

Examining students' cultural diversity experiences at university

Jiadi Cai

ORCID ID: 0000-0002-0622-1272

Submitted in total fulfilment for the degree of

Doctor of Philosophy

January 2024

Melbourne Graduate School of Education

Melbourne Centre for the Study of Higher Education

The University of Melbourne

Abstract

Most Australian universities value the benefits students can receive from engaging in cultural diversity activities in and outside of class. More particularly, universities place value on promoting cultural diversity-related graduate attributes such as intercultural competence (IC), willingness to contribute to the international community, and global employability. With various programs, events, and activities offered to encourage meaningful interactions within the culturally diverse student population, many Australian universities are considered as providing the necessary setting and opportunities for students to develop these attributes. However, decades of research have shown that these interactions are still limited. It is thus unclear whether students are availing themselves of and benefiting from the opportunities for cultural diversity experiences at university, which may help them develop the attributes that their universities espouse. In response, this thesis aims to gain a more nuanced understanding of undergraduate students' cultural diversity experiences at a large Australian university.

Using a mixed-method research design, this two-stage investigation explores factors influencing students' participation in cultural diversity activities at the university. The study also examined whether and how students' participation in these activities is associated with their levels of IC as well as intergroup anxiety (IA), which has been demonstrated in literature as predictive of avoidance of intercultural interaction.

This study identifies two broad categories of factors influencing students' participation in cultural diversity activities: structural (e.g., cultural diversity composition of the study body) and personal factors (e.g., whether the individual student values the importance of cultural diversity activities). This study also reveals that engaging in intercultural interactions with peers outside of class might be beneficial for promoting students' IC and lowering their IA levels. However, the frequency of students' participation in cultural diversity activities within the classroom setting was unrelated to their IC and IA levels. This study affirms the importance

of promoting intercultural interactions among students and ensuring students actively engage in and benefit from cultural diversity activities at university. The findings of this study have implications for institutions, policymakers, and educators in improving students' cultural diversity experiences and in producing more interculturally competent graduates.

Declaration

This declaration is to certify that

(i) this thesis comprises only my original work towards the Doctor of Philosophy degree except where indicated in the preface;

(ii) due acknowledgement has been made in the text to all other material used; and

(iii) this thesis is fewer than 100,000 words in length, exclusive of tables, references, and appendices.

Jiadi Cai

January 2024

Preface

The following publications derived from or were related to the research in this thesis:

1. Cai, J., & Marangell, S. (2022). The benefits of intercultural learning and teaching at university: A concise review. <https://melbourne-cshe.unimelb.edu.au/ioc/further-reading/The-benefits-of-intercultural-learning-and-teaching-at-university.pdf>

This article was derived from the literature review of this study, particularly on the benefits of different types of cultural diversity activities. Some information in this article is incorporated into Chapter 3 of this thesis.

2. Cai, J. (2023, November 26-30). University students' cultural diversity experiences and graduate outcomes. [Paper presentation]. Australian Association for Research in Education (AARE) Conference. Melbourne, Victoria, Australia.

This conference paper was based on the key findings from this study, which are presented in Chapter 5 and 6 of this thesis.

Acknowledgements

First and foremost, I would like to express my sincere gratitude to my supervisors, Professor Chi Baik and Dr Tracii Ryan, for their invaluable guidance, expertise, and wisdom, without which this thesis would not have been possible. Words cannot describe how grateful I am to have them as my supervisors, and to have their support and encouragement throughout my entire candidature. Their supervision has been extremely instrumental in not only shaping the direction of this project but also in my growth and development as a researcher.

I would also like to thank my Committee Chair, Associate Professor Suzanne Rice, and Committee Members, Professor Sophie Arkoudis and Dr Samantha Marangell, for their guidance and support. I extend my sincere gratitude to the University of Melbourne for the Melbourne Research Scholarship, and the Melbourne Graduate School of Education for the William and Kate Herschell Scholarship, which provided tremendous support for my study.

I am extremely thankful to have been a part of the Melbourne Centre for the Study of Higher Education, and to receive help and support from the staff members at the Centre. I would also like to thank fellow graduate researchers at the Centre for their insight and time. A special thank you to Ben Symon for proofreading chapters of this thesis as per the university policies, as well as to Claudia Rivera Munoz, Lize Vanderstraeten, and Vicky Chang for their friendship and encouragement.

I would like to dedicate this thesis to my parents and grandparents, as I can never offer enough gratitude for their unwavering love, support, and sacrifice, without which I would not have had the opportunities to study in countries away from home and to pursue my journey as a researcher. To my parents especially, I am truly thankful for all their guidance and encouragement, as well as for always believing in me that I can accomplish this.

Table of Contents

| | |
|---|------------|
| ABSTRACT..... | I |
| DECLARATION | III |
| PREFACE | IV |
| ACKNOWLEDGEMENTS | V |
| LIST OF FIGURE AND TABLES..... | X |
| 1 INTRODUCTION..... | 1 |
| 1.1 CONTEXT AND RATIONALE OF THE STUDY | 1 |
| 1.1.1 THE RESEARCH PROBLEM | 5 |
| 1.2 THE PRESENT STUDY | 7 |
| 1.2.1 ASSUMPTIONS OF THE RESEARCH..... | 8 |
| 1.2.2 RESEARCH SETTING..... | 10 |
| 1.2.3 TERMINOLOGY AND DEFINITIONS..... | 11 |
| 1.2.4 SCOPE AND LIMITS | 14 |
| 1.3 THESIS OVERVIEW | 16 |
| 2 INTERCULTURAL COMPETENCE AS A GRADUATE ATTRIBUTE..... | 18 |
| 2.1 INTERNATIONALISATION OF HIGHER EDUCATION | 18 |
| 2.1.1 DEFINING INTERNATIONALISATION OF HIGHER EDUCATION..... | 19 |
| 2.1.2 DRIVERS OF INTERNATIONALISATION OF HIGHER EDUCATION | 20 |
| 2.1.3 INTERNATIONALISATION AT HOME..... | 23 |
| 2.1.4 INTERCULTURALITY | 24 |
| 2.2 CULTURAL DIVERSITY-RELATED GRADUATE ATTRIBUTES..... | 25 |
| 2.3 UNDERSTANDING INTERCULTURAL COMPETENCE | 27 |
| 2.3.1 CONCEPTUALISING INTERCULTURAL COMPETENCE | 28 |
| 2.3.2 DEVELOPING INTERCULTURAL COMPETENCE | 30 |
| 2.3.3 MEASURING INTERCULTURAL COMPETENCE | 32 |
| 2.4 CHAPTER SUMMARY | 38 |
| 3 CULTURAL DIVERSITY EXPERIENCES AT THE UNIVERSITY..... | 39 |
| 3.1 CATEGORISATION OF CULTURAL DIVERSITY EXPERIENCES | 39 |
| 3.1.1 STRUCTURAL DIVERSITY..... | 39 |
| 3.1.2 CLASSROOM DIVERSITY..... | 42 |
| 3.1.3 INTERACTIONAL DIVERSITY | 43 |
| 3.2 BENEFITS OF CULTURAL DIVERSITY EXPERIENCES..... | 43 |
| 3.2.1 CLASSROOM DIVERSITY EXPERIENCES..... | 47 |
| 3.2.2 INTERACTIONAL DIVERSITY EXPERIENCES | 58 |

| | | |
|-----------------|---|------------------|
| 3.3 | FACTORS INFLUENCING STUDENTS' CULTURAL DIVERSITY EXPERIENCES | 60 |
| 3.3.1 | <i>PREVIOUS EXPERIENCES WITH INTERCULTURAL INTERACTIONS.....</i> | 61 |
| 3.3.2 | <i>HOMOPHILIC PREFERENCE FOR INTERACTIONS</i> | 62 |
| 3.3.3 | <i>LACK OF INTEREST AND MOTIVATION.....</i> | 65 |
| 3.3.4 | <i>INTERGROUP ANXIETY.....</i> | 65 |
| 3.4 | GAPS IN THE LITERATURE | 68 |
| 3.5 | CHAPTER SUMMARY | 71 |
| <u>4</u> | <u>METHODOLOGY.....</u> | <u>72</u> |
| 4.1 | RESEARCH AIMS AND QUESTIONS..... | 72 |
| 4.2 | METHODOLOGICAL FRAMEWORK..... | 73 |
| 4.3 | RESEARCH DESIGN..... | 74 |
| 4.3.1 | <i>COVID-19 DISRUPTIONS.....</i> | 76 |
| 4.3.2 | <i>RESEARCH SITE.....</i> | 77 |
| 4.4 | STAGE 1: INTERVIEWS AND FOCUS GROUPS | 78 |
| 4.4.1 | <i>SAMPLING STRATEGY</i> | 79 |
| 4.4.2 | <i>INTERVIEW PROTOCOLS</i> | 79 |
| 4.4.3 | <i>PROCEDURE.....</i> | 80 |
| 4.4.4 | <i>DATA ANALYSIS</i> | 81 |
| 4.5 | STAGE 2: SURVEY | 84 |
| 4.5.1 | <i>SAMPLING STRATEGY</i> | 84 |
| 4.5.2 | <i>INSTRUMENT</i> | 84 |
| 4.5.3 | <i>DATA ANALYSIS</i> | 88 |
| 4.6 | TRUSTWORTHINESS..... | 92 |
| 4.7 | LIMITATIONS..... | 92 |
| 4.8 | CHAPTER SUMMARY | 94 |
| <u>5</u> | <u>STUDENTS' PERCEPTIONS AND EXPERIENCES OF CULTURAL DIVERSITY.....</u> | <u>95</u> |
| 5.1 | PARTICIPANTS..... | 96 |
| 5.2 | STUDENTS' CLASSROOM DIVERSITY EXPERIENCES..... | 99 |
| 5.2.1 | <i>LEARNING FROM CULTURE-RELATED CONTENTS IN CLASS</i> | 99 |
| 5.2.2 | <i>INTERCULTURAL GROUP ACTIVITIES</i> | 102 |
| 5.2.3 | <i>STUDENTS' ATTITUDES TOWARDS CLASSROOM DIVERSITY ACTIVITIES</i> | 103 |
| 5.2.4 | <i>PREFERENCES FOR WORKING WITH FAMILIAR AND SIMILAR TEAMMATES</i> | 104 |
| 5.2.5 | <i>NEGATIVE CLASSROOM DIVERSITY EXPERIENCES.....</i> | 109 |
| 5.3 | STUDENTS' INTERACTIONAL DIVERSITY EXPERIENCES | 112 |
| 5.3.1 | <i>EXTRACURRICULAR ACTIVITIES AS OPPORTUNITIES FOR INTERCULTURAL INTERACTIONS</i> | 113 |
| 5.3.2 | <i>REASONS FOR NOT ENGAGING IN EXTRACURRICULAR ACTIVITIES</i> | 116 |

