curricular assignments (Arkoudis, et al., 201; Osmond & Roed, 2010), and ensuring that students from different cultures are mixed throughout accommodation rather than being clustered together. While most of the above approaches create contact opportunities, the question is the extent to which they effectively facilitate intercultural development and address the challenges that

often arise when individuals from different cultures meet and interact.

Developmentally appropriate activities and facilitation and addressing the challenges of intercultural contact may be critical if intercultural learning is to be realised by more than just a minority of students.

7.4 Recommendations for further research

The intercultural development of students is a field that is wide open for research, particularly in the UK where the facilitation and assessment of intercultural outcomes seems not to have progressed as extensively as in some other countries. The following provides a few ideas emanating from this study as well as gaps identified in the literature.

7.4.1 Longitudinal studies on home campuses

Again, an important finding of the study was that most students seemed not to make positive intercultural gains. While this finding is supported to some extent by other studies (e.g., Ayas, 2006; Carter, 2006), research and practice emanating from study abroad (e.g., Michael Vande Berg, 2009) and theory and practice from language education (Byram, 1997), there is a shortage of comparable studies. In particular more studies assessing students' intercultural development should be conducted on home campuses incorporating a longitudinal approach over the duration of a degree course that involve interventions and control groups and home and international students. Such studies would be useful in better understanding whether or not and the extent to which development occurs as well as what hinders and facilitates it.

7.4.2 Studies linking ICC to intercultural challenges

Again another important finding of the study was that students experienced and observed a variety of difficulties during intercultural interactions and observed and engaged in cultural clustering. There is substantial literature regarding the challenges surrounding international and home student interactions (e.g., Harrison & Peacock, 2009, 2010; Peacock & Harrison, 2009) which have been echoed by this study. However, little other research is available particularly in the UK which considers challenges that occur for students at different developmental stages and

how students view and cope with such challenges. Additional research would be useful to facilitate understanding of the experiences of UK and non-UK students at different developmental stages and with different developmental outcomes to more effectively support their development. While some challenges may be the same, others are likely to be different. For instance, some non-UK students might be dealing with challenges in integrating with large numbers of home students who may be unreceptive. Alternatively, UK students might feel threatened by the presence of non-UK students and avoid them. While the IDI could be useful to develop an understanding of populations of students and helping students to understand how they perceive and deal with cultural difference, tools which incorporate the myriad components of ICC could also be useful in addressing specific skills, knowledge and attitudes related to intercultural development.

7.4.3 Explore home and international student development

An interesting finding was that students from outside the UK did not necessarily score higher than home students. This is consistent with the findings of at least one other study (e.g., Ayas, 2006) although in conflict with others in the literature that suggest that international students advance more because their wider cultural experiences (e.g., Montgomery, 2010; Montgomery & McDowell, 2009). Findings around this topic, therefore, are somewhat equivocal and suggest that more research is needed not only to clarify conflicting evidence and identify appropriate methods of facilitation but because of the dearth of such studies.

Linked to this topic is the issue of students who have attended international schools. Some students in my study who attended international schools were in the *acceptance* stage of development while others ranged through the ethnocentric stages with one in *denial*. These findings are in conflict with at least one other study (Straffon, 2003) which found that nearly all students surveyed at one international school scored in the *acceptance* stage. Although international school attendance surfaced as an interesting issue within this research, this data point was collected on only a minority of students during interviews so this finding should not be overstated. However, it does suggest that more research would be useful to explore

whether or not international school graduates coming to universities are actually more interculturally advanced which may indicate different developmental needs.

7.4.4 Explore links between student societies and intercultural development

Although the findings in this study regarding the associations between being active in clubs and societies and feelings of not fitting in with intercultural development were weak, both might be explored in more depth by further research. Of interest in particular may be the extent to which being active in particular societies helps or hinders students' development. Some students in this study noted that societies can bridge cultural difference by providing leisure environments where students from different cultures get together in a relaxed environment around a shared interest. Some mentioned the benefits of societies specifically aimed at promoting cross-cultural learning (e.g., Culture Society). However, others noted that societies could promote cultural separation and some studies suggest that participation in particular societies is associated with lower levels of development (e.g., Carter, 2006; Pascarella & Terenzini, 2005). Outside of these few limited studies, there is little research examining the connection between students' participation in societies and intercultural development.

7.4.5 Research into lecturers' ICC

While educators are well placed to help facilitate students' intercultural development, they may similarly be challenged by the growing diversity of students. Comments from a few students in this study indicate that there may be times when more cultural sensitivity from lecturers would have been helpful.

The research was suggesting that Asian people were more dependent on others and that they value things like family and rules...Europeans value goal seeking and personal success... I think that kind of made a barrier between Europeans and Asian people in our group... it was pretty strange to me. – Geneva, non-UK student, Minimisation

I remember there was this one lecture about how this psychologist says there is no life after now...I felt quite defensive because my belief is that there is life after this life... but it just way he put it, it was like as if 'if you believe there is life after this, you are deluded'. – Faline, non-UK student, Denial

Chen (2008) found that teachers' views around cultural difference could have an impact on students and suggested along with others (e.g., K. Johnson &

Inoue, 2003) that more research is needed into their intercultural competence. While there is literature aimed at helping lecturers to understand ICC and how it develops in students (e.g, Stone, 2006) no literature identified to date seems to address the intercultural development of university educators with only limited studies found which address the development of school teachers (e.g., DeJaeghere & Zhang, 2008; Yuen, 2010). More research in this area would be useful in order to better understand the extent to which university educators are able to engage appropriately and effectively with increasingly diverse groups of students as well as to support students in developing interculturality.

7.4.6 Studies exploring other cultural contact relevant to ICC

This study concentrated on contact between UK and non-UK students as a factor involved in intercultural development. I took this approach because of the existing research on the state of internationalisation in universities and the challenges highlighted in the literature between home and international students. However, culture is defined by more than just nationality (Avruch, 1998) and there is a variety of cultural variation between individuals from the same nation. Caruana and Spurling (2007) and others note that the intercultural learning goals espoused by internationalisation are similar to those that promote equality and diversity within nations. There is some but relatively little research looking at the contact between different cultural groups within the same country (e.g., Halualani, 2008; Halualani, et al., 2004) and more would certainly be useful to both widen our conception of intercultural competence as something that involves all manner of difference (e.g., disability, ethnicity, socio-economic class) and to better understand how different contact experiences impact intercultural development.

7.4.7 Further understanding of the psychology behind relationships across cultures

Similar to the above practice recommendation, the discipline of psychology has contributed extensively to research on human interactions across cultures. However, more research is needed to better understand the psychology behind the cross-cultural interactions in particular on university campuses to address the challenges around contact and to identify ways to facilitate and assess development. Work has

recently been published using psychological theory to examine international and home student interactions (Harrison & Peacock, 2009) and a psychologist at the University of Surrey supervised a doctoral thesis on intercultural competence (Alkhesnam, 2012) and wrote a piece for the European Wergeland Centre (Barrett, 2011). More such research would be beneficial to inform policy and practice both within and outside the discipline.

7.4.8 Explore ICC in the context of internationalisation

Existing studies suggest that the promotion of intercultural competence in university students is sorely lacking within the framework of institutions' internationalisation strategies as described in the literature review (e.g., Caruana & Spurling, 2007; Middlehurst & Woodfield, 2007). The findings from this study provide evidence suggesting that intercultural development indeed may not occur for most students as a matter of course and that universities may need to focus more attention on promoting it if it is to be an outcome of internationalisation. Studies around the priority that institutions place on students' intercultural development, the use of practices which facilitate it, and the measurement of it as an outcome of internationalisation strategies would help to identify the extent to which it becomes more of a priority in future and the extent to which it is a realised outcome of internationalisation.

7.5 Conclusion

Greater importance should be placed on developing students' intercultural competence as part of universities' and departments' internationalisation strategies. While it may have gained some prominence in higher education circles due to the forces of globalisation and the marketization discourse that permeates higher education today, the ability to understand and get along with one another has been and will be of primary importance to humans as long as there is cultural variation. While ICC will be increasingly important to student employability and the goals of organisations working with diverse individuals, it stretches well beyond such utilitarian goals and relates to much larger issues such as war and peace. While there are many worthwhile areas of research, I believe that the ability to engage positively

with those who are different is paramount and impacts all of us even if we do not realise it.

I hope that the findings of this study and the above recommendations will be useful for both practice and research. Of course, prioritising the intercultural development of students is important, but hopefully universities and departments will increasingly view and support it not simply as an employability outcome but as a means to promote positive relations among people across all of the many affiliations that define culture.

List of Appendices

Appendix A: Sample IDI questions.....	279
Appendix B: Background Questionnaire.....	280
Appendix C: Intercultural Experiences Questionnaire.....	282
Appendix D: Interview protocol.....	287
Appendix E: Sample interview request email	290
Appendix F: Participant bios	291
Anna – UK dual nationality (88 Minimisation / 88 Minimisation).....	291
Candace – UK (110 Minimisation / 91 Minimisation).....	292
Corinne – Non-UK (86 Minimisation / 77 Defence).....	293
Faline – Non-UK (83 Defence / 69 Denial)	293
Francesca – UK (108 Minimisation / 121 Acceptance)	294
Geneva – Non-UK (88 Minimisation / 88 Minimisation).....	295
Hilary – Non-UK (109 Minimisation / 121 Acceptance).....	296
Jade – UK (107 Minimisation/ 121 Acceptance)	297
Jill – UK (111 Minimisation – 118 Acceptance).....	298
Kendra – UK (73 Defence / 77 Defence)	299
Leila – UK (51 Denial / 53 Denial).....	300
Matilda – Non-UK (77 Defence / 70 Denial).....	301
Miranda – Non-UK (104 Minimisation / 114 Minimisation).....	302
Patrick – UK (85 Minimisation / 71 Defence)	303
Renata – UK (77 Defence / 81 Defence).....	304
Rosy – UK (88 Minimisation / 104 Minimisation)	305
Sally – Non-UK (80 Defence / 75 Defence)	306
Sang – Non-UK (79 Defence / 83 Defence).....	307
Serena – UK dual nationality (91 Minimisation / 68 Defence).....	308

Tamara – Non-UK (100 Minimisation / 102 Minimisation).....	309
Appendix G: NVivo nodes and sub-nodes	310
Appendix H: Ethical guidelines.....	311
Appendix I: Intercultural project consent form	312

Appendix A: Sample IDI questions

As provided in Hammer, Bennett and Wiseman (2003, p. 434).

Indicators of Denial / Defense

- It is appropriate that people do not care what happens outside their country.
- People should avoid individuals from other cultures who behave differently.
- Our culture's way of life should be a model for the rest of the world.

Indicators of Reversal

- People from our culture are less tolerant compared to people from other cultures.
- People from our culture are lazier than people from other cultures.
- Family values are stronger in other cultures than in our culture.

Indicators of Minimisation

- Our common humanity deserves more attention than culture difference.
- Cultural differences are less important than the fact that people have the same needs, interests, and goals in life.
- Human behaviour worldwide should be governed by natural and universal ideas of right and wrong.

Indicators of Acceptance / Adaptation

- I have observed many instances of misunderstanding due to cultural differences in gesturing or eye contact.
- I evaluate situations in my own culture based on my experiences and knowledge of other cultures.
- When I come in contact with people from a different culture, I find I change my behaviour to adapt to theirs.

Hammer, M. R., Bennett, M. J., & Wiseman, R. (2003). Measuring intercultural sensitivity: The Intercultural Development Inventory. *International Journal of Intercultural Relations*, 27(4), 421-443.

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Appendix B: Background Questionnaire

Instructions

To follow are a series of questions about your background. Please choose only one answer for each question by ticking the appropriate box and / or writing your answer in the space provided. Thank you.

- 1) Did your mother or primary female guardian have a degree (e.g. Bachelor's, Master's, PhD)? Yes (1) No (2) Unsure / Other (10)
- 2) Did your father or primary male guardian have a degree (e.g. Bachelor's, Master's, PhD)? Yes (1) No (2) Unsure / Other (10)
- 3) Are you from a bi-cultural or multi-cultural family?
 Yes (1) No (2) Unsure / Other: (*please explain*)
 (10): _____
- 4) Prior to study at the University, what is the total amount of time that you have lived in a country other than your primary country of citizenship? (*Do not include short term travel for leisure.*)
 I have never lived outside my country of citizenship (0)
 I have lived outside my country of citizenship _____ year(s) _____ month(s)
- 5) About how many countries have you visited in the last five years? ____

Instructions

Please read the following statements and tick the box that indicates how strongly you agree or disagree.