| | | |
|------------|---|------------|
| 5.4 | FACTORS SUPPORTING STUDENTS' PARTICIPATION IN CULTURAL DIVERSITY ACTIVITIES | 118 |
| 5.4.1 | <i>INTERCULTURAL INTERACTION OPPORTUNITIES PROVIDED BY THE UNIVERSITY</i> | 118 |
| 5.4.2 | <i>STRUCTURAL DIVERSITY PROVIDES THE CONDITION FOR INTERCULTURAL INTERACTIONS</i> | 119 |
| 5.4.3 | <i>INTEREST IN CULTURAL DIVERSITY ACTIVITIES</i> | 122 |
| 5.4.4 | <i>OPEN-MINDEDNESS</i> | 123 |
| 5.5 | FACTORS HINDERING STUDENTS' PARTICIPATION IN CULTURAL DIVERSITY ACTIVITIES | 124 |
| 5.5.1 | <i>COMMUNICATION-RELATED ISSUES</i> | 125 |
| 5.5.2 | <i>THE VIRTUAL CAMPUS MODE</i> | 129 |
| 5.5.3 | <i>DIFFICULTIES IN FORMING CONNECTIONS WITH PEERS</i> | 132 |
| 5.6 | STUDENTS' PERCEPTIONS OF THE IMPACTS OF CULTURAL DIVERSITY EXPERIENCES AT UNIVERSITY | 138 |
| 5.6.1 | <i>DEVELOPMENT IN CROSS-CULTURAL SKILLS AND COMPETENCIES</i> | 139 |
| 5.6.2 | <i>ENHANCED PREPAREDNESS FOR FUTURE INTERACTIONS</i> | 141 |
| 5.6.3 | <i>POSITIVE CHANGES IN WORLDVIEWS AND ATTITUDES</i> | 143 |
| 5.6.4 | <i>NEGATIVE CHANGES IN ATTITUDES AND AVOIDANCE OF FUTURE INTERACTIONS</i> | 144 |
| 5.6.5 | <i>NO PERCEIVED IMPACT FROM CULTURAL DIVERSITY EXPERIENCES</i> | 145 |
| 5.7 | CHAPTER SUMMARY | 146 |
| 6 | <u>CULTURAL DIVERSITY ACTIVITIES AND INTERCULTURAL COMPETENCE</u> | 147 |
| 6.1 | SURVEY OVERVIEW | 148 |
| 6.1.1 | <i>PARTICIPANTS</i> | 148 |
| 6.1.2 | <i>DESCRIPTIVE STATISTICS OVERVIEW</i> | 150 |
| 6.2 | HOW DO STUDENTS ENGAGE IN CULTURAL DIVERSITY ACTIVITIES AT UNIVERSITY? | 152 |
| 6.2.1 | <i>TYPES OF CULTURAL DIVERSITY ACTIVITIES</i> | 152 |
| 6.2.2 | <i>CLASSROOM DIVERSITY EXPERIENCES</i> | 155 |
| 6.2.3 | <i>INTERCULTURAL INTERACTIONS OUTSIDE OF CLASS</i> | 157 |
| 6.3 | CULTURAL DIVERSITY EXPERIENCES AND INTERCULTURAL COMPETENCE | 160 |
| 6.4 | CULTURAL DIVERSITY EXPERIENCES AND INTERGROUP ANXIETY | 162 |
| 6.5 | CULTURAL DIVERSITY EXPERIENCES BEFORE UNIVERSITY | 163 |
| 6.6 | COMPARING SCORES ACROSS DIFFERENT STUDENT GROUPS | 166 |
| 6.6.1 | <i>INTERNATIONAL AND DOMESTIC STUDENTS</i> | 167 |
| 6.6.2 | <i>LINGUISTIC DIVERSITY GROUPS</i> | 168 |
| 6.6.3 | <i>YEAR OF STUDY</i> | 169 |
| 6.6.4 | <i>DISCIPLINES OF STUDY</i> | 171 |
| 6.7 | CHAPTER SUMMARY | 172 |

| | | |
|------------|--|-------------------|
| 7 | <u>UNDERSTANDING STUDENTS' CULTURAL DIVERSITY EXPERIENCES</u> | <u>173</u> |
| 7.1 | STUDENTS' CULTURAL DIVERSITY EXPERIENCES AT THE UNIVERSITY | 173 |
| 7.1.1 | <i>MOTIVES FOR PARTICIPATING IN CULTURAL DIVERSITY ACTIVITIES AT UNIVERSITY.....</i> | 174 |
| 7.1.2 | <i>INTERACTION TENDENCIES.....</i> | 175 |
| 7.2 | INTERCULTURAL COMPETENCE AND CULTURAL DIVERSITY ACTIVITIES | 181 |
| 7.2.1 | <i>STUDENTS' PERCEIVED IMPACT OF CULTURAL DIVERSITY EXPERIENCES.....</i> | 187 |
| 7.3 | STRUCTURAL FACTORS INFLUENCING STUDENTS' CULTURAL DIVERSITY EXPERIENCES .. | 189 |
| 7.3.1 | CONDITIONS AND OPPORTUNITIES FOR INTERCULTURAL INTERACTIONS | 189 |
| 7.3.2 | LACK OF A CONSISTENT LEARNING COHORT | 191 |
| 7.3.3 | THE VIRTUAL CAMPUS MODE | 192 |
| 7.3.4 | PEER INFLUENCE | 192 |
| 7.4 | PERSONAL FACTORS INFLUENCING STUDENTS' CULTURAL DIVERSITY EXPERIENCES | 194 |
| 7.4.1 | ATTITUDES TOWARDS AND INTEREST IN CULTURAL DIVERSITY AND RELATED ACTIVITIES | 195 |
| 7.4.2 | INTERGROUP ANXIETY..... | 196 |
| 7.4.3 | CULTURAL DIVERSITY EXPERIENCES AT THE PREVIOUS EDUCATIONAL INSTITUTION..... | 198 |
| 7.4.4 | CHALLENGES TO EFFECTIVE COMMUNICATION | 199 |
| 7.5 | CHAPTER SUMMARY | 201 |
| 8 | <u>TAKING NOTE AND MOVING FORWARD</u> | <u>203</u> |
| 8.1 | CONTRIBUTIONS OF THE STUDY..... | 204 |
| 8.2 | IMPLICATIONS FOR RESEARCH, PRACTICE, AND POLICY | 205 |
| 8.2.1 | RESEARCH CONSIDERATIONS | 205 |
| 8.2.2 | PRACTICAL CONSIDERATIONS..... | 207 |
| 8.2.3 | POLICY CONSIDERATIONS | 210 |
| 8.3 | LIMITATIONS OF THE STUDY | 211 |
| 8.4 | RECOMMENDATIONS FOR FUTURE RESEARCH..... | 213 |
| | <u>REFERENCES</u> | <u>215</u> |
| | <u>APPENDICES.....</u> | <u>250</u> |
| | APPENDIX A. INTERVIEW QUESTIONS – INDIVIDUAL INTERVIEW AND FOCUS GROUP | 250 |
| | APPENDIX B. PLAIN LANGUAGE STATEMENT – INTERVIEW AND FOCUS GROUP | 253 |
| | APPENDIX C. CONSENT FORM – INTERVIEW AND FOCUS GROUP | 256 |
| | APPENDIX D. PLAIN LANGUAGE STATEMENT - SURVEY | 257 |
| | APPENDIX E. SURVEY..... | 259 |
| | APPENDIX F. DESCRIPTIVE STATISTICS OF MEASURES BY STUDENT GROUPS | 286 |

List of Figure and Tables

| | |
|--|-----|
| Figure 2.1 Deardorff's (2006) Process Model of Intercultural Competence (p. 256)..... | 31 |
| Table 2.1 Conceptual Overlap in Three Measures..... | 37 |
| Table 4.1 Research Design of the Study | 75 |
| Table 5.1 Enrolment Characteristics of Interview and Focus Group Participants (N = 41) ... | 97 |
| Table 5.2 Overview of Interview and Focus Group Participants (N = 41) | 97 |
| Table 5.3 Reasons for Students' Negative Classroom Diversity Experiences..... | 109 |
| Table 5.4 Common Themes Relating to Students' Interactional Diversity Experiences | 112 |
| Table 5.5 Factors that Supported Students' Participation in Cultural Diversity Activities .. | 118 |
| Table 5.6 Factors that Hindered Students' Participation in Cultural Diversity Activities | 124 |
| Table 5.7 Students' Perceptions of the Impacts of Cultural Diversity Experiences | 139 |
| Table 6.1 Survey Participants' Characteristics | 149 |
| Table 6.2 Descriptive Statistics of the Measures | 151 |
| Table 6.3 Descriptive Data on Students' Participation in Cultural Diversity Activities..... | 153 |
| Table 6.4 Frequency of Classroom Diversity Activities | 155 |
| Table 6.5 Reasons of Participation in Classroom Diversity Activities | 156 |
| Table 6.6 Frequency of Intercultural Interactions Outside of Class | 158 |
| Table 6.7 Reasons of Participating in Intercultural Interactions | 159 |
| Table 6.8 Correlation Coefficients for Study Variables..... | 161 |
| Table 6.9 Cultural Diversity Experiences at Previous Institution | 164 |
| Table 6.10 Measurement Scores Based on Enrolment Status at Previous Institution..... | 165 |
| Table 6.11 Measurement Scores Based on Characteristic of Previous Institution..... | 165 |
| Table 6.12 Descriptive Statistic and Correlation Coefficients for Study Variables..... | 166 |
| Table 6.13 International and Domestic Students' Scores on MPQ and IAS..... | 167 |
| Table 6.14 Scores on MPQ and IAS in Two Linguistic Diversity Groups | 169 |
| Table 6.15 One-Way ANOVA of Measurement Scores by Year of Study..... | 170 |
| Table 6.16 One-Way ANOVA of Measurement Scores by Discipline..... | 172 |

1 Introduction

Most Australian universities value the benefits students can receive from engaging in cultural diversity activities in and outside of class (Baker et al., 2022). In particular, importance is placed on the promotion of cultural diversity-related graduate attributes such as intercultural competence (IC), intercultural awareness, willingness to contribute to the international community, and global employability (Arkoudis et al., 2012; Baker et al., 2022). With various programs, events and activities offered to encourage meaningful interactions within the culturally diverse student population, many Australian universities are considered as providing the necessary setting and opportunities for students to develop these attributes. However, decades of research have shown that these interactions are still limited (e.g., Arkoudis et al., 2019; Arkoudis & Baik, 2014; Baik, 2018; Marginson et al., 2010; Smart et al., 2000; Volet & Jones, 2012; Volet & Ang, 2012). It is thus unclear whether students are actively availing themselves of and benefiting from these opportunities intended to help them develop their diversity-related skills and competencies.

In response, this study aims to gain a more nuanced understanding of student experiences of cultural diversity-related activities at university, which can better inform us whether and how students are engaging in these activities that may be beneficial for developing their diversity-related skills and competencies. An in-depth examination of the factors influencing students' participation in these activities can provide important insights for institutions and policymakers regarding how to enhance students' intercultural experiences and growth.

1.1 Context and Rationale of the Study

Australia is one of the most successful multicultural societies, built upon more than 60,000 years of First Nations culture (Department of Home Affairs, 2024). Australia is home

to many culturally and linguistically diverse communities, and multiculturalism is a key characteristic of the country's national identity (Department of Home Affairs, 2024). The cultural diversity of the country is evident in the presence of over 300 different ancestries in its population (Australian Bureau of Statistics, 2022). In 2023, more than 30% of its population was born overseas (Australian Bureau of Statistics, 2023).

The student populations of Australian universities reflect this diversity of the country, comprising individuals from diverse cultural backgrounds with different experiences and understandings of intercultural learning. In its higher education sector, Australia has also attracted a large number of international students. From 2001 to 2020, international student enrolment, for those studying both onshore and offshore at Australian universities, grew at an annual average rate of 5.2% (Universities Australia, 2022). Due to the global impact of the COVID-19 pandemic, there was a notable drop of 7.4% in international student enrolments in 2020, which was the first decline since 2013. Despite this, the percentage of international students at Australian universities was recorded at 28.1% in 2020, which is still significantly higher than the 19% reported in 2001 (Universities Australia, 2022).

This cultural diversity within the university context is theorised to have important benefits for students, as scholars posit that traditional-age university students are at a critical stage of personal and social identity formation (Gurin et al., 2002). During this stage, information that challenges students' pre-existing views can have a positive impact on their cognitive development. While engaging in intercultural interactions at university, students may encounter information about people from other cultural backgrounds that are different from their pre-existing views (Gurin et al., 2002). This could benefit their cognitive development and help them obtain a more well-rounded understanding of other cultures and, eventually, of the diverse world.

Gurin and colleagues' (2002) work is supported by Pascarella and Terenzini's (2005) comprehensive literature review of how university affects students, which demonstrated that experiencing diversity during their university study has "a unique, positive impact on dimensions of general cognitive development such as critical thinking, analytical competencies and thinking complexity" (p. 209) for all students. Further, the authors noted the significance of engaging in cultural diversity experiences at university, particularly interactions with diverse peers: "Involvement in diverse experiences...has a unique, positive impact on dimensions of general cognitive development such as critical thinking, analytical competencies and thinking complexity...The most salient diversity experiences appear to be informal interactions with racially and culturally diverse peers" (Pascarella & Terenzini, 2005, p. 209).

Indeed, Australian universities on the whole value the importance of cultural diversity on their campuses and recognise the goal of preparing their students with the knowledge and values required to become citizens in a culturally diverse society. This is evident in their strategic documents. Over a decade ago in 2012, an analysis conducted by Arkoudis and colleagues (2012) revealed that 27 of the 39 public Australian universities' websites mentioned the formation of global citizenship as one of their graduate attributes, referring to constructs such as: "awareness of knowledge in a global context, ability to apply international perspectives, willingness to contribute to the international community, and demonstrate of cross-cultural awareness" (p. 6). Although the term "global citizenship" was listed as a graduate attribute of 27 out of 39 universities, it is "used broadly and loosely by universities" (Arkoudis et al., 2012, p. 6).