	Strongly Agree (5)	Mainly Agree (4)	Neither Agree nor Disagree (3)	Mainly Disagree (2)	Strongly Disagree (1)	Don't Know (10)
6) I grew up in a large city.						
7) I grew up in a multicultural area.						
8) My school was culturally diverse.						
9) At school, I mainly spent time with people from my own culture.						
10) At home, I have friends from other cultures.						

11) My parents or primary care givers have friends from other cultures.						
12) At home, few of my neighbours are from other cultures.						
13) I sometimes feel that I don't fit in well with people from my home country.						

14) What is your first language?

- English (1)
- English and one or more other languages learned from childhood (2)
- Non-English (3) - If non-English, how confident are you having conversations with individuals whose first language is English?
 - Very confident (4)
 - Confident (3)
 - Somewhat confident (2)
 - Not so confident (1)
 - Not confident at all (0)
 - Not sure (10)

15) Other than your first language, how many languages have you studied? _____

16) Other than your first language, how many languages can you **speak** fluently? _____

17) Other than your first language, how many languages can you **read** fluently? _____

18) Would you identify yourself as lesbian, gay, bisexual, transgender, pansexual or other?

- Yes (1)
- No (2)
- Do not wish to answer (10)

If you have any additional comments regarding this study or the IDI, please write them below.

Thank you for your participation.

Appendix C: Intercultural Experiences Questionnaire

Intercultural development is a phrase which means different things to different people. Broadly, individuals who have a high level of intercultural development have the ability to effectively interact with those who are culturally different from themselves. Universities are increasingly interested in the intercultural development of students. However, there is limited research in this area. This study attempts to learn more about students' intercultural development.

In this questionnaire, you are asked, please, to report on culture related experiences and the intercultural interactions that you have had during your time as a university student. While cultural groups can be defined by national, ethnic, religious and social class boundaries (among others), for this questionnaire, intercultural experiences and interactions refer only to experiences you have with those from countries other than your own. These can occur during formal situations such as small group work in tutorials as well as informal activities such as eating out or shopping.

Intercultural interactions: Questions 1 through 6 are related to your intercultural interactions. For each question, circle the letter that most closely reflects your answer.					
1. About how many times during a typical week do you have intercultural interactions?					
a. None (<i>skip to 7</i>) ^(a) b. 1 to 3 ^(a) c. 4 to 6 ^(a) d. 7 to 10 ^(a) e. 11 to 14 ^(a) f. 15+ ^(a)					
2. Recall a typical interaction. For this interaction, about how many minutes did it last?					
a. Less than 1 ^(a) b. Less than 5 ^(a) c. 5 to 15 ^(a) d. 16 to 30 ^(a) e. 31 to 60 ^(a) f. 61 to 90 ^(a) g. 91 to 120 ^(a) h. More than 120 ^(a)					
3. Where did the interaction occur?					
a. before, during, or after a lecture or tutorial ^(a) b. accommodation ^(a) c. library / common area ^(a) d. pub or restaurant ^(a) e. retail shop ^(a) f. elsewhere (<i>please specify</i>) _____ ^(a)					
4. How would you describe your relationship with the person that you had the interaction with?					
a. stranger ^(a) b. acquaintance ^(a) c. casual friend ^(a) d. good friend ^(a) e. very good friend ^(a) f. boy or girl friend ^(a) g. family member ^(a) h. other ^(a)					
5. Was the person a...					
a. psychology student ^(a) b. student on another course ^(a) c. psychology staff member ^(a) d. other university staff member ^(a) e. person from outside the university ^(a) f. other/unknown ^(a)					
6. How often do you typically interact with this person?					
a. this was the first/only time ^(a) b. less than once per week ^(a) c. 1-3 times per week ^(a) d. 4-7 times per week ^(a) e. > 7 times per week ^(a)					
For questions 7 and 8, please place an 'x' in the box that mostly closely reflects your experiences.					
7. When you have intercultural interactions, in general to what extent do you experience the interactions as...					
	Very Frequently ^(a)	Frequently ^(a)	In between ^(a)	Infrequently ^(a)	Very Infrequently ^(a)
Pleasant					
Cooperative					
Superficial					
Forced					

8. During your interactions, in general to what extent have you experienced the following?					
	Very Frequently (4)	Frequently (3)	In between (2)	Infrequently (1)	Very Infrequently (0)
Confidence					
Irritation					
Awkwardness					
Impatience					
Frustration					
Stress					
Happiness					
Self-consciousness					
Defensiveness					

9. **Please describe the most significant intercultural interaction or experience that you have had while at university.** A significant interaction or experience is one that is important to you (e.g. made you think, surprised you, you particularly enjoyed it or found it difficult). Experiences might relate to cultural misunderstandings, value differences, working in a mixed cultural group, living or socialising with someone from another country, etc.

10. **What did you learn from the experience described above?** If you think you have not learned anything in particular, please explain why.

11. **How do you think the person/people that you interacted with during this experience view your ability to interact with people from different countries?**

Departmental experiences: Questions 12 through 22 are related to your experience within the Psychology Department. For each question, please place an 'x' in the box that mostly closely reflects your experience.

	Strongly Agree (4)	Agree (3)	Neither Agree nor Disagree (2)	Disagree (1)	Strongly Disagree (0)
12. During lectures or tutorials, I rarely work in small groups comprised of students from other countries.					
13. During lectures or tutorials, session leaders intentionally put students in groups made up of individuals from different countries.					
14. I have a lot of contact with psychology students from other countries as part of my course.					
15. When interacting with students from countries other than my own in the department, there are sometimes challenges resulting from cultural or language differences that lecturers or departmental staff do not notice or address.					
16. I have noticed psychology staff members displaying sensitivity towards the needs of students from different countries by, for example, explaining concepts in simple terms or asking students about how concepts apply in their own countries.					
17. Generally, recognition of national diversity can be seen within the department through, for example, the acknowledgment of national events or concerns (e.g. Chinese New Year, Japan's 2011 earthquake).					
18. The curriculum (e.g. readings, course work) includes material that helps me to learn about psychology research and practice outside of Western English speaking countries such as the UK and US.					
19. Departmental staff members encourage students to be involved in activities that help us to learn about intercultural development.					
20. Departmental staff members encourage students to broaden their cultural experiences by, for instance, studying abroad or getting involved in international exchange programmes.					
21. I think that intercultural learning is an important part of my course.					
22. I have become good friends* with one or more psychology students from countries other than my own. *Good friends are those with whom you socialise with regularly and with whom you can say what you really think.					

Campus experiences: Questions 23 through 31 are related to your experience on campus but outside of the Psychology Department. For each question, please place an 'x' in the box that mostly closely reflects your experience.					
	Strongly Agree (4)	Agree (3)	Neither Agree nor Disagree (2)	Disagree (1)	Strongly Disagree (0)
23. Around the campus, I have a lot of contact with students from countries other than my own.					
24. When interacting with students from countries other than my own, there are sometimes challenges resulting from cultural or language differences that I am not sure how to handle.					
25. I have noticed university staff members displaying sensitivity towards students from different countries by, for example, explaining things in simpler terms or patiently addressing misunderstandings.					
26. Generally, recognition of national diversity can be seen across the campus through, for example, the acknowledgment of national events or concerns (e.g. Chinese New Year, Japan's 2011 earthquake).					
27. University staff members encourage students to be involved in activities on campus that help us to learn about intercultural development.					
28. University staff members encourage students to broaden their cultural experiences by, for instance, studying abroad or getting involved in international exchange programmes.					
29. I think that intercultural learning is an important part of my university experience in general.					
30. I have become good friends* with one or more students on other courses who from other countries. <i>*Good friends are those with whom you socialise with regularly and with whom you can say what you really think.</i>					
31. I have been active in societies, activities or sports since I have been at the University of York.					
32. Please list the societies, activities or sports that you have been most active in since starting your studies at York (e.g., PsychSoc, International Students' Association, Culture Society, Lithuanian Society, College Committee, Netball, UYSU LGBT, etc.) If none, please specify none.					
33. Students from countries other than my own country live in my house or flat. a. Yes (1) b. No (0)					
34. Please circle the college or location in which you have lived for most of your time at university. Alcuin (1) Derwent (2) Goodricke (3) Halifax (4) James (5) Langwith (6) Vanburgh (7) Wenworth (8) live off campus (9)					

Other experiences: Questions 35 through 41 are related to your experiences primarily off-campus. For each question, please circle the letter that most closely reflects your answer.

35. How often do you participate in organised activities (e.g. student trips) or informal gatherings (e.g., shopping, going to the cinema) with other people during which you go off campus to York or other areas?

- a. Never ⁽⁰⁾ b. Rarely ⁽¹⁾ c. Sometimes ⁽²⁾ d. Often ⁽³⁾ e. Regularly ⁽⁴⁾

36. Do these activities or gatherings involve individuals from other countries?

- a. Never ⁽⁰⁾ b. Rarely ⁽¹⁾ c. Sometimes ⁽²⁾ d. Often ⁽³⁾ e. Regularly ⁽⁴⁾

37. How often do you participate in volunteer work off campus?

- a. Never ⁽⁰⁾ *(skip to 39)* ⁽⁰⁾ b. Rarely ⁽¹⁾ c. Sometimes ⁽²⁾ d. Often ⁽³⁾ e. Regularly ⁽⁴⁾

38. Does your volunteer work involve people from other countries?

- a. Never ⁽⁰⁾ b. Rarely ⁽¹⁾ c. Sometimes ⁽²⁾ d. Often ⁽³⁾ e. Regularly ⁽⁴⁾

39. Are you in a job (paid employment) during term time?

- a. Yes ⁽⁰⁾ b. No ⁽¹⁾ *(skip to 42)* ⁽⁰⁾

40. Is your job:

- a. On campus ⁽⁰⁾ b. Off campus ⁽¹⁾ c. Both ⁽²⁾ d. Other ⁽³⁾

41. How often does your job bring you into contact with people from different countries?

- a. Never ⁽⁰⁾ b. Rarely ⁽¹⁾ c. Sometimes ⁽²⁾ d. Often ⁽³⁾ e. Regularly ⁽⁴⁾

42. Are you interested in being interviewed during the final phase of this study? Note that interviewees will receive a £20 gift voucher.

- a. Yes ⁽⁰⁾ b. No ⁽⁰⁾ c. Maybe ⁽⁰⁾

Optional comments: Use this space if you would like to comment on any of your answers to the questions in this questionnaire.

Thank you for your participation.

Appendix D: Interview protocol

Introductions: Thank you for agreeing to be interviewed.

Study Description: You might remember from the sessions earlier this year, that my research involves exploring the intercultural development of psychology students.

Interview structure, confidentiality, and ethics

- The interview will take about an hour.
- Already you've completed two sets of questionnaires related to your intercultural background and experiences.
- Today, I'll be asking you some additional questions to get a little more detailed information.
- Some of the questions I will ask are related to some that were on the questionnaires that you completed. The purpose in asking them is to get more in-depth information and get you to describe your experiences, thoughts, and feelings in your own words.
- Some questions I will ask will be new but are still related to your intercultural experiences.
- There are no right or wrong answers or viewpoints and I do hope you will be candid.
- As I mentioned already, I am planning to record the interview. Is that okay with you?
- You already completed a consent form regarding the study but I'll just remind you that your name will not be associated with any of your data.
- Do you need anything before we get started?

Interview Questions

- 1) **Terminology:** I am going to ask you about a few concepts or terms that I have already mentioned. Just tell me as best you can, what each term means to you.
 - a. When you hear the word "culture", what comes to mind? How would you define it?
 - b. How would you describe your cultural background?
 - c. Had you ever heard about or seen the term intercultural competence or related terms aside from its use in this study? If so, where, when?
 - d. What does intercultural competence mean to you?
 - e. Some people think that it is important to develop intercultural competence and others don't. Is developing intercultural skills or competencies important for you? Why or why not?
- 2) **Background:** I'd like to talk a little about your experiences before coming to study at university (family, neighbourhood, school, travel, living abroad, applying to university).
 - a. **Family:** Can you tell me a little about your family and how cultural difference was perceived in your family?
 - b. **Neighbourhood:** Growing up in your neighbourhood, what kinds of experiences did you have with people who were different from you (e.g., nationality, ethnicity, religion)?
 - c. **School:** How about your school, how diverse was your school? What kinds of experiences did you have with people who were different from you (e.g., nationality, ethnicity, religion)?
 - d. **Time Abroad:** You noted on the questionnaire that you spent X time abroad / travelling abroad. Can you tell me a little more about that? What kinds of experiences did you have with people who were different from you (e.g., nationality, ethnicity, religion)?
 - e. **Overall Impact:** How do you think your experiences prior to coming to university might have impacted your approach to responding to or relating to students from different cultures (e.g. stereotypes, being open or closed to cultural difference)?