More recently, Baker and colleagues' (2022) audit of Australian universities' public-facing documents found that 37 out of 39 universities mentioned the term "diversity" in their strategic plans or websites. Moreover, terms relating to intercultural learning or awareness were found in 20 out of 39 universities' websites (Baker et al., 2022). Diversity and inclusion are

important goals for most Australian universities, although definitions of the term “diversity” remain vague and inconsistent. Their initial searches also found that graduate attribute statements include terms such as “internationalisation” or “global citizenship”. Specifically, cross-cultural competence was included as one of the nine graduate attributes of Central Queensland University, while cultural competence, including intercultural knowledge and skills, was described as one of the development aims for all students and staff development at Deakin University (Baker et al., 2022). Such consistency in Arkoudis et al.’s (2012) and Baker et al.’s (2022) findings throughout the last decade demonstrates the emphasis that Australian universities have placed on producing graduates that are competent to work and live in a global society.

These cultural diversity-related attributes align well with the democratic learning benefits of engaging in cultural diversity experiences at university, which “include citizenship engagement, perspective-taking, understanding of different cultures, and judgment of compatibility among different groups” (Gurin et al., 2002). Such alignment places significant prominence on undergraduate students’ engagement in cultural diversity activities during their university studies.

However, there are several challenges in promoting frequent intercultural interactions among students and ensuring these eventually lead to positive student outcomes. For example, despite having ample opportunities for intercultural interactions within the university context, scholars (e.g., Arkoudis et al., 2019; Arkoudis & Baik, 2014; Baik, 2018; Marginson et al., 2010; Smart et al., 2000; Volet & Jones, 2012; Volet & Ang, 2012) found that intercultural interactions among diverse students rarely occur. Even when these interactions do take place, there are specific conditions under which diversity experiences lead to positive outcomes for the parties involved. Crisp and Turner (2011) hypothesise that cultural diversity experiences are effective in promoting positive outcomes for individuals only when their pre-existing views

are challenged, and they are motivated and able to consider and resolve the dissonance resulting from these challenges. They also highlight that for the benefits to be realised, the individual must repeatedly engage in the process of resolving the dissonance (Crisp & Turner, 2011), underlining the significance of both cultural diversity experiences and the motivation.

It is thus argued that providing opportunities for intercultural interaction does not automatically ensure positive benefits for participating students. Having a culturally diverse student body, therefore, does not guarantee that students will have the kinds of meaningful interactions that are important for fostering the educational benefits of cultural diversity engagement (Gurin et al., 2002; Gurin et al., 2004). Without actively availing themselves of these opportunities for intercultural interaction within the university context, it is questionable whether students are developing the graduate attributes stated in universities' strategic documents. As such, it is important for universities and educators to purposefully design for and support positive intercultural interactions, which are essential for these benefits to be realised. The next section details further the research problem that this study aims to address.

1.1.1 The Research Problem

As the last section revealed, theoretical and empirical work has indicated that cultural diversity experiences can be beneficial for undergraduate students (Crisp & Turner, 2011; Gurin et al., 2002). These experiences are also important for them to develop IC and other graduate attributes, which are highly valued for their graduate employability and for living in a diverse society. Many Australian universities offer various programs, events, and activities as a means to encourage meaningful intergroup communications within the student body.

However, despite the culturally diverse student populations present at many Australian universities, and institutional efforts to promote intercultural interaction among students, decades of research suggests that these interactions are still lacking (e.g., Arkoudis et al., 2019; Arkoudis & Baik, 2014; Baik, 2018; Marginson et al., 2010; Smart et al., 2000; Volet & Jones,

2012; Volet & Ang, 2012). This is a cause for concern, given that positive cultural diversity experiences, particularly those involving interactions with diverse peers, are critical preconditions for students to reap the benefits of cultural diversity at university (Denson & Bowman, 2013; Gurin et al., 2002). Hence, there is a need to further explore whether and how students engage in these activities that their universities offer, as well as what influences their participation.

In addition, although research efforts have been made to investigate the reasons for the lack of intercultural interactions among students, many of them have focused on broad, heterogeneous groups of students. More specifically, while factors such as low English language proficiency, lack of common ground and interests between student groups (Arkoudis & Baik, 2014), and the preference to stay within familiar cultural and language groups (Eisenschlas & Trevaskes, 2007; Volet & Ang, 1998) have been found to present barriers to intercultural engagement, most of this research - particularly within the Australian context - has largely focused on broad groups of international and domestic students (Arkoudis & Baik, 2014).

Categorising students into these two broad groups might overlook important insights into students' intercultural interactions, considering that there is a large degree of diversity among students within each group. For example, an individual from an Asian background who recently migrated to Australia may be considered a domestic student due to their permanent residency in the country; meanwhile, an international student, despite their residency status, may have been living and studying in Australia for several years before attending university. Characteristics such as an individual's previous exposure to cultural diversity may be important, possible determinants of their tendencies to engage in cultural diversity activities at university.

In essence, then, gaining a more nuanced understanding of student experiences of cultural diversity-related activities at university can better inform us whether and how students

are availing themselves of these opportunities that may be beneficial for developing their diversity-related skills and competencies. This may be achieved by conducting an in-depth examination of the factors influencing students' participation in these activities can provide important insights for institutions and policymakers regarding how to improve students' intercultural experiences and growth. This study is a response to these needs in understanding students' engagement in cultural diversity activities at the university.

1.2 The Present Study

This study aims to investigate factors influencing students' participation in cultural diversity activities, namely the curriculum-based activities and out-of-class intercultural interactions, at a large, metropolitan university in Australia. These activities have been supported by empirical evidence demonstrating benefits students in various aspects. The study seeks to examine how students engage with these cultural diversity activities, and to explore students' perceived impact and challenges of students' engagement in cultural diversity activities at the university. The study also has the purpose of examining the relationships between students' engagement in cultural diversity activities and their levels of IC. It also examines how students' participation in cultural diversity activities is linked to their intergroup anxiety (IA) levels, which has been demonstrated as predictive of avoidance of intercultural interaction. Further, in addition to exploring different student groups based on enrolment status (e.g., international or domestic students, year and discipline of study), this study also considers the potential influence of exposure to cultural diversity before university, particularly in their previous institutions (e.g., high schools), on students' tendencies to engage in cultural diversity activities at the university.

The main research question for this study is: "What are the factors influencing students' engagement in cultural diversity activities at university?". To address this question, two sub-questions guide the investigation:

- How do students engage in cultural diversity activities at university?
- What are the relationships between students' engagement in cultural diversity activities at university and their levels of IC?

The study involves analysis of data collected from undergraduate students using a mixed methods approach, which consists of interviews and focus groups as well as an online survey. It employs Gurin et al.'s (2002) categorisation of different types of cultural diversity experiences that students may have within the university setting.

1.2.1 Assumptions of the Research

Given that this study is an exploration of students' experiences with cultural diversity activities within the university context, the data collected and analysed in the current study depends on individual participants' experiences and subjective interpretations of the experiences. Hence, the study acknowledges that there is no single, objective truth to the research topic of the study and that each participant's experiences and interpretation of the experience are determined by numerous contextual, personal, and emotional factors.

There are, however, some aspects of the student experience relating to IC that can be accessed and measured. This study was designed based on the assumption that the frequency of students' participation in cultural diversity activities at the university can be measured. The present study is also based on the assumption that the factors influencing students' experiences and perceptions, despite being an intangible concept, can also be assessed. These elements have been assessed in the previous studies in the higher education context (e.g., Milem & Umbach, 2003). These assumptions guided the research design and data analysis of the current study. Understanding that factors can influence students' participation in cultural diversity activities is important, as doing so would help identify possible ways to encourage students to participate in these activities, which may in turn benefit the development of IC and cultural diversity-related outcomes. The findings of this study will have practical implications in terms of the

design and implementation of such activities at university. It will also inform educators about how to promote intercultural interactions among students for better IC development. In addition, exploring how students engage in cultural diversity experiences at university can uncover potential obstacles that hinder students' participation in these activities. The findings of this study will also offer areas of consideration for educators and policymakers when designing and implementing structured efforts for promoting student interaction and engagement in cultural diversity activities.

Researcher's Positionality. In reflecting on my positionality, I acknowledged that my identity and experience as an international student can bring strengths and limits to this study. My journey of studying overseas has inspired me to explore students' cultural diversity experiences within the university setting. My identity and experience as an international student at an Australian university shaped my interest in this topic as well as the lens through which I approached data collection and interpretation.

My experience as an international student enables me to interpret the data with insights as an insider. Being an insider to the research topic can have several strengths. For example, an insider researcher can have a deeper familiarity with the group and can be seen by participants as a member of the group, making it easier for the researcher to gain trust and cooperation. Insider researchers' position as a group member can also enable them to integrate perspectives that would otherwise be unrecognised (Bonner & Tolhurst, 2002).

However, I also acknowledged the limitations that my positionality may have brought to the study. Previous literature has pointed out that greater familiarity may lead to a tendency to make assumptions based on insider researchers' prior knowledge and experience (Gerrish, 1997; Hewitt-Taylor, 2002). Interviewees might assume that the researcher already knows the information (Breen, 2007), hence omitting the information from their responses. It is also important to acknowledge that my experience and positionality may have influenced the

research design and led to biases in interpreting and reporting the data (Bonner & Tolhurst, 2002), especially in the qualitative stage. Nevertheless, such biases may be unavoidable considering that just as participants' experiences are shaped by the social and cultural contexts, the same applies to the researchers. As Hall (1990) suggested, "There's no enunciation without positionality. You have to position yourself somewhere in order to say anything at all" (p. 18). Both the researchers and the participants can have a potential impact on the research process, as research is a shared space shaped by the interactions between both parties (England, 1994).

1.2.2 Research Setting

This study examines the experience of undergraduate coursework students at a large, metropolitan Australian university, which, according to its strategic statements, claims to value the importance of producing globally competent graduates. For example, in the latest Annual Report of the university¹, value is placed on preparing students to live and work in a global society, and that students "are offered a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens" (University A, 2023, p. 24). In addition, the university is "committed to fostering an environment that values diversity and inclusion, where a culture of respect and equity is supported to flourish" (University A, 2023, p. 38), and "aspires to be a vibrant, diverse and inclusive community, and a destination of choice for talented students and staff" (p. 36).

The research site provides opportunities for intercultural interactions to take place among students, both in-person and online. In particular, the research setting can be considered culturally diverse, with a large student population of 52,712, of which 41% are international students from more than 150 countries (University A, 2022). Apart from the cultural composition of the university's student population, the university is also located in close

¹ The name of the research site is removed for confidentiality.

proximity to a culturally diverse, metropolitan city in Australia. In 2021, the city has an estimated resident population of 149,615, of which more than half (54.8%) were born overseas. Furthermore, close to half (46%) of the city's population use a language other than English (LOTE) at home (City of Melbourne, n.d.). Hence, in addition to the cultural diversity present at the university, the geographic location of the university may provide students and staff at this university with opportunities for cultural exposure and intercultural encounters. Worth noting is that undergraduate study at the research site is primarily campus-based, although at the time of the data collection, the campus was closed, and student activities were moved wholly online.

1.2.3 Terminology and Definitions

This study is an exploration of undergraduate students' cultural diversity experiences at university. Several key terms needed to be clarified, as each of them has been discussed in the literature with various definitions, meanings, and dimensions. These include culture and cultural diversity, intercultural interactions, intercultural learning, intercultural competence, and international and domestic students.

The concepts of "culture" and "cultural diversity" are broad and multifaceted, encompassing various dimensions and contexts. In the literature, there exist various definitions and understandings of these terms. The concept of culture, for example, can include various tangible aspects such as language, and those that are intangible such as norms, values or customs. Holliday (1999) distinguishes two paradigms of culture: the large and small culture. The author posits that the large culture signifies the features of "ethnic, national, and international entities" (p. 240), while the small culture involves "cohesive behaviours in activities within any social grouping" (p.241). Small culture, as the author emphasises, should be understood as "a dynamic, ongoing group process" (p. 248) that involves individuals making sense of their identities within the specific context (Holliday, 1999).