- f. **Prior Plans:** When you were thinking about applying to universities, were you looking for a university that would provide a lot of cultural diversity? Why or why not?
- 3) **University:** Reflect for a minute on your first year at university, getting settled in accommodation, Freshers' week, etc.,
- What kind of messages did the university send about the international or intercultural character of the university?
 - Do you feel that the university promotes intercultural learning? If not, why? If so, how do you know?
 - Are there other things that you think the university should do to promote intercultural learning? If so, what?
- 4) **Accommodation:** From the questionnaire you completed earlier in the term, it looks as if you have / have not been living with flatmates from other countries.
- Have been:
 - How has it been living with students from other countries?
 - What have you learned from living with students from other countries?
 - Have not been:
 - To what extent do you think this may have diminished your intercultural experiences?
- 5) **Department:** What part of your psychology course thus far has led to discussions or debates about issues related to cultural difference?
- Which modules, activities, or topics?
 - Were there any particular negative or positive experiences that stood out for you? If so, can you describe them?
 - Do you think that it is important to incorporate intercultural topics into the psychology curriculum? If so, what topics do you think should be included?
 - Can you tell me a little about working in mixed cultural groups in the department? What are the high and low points (if applicable)?
- 6) **Student Societies:** Another question asked what activities you have mostly been involved in *(If they did not record activities then ask: On the questionnaire you completed earlier in the term, you did not mention being involved in any activities, is that right? Were there other off campus activities that you have been involved in....)*
- Which of these activities, if any, provided opportunities to interact with individuals from other countries? Can you tell me about those interactions? Were they positive or negative?
 - Since starting your course, have you attended any ethnic or cultural student events? Why or why not?
- 7) **Outside Activities:** Another series of questions asked about your experiences off campus. You indicated that you did/did not work/volunteer/participate in other activities off of the campus. To what extent do your experiences off campus lead you to come into contact with individuals from different countries?
- 8) **Home / International:** Do you see a distinction between home and international students on campus (e.g., cultural openness / awareness, prejudice, stereotype)? If so, please describe.
- 9) **Interactions:** In another question about your intercultural interactions in general, you noted that you do/do not have very many intercultural interactions.
- Why do you think that is?
 - Some students report feeling a lot of positive or sometimes negative or ambivalent feelings about interacting with people from different cultures. For example: pleasant, cooperative, superficial, forced.) You reported positive/negative/mixed feelings on your questionnaire. Can you tell me a bit more about that? In general, how do you find interacting with individuals from other countries? What do you see as the high and low points?
- 10) **Friendships:** From the questionnaire you completed in May, you noted that you had / did not have friends from other countries.
- Why do you think that is? How do you go about choosing friends?
 - Tell me about your closest friend. How is the person similar or different from you?

- c. What have you learned from the relationship?
 - d. Tell me about your next closest friend. How is that person similar or different from you?
 - e. What have you learned from the relationship?
- 11) **Significant interaction / experience:** In the questionnaire, you mentioned your most significant intercultural interaction or experience that you have had while at university as being...
- a. *Ask for elaboration if necessary*
 - b. *Ask to clarify what they learned if necessary?*
- 12) **Change:** Thinking back on your first three terms at university thus far...
- a. When it comes to interacting with or relating to people who are from different countries, how have you changed?
 - b. If you have changed, what do you think contributed most to this change?
- 13) **IDI:** Moving away from your intercultural experiences, I would like to ask you about the Intercultural Development Inventory which is the questionnaire that you completed twice in the last year. The IDI is thought to be an indicator of intercultural sensitivity. Do you remember if you had difficulty answering any of the questions? If you'd like you can look over the questionnaire. Specifically, are there questions that you did not understand, did not make sense, or questions that would perhaps not be asked in such a way in the UK/your country?

That concludes the main questions. Is there anything that we did not discuss that you would like to add?

Those are all the questions I have. Do you have any questions you would like to ask me?

That's all very helpful. Thank you.

Payment.

If I need to contact you to clarify anything, can I email you?

Appendix E: Sample interview request email

Dear Leila

You might remember that you completed two sets of intercultural questionnaires as part of my study looking at the intercultural development of students. As you indicated on your last questionnaire that you might be willing to participate in an interview, I would like to invite you to a one on one in person interview. The interview would take place in the psychology department and last about 1 to 1.5 hours during which we would talk about topics related to your intercultural experiences. At the end of the interview, you would receive £20. Of course, your interview transcript would be kept completely confidential and your anonymity would be guaranteed.

Please let me know if any of the dates or times below will work for you. If not, please suggest some alternatives. In the event that you are NOT interested in being interviewed, please let me know AS SOON AS POSSIBLE so that I can invite someone else.

Many thanks,
Caprice

Caprice Lantz
PhD Researcher, Education Department, University of York

INTERVIEW SCHEDULE

Wed.30 May 08:30-10:00
Wed.30 May 10:30-12:00
Wed.30 May 12:30-14:00

Thur.31 May 14:30-16:00
Thur.31 May 16:30-18:00
Thur.31 May 18:30-20:00

Mon.4 June 08:30-10:00
Mon.4 June 10:30-12:00
Mon.4 June 12:30-14:00

Tue.5 June 10:30-12:00
Tue.5 June 12:30-14:00

Wed.6 June 16:30-18:00

Appendix F: Participant bios

Anna – UK dual nationality (88 Minimisation / 88 Minimisation)

Anna has dual nationality as her mother is from South America and her father is English. She has always lived in major capital cities in highly diverse areas and spent nearly half of her life living in each country. She described her father as not adjusting well to living in South America, never learning the language and holding negative views of people due to their different ways of interacting. She described her mother as adapting well to living in the UK and to cultural differences although she described her as still very much South American in her attitudes. She described herself as open to different cultures although attributes this to having to move a lot and to adjust rather than to her parents. Anna learned English and another language from childhood. She can speak three languages fluently.

When asked how her background prepared her for meeting people from different cultures at university. She noted that she found the campus predominantly white middle class British and was surprised that there was not more diversity. She went on to highlight the difficulty she has had in forming friendships.

I am one of those people who jump into friendships. And actually a couple like of times it has been really hard for me because it has been really weird because people just kind of wave it off. I have found it really, really weird that what I thought was friendships, what I considered as friendships just kind of like 'oh I don't have the time' 'oh I can't be bothered' and I find it really selfish, I'm really not used to it. Like, yeah it's just people, I would say, there's a lot of people just seeing friendships as acquaintances more for convenience. And small talk and...something more shallow ...

Anna indicated that she has more than 15 intercultural interactions every week. Both of her closest friends are from different countries although they are both located in South America.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it she wrote, "Many of my closest friends are from different cultures. People are just people."

Candace – UK (110 Minimisation / 91 Minimisation)

Candace grew up in a village that she described as small and quiet and without a lot of diversity. She described herself as quite racist up until she was about 13 when she became friends with an Indian girl who was labelled ‘the curry pot queen’ and was bullied by classmates. She described this as a turning point for her. She later became close friends with two boys who were both Sikh. She described her parents and the rest of her family as quite racist and felt the need to keep her culturally diverse friends away from them. She travelled to eight different countries in the last five years and described getting to know a local man in Turkey and gaining some insight into the culture which she felt contrasted to most holidays during which she did not get to know anyone from the local culture. She also mentioned working in a care home with a lot of people from Africa and noted that this experience also helped her to become more open to people from other cultures. She described the British culture as “a little bit narrow-minded...”

Candace felt that her background prepared her well for meeting people from other cultures. She attributes this to developing close friends and working with people from other cultures which led her to discard the racist attitudes she had originally adopted from her family.

Candace reports having seven to 10 intercultural interactions per week. Candace noted that her interactions were typically positive. Her closest friends are also British although she agreed that she has good friends from other countries at university.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it she wrote:

In a tutorial; two Chinese classmates began speaking together in their native language. I found this very uncomfortable because I had no idea if the conversation was about work or people in the room. [I learned] just to be a bit more relaxed if it ever occurs again - there is nothing to be done.

Corinne – Non-UK (86 Minimisation / 77 Defence)

Corrine is from China where she described growing up in a traditional Chinese culture. There was not a lot of diversity in her school, neighbourhood, or city and neither she nor her parents had friends from other cultures. However, she described her parents as more open than typical Chinese parents as they were interested in Western culture and had always encouraged study abroad. She completed A-levels in the UK prior to coming to university. She speaks and reads English fairly fluently. She noted feeling as if she fits in well with those from her own culture although she also noted that of the Chinese people she knows on campus, she is more interested in and integrated into British culture and sees herself as sometimes serving as a cultural bridge. She felt as if her previous two years in the UK prepared her well for encountering diversity at university.

Corrine indicated that she has more than 15 or more intercultural interactions every week. The feelings she reported during her interactions were mixed. While she often finds them positive experiences, she also noted that frequently she feels stressed and self-conscious, sometimes irritated, awkward, frustrated, and defensive and that interactions can sometimes be superficial. Both of her closest friends are from different although Asian countries.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it, she wrote:

It was a talk between my housemate and me. He is always surprised by the way that I'm cooking, so he asked me few questions about the reason why I cooked in a different way as his. The differences between cultures made me think, and honestly I found it difficult to explain when the person you were interacting with said something rude. [I learned from this to] Respect each others' culture and sometimes do keep the curiosity in mind.

Faline – Non-UK (83 Defence / 69 Denial)

Faline from a Southeast Asian country where she grew up in a small village in a very mono-cultural area surrounded by her relatives. Although she attended a school taught in English, her classmates in secondary school in particular were all from her home country except one who was from China. She noted that her parents were in the media industry and travelled around Southeast Asia and her father has a Masters

from the UK. They would sometimes host people from different countries. She mentioned visiting a few other Asian countries and once went on an exchange to Japan. She undertook UK A-levels prior to coming to university. She said this was a good experience but that, “sometimes I’m afraid that people don’t understand my culture. Like for example when I’m here, I think it is quite hard being a Muslim and living in a Western country.” She learned English and her own language from early childhood and speaks English fluently.

When asked her how her background prepared her for meeting people from different cultures at university, she highlighted her study of English as an important factor and noted, “my parents always taught me to tolerate others’ and ‘seeing my parents inviting people from different countries to our home sort of makes me more comfortable approaching people...”

Faline indicated having 1 to 3 intercultural in interactions per week. She indicated that her interactions are generally positive although sometimes she feels self-conscious and defensive. Two of her closet friends are British. Two others are from Islamic countries and she is moving in with them next year.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it she wrote:

The drinking culture in Britain taught me a lot about relationship and friendship among people here. Although not directly involved in these activities, I witness pre or after moments of those drinking activities...They bring a lot of negative impacts on people and waste a lot of students' time and money. It makes me appreciate my cultural beliefs and values more.

Francesca – UK (108 Minimisation / 121 Acceptance)

Francesca grew up on the outskirts of a large city in the Midlands that she said was rather diverse. She described her neighbourhood and school as middle class and not as diverse as some parts of the city although quite diverse compared to others. She mentioned having friends from a variety of different cultures as did her mother in particular. Francesca travelled visits Turkey every year with her family and that

they became friends with a Turkish family and they typically spent time with them while in Turkey.

When asked how her background prepared her for meeting people from different cultures at university, she highlighted in particular her experiences in Turkey noting:

you kind of realise that if someone is from a different country they may just think that they can say stuff whereas we would probably hold back and not say it. And you kind of realise that it's not rude it's just them behaving like they would so I guess that helped...

Francesca indicated that she has more than 15 intercultural interactions every week or more. She reported that typically interactions are positive. One of her closest university friends is from a European country and the other is from the UK.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it she wrote:

A particular friendship I made with a German student living with us who became one of my closet friends at university. I learned that cultural boundaries don't prevent friendships, it normally cinches them.

Francesca's initial score well over one standard deviation above the mean and this increased by thirteen points making her one of only eight students in the study to reach the *acceptance* stage.

Geneva – Non-UK (88 Minimisation / 88 Minimisation)

Geneva is from a former Soviet Republic state where she grew up in an area that had quite a few people from Russia and Poland. She mentioned that there were segregated schools and language barriers but did not describe these as problematic. She never lived outside her home country although visited Poland several times with her mother whose work sometimes took her abroad. She indicated that she had some friends from other cultures as did her mother who was friendly with a Chinese family. Although she said that her parents “don't really know much about other cultures...So I would say that I educate them more than they do me.” She speaks English fairly fluently.

When asked how her background prepared her for meeting people from different cultures she said, “Well, I live in a house with six other people and they are all English but one and it was pretty hard at first to fit in but the other girl who is Indian helped me a lot because she knew what it’s like to come to another country that is very different from yours.”

Geneva indicated that she has more than 15 intercultural interactions every week. She reports that interactions are at times pleasant and cooperative but are very frequently superficial and forced and that at times she feels awkward, irritated, frustrated, stressed, self-consciousness and defensive. Both of her closest friends are from countries other than her own (India and the UK).

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it, she wrote:

I remember my house-mate who is English asking me questions like ‘Do you have your own TV programmes?’ or ‘Do you celebrate Easter in your country?’ which were offensive and ignorant. I learned that some people are very closed-minded and have little interest or awareness of other countries and cultures which are not their own.

Hilary – Non-UK (109 Minimisation / 121 Acceptance)

Hilary was born in an Asian Pacific country and then moved to another Asian country when she was about eight. She lived there for about eight years, and attended a large international school that she described as somewhat diverse (drawing many students from dual nationalities), open, and Westernised. When she moved back to her home country, she also attended an international school although it was smaller and not very diverse.

Hilary described her neighbourhood when she lived abroad as being diverse but not where she lived in her home country. She had friends from other cultures, particularly when she was living abroad. Hilary said that her parents lived in the US before she was born and while they encouraged her to learn English and study outside of their home country, she believed them to be somewhat uncomfortable around Westerners. She noted, “I noticed that Western culture people are more casual in interacting...and they [my parents] find it sort of like offensive...I guess the

level of politeness is different and sometimes they don't really understand that." She can speak three languages fluently.

When asked how her background prepared her for meeting people from different cultures at university, she said "I got used to being around people from different cultures so I wasn't like uncomfortable or anything. But I've never had so many people say 'oh are you Chinese'. That was kind of shocking I guess."

Hilary reports having four to six intercultural interactions per week and she generally finds them to be very positive. Hilary noted that she has good friends from other cultures with one of her closest friends from her country and the other from another country.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from this she wrote:

I interact with people from different cultures on daily basis but nothing really struck me as significant. I do enjoy talking to them I do learn the differences in the way people approach things...religion, holidays, etc.

Hilary's initial score was nearly two standard deviations above the mean and increased by 12 points taking making her one of only eight students to score in the *acceptance* stage.

Jade – UK (107 Minimisation/ 121 Acceptance)

Jade described her mother as white British, very open and having many friends from other cultures. Her step father was from the Middle East. She described her biological father as having 'old fashioned views' and said that he would not be friends with black people. She spent her early years in a school that was 50% non-White and lived in a very diverse neighbourhood in a large city in the Midlands where she had many friends and neighbours from different countries. Her family then moved to a city in the north of England that Jade described as follows:

It was probably one of the least multicultural places I have ever been in...I didn't enjoy having people around me that were so closed minded about everything when I'd been brought up to be really open minded about everything...I remember a girl standing up in an English lesson ... and said well all Muslims are terrorists so I hate them all and that was a

massive shock to me because I knew some people weren't as open minded but I didn't realise that they were actually just downright quite racist.

When asked how her background prepared her for meeting people from different cultures at university, she highlighted the time she spent immersed in the Middle East while visiting her step-father's family as being important.

Jade indicated having 15+ intercultural interactions per week. She reported generally positive feelings about her interactions only noting that at times they could be awkward. One of her closest friends on campus is from an EU country and the other is from the UK.

When asked to describe her most significant intercultural interaction or experience during university she wrote:

I haven't had any significant intercultural experiences that I can remember. I assume this is because I view intercultural experiences in the same way as interactions with people from the same country as my own.

Jade initially scored towards the top of the *minimisation* stage well over one standard deviation above the mean. Her score increased to by 13 points placing her in the *acceptance* stage and more than two standard deviations above the mean. She was one of only eight participants to score in the *acceptance* stage.

Jill – UK (111 Minimisation – 118 Acceptance)

Jill described herself as coming from a traditional British family. There was diversity in her city near where she lived but she reported that she grew up in a small rural village that was not diverse and her school similarly lacked diversity.

Although she noted that she mainly spent time with people from her own culture, she had a friend whose father was from Iran which she felt gave her insight into the Iranian culture. Jill's father has a university friend from India who still lives in the UK and the family visits him and his family often. She described her parents as open to different cultures although felt her mother was more open as she works with deprived children and knows a lot about other cultures. While she has never lived outside the UK she has been on exchanges to France and Hungary. She noted staying with Spanish friends in Spain.

When asked how her background prepared her for meeting people from different cultures at university, she said she believed that travelling made her more interested in other countries and open minded in that if “I’d just come to university straight away and had never left my little village then it would have been quite a big difference having people from like a range of backgrounds.”

Jill reported that she has four to six intercultural interactions per week and described them very positively. One of her closest friends is from the UK and the other is from Germany although she noted that she has good friends from other cultures at university.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it she wrote:

Talking to a friend from Singapore about their experience when conscripted into the police force. I didn't realise how brutal and small you can be made to feel and the harsh reality that you are forced to live away from your family and have no contact with them...I often don't realise how different their lives have been.

Jill’s initial score was nearing two standard deviations above the mean and increased by seven points making her one of only eight students to reach the *acceptance* stage.

Kendra – UK (73 Defence / 77 Defence)

Kendra is a year older than most of the students interviewed as she completed a year on another course before switching to psychology. She described herself as being ‘very white British’ growing up in a very small village in the south of England that had little diversity and was an insular culture. The largest city was about 45 minutes away. Kendra spent part of a summer on a holiday in Kenya engaging in volunteer work. She described the experience as strengthening her interest in and “appreciation of the colour and beauty of different places.” She also visited Greece on a family holiday but described it as a touristy holiday. Neither she nor her parents had friends from other cultures as she was growing up although she described her parents as open because they would have her watch television programmes and read literature about diverse places and people.

When asked how her background prepared her for meeting people from different cultures at university, she said “I think the way that I’ve seen it is that they are just other people. There has been no sense to me of these people are different because they are from China or Singapore or Latvia.”

Kendra has between one and three interactions per week. She noted that interactions tend to be positive although she frequently finds them awkward and sometimes feels self-conscious. Both of her close friends are from the UK and she seems to mainly to be friendly with non-UK students through her book group.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it, she wrote: “Spending time with a girl from Poland socially. Didn’t learn anything in particular because I know her fairly well although she is very anti-British which can be difficult to deal with.”

Leila – UK (51 Denial / 53 Denial)

Leila described herself as coming from a white British family and growing up in a small city which that had little diversity. She described her parents’ attitudes towards cultural difference as not having racist views but noting that they joke about those from other cultures. She described her holidays abroad as all inclusive family holidays or involving caravanning and seeing sites. Her major experience with diversity seemed to be getting to know an exchange student who she later visited in Germany. Of her visit she noted the following:

I went to this crazy culture festival thing and everyone was wearing masks and it was kind of scary... A lot of children in cages were being carried through the streets... I don’t know what it was about. She gave me a book about it but I don’t know. It was very strange.

Neither Leila nor her parents had friends from other cultures. When asked how her background prepared her for meeting people from different cultures at university, she noted:

I suppose my German friend influenced me. But I was thinking like oh there is going to be a lot of, I don’t mean to be stereotypical, but a lot of Chinese

people and there's going to be a lot of other people and like how would I get on with them?

Leila's contact with those from other cultures seemed to be limited. She had no good friends from other countries and had just one to three intercultural interactions per week which she found to be frequently pleasant and cooperative and very frequently forced, awkward, stressful and frustrating. She reported that her closest friends on campus were from the UK.

She described her most significant experience during university as follows:

During group work I worked with an international student, she was very abrupt and didn't want to change her ideas. The group of non-international students found this uncomfortable. [I learned] that some people have strong opinions and find it hard to accommodate to others views.

Leila's IDI scores were more than three standard deviations below the mean and were the lowest scores of any student putting her in very early *denial*.

Matilda – Non-UK (77 Defence / 70 Denial)

Matilda is a few years older than most of the students as she studied for three years at a university at home, a Baltic country in Northern Europe. She grew up in a large city that she described as made up of people from her country and Russia. She believed there to be a lot of segregation and described her neighbourhood and school as being made up of people from her own culture. She noted that at home she did not have friends from other cultures although her parents had a friend from a neighbouring country. She visited Poland for two months while staying with a friend that she met through an international conference. Of the experience, she remembered, "there were homeless people who heard me speaking in English and frankly they insulted me and thought that I was American." She noted having online friends from other countries through her activities in online gaming and commented, "I have heard things about Singapore that is mostly confirming the well-known fact that they are very competitive." She described her parents as being interested in other cultures but as not knowing much about them.

When asked how her background prepared her for meeting people from different cultures at university, she noted:

I think I was well prepared. I had had some contact with people from other countries and I've heard bits of news from other countries and learned about different cultures in school so I kind of know that there is a whole world out there and that there would be different people.

Matilda noted having 15+ intercultural interactions per week. She finds her interactions positive but also feels frequently self-conscious and sometimes finds interactions awkward and superficial. Her two closest friends are from countries other than her own (UK and Lithuania).

When asked to describe and talk about what she learned from her most significant intercultural interaction or experience during university, she wrote “Dougso events. Learned just how little I understand British humour.”

Miranda – Non-UK (104 Minimisation / 114 Minimisation)

Although both of her parents are from a Western European country, her mother was born and raised in England. Miranda was also born in England and has relatives in England but moved to her home country as a small child. Because of this Miranda describes her upbringing as mixed although mostly Western European. She feels that this background helps her to understand both cultures. “Like if something, for example, is funny for me it won't be funny for someone else because it is a totally different way of thinking.”

Miranda grew up in a very large city. She spent her early years in a local school and then attended an international school. She noted that the school mostly had students from her own country or students who had English heritage so it was not that diverse and neither was her neighbourhood. She described her parents as open minded but noted that there might be some suspicion of local minorities. She is fluent in English.

When asked how her background prepared her for meeting people from different cultures at university, she mentioned that her older cousin told her about university life but she did not mention culture specifically.

Miranda reported that she has 15 + intercultural interactions per week. She finds her interactions to be generally positive. Of her two closest friends, one is from her home country and the other is from an Asian country.

When asked to describe her most significant intercultural experience and what she learned from this she wrote:

There is no specific intercultural interaction that is very important to me, because all of them are important. I enjoy all of them and get experience from all of the intercultural interactions equally. All intercultural interactions are important and through them I learn how people from different cultures behave and what they think about different situations and how they respond to them.

Miranda's initial score was more than one standard deviation higher than the mean and this increased by nearly ten points which placed her less than one point away from *acceptance*.

Patrick – UK (85 Minimisation / 71 Defence)

Patrick is from a white British family in Northern England. Patrick indicated that his parents didn't really have friends from other cultures although thought they are fine with people from other cultures. He mentioned his Mom bringing home Indian food from an Indian colleague and that they were friendly with a family who had some Italian heritage.

Patrick grew up in a large city. His neighbourhood was not diverse although was close to other neighbourhoods that he said were segregated by culture. He attended a Catholic fee paying school that also was not diverse and he didn't really have friends from other cultures. Commenting on the mono-culturalism of his school he said:

strangely, it seems to me that ... the fact that we didn't go to one [a diverse school] made, like cause people who went to these one's that did have massive cultural diversity tended to like have worse views on like the other cultures around them... like fights used to break out all the time, by what we heard. But in our school we never really had any issues.

When asked how his background prepared him for meeting people from different cultures he noted, "I find the Chinese culture is a little bit harder because we are like literally worlds apart..."

Patrick reported having 1 to 3 intercultural interactions per week which he found to be sometimes pleasant and cooperative but also superficial and forced. His two closest friends at university are from the UK and he said he does not have any good friends from other cultures at university.

When asked to describe his most significant experience and what he learned from it he wrote:

My flatmate is from a different culture and I first met her in the kitchen. She was very nice and introduced herself. I've not learnt much due to the fact that we are all human and I took away just as much as I would with a conversation with someone from my own culture.

Renata – UK (77 Defence / 81 Defence)

Renata is from a white British family and grew up on the outskirts of a city in Northern England that was not diverse. She attended a Catholic School some miles away in smaller town with even less diversity. She described herself as having been shielded from cultural difference because of her living and school situations. She noted that cultural difference was not really discussed in her family although her parents did encourage her to go abroad which made her think that they were not prejudiced. She went on a school trip to volunteer in Africa which she found to be a big culture shock suggesting that the children she worked with could be:

pushy...oh like not in a bad way pushy but just really involved I guess. Also like one of the things like a lot of them, you can't blame them for it really but like a lot of them asked me to send them money and stuff and send them gifts ...I don't know it was a bit upsetting that that is how they seem to see it.