Mirroring this complexity is the term “cultural diversity”. There has been a large body of literature expanding on the concept of cultural diversity. It reflects the different cultures present within a specific geographic area, organisation, or society. Piller (2016) elaborates on the connections between linguistic diversity and social justice and underscores the role of language in constructing an individual’s identity.

In Australia, the Diversity Council Australia (DCA) defines “cultural diversity” as “having a mix of people from different cultural backgrounds - it can include differences in cultural/ethnic identity (how we identify ourselves and how others identify us), language, country of birth, religion, heritage/ancestry, national origin, and/or race” (DCA, 2020). The DCA defines “culture” as “a common set of norms and values shared by a group” (DCA, 2020).

However, given that every individual can be a member of several cultural groups simultaneously (e.g., language, country of birth, etc.), it will be problematic for this study to explore every aspect outlined in the DCA’s definitions of these terms. Therefore, to limit the scope of this study, the term “culture” is used in this thesis as groups of ethnicities and linguistic backgrounds; the term “cultural diversity” is used as a variety of ethnicities and linguistic backgrounds.

Another term that requires definition in this thesis is “intercultural”. This study follows Spencer-Oatey and Franklin’s (2009) definition, who explain that “an intercultural situation is one in which the cultural distance between the participants is significant enough to have an effect on interaction/communication that is noticeable to at least one of the parties” (p. 3). The term intercultural is used interchangeably with the term “intergroup” in this thesis because both terms are used in reference to groups of people from different cultures, ethnicities, and linguistic backgrounds. A more in-depth definition of interculturality and its connection to the internationalisation of higher education is presented in Section 2.1.4.

In a related vein, a key construct of the study is “intercultural interaction”. The term “interaction” was selected for two main reasons. First, the term “interaction” emphasises an “encounter” (Spencer-Oatey & Franklin, 2014, p. 1) between individuals, rather than “the intentional verbal and non-verbal communication” (Spencer-Oatey & Franklin, 2014, p. 1). This underscores the dynamic nature of the behaviour and usage of language (Spencer-Oatey & Franklin, 2009).

Second, while the terms “interaction” and “contact” have been widely used in the literature, there are differences in how they have been portrayed and used in empirical studies. According to MacInnis and Page-Gould (2015), researchers in intergroup interaction studies typically examine short-term interactions between groups, and often do so in a laboratory setting. Participants in these studies typically interact with each other to complete tasks, which are often structured with guidance by the researchers (e.g., Page-Gould et al., 2008). In these studies, the quality of the interaction and its effects are typically measured using self-report, behavioural, or physiological measures (MacInnis & Page-Gould, 2015). In intergroup contact studies, interactions are often referred to as long-term contact with outgroup² members, and participants provide self-report data on the quantity and/or quality of the intergroup interactions that they have engaged in. These studies (e.g., Stephan & Stephan, 1985) often aim to explore the association between intergroup contact and outcomes related to intergroup bias (e.g., anxiety experienced in an intergroup interaction).

Rather than contradicting each other, studies on intergroup interaction and intergroup contact are examining the same phenomenon but at different levels, and “intergroup interaction is the atomic unit of intergroup contact” (MacInnis & Page-Gould, 2015, p. 309). In other words, it is possible for someone who has not had any degree of intergroup contact to engage

² The term “outgroup” is used to refer to a group to which an individual does not belong, or with which they do not identify themselves (American Psychology Association, n.d.).

in an intergroup interaction, but not all people engaging in an intergroup interaction would have much intergroup contact. Considering the above-mentioned literature on the terminology, this thesis uses the term “interaction” because not all intended participants would have engaged in long-term contact with people from different cultural backgrounds.

Another key term of this study is “intercultural learning”. Since World War II, intercultural learning has received widespread interest due to increases in international business, travel, education, and diplomacy (Lane, 2012). This special category of learning refers to “the acquisition of knowledge, skills, attitudes, and behaviours that support learners’ ability to interact with and understand people from cultures different to their own” (Lane, 2012, p. 1618).

Within such a global society, the outcome of intercultural learning became a particularly important attribute for employment. This is referred to as intercultural competence (IC), or “the ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills, and attitudes” (Deardorff, 2004, p. 184). Preparing students as interculturally competent individuals who can work and collaborate in a global workplace has been a goal of many higher education institutions.

Lastly, the term “international students” is used in this study to refer to “individuals who have physically crossed an international border between two countries to participate in educational activities in the country of destination, where the country of destination is different from their country of origin” (OECD, 2017, p. 38).

1.2.4 Scope and Limits

This study focuses on undergraduate students’ experiences of cultural diversity activities at one large, culturally diverse Australian university, aiming to shed light on student engagement in cultural diversity experiences at that institution. Because institutions vary in size, priorities and student composition across different contexts and cultures, the

generalisability of the results from this single-site study is limited. In other words, the study's findings and implications may not apply to other universities. However, many other universities in Australia and abroad have culturally diverse student populations and share a common value of promoting intercultural capabilities. In addition, many universities, particularly those in metropolitan areas, have cultural diversity surrounding communities. Therefore, the findings of the present study may apply to institutions that share a similar composition of student population and strategic directions as the research site.

It is crucial to note that this study is exploratory in nature and does not identify the direction of relationships between variables tested in the statistical analyses. While this study will examine the association between students' engagement in cultural diversity activities and IC, it is not an attempt to evaluate the outcome of these cultural diversity experiences. This study also acknowledges that many potential determinants can influence a student's tendency to engage in cultural diversity activities at university. However, it is limited to the exploration of several factors, such as intergroup anxiety and exposure to cultural diversity at previous institutions.

This study is also limited to the experiences of undergraduate students within the university setting, and it does not consider postgraduate students. This direction is based on the work of Gurin and colleagues (2002), which, as mentioned in Section 1.1, suggests that university students of traditional age (e.g., 18-25 years old) are in a crucial phase of developing their personal and social identities, and exposure to information challenging students' existing perspectives during this period can have a positive impact on their cognitive development. As such, it is hypothesised that cultural diversity experiences at university can have a significant influence on undergraduate students.

Data collection for this study was significantly disrupted by the COVID-19 pandemic which forced student activities to move online. The COVID-19 disruption to this study will be

detailed in Section 4.3.1. The findings of this study may reflect student experience at an unusual period where their university experiences were disrupted due to the pandemic, but there are important sights to be learnt from students' cultural diversity experiences at university during this period of disruption.

1.3 Thesis Overview

There are eight chapters in this thesis. The current chapter has provided the context for the research problem, identified the research gaps, and offered a rationale and overview of the current study. It has also outlined the research aims and questions and the scope of the study, as well as defined the key terms used in the thesis.

Chapter 2 provides an overview of scholarly discussion on the internationalisation of higher education and related strategic approaches, which can influence the implementation of cultural diversity activities at university. It then presents the theoretical foundation regarding the conceptualisation and development of IC. The chapter also reviews the published research on measurements of IC.

Chapter 3 begins by reviewing the theoretical literature on how students may be impacted by cultural diversity within the university setting. It then synthesises the empirical evidence documenting the benefits for students to engage in cultural diversity activities, both in and outside of class at the university. The chapter also presents the factors influencing students' cultural diversity experiences identified in the previous studies and concludes with a discussion on the gaps in the current literature.

Chapter 4 outlines the research design and methodological framework used in this study and provides a rationale for the selection of a mixed-method research design with two sequential stages. It also explains the methods used to collect and analyse data for each stage.

Chapter 5 presents and discusses findings from the interview stage (Stage 1) of the study, which explored how students engage in cultural diversity activities at university, as

well as their perceptions of factors influencing their participation and the impact of cultural diversity experiences at university.

Chapter 6 presents and discusses survey findings from Stage 2 of the study, which examined how students engage in different cultural diversity activities and the factors influencing their participation. It also tested the relationships between students' cultural diversity experiences and their levels of IC.

Chapter 7 synthesises the main findings from both stages of this study to provide insights into the students' experiences of cultural diversity activities and to identify factors influencing students' engagement in these activities at university. This chapter also draws on the findings from both stages of the study to discuss the relationship between students' cultural diversity experiences and IC.

Chapter 8 presents the conclusions from the study and discusses the implications of the findings for research, practice, and policy.

2 Intercultural Competence as a Graduate Attribute

The previous chapter introduced the context, rationale, and purpose of this study. It also provided the definitions of key terms used in this thesis. As outlined in Section 1.1.1, many universities emphasise intercultural competence (IC) as a key graduate attribute. This reflects a response to the internationalisation of higher education, which has received increased attention in recent years. To comprehend why IC is emphasised as a critical graduate attribute, it is important to first understand the definitions, drivers and approaches of the internationalisation of higher education.

This chapter begins with an overview of the internationalisation of higher education, particularly the shifting focus in its definition in recent decades, as well as the main drivers and approaches. The aim here is to offer insights into the international dimension of higher education and the related strategic focus at Australian universities, which can impact the implementation of cultural diversity activities for students. This chapter then focuses on the cultural diversity-related graduate attributes of Australian universities, of which IC has emerged as a desirable outcome. The chapter then reviews the previous literature on understanding IC, particularly how it is conceptualised, the process through which it can be developed, and how it has been measured.

2.1 Internationalisation of Higher Education

Understanding the strategic orientation of an educational institution is crucial, as it serves as the foundation for implementing programs and activities that provide students with opportunities to engage in cultural diversity experiences. The international dimension of higher education, or internationalisation of higher education, is considered an important factor that has shaped many countries' higher education sectors, and it has become a "formidable force for change" (p. 3) and a key feature of the sector (Knight, 2008). Therefore, comprehending

the international dimension of higher education is of significance to the topic of this study, as it can assist in understanding how cultural diversity at universities can influence students.

2.1.1 Defining Internationalisation of Higher Education

In the last 50 years, the internationalisation of higher education has transformed from a “marginal activity” (p. 303) to an important component of the reform agenda (de Wit & Altbach, 2021). The shifting focus in defining the internationalisation of higher education over the last few decades reflects the changes in its main thinking. Early attempts to define the internationalisation of higher education centred around a set of institutional activities, for example, Arum and van de Water’s (1992) definition of “multiple activities, programs, and services that fall within international studies, international educational exchange and technical cooperation” (p. 202). By the mid-1990s, a process or organisational approach was introduced by Knight (1994), through which internationalisation was defined as “the process of integrating an international and intercultural dimension into the teaching, research, and service functions of the institution” (p.7).

In the following decade, the emphasis on conceptualising internationalisation shifted to the process of educational change and management (e.g., Söderqvist, 2002). Meanwhile, the focus on internationalisation became broader, and an effort was made to reach a consensus that entails all aspects of students’ university experiences. Knight (2008) revised her 1994 definition of internationalisation to include more generic terms: internationalisation at the national, sector and institutional levels was defined as “the process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education” (p. 21). Knight’s (2008) definition has been used widely. As noted by de Wit and Leask (2015), there was a shift “away from ad hoc, marginal, and fragmented activities toward broader, more diverse, and more integrated and transformative processes” (p. 347) evident in the focus of the approaches to internationalisation. With such complexity in defining

the internationalisation of higher education, its drivers and rationales have also received extensive scholarly discussion. The following subsection outlines discussion of the main drivers of internationalising higher education.

2.1.2 Drivers of Internationalisation of Higher Education

For this study, the underlying motives of internationalising higher education are important to understanding intercultural learning, as they can largely determine how strategic programs and activities are implemented at the institution. In the past three decades, the internationalisation of higher education has manifested in areas such as student, staff and program mobility, as well as global reputation and branding (Van Der Wende, 2001). Two main drivers underpinning the internationalisation of higher education involve the humanistic and the economic motives. The humanistic driver of internationalisation has a focus on societal benefits and aims to cultivate students with “an ability to see themselves not simply as citizens of some local region or group but also, and above all, as human beings bound to all other human beings by ties of recognition and concern” (Nussbaum, 1997, p. 10). The humanistic motive of internationalisation views the role of higher education as “cultivating humanity” (Nussbaum 1997), aiming to solve global problems in areas of economic, environmental, religious and political (Nussbaum, 2010). The economic driver, on the other hand, places great importance on the economic benefits that internationalising higher education can generate, in ways such as recruiting fee-paying international students.

The recruitment of fee-paying international students has become the dominant rationale for the internationalisation of universities (Maringe & Woodfield, 2013). In countries such as Australia and the U.K., one way for the nation to increase and expand its funding streams and income was to promote the recruitment of overseas students (Maringe & Woodfield, 2013). In Australia, for example, most international students are self-funded or fee-paying and pay higher

tuition fees than their domestic counterparts from the same university (OECD, 2019). Therefore, this student population has a direct economic impact on universities (Knight, 1997).

While higher education in Australia has become “a significant export industry” (p. 45) over the last two decades, international students have become the largest funding source for international education (Norton et al., 2018). More specifically, international education is the fourth-largest export in the country in 2022; it has generated \$26.6 billion to the national economy, of which the higher education sector contributed 67% (Department of Education, 2023). This export income from international education has experienced an increase of 153% from 2008 to 2019. The higher education sector, in particular, contributed 67% to the nation’s international education export income in 2020 (Department of Education, 2023). Therefore, many universities compete in this market by aiming to attract international students and reach numeric, measurable targets, such as the population of international students and scholars and international ranking (Knight, 2013; Knight & de Wit, 2018).

This economic rationale has received criticism, as it is marked as the “increasing commodification of education” (Knight & de Wit, 2018, p. 3). Internationalisation has become an industry for study abroad agencies and international student recruiters, viewing it as a commodity that can be purchased by students as consumers (Stein et al., 2016). Meanwhile, international students as consumers often question why they are required to pay tuition and fees higher than their domestic peers for the same goods, services, and experiences from the same universities (Maringe & Woodfield, 2013).

Another criticism of the economic rationale centres around the emphasis on student and staff mobility, which has been one of the main manifestations of internationalisation in the past 30 years (de Wit, 2020). While having a large and diverse population of staff and students has often been assumed to help create inclusive engagement at universities, in reality, this is insufficient. A common myth, as outlined by Knight (2011), is the assumption that having a

large international student population would create a more “internationalised institutional culture and curriculum” (p. 15). Indeed, international students often tend to feel marginalised, both socially and academically, whereas their domestic counterparts often are reluctant to work in groups or socialise with international students (Knight, 2011). Moreover, the paucity of interactions among diverse student groups continues to be evident on many culturally diverse university campuses (Arkoudis & Baik, 2014; Baik, 2018; Marginson et al., 2010; Smart et al., 2000; Volet & Jones, 2012). This issue questions the assumption that the motive behind recruiting international students is primarily to help the internationalisation of the institution (Knight, 2011). Although mobility contributes to international knowledge exchange and research collaboration, one should not assume that having a large international student population equates to internationalisation (de Wit, 2011), nor should international students be considered “international agents” that “help internationalize the campus” (Knight, 2011, p. 14).

Apart from inbound mobility, providing outbound mobility programs, such as study or internship opportunities abroad as a part of the student’s university experience, is often oversimplified as an equivalent of internationalisation (de Wit, 2011, p. 2). This kind of program has prompted criticism for “serving as university-sponsored tourism” (Mwangi & Yao, 2020, p.34) and portraying the host country as the “other” (Lewin, 2009). Breen (2012) also argues that these programs can contribute to the “privileged migration” that “privilege a kind of temporary engagement with the foreign” (p. 84). Emphasising mobility as the approach to internationalisation has received criticism revolving around practicality and social responsibility, as it raises the problem of only benefiting the minority group of students who can afford to study abroad (Beelen & Jones, 2015; de Wit & Jones, 2018; Harrison, 2015).

As noted by de wit and Altbach (2021), although the economic driver has played a dominant role in the strategic orientation of the higher education institution, internationalisation of higher education has also been “called upon to help contribute” (p. 303)

to the global society recently, particularly by placing more importance on internationalising at the home university. This approach, termed Internationalisation at Home (IaH), will be discussed further in the subsection that follows.

2.1.3 Internationalisation at Home

Compared to mobility programs, intercultural learning opportunities available at the home campus can benefit a larger group of students. This includes not only the events, programs and activities happening within the university context but also the curriculum that students are learning from. Moving beyond the emphasis on student mobility, the approach of IaH is defined as “the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments” (p. 69), and that “international and intercultural teaching and learning on the domestic campus is the main aim, irrespective of whether the student experience is enhanced by mobility” (Beelen & Jones, 2015, p. 63). The IaH initiatives involve the diversity of both the home student population and the domestic learning environment (Gregersen-Hermans, 2017). Such initiatives aim to provide internationalised experiences for all students at the domestic campus, in addition to incorporating the presence of international staff and students. One of the main IaH strategies involves encouraging interactions among students from different groups.

A similar approach to IaH is the approach of Internationalisation of the Curriculum (IoC), which is defined as “the process of incorporating international, intercultural and/or global dimensions into the content of the curriculum as well as the learning outcomes, assessment tasks, teaching methods and support services of a program of study” (Leask, 2015, p. 9). It is an approach to internationalisation that involves both mobile and non-mobile students, with the development of IC embedded into the core of the curriculum. According to Leask (2009), an internationalised curriculum would involve engaging students “with

internationally informed research and cultural and linguistic diversity and purposefully develop their international and intercultural perspectives as global professionals and citizens” (p. 209).

Both the IaH and IoC approaches give great prominence to ensuring all students can engage in and benefit from internationalised education. Both approaches also emphasise intercultural learning to produce interculturally competent graduates. This goal can be supported by encouraging students to engage in cultural diversity at the university, such as learning from a range of contexts and perspectives included in an internationalised curriculum, participating in diversity-related activities (e.g., multicultural group work), and interacting with peers who have different perspectives, beliefs, or backgrounds (Leask, 2009). Centre to this goal is the concept of interculturality, which will be outlined in the next section.

2.1.4 Interculturality

The concept of interculturality is of great complexity, and how interculturality is understood depends on the definition of culture (Dervin, 2016). As scholars have suggested, the definition of culture has “consequences for understanding interculturality” (Liddicoat, 2015, p.2). Dervin (2011) identified two different ways of understanding interculturality: a solid and a liquid approach. The solid approach perceives “difference as a product of an individual’s origin” (Liddicoat, 2015, p. 2) and views cultures as static determinants of interaction. This approach to interculturality has been criticised for oversimplifying the nature of culture, as it considers cultures as the shaping forces of the interaction, human being, and their behaviours while undermining individual differences (Dervin, 2016). Further, such an approach focuses on the group rather than the individual, and the latter is often “seen as little more than an instance of the group” (Liddicoat, 2015, p. 2).

The liquid approach to interculturality, on the contrary, views cultures as diverse and variable and as “deployable resources” for social purposes (Liddicoat, 2015, p. 2). Unlike the solid approach, this view focuses on culture in interaction as a result of the process of

interaction, rather than a force that determines the interaction. With the liquid approach to interculturality, individuals are seen as members of diverse social and cultural groups, with multiple identities (Dietz, 2018). As such, the variation among individuals is considered “a constituent parts” (p. 7) of interculturality, which has come to be defined as the “interaction between diversities where different perspectives are exchanged and negotiated” (Dervin & Liddicoat, 2013, p. 7).

A crucial element of interculturality, as proposed by Liddicoat (2015), is the ability to decentre, which requires the individual to step outside of their existing perspective and to view the situation from both external and internal perspectives. As Byram (1997; 2021) suggests, the ability to decentre involves the “willingness to suspend belief in one’s own meanings and behaviours, and to analyse them from the viewpoint of the others with whom one is engaging” (Byram, 1997, p. 34). Further, this central element of interculturality pertains to “the capacity to understand multiple perspectives and to search for and accept multiple possible interpretations” (Liddicoat, 2015). This ability aligns well with the foundation of IC, an intended outcome of intercultural learning, particularly in the cognitive aspect (i.e., cultural awareness and cultural empathy). The next section presents an overview of cultural diversity-related outcomes that are mentioned as graduate attributes by many Australian universities.

2.2 Cultural Diversity-Related Graduate Attributes

The need to prepare students with the skills and competencies necessary for working across cultures and contexts has been demonstrated by the demands of today’s global workplace. As such, most universities in Australia value the educational benefits of engaging in cultural diversity on campus (Denson & Zhang, 2010). This is particularly through the promotion of various terms related to cultural diversity (e.g., “diversity”) and those related to intercultural competence and awareness (e.g., “cross-cultural competence” and “cultural competence”), as presented in Section 1.1.

Explicit mentions of cultural diversity-related graduate attributes have been made in Australian universities' public-facing strategic documents. One example is The University of Melbourne (UoM), which states in its strategic document *Advancing Melbourne 2030* that it aims to prepare students “for success as leaders, change agents, and global citizens” (p. 5), providing students with “opportunities for learning in regional and global contexts” (p. 14), and “equipping them with the attributes needed for working cross-culturally on campus” (UoM, 2020, p. 14). The university also prioritises producing “outstanding graduates for Australia and the world, known for their capacity to lead in a time of rapid transformation, and ensuring the “curriculum is informed by a global range of perspectives” (UoM, 2020, p. 16). These statements from the university's strategic plan underscore the significance of supporting intercultural learning and related outcomes.

Other mentions of cultural diversity-related graduate outcomes in Australian universities' strategic documents also involve the term “global citizens” as one of their graduate attributes. For example, Australian Catholic University (ACU) states in its *ACU Global Strategy 2020-2023* that “the campus serves staff and students seeking to become engaged global citizens through an expansive curriculum that embeds global perspectives across teaching research and engagement” (ACU, n.d., p. 3) and the university would be a “vibrant and diverse community where physical and virtual opportunities for global citizenship are integrated into our curriculum to provide a distinctive education experience for all students” (ACU, n.d., p. 6). Another example is from The University of Adelaide's *International Plan*, as the university notes that it “will continue to nurture our cosmopolitan culture; one that embraces diversity, provides internationalised learning experiences—both at home and abroad—and prepares our people to be active global citizens” (The University of Adelaide, 2020, p.4).

From previous analyses of universities' documents (e.g., Baker et al., 2022), it is clear that Australian universities on the whole value the importance of intercultural learning and producing interculturally competent graduates. However, this is difficult to elucidate as universities tend to differ in aspects such as their strategies, approaches, and various institutional characteristics (e.g., student number), and the terms included in their graduate attributes tend to be loosely defined (Arkoudis et al., 2012). A shared commonality across many Australian universities is a focus on developing students' intercultural competence as an outcome of their university studies.

2.3 Understanding Intercultural Competence

Intercultural competence (IC) is considered a desired outcome of the internationalisation of higher education (Deardorff, 2004) and an espoused graduate attribute of many Australian universities. The development of intercultural competence (IC) is central to the efforts of internationalising higher education; these efforts lead to increases in the institutional emphasis on cultivating graduates who are “successful members” (p. 1804) of a diverse workforce and the society as global citizens (Deardorff, 2020). On a global scale, the importance of developing IC is recognised by organisations such as The Organisation for Economic Co-operation and Development (OECD), which included a test of global competence in its 2018 Program in International Student Assessment (PISA) Test (Deardorff, 2020).

In the literature, IC has been referred to by numerous other terms, such as cross-cultural competence, multicultural effectiveness, intercultural sensitivity, intercultural communication competence, and cultural intelligence (Bradford et al., 1998). As these terms have been used interchangeably as IC with variability in its definition, IC remains a contested term.

To seek a consensus on the definition of IC, Deardorff (2006) conducted a Delphi study with 23 experts; the top-rated definition among intercultural scholars was Deardorff's (2004)

definition, which conceptualises IC as an individual's "ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills and attitudes" (p. 194). This study adopts Deardorff's (2004) definition of IC, which interprets IC with prominence to three aspects of intercultural knowledge, skills, and attitudes. This section consolidates the previous literature on the conceptualisation, development and measurement of IC that provide a foundation for understanding how IC can be facilitated among university students.

2.3.1 Conceptualising Intercultural Competence

In the previous literature, the conceptualisation of IC has involved understanding the concept through multiple constituent elements. For example, in alignment with Deardorff's (2006) focus on intercultural knowledge, skills, and attitudes, van der Zee and van Oudenhoven (2000, 2001) proposed five traits in understanding and measuring IC: cultural empathy, social initiatives, emotional stability, open-mindedness, and flexibility. *Cultural empathy* (CE) involves empathising with the feelings, thoughts, and behaviours of individuals from diverse cultural backgrounds. Individuals with high levels of cultural empathy can "easily understand the rules of cultures that are unknown to them" (van der Zee & van Oudenhoven, 2013, p. 929). *Social initiative* (SI) includes the tendency to approach and demonstrate initiative in an intercultural context. *Emotional stability* (ES) refers to the ability to remain calm in novel and stressful situations. Individuals with high levels of emotional stability tend to not fear uncertainty in an intercultural situation (van der Zee & van Oudenhoven, 2013, p. 929). *Open-mindedness* (OP) includes having an unbiased attitude toward cultural differences. Individuals with high levels of open-mindedness can "postpone their judgment" (van der Zee & van Oudenhoven, 2013, p. 929) when confronted with behaviours or values different from their own. *Flexibility* (FX) refers to the ability to see novel situations as a positive challenge rather than a threat, and accordingly adapt to these situations (van der Zee & van Oudenhoven, 2013;

van der Zee et al., 2013; van der Zee & van Oudenhoven, 2000; van der Zee & van Oudenhoven, 2001).