When asked how her background prepared her for meeting people from different cultures she said:

Well I kind of had the view before I came that like people from other cultures, particularly like people from Eastern cultures were more kind of reserved ... so part of me was thinking okay then would I want to go there, not because I have anything against them but just I had the impression that people wouldn't be as socialable and willing to like make ... I felt like that would kind of be a cultural barrier especially if like there was a lot of foreign students and me as an outsider like if they had a little group.

Renata indicated having 11 to 14 intercultural interactions every week. Of all the students interviewed for the study, she was the most negative about her experiences around her interactions finding them sometimes superficial and

frequently forced. She noted frequently feeling irritation, awkwardness, impatience, frustration, and stress. Her two closest friends are from the UK although she noted that she had some friends from other cultures on campus.

When asked to describe her significant experience she wrote, “I live with a lot of international students and often find it hard to communicate with them over living issues. [I learned that I] need to make a lot of effort in order for conversations to start.”

Rosy – UK (88 Minimisation / 104 Minimisation)

Rosy is from a traditional white British family. She grew up in a larger city in the North of England but the area where she lived was not that multicultural and neither was her school. She said that while she had a few friends who were Muslim they were very Westernised having been born and raised in England. She travelled to five countries in the last five years which she described as family holidays where they “didn’t really do culture, we just sunbathed.” In terms of her parents’ attitudes towards cultural difference she said, “both have to deal with the public in their jobs so they probably adapt to different people who may not be from England...probably adaptive to different cultures and like open to different people.”

When asked how her background prepared her for meeting people from different cultures at university, she said:

I think I was quite used to just being around people who grew up in the same area as me...so coming into contact with people who were from like different countries or just like different areas in England was quite different but I think at school you kind of learn about things like that and you are taught to be accepting of other people so it wasn’t a problem.

Rosy reported having four to six intercultural interactions each week. Rosy found her interactions to be frequently pleasant, sometimes cooperative, and sometimes superficial. She also reported that she frequently felt confident and happy during interactions although she also reported very frequently feeling irritated and sometimes frustrated and defensive. Both of her closest friends are from the UK although one has a parent from Africa.

When asked to describe her most significant intercultural interaction and what she learned from it she wrote “Not applicable. People conform to the English culture and way of life while living here.”

Sally – Non-UK (80 Defence / 75 Defence)

Sally is from a Southeast Asian country. When asked about her parents’ attitudes towards cultural difference, she said:

...when I say conservative, I mean it because we are Muslim so they are very close minded. Well not closed minded but yeah they are conservative...You can socialise with other cultures, that’s fine but you have to know your limits kind of thing. It’s more like you can’t, I can say this but it sounds a bit, my family would be like well don’t socialise how like the Westerners socialise.

She further described her parents as holding some prejudices with her father, for example, when he sees a bad driver saying “oh I bet it’s a Chinese.” She indicated that the family moved to China for four years with her father’s job. During that time she attended an international school and she said that this experience made her more open minded than her parents. She learned English and another language from childhood and is fluent both.

When asked how her background prepared her for meeting people from different cultures at university, she noted:

I think it helped being in an international school because I had been exposed to diversity but I was kind of sad when I came here at first because I couldn’t really relate to the English which was kind of weird because I do have English friends...I relate better with the international students here than the English even though I can understand their cultures it’s fine but I just can’t really, I just find the relationships quite superficial between the English.

Sally indicated that she has more than 15 intercultural interactions every week.

When asked about her experiences around her interactions, while she reported that they were positive at times she also indicated that they were very frequently superficial and sometimes forced. As well she indicated feeling at times awkwardness and irritation, frustration, stress, and self-consciousness. Her closest friends on campus were from France and Germany.

When asked to describe her most significant experience and what she learned from it, she wrote:

In choosing to live between two groups, one group of just girls from England except for me, and another group with more cultural diversity. I decide to choose the more diverse group. I am more comfortable in a more international environment. I would prefer to interact with people from different countries rather than just one. I am much more comfortable with internationals, being an international student myself.

Sally's initial score was one standard deviation below the mean changing little between administrations.

Sang – Non-UK (79 Defence / 83 Defence)

Sang is from a small city in China that he described as not very diverse. He did not have friends from other cultures and neither did his parents. He recalls visiting a large city once with his family and seeing some Western people. He recalled that his "brother told me that he felt strange. My parents didn't say anything." When asked about his cultural background he said that Chinese people tend to be gentle and that "we don't like Western people. When people first meet we are not very open. We need time to know each other and then we can open our mind...Like we don't talk directly. If you speak directly to not very close people it is rude behaviour." He undertook UK A-levels.

Sang reported having four to six intercultural interactions in a week. His two closest friends are from China and he does not have good friends from other countries at university.

When asked to describe his most significant intercultural experience and what he learned from it he wrote, "Hard to find the common topics to talk. Have to improve my spoken English."

While he studied English for many years, he was difficult to understand during the interview and he also had difficulty understanding some interview questions.

Serena – UK dual nationality (91 Minimisation / 68 Defence)

Serena's mother is English and her father is from a country in Western Europe. She was born in Western Europe but lived also in North Africa and Asia. She lived outside the UK virtually all of her life attending mostly international schools drawing students from a variety of backgrounds. She suggested that she is a 'third culture kid' who always has 'the outside view'. She described the third culture as celebrating "the fact that it's not just one thing it's a lot of traditions that can be combined." She described her mother as growing up in a small town where she felt she did not belong and so left as soon as she could. She feels that her father has maintained more of his heritage in terms of values. She speaks three languages fluently.

When asked how her background prepared her for meeting people from different cultures at university, she said:

I think it almost becomes frustrating ... I do have conversations with people and like England is not the only country, there is so much out there and then they still refuse to accept that. They're like 'no but England is so good' and I'm like...so I definitely try and like with my friends who are from just a few miles away from here, they'll be like 'yeah the world is big and there's lots out there but I'm really comfortable here and I like it that way' and I try to say but it's so amazing that you need to have a bit of an experience because otherwise you're cutting yourself off from the rest of the world... it's yeah like 'come on people you have to travel, you have to see the world to be able to judge, you can't just say other cultures aren't as good if you haven't been there.

Serena indicated that she has more than 15 intercultural interactions every week. She generally reported positive feelings about her interactions only noting that they can at times she can feel self-conscious. Serena reported having friends from other cultures at university. One of her closest friends is from an Asian country and the other is British.

When asked to describe her most significant experience during university and what she learned from it she wrote:

Went to an international society association event, where the theme was Africa. Felt very out of my element but pleasantly welcomed. The warm exciting stereotype of African themed parties was definitely present. But surprisingly everybody appeared shy at first. I did not interact with many people as groups ("cliques") were formed quickly. However, I was introduced to a few people and enjoyed (loved!) trying the buffet of foreign flavours they had prepared for us.

Tamara – Non-UK (100 Minimisation / 102 Minimisation)

Tamara and her parents are from a non-EU Northern European country. When she was two she moved with her parents to China until she was 13. Then she moved back to her home country and then to another Asian country and then back to her country before starting university. She described her identity as mixed when it comes to culture.

For a few years in China she went to a Chinese school. As the only white person she felt she was treated differently. She said that she mainly noticed the differences between cultures when she changed schools. She attended an international school in China and also spent time in a local school back in her home country. She learned English and another language from childhood, studied five other languages, three of which she reported to be able to speak fluently.

When asked if her international background prepared her for experiencing cultural difference at university, she agreed that it did although said “I don’t think it has to be ‘cause you do meet people in England who might never have been abroad but are still very open.”

Tamara indicated that she has more than 15 intercultural interactions every week. She reported positive feelings about her interactions only noting that they can at times be superficial. Her closest friends at university are non-UK students, one from an Islamic country and the other from an Asian country.

When asked to describe her most significant intercultural interaction or experience during university and what she learned from it she wrote the following:

I don't think I've had a particularly significant intercultural experience which shocked/surprised me, which is probably because my entire life has been one big intercultural experience. I've grown up knowing of different cultural differences because I experienced it at a young age, so I think am able to cope and understand cultural differences in a different way... I do think my cultural understanding of others still develops as I grow older and mature.

Tamara’s IDI scores were about one standard deviation above the mean with little change in score over the two administrations.

Appendix G: NVivo nodes and sub-nodes

PRIMARY	SECONDARY	TERTIARY
Background		
	A-levels	
	Cultural background	
	Choice of university	
	International school	
	Travel / study abroad	
	Neighbourhood / school	
	Parental attitudes	
Preparation	Well prepared	
	Not well prepared	
Campus	Accommodation	Positive / Negative
	Societies	
	Cultural event	
	Freshers'	
	International week	
	University do more more	
Self-rated change	Positive	
	Negative	
	No change	
	Contributions	
Department	Curriculum	Language / Social
	Tutorial group work	Positive / Negative
	Lectures	
	Department do more	
Friendships	First friend different	
	Second friend different	
ICC	Heard of it	
	Importance	
	Meaning	
IDI feedback		
Outside activities		
Significant experience	Deep, Superficial, Conflict, None	
Significant experience -learning	Positive, Negative, Neutral	
Themes	Cultural clustering	
	Admin segregation	
	Cultural conflicts	

Appendix H: Ethical guidelines

- Treat participants professionally and with respect listening to students' comments openly by maintaining a non-judgemental view of opinions they might share regarding cultural difference or other topics.
- Inform participants of study objectives and gain informed consent.
- Emphasise participants' right to withdraw from the study during each wave of data collection.
- Provide opportunities for questions during each wave of data collection and ensure that students have appropriate contact information should they wish to follow up.
- Treat all data confidentially. This includes:
 - Maintaining hard copy data in a locked file drawer.
 - Maintaining electronic files on a password protected computer.
- Assigning pseudonyms and changing any information provided during interviews that could identify students (e.g., names of friends, places where they grew up).

Appendix I: Intercultural project consent form

You are invited to participate in a research study exploring the intercultural development of undergraduate psychology students at the University of York. We ask that you read this form and ask any questions you may have before agreeing to participate in the study. The study is being conducted by: Caprice Lantz, PhD candidate, Education Department, University of York. Advisor: Professor Ian Davies.

Procedures

If you agree to participate in this study, you will be asked to complete two similar sets of questionnaires. Two will be completed today. Two will be completed in the late spring or summer of 2012. The questionnaires will include questions related to your background, your experiences around encountering individuals who are different from you and your interactions with others. The first two questionnaires include 79 questions and will take about 30 minutes to complete. The second set of questionnaires will be of similar length and content. Some students will be invited to participate in a one-to-one interview in the summer or autumn of 2012 which will take about an hour and be audio taped.

Risks and benefits of participating in the study

The study has minimal risk. The questionnaires include some questions that may be challenging as they explore beliefs, attitudes and perceptions that deal with cultural difference. Participants who choose to can attend an intercultural development workshop and receive personalised reports illustrating their individual intercultural development.

Compensation

Participants who complete both sets of surveys in their entirety have the option to be included in a £300 prize draw. Participants who are invited to participate in and complete an individual interview will be given £20.

Confidentiality

Data for this study is being processed on a secure website. It will be downloaded through an encrypted network and stored in a local file only accessible to me. Tape recordings made during interviews will only be accessible to me and will be kept in a locked drawer. The recordings will be erased once the transcription is complete.

Data published in any report will not include information that will make it possible to identify anyone individually. Research records will be stored securely and only I will have access to the records. The department and departmental lecturers will not have access to individual student data. Names and email addresses are collected only for the purposes of matching longitudinal data, following up on missing data, selecting a recipient for the prize draw and contacting individuals for interviews and will kept strictly confidential.

Voluntary nature of the study

Participation in the study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of York or your department. If you decide to participate, you may withdraw from the study at any time.

Contacts and questions

You may direct any questions or concerns you have about the study to the researcher, Caprice Lantz. You may contact me at the University of York, Education Department, York, YO10 5NH, cl536@york.ac.uk, 07747 357 557. My advisor is Professor Ian Davies, id5@york.ac.uk.

Statement of consent

“I have read the above information. If I had questions I have asked them and have received answers. I indicate my consent to participate in the study.”