To comprehend how these five elements can promote IC, van der Zee and van Oudenhoven (2013) further categorise them into two types: stress-buffering and social-perceptual traits. According to van der Zee and van Oudenhoven (2013), CE, OM, and SI are considered social-perceptual traits that can predispose individuals to see intercultural situations as interesting or as opportunities for growth, while ES and FX are stress-buffering traits that help reduce the impact of threatening experiences from an interaction.

As theorised by van der Zee and van Oudenhoven (2013), stress-buffering and social-perceptual traits can influence individuals' affective, behavioural, and cognitive experiences in intercultural interactions in different ways. In terms of the affective responses in an intercultural situation, stress-buffering traits are hypothesised to reduce the impact of threatening experiences resulting from an intercultural interaction and, in turn, reduce negative affect (van der Zee & van Oudenhoven, 2013). Social-perceptual traits may predispose the individual to perceive intercultural situations as positive challenges or as interesting, resulting in positive affect. Stress-buffering traits may reduce an individual's level of anxiety in new intercultural situations, which can in turn facilitate their adaptation to the new intercultural situation as a behavioural consequence and protect them against culture shock. Social-perceptual traits are posited to promote cultural learning by helping the individual "approach the new situation with creativity and interest" (van der Zee & van Oudenhoven, 2013, p. 936).

A similar conceptualisation of IC with the three aspects of affect, behaviour, and cognition is applied by scholars in the theoretical literature. For example, Chen and Starosta (1996; 1997) outline that IC comprises three components: intercultural awareness (cognition), intercultural sensitivity (affect), and intercultural adroitness (behaviour). More specifically, intercultural awareness, the cognitive component of IC, is referred to as "the understanding of

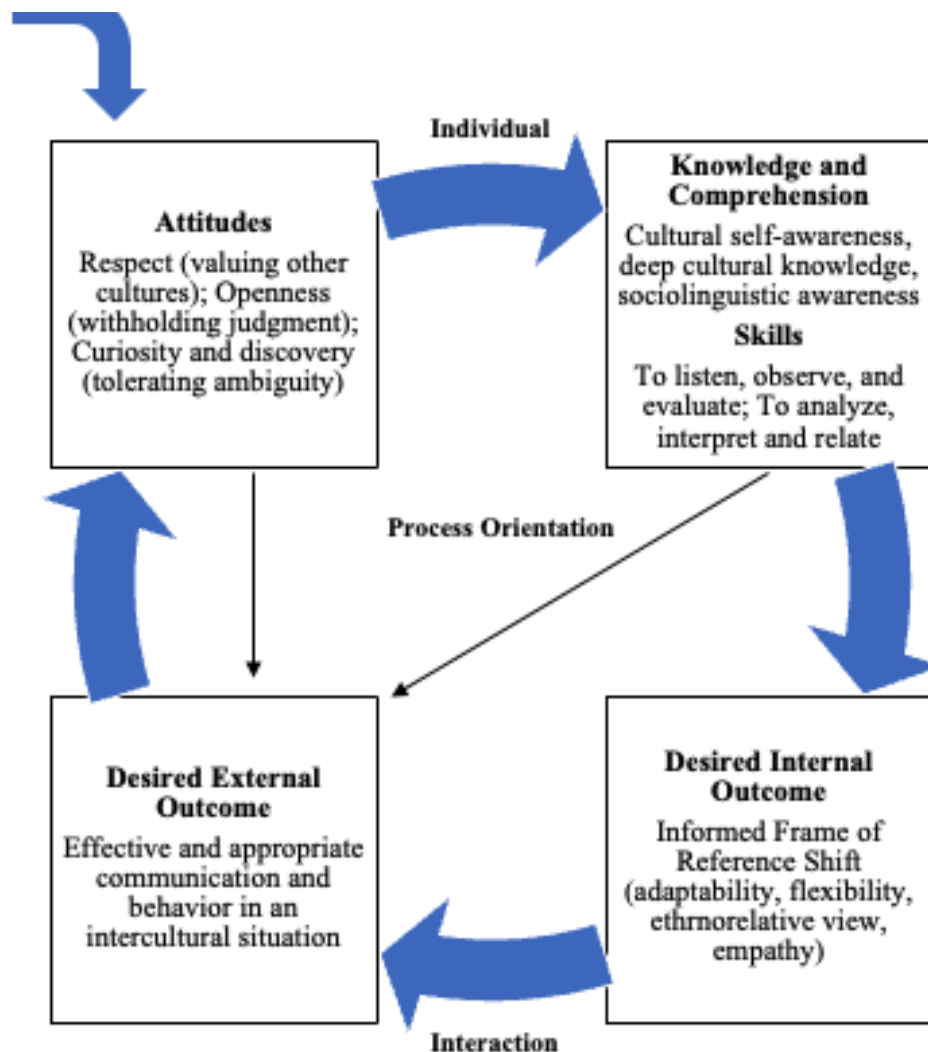
cultural conventions that affect how we think and behave” (Chen & Starosta, 1998, p. 28). Because being aware of cultural differences is the first step to tolerating and showing respect for cultures, intercultural awareness is considered “the minimum condition” (p. 29) for IC (Chen & Starosta, 1998). Intercultural sensitivity, or the affective component of IC, is defined as developing “a readiness to understand and appreciate cultural differences in intercultural communication” (Chen & Starosta, 1998, p. 28). This involves the “ability to receive and send positive emotional signals before, during and after intercultural interaction” (p. 54); these positive emotional responses can in turn lead to developing acknowledgment and respect for cultural differences (Fritz et al., 2005). Moreover, intercultural adroitness, the behavioural component of IC, is referred to as having the necessary skills to “act effectively in intercultural interactions” (Chen & Starosta, 1998, p. 28). According to Chen and Starosta (1996), these three concepts are separate but closely related, in the way that intercultural awareness (cognition) provides the foundation of intercultural sensitivity (affect), which in turn leads to intercultural adroitness (behaviour). The authors also hypothesise that these three components must be developed for individuals to communicate efficiently with people from different cultures.

2.3.2 Developing Intercultural Competence

The theatrical basis for unpacking the development of IC is another key area worth reviewing, as it can offer insights into the direction of intercultural learning. To explain the development of IC and the relationships between main IC components, Deardorff (2004; 2006) proposed the Process Model of Intercultural Competence. Figure 2.1, adapted from Deardorff (2006, p. 256), outlines that an individual’s degree of IC depends on their attitudes, knowledge and comprehension, and skills.

Figure 2.1

Deardorff's (2006) Process Model of Intercultural Competence (p. 256)



Attitudes serve as the foundation of this model and include respect in valuing different cultures, openness to withhold judgment, as well as curiosity and discovery in tolerating ambiguity (Deardorff, 2006). As the starting point of the development process, the element of attitudes is considered the most crucial and can affect all other aspects of IC (Deardorff, 2006; Deardorff, 2009). Knowledge and comprehension pertain to cultural self-awareness, deep cultural knowledge and sociolinguistic awareness, whereas skills involve the abilities to listen,

observe and evaluate, and to analyse, interpret and relate to an intercultural setting (Deardorff, 2006).

This model emphasises both the development of IC as a continuous process of improvement, and that there is no ultimate IC (Deardorff, 2006). The desired outcomes are categorised into internal and external outcomes of IC. The internal outcome centres around an internal shift in frame of reference, and the external one involves demonstrating effective and appropriate behaviour in an intercultural setting. This model notes that while an individual can obtain the external outcome without fully achieving the internal outcome, the degree of IC would be more limited than if the internal outcome is attained (Deardorff, 2006).

In addition, this model connects IC development with the importance of interaction, highlighting that interaction is key to achieving a higher level of IC. As the author posits, although an individual can achieve external outcomes without engaging in intercultural interaction, “the degree of appropriateness and effectiveness of the outcome may not be nearly as high as when the entire cycle is completed and begins again” (Deardorff, 2006, p. 257). While an individual can gain IC without engaging in interaction, the model implies that the gain of IC would be impoverished compared to when the interaction is involved. Therefore, the model suggests that interaction is a crucial part integrated into the intercultural experience. As will be reviewed in Section 3.2.2, a large body of empirical evidence has supported the benefits of engaging in interactions on developing IC and other positive outcomes.

2.3.3 Measuring Intercultural Competence

As mentioned in Section 1.2.3 many terms have been used in the literature interchangeably as IC (e.g., intercultural communication competence, cultural intelligence, multicultural effectiveness, etc.). Mirroring this complexity is the usage of existing measures to assess an individual’s level of IC. Matsumoto and Hwang (2013) conducted a comprehensive review of the content, construct, psychometric properties and evidence of ten IC measures and

revealed three of them to have the most promising evidence for IC assessment: Ang et al.'s (2006) Cultural Intelligence Scale (CQS); Matsumoto et al.'s (2001) Intercultural Adjustment Potential Scale (ICAPS); and van der Zee and van Oudenhoven's (2000) Multicultural Personality Questionnaire (MPQ). These three scales are discussed further in this section.

Cultural Intelligence Scale (CQS). The development of the CQS was based on Earley and Ang's (2013) theoretical model, which defines cultural intelligence (CQ) as the ability to effectively manage culturally diverse situations (Ang et al., 2006). More specifically, Earley and Ang (2003) theorise CQ as having four components: metacognitive, cognitive, motivational, and behavioural CQ.

Metacognitive CQ describes the processes of acquiring and understanding cultural knowledge of acquiring cultural knowledge (Flavell, 1979). *Cognitive CQ* refers to "knowledge of the norms, practices and conventions in different cultures acquired from education and personal experiences" (Ang et al., 2007, p. 338). *Motivational CQ* is defined as "the capability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences" (Ang et al., 2007, p. 338), and *behavioural CQ* is referred to as "the capability to exhibit appropriate verbal and nonverbal actions when interacting with people from different cultures" (Ang et al., 2007, p. 338).

Earley and Ang (2003) also differentiate culturally intelligent behaviours from culturally competent ones: the former are motive-oriented and strategic, while the latter are passive and less agentic. They further contend that CQ is a state-like individual difference, which represents an individual's capability to deal effectively with cultural encounters; in contrast to personality traits, CQ is malleable and specific to a certain task or situation (Ang et al., 2006).

The CQS has been employed in empirical studies examining the influence of overall CQ and individual CQ components on several outcomes, such as adjustment and adaptation,

performance and effectiveness, as well as cross-cultural leadership (Ott & Michailova, 2018). For example, Ang et al. (2007) developed a model that hypothesizes relationships between the four CQ dimensions and three outcomes related to intercultural effectiveness (cultural judgment and decision-making, cultural adaptation, and task performance in culturally diverse contexts). They also tested this model and found a consistent pattern of relationships: metacognitive and cognitive CQ predicted cultural judgment and decision-making, motivational and behavioural CQ predicted cultural adaptation and metacognitive and behavioural CQ predicted task performance (Ang et al., 2007).

Based on Earley and Ang's (2003) model of CQ, 53 items were initially drafted by Ang et al., (2007) and ranked by three faculty members and three international executives with cross-cultural expertise for clarity and definitional accuracy. This process resulted in a 40-item version, which included the ten items from each CQ component. Based on responses to the 40-item CQS from a sample of 576 undergraduate students at a Singaporean university, researchers removed items that had high residuals, low factor loadings or item-total correlations, small standard deviations, or extreme means. This process resulted in the latest version of the CQS with 20 items, which consists of four, six, five, and five items for measuring metacognitive, cognitive, motivational, and behavioural CQ, respectively. The internal consistency of the four components of CQS was good, ranging from .72 to .86 (Ang et al., 2007).

The CQS has been employed in the higher education context with samples across different cultures, such as the U.S., Singapore, and Korea. There is considerable support from previous studies for the construct and ecological validity of the CQS, based on confirmatory factor analysis (CFA) results confirming the four-factor structure (Matsumoto & Hwang, 2013). For example, Ang et al.'s (2007) study provided evidence of the validity and reliability of the CQS by conducting cross-validation of the CQS across samples, time, and countries.