Printed Name	Signature	Date
Email address (please print)		

Bibliography

- Alkhesnam, A. (2012). *Intercultural competence: Components and measurement*. Unpublished doctoral thesis, University of Surrey, Surrey.
- Allison, P. D. (1999). *Multiple regression: A primer*. Thousand Oaks, California: Pine Forge Press.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, Massachusetts: Addison Welsey.
- Anderson, P. H., Lawton, L., Rexeisen, R. J., & Hubbard, A. C. (2006). Short-term study abroad and intercultural sensitivity: A pilot study. *International Journal of Intercultural Relations*, 30(4), 457-469.
- Arevalo-Guerrero, E. (2009). *Assessing the development of learners' intercultural sensitivity and intercultural communicative competence: The intercultural spanish course*. Unpublished doctoral thesis, University of Maryland, Balimore County, Baltimore.
- Arkoudis, S., Yu, X., Baik, C., Borland, H., Chang, S., Loang, I., Lang, J., Pearce, A., & Watty, K. (2010). *Finding common ground: Enhancing interaction between domestic and international students: Guide for academics*. Retrieved from http://www.cshe.unimelb.edu.au/research/projectsites/enhancing_interact.html.
- Avruch, K. (1998). *Culture and conflict resolution*. Washington DC: United States: Institute of Peace Press.
- Ayas, H. (2006). *Assessing intercultural sensitivity of third-year medical students at the George Washington University*. Unpublished doctoral thesis, The George Washington University, Washington DC.
- Bailey, C. (2006). *Supporting international students in UK Higher Education: Key issues, and recommendations for further research*. Wolverhampton: University of Wolverhampton.
- Barrett, M. (2011). Intercultural competence. *European Wergeland Centre statement series*, (2), 23-27. Retrieved from http://www.theewc.org/content/resources/intercultural_competence/
- Baxter Magolda, M., Okechukwu, U., King, P., & Maser, C. (2004). *Learning partnerships: Theory and models of practice to educate for self-authorship*. Sterling, Virginia: Stylus Publishing.
- Bennett, J. (1993). Cultural marginality: Identity issues in intercultural training. In M. R. Paige (Ed.), *Education for intercultural experience* (pp. 109-136). Yarmouth, Maine: Intercultural Press.
- Bennett, J. (2012). The developing art of intercultural facilitation. In K. Berardo & D. K. Deardorff (Eds.), *Building intercultural competence: Innovative activities and models* (pp. 13-21). Sterling, Virginia: Stylus.
- Bennett, J. M., & Bennett, M. J. (2004). Developing intercultural sensitivity. In D. Landis, J. M. Bennett & M. J. Bennett (Eds.), *Handbook of intercultural training* (Third ed., pp. 147-165). London: Sage Publications Inc.
- Bennett, M. (2004). Becoming interculturally competent. In J. S. Wurzel (Ed.), *Toward multiculturalism: A reader in multicultural education*. Newton, Massachusetts: Intercultural Resource Corporation.
- Bennett, M. (2011). A developmental model of intercultural sensitivity. Retrieved from http://www.idrinstitute.org/allegati/IDRI_t_Pubblicazioni/47/FILE_Documento_Bennett_D_MIS_12pp_quotes_rev_2011.pdf
- Bennett, M. J. (1986a). A developmental approach to training for intercultural sensitivity. *International Journal of Intercultural Relations*, 10(2), 179-196.
- Bennett, M. J. (1986b). Towards ethnorelativism: A developmental model of intercultural sensitivity. In M. Paige, R. (Ed.), *Cross-cultural orientation: New conceptualizations and applications* (pp. 27-70). New York: University Press of America.
- Bennett, M. J. (1993). Towards ethnorelativism: A developmental model of intercultural sensitivity. In M. R. Paige (Ed.), *Education for the intercultural experience* (pp. 21-71). Yarmouth, Maine: Intercultural Press.
- Bennett, M. J. (1997). How not to be a fluent fool: Understanding the cultural dimension of language. 16-21. Retrieved from http://www.sit.edu/SITOccasionalPapers/feil_appendix_k.pdf
- Bennett, M. J. (1998). Intercultural communication: A current perspective. In M. J. Bennett (Ed.), *Basic concepts of intercultural communication* (pp. 1-34). London: Nicholas Brealey Publishing.

- Bennett, M. J. (2009). Defining, measuring, and facilitating intercultural learning: A conceptual introduction to the Intercultural Education double supplement. *Intercultural Education*, 20(sup1), S1-S13.
- Berger, P., & Luckmann, T. (1966). *The social construction of reality*. Garden City, New York: Doubleday.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46(1), 5-34.
- Bochner, S. (2003). Culture shock due to contact with unfamiliar cultures. In W. J. Lonner, D. L. Dinnel, S. A. Hayes & D. N. Sattler (Eds.), *Online readings in psychology and culture* (pp. 1-14): International Association for Cross Cultural Psychology.
- Bohm, A., Follari, M., Hewett, A., Jones, S., Kemp, N., Meares, D., Pearce, D., & Van Cauter, K. (2004). Forecasting international student mobility a UK perspective (pp. 91). London: British Council.
- Bone, D. (2008). Internationalisation of HE: A ten-year view (pp. 1-19). Liverpool: Department for Business Innovation & Skills.
- Bourn, D. (2010). Students as global citizens. In E. Jones (Ed.), *Internationalisation and the student voice* (pp. 18-29). London: Routledge.
- Braddock, J. H. (1985). School desegregation and black assimilation. *Journal of Social Issues*, 41(3), 9-22.
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86(2), 307-324.
- Brewer, M. B. (2003). *Intergroup relations*. Philadelphia: Open University Press.
- Brewer, M. B., & Miller, N. (1996). *Intergroup relations*. Buckingham: Open University Press.
- Brislin, R. W. (1981). *Cross-cultural encounters: Face-to-face interaction*. New York: Pergamon.
- British Educational Research Association. (2011). Ethical Guidelines for Education Research. 12. Retrieved from <http://www.bera.ac.uk>
- British Psychological Society. (2009). Code of Ethics and Conduct. 28. Retrieved from <http://www.bps.org.uk>
- British Psychological Society. (2013). Accreditation through partnership handbook: Guidance for undergraduate and conversion programmes in psychology (pp. 82). London: British Psychological Society.
- Brown, L. (2009). An ethnographic study of the friendship patterns of international students in England: An attempt to recreate home through conational interaction. *International Journal of Educational Research*, 48(3), 184-193.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1), 97-113.
- Bryman, A. (2008). *Social research methods* (Third ed.). Oxford: Oxford University Press.
- Burnapp, D., & Zhao, W. (2010). Elephants in the parlour, *Learning Exchange* (Vol. 1). Northampton: University of Northampton.
- Busch, D. (2009). What kind of intercultural competence will contribute to students' future job employability? *Intercultural Education*, 20(5), 429 - 438.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. New York: Multilingual Matters.
- Byram, M., Barrett, M., Ipgrave, J., Jackson, R., & Méndez Garcia, M. (2009). *Autobiography of intercultural encounters: Introduction*. Retrieved from http://www.coe.int/t/DG4/AUTOBIOGRAPHY/AutobiographyTool_en.asp.
- Campinha-Bacote, J. (2011). The process of cultural competence in the delivery of healthcare services. Retrieved 20 January 2012, from <http://www.transculturalcare.net/>
- Carter, K. A. (2006). *Did we make a difference?: Contributors to intercultural sensitivity development in undergraduate students*. Unpublished doctoral thesis, Loyola University Chicago.
- Caruana, V., & Hanstock, J. (2003, 17-18 September 2003). *Internationalising the curriculum: From policy to practice*. Paper presented at the Education in a Changing Environment, Salford, United Kingdom.
- Caruana, V., & Spurling, N. (2007). *The internationalisation of UK Higher Education: A review of selected material*. York: Higher Education Academy.
- Chapdelaine, R., & Alexitch, L. (2004). Social skills difficulty: Model of culture shock for international graduate students. *Journal of College Student Development*, 45(2), 167-184.
- Chen, H. Y. (2008). *Intercultural sensitivity development among taiwan business college students*. Unpublished doctoral thesis, Kent State University, Ohio.

- Cohen, A. D., Paige, M. R., Shively, R. L., Emert, H. A., & Hoff, J. G. (2005). *Maximizing study abroad through language and culture strategies: Research on students, study abroad program professionals, and language instructors*. Minnesota: University of Minnesota.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression / correlation analysis for the behavioural sciences* (Third ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. London: Routledge.
- Complete University Guide. (2014). University subject tables 2014 - Psychology. Retrieved February 13 2014, from <http://www.thecompleteuniversityguide.co.uk/league-tables/rankings?s=Psychology>
- Coolican, H. (2009). *Research methods and statistics in psychology*. London: Hodder Education.
- Council of Europe. (2012). *Autobiography of Intercultural Encounters*. Retrieved 11 Dec 2013, from http://www.coe.int/t/DG4/AUTOBIOGRAPHY/AutobiographyTool_en.asp
- Country Codes (n.d.). Retrieved November 21 2011, from <http://www.worldatlas.com/aatlas/ctycodes.htm>
- Cranney, J., & Dunn, D. S. (2011). *The psychologically literate citizen: Foundations and global perspectives*. Auckland: Oxford University Press.
- Crossman, J., & Clarke, M. (2010). International experience and graduate employability: Stakeholder perceptions on the connection. *Higher Education*, 59(5), 599-613.
- Cunningham, W. A., Nezleck, J. B., & Banaji, M. R. (2004). Implicit and explicit ethnocentrism: revisiting the ideologies of prejudice. *Personality and Social Psychology Bulletin*, 30(10), 1332-1346.
- Currier, C., Lucas, J., & Saint Arnault, D. (2010). Study abroad and nursing: From cultural to global competence. In E. Jones (Ed.), *Internationalisation and the student voice* (pp. 133-150). London: Routledge.
- Dancy, C. P., & Reidy, J. (2011). *Statistics without maths for psychology* (5th ed.). London: Pearson Education Limited.
- De Vaus, D. (2002). *Surveys in social research* (5th ed.). London: Routledge.
- De Vita, G. (2005). Fostering intercultural learning through multicultural group work. In J. Carroll & J. Ryan (Eds.), *Teaching international students. Improving learning for all*. Abingdon: Routledge.
- De Vita, G., & Case, P. (2003). Rethinking the internationalisation agenda in UK higher education *Journal of Further and Higher Education*, 27(4), 383-398.
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241-266.
- Deardorff, D. K. (2009a). Implementing intercultural competence assessment. In D. K. Deardorff (Ed.), *The SAGE handbook of intercultural competence* (pp. 477-491). London: SAGE.
- Deardorff, D. K. (2009b). *The SAGE handbook of intercultural competence*. London: SAGE Publishing, Inc.
- Deardorff, D. K. (2011). Assessing intercultural competence. *New Directions for Institutional Research*, 2011(149), 65-79.
- DeJaeghere, J. G., & Zhang, Y. (2008). Development of intercultural competence among US American teachers: Professional development factors that enhance competence. *Intercultural Education*, 19(3), 255 - 268.
- Department for Education and Skills. (2004). *Putting the World into World-Class Education*. Retrieved from <http://www.globalgateway.org.uk>.
- Devereux, L. (2004). *When Harry met Sarita: Using a peer-mentoring programe to develop intercultural wisdom in students*. Canberra: University of Canberra.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56(1), 5-18.
- Dunne, C. (2009). Host students' perspectives of intercultural contact in an Irish university. *Journal of Studies in International Education*, 13(2), 222-239.
- Endicott, L., Bock, T., & Narvaez, D. (2003). Moral reasoning, intercultural development, and multicultural experiences: relations and cognitive underpinnings. *International Journal of Intercultural Relations*, 27(4), 403-419.
- Engle, L., & Engle, J. (2004). Assessing language acquisition and intercultural sensitivity development in relation to study abroad program design. *Frontiers: The Interdisciplinary Journal of Study Abroad*(Fall 2004), 219-236.