However, several issues have been raised regarding the concepts of CQ and the CQS. Although scholars who developed the CQS contend that CQ is distinct from emotional intelligence (Earley & Ang, 2003), findings from a psychometric analysis of CQ conducted by Ward et al., (2009) indicated differently: these two constructs had 67.2% of shared variance. Ward et al.'s (2009) analysis also did not find support for the incremental validity of CQ and CQ "failed to explain additional variance in psychological, sociocultural, and academic adaptation outcomes over and above that explained by personality and emotional intelligence" (p.102). Further, Bückner and colleagues (2016) also investigated the cross-cultural robustness of the CQS but found contrary results to Ang et al.'s (2007) study. They pointed out that Ang et al.'s (2007) study did not assess the scalar equivalence of the CQS, and the discriminant validity of the CQS was found to be problematic (Bücker et al., 2016).

Intercultural Adjustment Potential Scale (ICAPS). The ICAPS was developed by Matsumoto and colleagues (2001) as a means to measure individuals' potential for intercultural adjustment, which is "a function of psychosocial skill that the individuals possess" (Matsumoto & Hwang, 2013, p. 857). In the formation of the ICAPS, eight constructs were identified: emotion regulation, critical thinking, openness, flexibility, interpersonal security, emotional commitment to traditional ways of thinking, tolerance for ambiguity, and empathy (Matsumoto et al., 2001).

The initial ICAPS consists of 193 items and Matsumoto and colleagues (2001) conducted a three-stage study to further develop the ICAPS. They first conducted an ecological validity test on the responses from 28 Japanese sojourners, through which they removed items that did not correlate with any criterion variable. This process resulted in 153 items. Matsumoto and colleagues (2001) then conducted another ecological validity test with focus group discussions with another sample of 34 Japanese sojourners on the topic of adjustment to the U.S.; items with the lowest p-value across criterion variables and those which correlated

significantly with any of the criterion variables were kept, resulting in a 55-item ICAPS ($\alpha = .78$). The test-retest and parallel forms reliability of the English version of the ICAPS were .79, and .93, respectively (Matsumoto et al., 2001).

The ICAPS was originally developed to be culture-specific and used for one cultural group: Japanese sojourners and immigrants to the U.S. (Matsumoto et al., 2001). However, it has been employed in subsequent studies with participants from different cultures including India, Sweden, and Central and South America (Matsumoto & Hwang, 2013). Previous studies have documented the ecological validity of the ICAPS across different contexts including higher education (Matsumoto & Hwang, 2013).

Multicultural Personality Questionnaire (MPQ). The MPQ was first developed by van der Zee and van Oudenhoven (2000) and later revised to encompass five factors relevant to IC, as outlined in Section 2.3.1, cultural empathy, flexibility, social initiatives, emotional stability, and open-mindedness (van der Zee et al., 2013). The original MPQ consists of 91 items and is administered by asking participants to rate the extent to which each of the 91 statements applies to themselves, using a scale ranging from 1 (totally not applicable) to 5 (completely applicable). Researchers conducted an exploratory factor analysis for construct validation, which resulted in a four-factor solution explaining 30.6% of the total variance of the data. This 91-item version was thus revised into the final five-factor structure, with internal consistency ranging from .75 to .90 and test-retest reliability ranging from .75 to .87 (van der Zee & van Oudenhoven, 2000). The MPQ has been used in the higher education context with respondents from different countries such as the Netherlands, Singapore, the US, and New Zealand.

For more practicality, a short-form version of MPQ (MPQ-SF) was later developed by van der Zee et al. (2013) to include 40 items. The short-form version was developed using a split-sample scale validation design, in which researchers first conducted principal component

analysis and item selection criteria based on responses from 260 participants to extract 40 items. They then conducted CFA on responses from 251 participants to validate these 40 items as MPQ-SF, of which the five factors had coefficient alphas ranged from .72 to .82. In addition, when comparing the short form to the original 91-item MPQ, each scale of the MPQ-SF correlated highly and significantly with its corresponding scale in MPQ, ranging from .88 (for open-mindedness) to .94 (for social initiative). In a recent longitudinal study by Hofhuis et al., (2020), researchers examined the measurement invariance of the MPQ-SF between different gender and cultural groups of 519 undergraduate students at a university in the Netherlands. Their study found that the MPQ-SF appears to be reliable and shows sufficient invariance when employed in the higher education context, both in longitudinal and comparative design (Hofhuis et al., 2020).

The above three measurements of IC share similarities in variables in three domains. Table 2.1, adapted from Matsumoto and Hwang (2013, p. 868), presents the similarities of concepts used in these measures. On the other hand, these measures were validated against different outcome variables (Matsumoto & Hwang, 2013). For example, the CQS predicts leadership behaviour and the cognitive process of decision-making; the ICAPS predicts psychological adjustment potential; and the MPQ predicts international orientation, as well as international and intercultural vocational interests (Matsumoto & Hwang, 2013).

Table 2.1

Conceptual Overlap in Three Measures

| Domain | CQS | ICAPS | MPQ |
|--------|------------------|-----------------------|------------------------------------|
| 1 | Motivational CQ | Openness | Open-mindedness; Social Initiative |
| 2 | Behavioural CQ | Openness; Flexibility | Open-mindedness; Flexibility |
| 3 | Metacognitive CQ | Critical Thinking | Cultural Empathy |
| 4 | | Emotion Regulation | Emotional Stability |

Note. Adapted from “Assessing Cross-cultural Competence: A review of available tests” by Matsumoto & Hwang, 2013, *Journal of Cross-Cultural Psychology*, 44(6), p.868.

2.4 Chapter Summary

This chapter has reviewed the literature on internationalisation of higher education and intercultural competence, a desired graduate outcome. The previous scholarly discourse on the shifting focus in defining internationalisation in the recent decades, as well as its drivers, approaches, and intended graduate attributes, offers valuable insights and a foundation for understanding the strategic focus on Australian universities in recent years, which can determine the implementation of programs, events, and activities, as well as the student population of the institution. Further, with the value being placed on cultural diversity-related graduate attributes, Australian universities value the importance of intercultural learning at the home campus and preparing students as interculturally competent graduates ready to work and live in a diverse society. Students can develop these attributes through active and positive engagement in different cultural diversity activities within the university context. Literature on these cultural diversity activities will be reviewed in the following chapter, along with the issues and factors that may influence students' participation in these activities.

3 Cultural Diversity Experiences at the University

The previous chapter outlined the strategic orientation of the internationalisation of higher education, particularly the shifting focus in its definitions, main drivers, and approaches. It also offered elaboration on the conceptualisation of cultural diversity-related graduate attributes and intercultural competence (IC), the desired outcomes of the internationalisation of higher education. The development of these attributes can be facilitated through active engagement in different cultural diversity activities within the university context.

The chapter first reviews the literature on different types of cultural diversity experiences within the university context. It then synthesises the empirical studies on students' engagement in these activities, particularly the documented benefits of these activities, as well as the issues and challenges in promoting students' active participation in these activities.

3.1 Categorisation of Cultural Diversity Experiences

This section provides an overview of three types of cultural diversity experiences that students may have within the university context, as outlined by Gurin et al. (2002): structural, classroom and interactional diversity.

3.1.1 *Structural Diversity*

Structural diversity, or the cultural composition of the student population of the institution, has been positively associated with the possibility of encountering peers from diverse backgrounds (Gurin, 1999; Gurin et al., 2002). That is, attending a culturally diverse campus can provide students with opportunities to be exposed to opinions, values, and beliefs that are different from their own. Structural diversity has been demonstrated to shape the structured and unstructured opportunities for students to interact with diverse peers (Chang, 2001; Chang et al., 2004; Gurin, 1999; Gurin et al., 2002; Pike & Kuh, 2006).

Some scholars have argued that the mere presence of students from diverse cultural backgrounds on campus could directly foster positive educational impacts for students (Wood & Sherman, 2001). For example, in Antonio and colleagues' (2004) study, researchers conducted an experiment to test the effects of structural diversity on students. Based on a sample of 357 university students at three U.S. universities, their findings revealed that the presence of cultural- or opinion-minority individuals in a small discussion group led to positive effects on participants' cognitive complexity, which supports the educational significance of structural diversity. A positive association was also evident between cognitive complexity and the cultural diversity of participants' close friends and classmates. These findings further suggest that, compared to situations involving limited contact (e.g., during a discussion group), long-term intergroup contacts may have a greater benefit on participating students' complex thinking (Antonio et al., 2004). This long-term contact can be possible for students attending a culturally diverse university where they meet with peers from different cultural backgrounds throughout their time of study.

However, Rothman et al., (2003) argue that much of the previous studies that provided support for the benefit of the mere presence of cultural diversity composition of the group has limitations, such as poor item formulation and problems relating to selective recall and social desirability bias (Rothman et al., 2003). In response, they first surveyed 4,083 members of the university community (i.e., students, staff, and administrators) across 140 U.S. institutions about their experiences and the campus environment. The researchers then compared these responses with separate, statistical data on the structural diversity of participants' corresponding higher education institutions. Using this indirect approach, they found that structural diversity was negatively associated with student satisfaction and perceived quality of education. Moreover, the higher the structural diversity, the more likely the students were to report that they have experienced discrimination themselves (Rothman et al., 2003).

Although Rothman et al.'s (2003) multi-site study involved a large sample size, the direction of this correlation was not identified, and hence it was unsure whether the impact was indeed from structural diversity or other variables. Despite this, their usage of an indirect approach reduced the likelihood of participants reporting more socially desirable responses. Their findings contradicted the literature that demonstrated the positive impact of structural diversity. (e.g., Antonio et al., 2004). Such a contrast in findings of empirical studies on the influence of structural diversity highlights the need for further exploration of the role of structural diversity.

Indeed, other literature has shown that structural diversity raises important concerns about assuming that intercultural interactions automatically take place among students on a culturally diverse campus. A recent systematic review of social psychology literature has revealed that, despite being in a shared place, isolation on the individual level based on one's ethnicity, religion, socioeconomic status and gender is likely to occur (Bettencourt et al., 2019). This questions the idea that providing more contact opportunities would lead to an increase in the actual contact. In a similar vein, a common assumption in the higher education context is that students might automatically engage in intercultural interactions with peers, or the "immersion assumption" noted by Hammer (2012). Students may assume that attending a culturally diverse campus can be "a substitute and stand-in for actual intercultural interaction on a personal and individualized level" (Halualani, 2008, p. 10). Such an assumption raises possible concerns, as it is likely for some students who hold such belief to think that they have cultural diversity experiences by merely attending a culturally diverse university and hence do not engage in any actual activities that involve opportunities for intercultural learning and interactions.

Another concern associated with structural diversity is that having a large, culturally diverse student population may increase the chance for students to mainly interact with peers

with whom they share similar cultural backgrounds. That is, it is possible to have a large group of students who share a similar cultural background when the student population of the institution itself is large and culturally diverse. Previous studies have suggested that, with a larger number of students from the same background, there is an increased likelihood for them to mainly interact within culturally similar groups (Gareis, 2012; Peacock & Harrison, 2009). This thus questions the conditions in which the educational benefits of structural diversity can be realised.

Taking the available evidence together, the value of structural diversity seems to depend on whether it leads to students engaging in intercultural interactions and learning at the university. Researchers have suggested that the more diverse the university environment, the more likely students would be to engage in cultural diversity activities that may, in turn, benefit students (Chang, 2001; Gurin et al., 2002). Therefore, it is important to understand what these cultural diversity activities involve and how they can be particularly beneficial for students. These activities, discussed in the following section, are categorised into classroom diversity and interactional diversity.

3.1.2 Classroom Diversity

Classroom diversity refers to students' experience of engaging in diversity-learning activities that are curriculum-based. Classroom diversity experiences are considered formal due to the institutional efforts required to implement diversity-related activities (Gurin et al., 2002). Examples of this type of experience include student mobility programs, multicultural group work, adding global perspectives and/or culturally relevant materials to the teaching content, and subjects that focus on culture and diversity. Classroom diversity experiences align with IoC strategies, which aim to promote intercultural learning among students through curriculum-based programs and initiatives, as mentioned above.