- Erzberger, C., & Kelle, U. (2003). Making inferences in mixed methods: The rules of integration. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 457-488). London: Sage Publications Ltd.
- ESRC. (2012). *ESRC Framework for Research Ethics*. Retrieved from http://www.esrc.ac.uk/_images/Framework-for-Research-Ethics_tcm8-4586.pdf.
- Fantini, A. E. (2000). A central concern: Developing intercultural competence. In A. E. Fantini (Ed.), (pp. 25-42). Brattleboro, Vermont: School for International Training.
- Fantini, A. E. (2009). Assessing intercultural competence. In D. K. Deardorff (Ed.), *The SAGE handbook of intercultural competence* (pp. 456-476). London: SAGE International Inc.
- Fantini, A. E., & Tirmizi, A. (2006). *Exploring and assessing intercultural competence*. St. Louis: Federation of The Experiment in International Living.
- Field, A. (2009). *Discovering statistics using SPSS* (Third ed.). London: SAGE Publications Ltd.
- Fielden, J. (2007). *Global horizons for UK universities*. London: Council for Industry and Higher Education.
- Försterling, F. (2001). *Attribution: An introduction to theories, research and applications*. New York, New York: Psychology Press.
- Fowler, S. M., & Blohm, J. M. (2004). An analysis of methods for intercultural training. In D. Landis, J. Bennett & M. Bennett (Eds.), *Handbook of intercultural training*. London: Sage Publications.
- Gertsen, M. C. (1990). Intercultural competence and expatriates. *International Journal of Human Resource Management*, 1(3), 341-362.
- Gorard, S. (2001). *Quantitative methods in educational research: The role of numbers made easy*. London: Continuum International Publishing Group Ltd.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11, 255-274.
- Greenholtz, J. F. (2005). Does intercultural sensitivity cross cultures? Validity issues in porting instruments across languages and cultures. *International Journal of Intercultural Relations*, 29(1), 73-89.
- Gregersen-Hermans, J., & Pusch, M. D. (2012). How to design and assess an intercultural learning experience. In K. Berardo & D. K. Deardorff (Eds.), *Building cultural competence innovative activities and models* (pp. 23-41). Sterling, Virginia: Stylus.
- Guardian. (2013). University guide 2014: University league table. *The Guardian*, (June 3). Retrieved from <http://www.theguardian.com>
- Guillam, P. (2011). This multiculturalism debate is not about culture. *The Guardian*, (April 26). Retrieved from <http://www.guardian.co.uk/>
- Haigh, M. (2008). Internationalisation, planetary citizenship and Higher Education Inc. *Compare*, 38(4), 427-440.
- Haigh, M., & Clifford, V. (2010). Widening the graduate attribute debate: A higher education for global citizenship. *Brookes eJournal of Learning and Teaching*, 2(5). Retrieved from <http://bejlt.brookes.ac.uk/>
- Halpern, D. F. (2010). *Undergraduate education in psychology: A blueprint for the future of the discipline*. Washington, DC: American Psychological Association.
- Halualani, R. T. (2008). How do multicultural university students define and make sense of intercultural contact: A qualitative study. *International Journal of Intercultural Relations*, 32(1), 1-16.
- Halualani, R. T., Chitgopekar, A., Morrison, J. H. T. A., & Dodge, P. S.-W. (2004). Who's interacting? And what are they talking about? Intercultural contact and interaction among multicultural university students. *International Journal of Intercultural Relations*, 28(5), 353-372.
- Hammer, M. R. (2004). *Assessment of the impact of the AFS study abroad experience*. New York: AFS Intercultural Programs, Inc.
- Hammer, M. R. (2011). Additional cross-cultural validity testing of the Intercultural Development Inventory. *International Journal of Intercultural Relations*, 35(4), 474-487.
- Hammer, M. R. (2012). The Intercultural Development Inventory: A new frontier in assessment and development of intercultural competence *Student Learning Abroad* (pp. 115-136). Sterling, VA: Stylus Publishing.
- Hammer, M. R., Bennett, M. J., & Wiseman, R. (2003). Measuring intercultural sensitivity: The Intercultural Development Inventory. *International Journal of Intercultural Relations*, 27(4), 421-443.

- Harrison, N. (2011). Investigating the impact of personality and early life experiences on intercultural interaction in internationalised universities. *International Journal of Intercultural Relations*.
- Harrison, N., & Peacock, N. (2009). Cultural distance, mindfulness and passive xenophobia: Using Integrated Threat Theory to explore home higher education students' perspectives on 'internationalisation at home'. *British Educational Research Journal*, 36(6), 877 - 902.
- Harrison, N., & Peacock, N. (2010). Interactions in the intercultural classroom: The UK perspective. In E. Jones (Ed.), *Internationalisation and the student voice* (pp. 125-142). London: Routledge.
- Hayes, N. (2000). *Doing psychological research*. Buckingham: Open University Press.
- Hermans, H. J. M. (1988). On the integration of nomothetic and idiographic research methods in the study of personal meaning. *Journal of Personality*, 56(4), 785 - 812.
- Higher Education Statistics Agency. (2011). Statistics. Retrieved 18 February 2012, from <http://www.hesa.ac.uk/>
- Hodges, B. A. (2005). A Critique of Milton J. Bennett's Developmental Model of Intercultural Sensitivity. University of Alabama.
- Hofstede, G. (2001). *Cultures's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, California: Sage.
- Huang, F. (2006). Internationalization of curricula in higher education institutions in comparative perspectives: Case studies of China, Japan and the Netherlands. *Higher Education*, 51(4), 521-539.
- Hunter, B., White, G. P., & Godbey, G. (2006). What does it mean to be globally competent. *Journal of Studies in International Education*, 10(3), 267-285.
- Ingraham, E. C., & Peterson, D. L. (2004). Assessing the impact of study abroad on student learning at Michigan State University. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 10(Fall), 83-100.
- International Unit. (2013). *International higher education in facts and figures*. Retrieved from <http://www.international.ac.uk/media/2416084/intfacts2013.pdf>.
- Ippolito, K. (2007). Promoting intercultural learning in a multicultural university: Ideals and realities. *Teaching in Higher Education*, 12(5), 749-763.
- Jivraj, S. (2012). *The dynamics of diversity: Evidence from the 2011 census*. Manchester: Centre on Dynamics of Ethnicity: University of Manchester.
- Johnson, K., & Inoue, Y. (2003). Diversity and multicultural pedagogy: An analysis of attitudes and practices within an American Pacific Island university. *Journal of Research in International Education*, 2(3), 251-276.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Jones, E. (1998). Major developments in five decades of social psychology. In D. T. Gilbert, S. T. Fiske & G. Lindzey (Eds.), *Handbook of social psychology* (pp. 3-57). New York: McGraw Hill.
- Kealey, D. J., & Protheroe, D. R. (1996). The effectiveness of cross-cultural training for expatriates: An assessment of the literature on the issue. *International Journal of Intercultural Relations*, 20(2), 141-165.
- Kelly, G. A. (1963). *A theory of personality*. London: W. W. Norton Company.
- Kelly, P. (2011). Multiculturalism is not a coherent policy that can be abandoned: David Cameron's speech reveals more continuity with Labour's 'British national identity' project than a radical departure from his 'liberal conservatism'. *British Politics and Policy at London School of Economics*, (February 11). Retrieved from <http://blogs.lse.ac.uk/>
- Killick, D. (2006). Cross-cultural capability & global perspectives: Guidelines for curriculum review. 32. Retrieved from http://repository-intralibrary.leedsmet.ac.uk/open_virtual_file_path/i2346n81341t/Cross-Cultural%20Capability%20&%20Global%20Perspectives.pdf
- Kim, R. I., & Goldstein, S. B. (2005). Intercultural attitudes predict favorable study abroad expectations of U.S. college students. *Journal of Studies in International Education*, 9(3), 265-278.
- King, P., & Baxter Magolda, M. (2005). A developmental model of intercultural maturity. *Journal of College Student Development*, 46(6), 571-592.
- Knight, J. (2003). Updated internationalization definition. *International Higher Education*, 33, 2-3.
- Knight, J. (2004). Internationalization remodeled: Definition, approaches, and rationales. *Journal of Studies in International Education*, 8(5), 5-30.

- Kohlberg, L. (1971). From 'is' to 'ought'. How to committ the naturalistic fallacy and get away with it in the study of moral development. In T. Mischel (Ed.), *Cognitive development and epistemology* (pp. 151-284). New York: Academic Press.
- Kohler Riessman, C. (2003). Narrative Analysis. In M. S. Lewis-Beck, A. Bryman & T. Futing Liao (Eds.), *The SAGE encyclopedia of social science research methods* (pp. 1-6). London: Sage Publications.
- Koutsantoni, D. (2006a). *Internationalisation in the UK*. Paper presented at the Leadership Summit 2006.
- Koutsantoni, D. (2006b). *What is internationalisation?* Paper presented at the The Leadership Summit 2006.
- Laerd Statistics. (2012). Independent *t*-test for two samples. Retrieved September 26, 2012, from <https://statistics.laerd.com/statistical-guides/independent-t-test-statistical-guide.php>
- Lantz, C., & Davies, I. (In press). Global education in theory: The centrality of intercultural competence. In B. Maguth & J. Hillburn (Eds.), *The state of global education: Learning with the world and its people*: Routledge.
- Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. *Journal of Studies in International Education*, 13, 205-220.
- Levine, R. A., & Campbell, D. T. (1972). *Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior*. New York: John Wiley & Sons.
- Madison, G. (2006). Existential migration. *Existential Analysis*, 17(2), 238-260.
- Manian, R., & Naidu, S. (2009). A cross-cultural overview of intercultural competence. In D. K. Deardorff (Ed.), *SAGE handbook of intercultural competence* (pp. 233-248). London: Sage Publications Inc.
- Matsumoto, D., Nakagawa, S., & Yoo, S. H. (2008). Culture, emotion regulation, and adjustment. *Journal of Personality and Social Psychology*, 94(6), 925-937.
- McDonald, H. (2011). Violent clashes in Belfast as loyalist marching season ends. *The Guardian*, (July 12). Retrieved from <http://www.guardian.co.uk/>
- McGovern, T., Corey, L. A., Cranney, J., Dixon, J., W. E., Holmes, J. D., Kuebli, J. E., Ritchey, K., Smith, R. A., & Walker, S. (2010). Psychologically literate citizens. In D. Halpern (Ed.), *Undergraduate education in psychology*. Washington D.C.: American Psychological Association.
- Meertens, R. W., & Pettigrew, T. F. (1997). Is subtle prejudice really prejudice? *Public Opinion Quarterly*, 61(1), 54-71.
- Merriam-Webster. (1987). *Webster's ninth new collegiate dictionary*. Springfield, Massachusetts: Merriam-Webster.
- Middlehurst, R., & Woodfield, S. (2007). Responding to the internationalisation agenda: Implications for institutional strategy. Retrieved from http://www.heacademy.ac.uk/assets/York/documents/ourwork/research/responding_to_the_internationalisation_agenda_full_report.pdf
- Montgomery, C. (2010). *Understanding the international student experience*. New York: Palgrave Macmillan.
- Montgomery, C., & McDowell, L. (2009). Social networks and the international student experience. *Journal of Studies in International Education*, 13(4), 455-466.
- National Centre for Languages, & Leonardo da Vinci European Training in the UK. (2004). INCA Assessor Manual (pp. 47). London.
- Neuliep, J. W., Chaudoir, M., & McCroskey, J. C. (2001). A cross-cultural comparison of ethnocentrism among Japanese and United States college students. *Communication Reserach Reports*, 18, 137-146.
- Nieto, C., & Zoller Booth, M. (2010). Cultural competence: Its influence on the teaching and learning of international students. *Journal of Studies in International Education*, 14(4), 406-425.
- Obama's commencement address at Notre Dame. (2009, May 17). *New York Times*. Retrieved from <http://www.nytimes.com>
- Office for National Statistics. (2005). *The National statistics socio-economic classification user manual*. Retrieved from <http://www.statistics.gov.uk>.
- Office for National Statistics. (2012). International migrants in England and Wales 2011. Retrieved December 31 2013, from <http://www.ons.gov.uk>
- Olson, C. L., & Kroeger, K. R. (2001). Global competency and intercultural sensitivity. *Journal of Studies in International Education*, 5(2), 116-137.

- Onwuegbuzie, A. J., & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 351-383). London: Sage Publications Inc.
- Osmond, J., & Roed, J. (2010). Sometimes it means more work...students perceptions of group work in a mixed cultural setting. In E. Jones (Ed.), *Internationalisation and the Student Voice* (pp. 113-124). London: Routledge.
- Paige, M., R. (2004). Instrumentation in intercultural training. In D. Landis, J. M. Bennett & M. J. Bennett (Eds.), *Handbook of intercultural training* (pp. 85-128). London: Sage Publications Ltd.
- Paige, M., R., Cohen, A. D., & Shively, R. L. (2004). Assessing the impact of a strategies-based curriculum on language and culture learning abraod. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 10, 253-276.
- Paige, M., R., Jacobs-Cassuto, M., Yershova, Y. A., & DeJaeghere, J. (2003). Assessing intercultural sensitivity: an empirical analysis of the Hammer and Bennett Intercultural Development Inventory. *International Journal of Intercultural Relations*, 27(4), 467-486.
- Pain, R. (2011). Bounrديات, processes and participation: Integrating peer support through a buddy scheme. *Enhancing the Learner Experience in Higher Education*, 3(1), 59-73.
- Parsons, L. R. (2010). The Effects of an internationalized university experience on domestic students in the United States and Australia. *Journal of Studies in International Education*, 14(4), 313-334.
- Pascarella, E. T., & Terenzini, P. (2005). *How college affects students: A third decade of research* (Vol. 2). San Francisco: Jossey-Bass.
- Peacock, N., & Harrison, N. (2009). "It's so much easier to go with what's easy". *Journal of Studies in International Education*, 13(4), 487-508.
- Pedersen, P. J. (2009). Teaching towards an ethnorelative worldview through psychology study abroad. *Intercultural Education*, 20(sup1), S73-S86.
- Pedersen, P. J. (2010). Assessing intercultural effectiveness outcomes in a year-long study abroad program. *International Journal of Intercultural Relations*, 34(1), 70-80.
- Pedersen, P. V. (1997). *Intercultural sensitivity and the early adolescent*. Paper presented at the 77th Conference of the National Council for the Social Studies.
- Perdue, C., Dovidio, J., Gurtman, M., & Tyler, R. (1990). Us and them: Social categorization and the process of intergroup bias. *Journal of Personality and Social Psychology*, 59(3), 475-486.
- Perry, W. (1970). *Forms of intellectual and ethical development in the college years*. New York: Holt, Rinehart & Winston.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751-783.
- Piaget, J. (1932). *The moral judgement of the child*. London: Routledge & Kegan Paul.
- Pollock, D. C., & Van Reken, R. E. (2009). *The third culture kid experience: Growing up among worlds*. Yarmouth ME: Intercultural Press.
- Powers, D. A., & Ellison, C. G. (1995). Interracial contact and black racial attitudes: the contact hypothesis and selectivity bias. *Social Forces*, 74(1), 205-226.
- Pusch, M. D. (2004). Intercultural training in historical perspective. In D. Landis, J. Bennett & M. Bennett (Eds.), *Handbook of Intercultural Training* (pp. 13-36). London: Sage Publications.
- QS Top Universities. (2013). QS world university rankings by subject 2013-Psychology. Retrieved 13 February 2014, from <http://www.topuniversities.com/university-rankings/university-subject-rankings/2013/psychology>
- Quality Assurance Agency for Higher Education. (2010). Subject benchmarking statement: Psychology 21. Retrieved from <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/Subject-benchmarking-statement-Psychology.aspx>
- Random.org. (2014). True random number generator. Retrieved 10 May 2012, from <http://www.random.org/>
- Rappoport, W. J. (2001). William Perry's scheme of intellectual and ethical development. Retrieved 26 September 2013, from <http://www.cse.buffalo.edu/~rapaport/perry.positions.html>
- Reddy, P., Lantz, C., & Hulme, J. (2013). *Employability in psychology*. York: Higher Education Academy.
- Riley, R. (2007). *Student engagement and intercultural competence in the North Harris Montgomery Community College district*. Unpublished doctoral thesis, Sam Houston State University, Houston.

- Rizvi, F. (2003). Democracy and education after September 11. *Globalisation, Societies and Education*, 1(1), 25-40.
- Ruben, B. D. (1989). The study of cross-cultural competence: Traditions and contemporary issues. *International Journal of Intercultural Relations*, 13(3), 229-240.
- Schofield, J. W., & Sagar, H. A. (1977). Peer interaction patterns in an integrated middle school. *Sociometry*, 40, 130-138.
- Scholte, J. A. (2002). What is globalization? The definitional issue - again. Retrieved from <http://www2.warwick.ac.uk/fac/soc/pais/staff/brassett/teaching/scholte-globalization.pdf>
- Schwartz, S. (1994). Are there universal aspects in the structure and contents of human values. *Journal of Social Issues*, 50(4), 19-45.
- Segall, M. H., Lonner, W. J., & Berry, J. W. (1998). Cross-Cultural psychology as a scholarly discipline: On the flowering of culture in behavioral research. *American Psychologist*, 53(10), 1101-1110.
- Sercu, L. (2002). Autonomous learning and the acquisition of intercultural communicative competence: Some implications for course development. *Language, Culture and Curriculum*, 15(1), 61-74.
- Sercu, L. (2010). Assessing intercultural competence: More questions than answers. In A. Paran & L. Sercu (Eds.), *Testing the Untestable in Language Education* (pp. 17-34). Bristol: Multilingual Matters.
- Shenkar, O. (2001). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 32(3), 519-535.
- Shiel, C., Williams, A., & Mann, S. (2005). *Global perspectives and sustainable development in the curriculum: Enhanced employability, more thoughtful society?* Paper presented at the Enhancing Graduate Employability: The roles of learning, teaching, research and knowledge transfer.
- Shippy, M. A. (2008). *Cultural fluidity: Adaptability factors of multicultural leaders within the U.S. business context*. Unpublished Doctoral thesis, Union Institute and University, Ohio.
- Sigelman, L., & Welch, S. (1993). The contact hypothesis revisited: Black-white interaction and positive racial attitudes. *Social Forces*, 71(3), 781-795.
- Silverman, D. (2010). *Doing qualitative research* (Third ed.). London: SAGE Publications Ltd.
- Sinicrope, C., Norris, J., & Watanabe, Y. (2007). Understanding and assessing intercultural competence: A summary of theory, research, and practice (technical report for the foreign language program evaluation project. *Second Language Studies*, 26(1), 1-58.
- Society for Intercultural Education Training and Research (SIETAR). (2003). Assessments & instruments. Retrieved 4 October 2013, from <http://www.sietar-europa.org/SIETARproject/Assessments&instruments.html#Topic26>
- Sovic, S. (2008). *Lost in translation? The international students' experience project*. London: Institute of Education.
- Sovic, S. (2009). Hi-bye friends and the herd instinct: International and home students in the creative arts. *Higher Education*, 58(6), 747-751.
- Sparrow, A. (2008, February 26). Cameron attacks 'state multiculturalism'. *The Guardian*. Retrieved from <http://www.guardian.co.uk>
- Spencer-Oatey, H., & Franklin, P. (2009). *Intercultural interaction: A multidisciplinary approach to intercultural communication*. Basingstoke: Palgrave Macmillan.
- Spencer-Rodgers, J. (2001). Consensual and individual stereotypic beliefs about international students among American host nationals. *International Journal of Intercultural Relations*, 25(6), 639-657.
- Spitzberg, B. H., & Changnon, G. (2009). Conceptualizing intercultural competence. In D. K. Deardorff (Ed.), *The SAGE handbook of intercultural competence* (pp. 2-52). London: SAGE International Inc.
- Stallman, E. M. (2009). *Intercultural competence and racial awareness in study abroad*. Unpublished doctoral thesis, University of Minnesota, Minneapolis.
- Stanger, C. (2009). The study of stereotyping, prejudice, and discrimination within social psychology: A quick history of theory and research. In T. D. Nelson (Ed.), *Handbook of Prejudice, Stereotyping and Discrimination* (pp. 1-12). Hove: Psychology Press.
- Steffani, S. A. (2007). Identifying embedded and conjoined complex sentences: Making it simple. *Contemporary Issues in Communication Science and Disorders*, 34(Spring), 44-54.
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41(3), 157-175.

- Stewart, E. J. (1972). *American Cultural Patterns: A Cross-Cultural Perspective*. Yarmouth: Intercultural Press.
- Stone, N. (2006). Conceptualising intercultural effectiveness for university teaching. *Journal of Studies in International Education*, 10(4), 334-356.
- Stout, H., Warwick, P., Roberts, P., & Ritter, S. (2011). Internationalising at home: Some ideas to internationalise the University of York student experience. University of York.
- Straffon, D. A. (2003). Assessing the intercultural sensitivity of high school students attending an international school. *International Journal of Intercultural Relations*, 27(4), 487-501.
- Sumner, W. G. (1906). *Folkways*. New York: Ginn.
- Sutton, R. C., & Rubin, D. L. (2004). The GLOSSARI project: Initial findings from a system-wide research initiative on study abroad learning outcomes. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 10(Fall), 65-82.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (International ed.). London: Pearson Education, Inc.
- Tajfel, H., Nemeth, C., Johoda, G., & Campbell, J. (1970). The development of children's preference for their own country: A cross-national study. *International Journal of Psychology*, 5(4), 245-253.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago Illinois: Nelson-Hall.
- Thom, V. (2000). Promoting intercultural learning and social inclusion for international students'. In B. Hudson & M. J. Todd (Eds.), *Internationalising the curriculum in higher education: Reflecting on practice* (pp. 50-57). Sheffield: Sheffield Hallam University Press.
- Thomas, L., & Quinn, J. (2006). *First generation entry into higher education*. Berkshire: Open University Press.
- Times Higher Education. (2014). World University Rankings. *Times Higher Education* Retrieved February 13, 2014, from <http://www.timeshighereducation.co.uk/world-university-rankings/2013-14/world-ranking>
- Ting-Toomey, S. (1999). *Communicating across cultures*. New York: Guilford Press.
- Townsend, M. (2011, September 3). EDL London march halted by police. *The Guardian*. Retrieved from <http://www.guardian.co.uk>
- Toyoshima, M. (2007). International strategies of universities in England. *London Review of Education*, 5(3), 265-280.
- Trapp, A., Banister, P., Ellis, J., Latto, R., Miell, D., & Upton, D. (2011). *The future of undergraduate psychology in the United Kingdom*. York: Higher Education Academy Psychology Network, University of York.
- UK Higher Education International Unit. (2007). *Global opportunities for UK higher education*.
- UKCOSA. (2004). Broadening our horizons. Retrieved from <http://www.ukcisa.org.uk/files/pdf/about/reports/BOHreport.pdf>
- UNITE. (2006). *International Student Experience Report*. Bristol.
- Universities UK. (2012). *Patterns and trends in UK higher education*. Retrieved from <http://www.universitiesuk.ac.uk/highereducation/Documents/2012/PatternsAndTrendsInUKHigherEducation2012.pdf>.
- Universities UK. (2013). *Higher education in facts and figures*. Retrieved from <http://www.universitiesuk.ac.uk/highereducation/Documents/2013/HigherEducationInFactsAndFiguresSummer2013.pdf>.
- University of Leeds. (2011). Protocol for reimbursement of research participants. 3. Retrieved from <http://researchsupportarchive.leeds.ac.uk/images/uploads/docs/ReimbursementofResearchParticipantsProtocol.pdf>
- Van Laar, C., Levin, S., Sinclair, S., & Sidanius, J. (2005). The effect of university roommate contact on ethnic attitudes and behavior. *Journal of Experimental Social Psychology*, 41(4), 329-345.
- Vande Berg, M. (2009). Intervening in student learning abroad: A research based inquiry. *Intercultural Education*, 20(sup1), S15-S27.
- Vande Berg, M. (Ed.). (2004 Fall). *Frontiers: The Interdisciplinary Journal of Study Abroad*. (Special issue on the assessment of learning abroad. ed.).
- Vaughn, L. M. (2010). *Psychology and Culture: Thinking, Feeling and Behaving in a Global Context*. Psychology Press.
- Vertovec, S. (2007). Super-diversity and its implications. *Ethnic and Racial Studies*, 30(6), 1024-1054.

- Voci, A., & Hewstone, M. (2003). Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes & Intergroup Relations*, 6(1), 37-54.
- Volet, S. E., & Ang, G. (1998). Culturally mixed groups on international campuses: An opportunity for inter-cultural learning. *Higher Education Research & Development*, 17(1), 5 - 23.
- Wakeling, P. (2010). International benchmarking review of psychology: Breifing document: Statistical overview and commentary. 64. Retrieved from http://www.esrc.ac.uk/_images/Psychology%20Statistical%20Overview_tcm8-15434.pdf
- Ward, C., & Masgoret, A.-M. (2004). *The experiences of international students in New Zealand: Report on the results of the national survey*. Victoria, New Zealand: Centre for Applied Cross-cultural Research and School of Psychology Victoria University of Wellington.
- Ward, C., Masgoret, A.-M., Ho, E., Holmes, P., Newton, J., & Crabbe, D. (2005). *Interactions with international students: Report prepared for Education New Zealand*. Victoria New Zealand: Center for Applied Cross-cultural Research, Victoria University of Wellington.
- Webb, G. (2005). Internationalisation of the curriculum: an institutional approach. In J. Ryan & J. Carroll (Eds.), *Teaching international students: Improving learning for all* (pp. 109-118). London: Routledge.
- Williams, C. T., & Johnson, L. R. (2011). Why can't we be friends?: Multicultural attitudes and friendships with international students. *International Journal of Intercultural Relations*, 35(1), 41-48.
- Williams, T. R. (2005). Exploring the Impact of Study Abroad on Students' Intercultural Communication Skills: Adaptability and Sensitivity. *Journal of Studies in International Education*, 9(4), 356-371.
- Yuefang, Z., Jindal-Snape, D., Topping, K., & Todman, J. (2008). Theoretical models of culture shock and adaptation in international students in higher education. *Studies in Higher Education*, 33(1), 63-75.
- Yuen, C. Y. M. (2010). Dimensions of diversity: Challenges to secondary school teachers with implications for intercultural teacher education. *Teaching and Teacher Education*, 26(3), 732-741.