To further categorise classroom diversity experiences, this thesis uses “curricular diversity” and “co-curricular diversity” to describe students’ curricular and co-curricular experiences with cultural diversity, respectively. An example of curricular diversity experiences is learning from culturally relevant course content and materials as part of the curriculum. As for co-curricular diversity experiences, an example would be participating in co-curricular programs with opportunities for intercultural learning, such as study abroad or international exchange programs. This categorisation has also been used in other previous empirical studies (e.g., Denson & Chang, 2009).

3.1.3 *Interactional Diversity*

Interactional diversity comprises the frequency and quality of students’ interactions with diverse peers in out-of-class settings. Interactions between students from different cultural backgrounds in any campus environment outside the classroom can be considered as interactional diversity (Gurin et al., 2002). For example, a student might interact with their peers from other cultural backgrounds in the university’s facilities, or when participating in extracurricular activities. Intercultural interaction among students and staff in the university context has been discussed and used as a variable of interest in many empirical studies that explore students’ interactional diversity experience (e.g., Roksa et al., 2017).

3.2 Benefits of Cultural Diversity Experiences

A strong empirical base has been established in supporting the benefits of engaging in cultural diversity for university students. There appears to be a shift in focus in the empirical literature discussing the benefits of cultural diversity experiences: earlier studies tend to explore more general experiences or a combination of two or more types of cultural diversity activities, while the more recent ones tend to focus on a single type of cultural diversity experience.

This section first synthesises the empirical evidence on the benefits of engaging in more general experiences with cultural diversity at university. It then reviews empirical studies that explored more particularly the effects of classroom (curricular and co-curricular) and interactional diversity activities on students.

Earlier studies have shown positive links between students' engagement in classroom and interactional diversity experiences and their intergroup attitudes (Lopez, 2004), knowledge about countries and regions, attitudes towards diversity (Parsons, 2008), critical thinking skills (Nelson Laird, 2005; Pascarella et al., 2001), cross-cultural skills (Parsons, 2008), as well as positive civic and democratic outcomes (Gurin et al., 2002; Hurtado, 2001; Zúñiga et al., 2005). Scholars suggest that these three forms of diversity experiences are not mutually exclusive (Milem & Umbach, 2003), and the impact of each form is multiplied when other forms of diversity are present simultaneously (Gurin, 1999).

In two meta-analyses, studies that explored the associations between students' engagement in multiple cultural diversity experiences at the university and outcomes were compared. For example, Bowman (2010a) conducted a meta-analysis with 58 effect sizes from 17 studies with a total sample of 77,029 undergraduate students to explore the relationships between students' cultural diversity experiences and their cognitive growth, such as critical thinking and problem-solving skills. In another quantitative meta-analysis by Bowman (2011), the author explored the associations between students' diversity experiences and their civic engagement, behaviour, and behavioural intentions with 180 effect sizes from 27 studies with a total sample of 175,950 undergraduate students. Both meta-analyses included students' engagement in cultural diversity at the university, such as taking diversity-related subjects, attending cultural awareness workshops, and engaging in intercultural interactions. Both meta-analyses revealed positive associations between engaging in cultural diversity and outcomes measured: students' cognitive growth (Bowman, 2010a) and civic engagement (Bowman,

2011). Among the types of diversity experiences explored, interacting with peers from different racial backgrounds was found in both analyses to have the strongest correlation with student cognitive growth (Bowman, 2010a) and civic engagement (Bowman, 2011).

Most of the above studies were conducted in the U.S. context. In the Australian context, Denson and Zhang (2010) explored the impact of engaging in multiple diversity-related activities on students' skill development and attitudes towards diversity. These activities included class discussions or assignments that exposed students to diverse perspectives and conversations with peers who had different beliefs and values or were from a cultural background other than their own. The statistical analyses of data from a representative sample of 5,464 students found that being exposed to diverse perspectives had a statistically significant positive effect on students' problem-solving ability, teamwork skills, and respect and appreciation for cultural diversity (Denson & Zhang, 2010).

In another study at an Australian university, Denson and Bowman (2013) explored associations between students' experiences with diversity at the university and two attributes essential for effective functioning in a diverse society: civic engagement and positive attitudes towards cultural groups other than one's own. Multiple regression analyses using survey responses from 606 students showed that high-quality engagement in structured curricular activities related to diversity along with positive intercultural interactions was significantly associated with improved civic engagement and attitudes towards cultural groups other than their own. Importantly, their analyses also showed that negative intercultural interactions were negatively associated with these outcomes. These associations were consistent regardless of students' openness to diversity and pre-university experience with diversity (Denson & Bowman, 2013).

While much of the literature has discussed both structured cultural diversity experiences and informal interactions among students, not many have considered the potential

environmental impact or structural diversity. All three types of diversity were examined in Denson and Chang's (2009) study, with 20,178 student responses to a national survey dataset across 236 U.S. higher education institutions. More specifically, their study explored the impact of environmental effects (structural diversity), intercultural interactions, and co- and curricular activities such as attending a cultural awareness workshop, participating in a culture-related student organisation, and taking an ethnic studies subject (Denson & Chang, 2009). Hierarchical linear modelling analyses revealed that these experiences were positively associated with students' self-efficacy, academic skills, and changes in their capacity to engage with cultural differences (Denson & Chang, 2009). Additionally, the findings of their study revealed the positive effect of the campus environment: a campus where students' peers are more engaged with diversity can positively benefit the students themselves, regardless of how often they engage with diversity-related experiences (Denson & Chang, 2009).

A comprehensive picture of students' engagement in cultural diversity may be lacking in some studies that explored multiple diversity experiences. Some of the above studies (e.g., Denson & Chang, 2009; Gurin et al., 2002; Hurtado, 2001; Pascarella et al., 2001) on students' engagement in multiple diversity experiences used data from national survey datasets administrated to tertiary students in the U.S. context. When using a nationwide survey dataset, researchers may have overlooked the uniqueness of each institution in terms of its available intercultural learning opportunities. Further, these surveys often only include a few types of experiences. For example, in Denson and Chang's (2009) study, students' engagement in intercultural interactions was measured with a three-point scale ranging from 1 (not at all) to 3 (frequently) on four items: studied, dined, dated, and interacted.

Therefore, although many of the above studies have a large, representative sample of participants across institutions, the variables measured in these studies may not provide a comprehensive picture of student cultural diversity engagement at the university. To review

the documented effect of students' experience more precisely, studies that focus more particularly on curricular cultural diversity experience are discussed in the following section.

3.2.1 Classroom Diversity Experiences

As mentioned in Section 3.1.2, there are many ways in which students can engage in classroom diversity activities at university. Literature focusing on student experience of classroom diversity activities that was published before 2010 revealed its positive links with outcomes such as students' intergroup understanding and prejudice (Chang, 2002), attitudes towards diversity of the university (Terenzini et al., 1996), and social action engagement outcomes (Nelson Laird, 2005), democratic outcomes (Gurin et al., 2004; Zúñiga et al., 2005), and intergroup understanding (Lopez, 2004).

Some of the more recent studies also focused on co-curricular and curricular activities rather than a specific element or initiative of an internationalised curriculum. For example, Engberg and colleagues (2016) analysed survey data collected from 12,125 undergraduate students across 61 higher education institutions in the U.S. and found positive associations between students' intercultural engagement in a series of curricular and co-curricular experiences and outcomes related to global perspectives. More specifically, students' engagement in intercultural co-curricular experiences was positively related to interpersonal development, as well as "respect for and acceptance of different cultural perspectives" (Engberg et al., 2016, p. 269). Students' engagement in intercultural curricular components was positively related to cognitive development in aspects such as "epistemological development" and knowledge about "cultural differences and the broader global society" (Engberg et al., 2016, p. 269).

In a more recent study, Denson and colleagues (2017) explored the association between students' curricular and co-curricular cultural diversity engagement during university and their democratic outcomes after graduation. Longitudinal data was collected from a national dataset,

of which 8,634 tertiary graduates from 229 higher education institutions in the U.S. responded to a survey across three time points. Participants' democratic outcomes, or “post-college informed citizenship” (Denson et al., 2017, p. 3) were operationalised as their frequency of discussing racial issues and consumption of the news, and their perception of how important it is to keep up to date with politics. The survey in this study asked alumni to retrospectively recall the frequency of their cultural diversity engagement during university, and the findings indicated that diversity experiences during university have direct effects on alumni’s post-university discussions of racial issues, which indicates possible long-term effects on university graduates. Likewise, curricular and co-curricular diversity engagement during university also had positive, indirect effects on outcomes such as alumni’s views about the importance of keeping up to date with politics, news consumption, and discussion on racial issues well after graduation (Denson et al., 2017).

Although the findings from the study by Denson et al. (2017) support the benefits of student engagement in cultural diversity, there is uncertainty about whether relying on survey responses from alumni participants' retrospective memory can accurately reflect their actual participation during university. Moreover, this study uses data from a national dataset, in which, as mentioned above, students’ engagement in cultural diversity experiences was measured using three dichotomous items. It is thus possible that these data did not capture an accurate picture of how students engage in cultural diversity at the university. Other studies focused more particularly on the effectiveness of curriculum-based and co-curricular initiatives in promoting intercultural learning. The following sections review these studies in more detail.

Culturally Relevant Content and Practices. Incorporating intercultural and/or international elements into curricular content or teaching and learning practices has been linked to a more “global” perspective and more positive attitudes toward diversity. For example, a quantitative study with a sample of 1,302 students from two U.S. universities and one

Australian university found that a range of practices, including learning from an internationalised curriculum, were associated with greater foreign language proficiency and cross-cultural skills, more knowledge about regions and countries, and “attitudes, perceptions, and behaviours that were more internationally aware, open, curious, and cooperative” (Parsons, 2010, p. 328).

Courses and training with culturally relevant materials were also found to increase students’ IC and other diversity-related outcomes. A recent study conducted by Wei and colleagues (2021), for example, tested the effect of a cross-cultural international psychology course on students’ IC. This course was designed to explore cultural differences in psychological phenomena in which students were encouraged to engage in cultural activities and reflect and present these cultural experiences. As a result, participating students showed increases in their perceived IC (Wei et al., 2021). Similar findings were demonstrated in Kağnici’s (2011) study, which explored the outcomes of an undergraduate multicultural counselling course at a Turkish university focusing on promoting students' cultural awareness and knowledge. Compared to those who did not enrol in this class, participating students showed higher levels of cultural empathy and open-mindedness, two of the five factors of multicultural effectiveness (Kağnici, 2011). Supportive evidence about participation in a diversity-related class or training was added by Engberg and Mayhew’s (2007) study, in which students who enrolled in a first-year class that focused explicitly on diversity to “encourage individual growth by increasing awareness of human diversity, cultures, values, and beliefs” (p. 246) exhibited significantly more growth in cognitive complexity, cultural awareness and commitment to social justice than those did not enrol.

Making changes to class materials and providing opportunities for cross-cultural exposure in class has also been linked with positive outcomes. A study conducted by Etherington (2014) at an Australian university, for example, examined the effectiveness of

curricular changes to an undergraduate Biomedical Physiology unit in developing students' cultural awareness. Changes to the course content involved incorporating global awareness into the assessment, starting a discussion about global perspectives on the topic of the unit, and promoting semi-structured peer interactions in class. Participating students' survey responses demonstrated that these curricular interventions were effective in developing cultural awareness and global perspectives among students (Etherington, 2014).

Virtual exchange and technology-enhanced experiences have also been used to help develop students' cross-cultural skills and competencies. For example, a mixed methods study by Ko et al. (2015) found that students' attitudes, knowledge, and behavioural aspects of IC development benefited from participating in a cross-university partnership experience that was a part of a graduate subject in Physical Education at a university in the U.S. Each participating U.S. student was paired with a student from a Korean university; throughout the seven-week experience, students engaged in activities for learning about cultures and professional issues in Physical Education in both countries. Results comparing pre- and post-program mixed-method data supported the benefits of participating even in virtual programs, in terms of the aspects of attitude, knowledge/skills and behaviours (i.e., openness to other cultures, increases in cultural knowledge, changes in cultural views and demonstrating accommodating behaviours) (Ko et al., 2015).

The importance of cultural immersion for developing cultural-related student outcomes is highlighted by the findings of a recent study in which virtual reality (VR) technology was used as an innovative platform for students to experience an international case in class. Results from pre- and post-intervention data demonstrated increases in students' knowledge of culture, and students had a more realistic self-evaluation of their IC levels after the VR intervention (Akdere et al., 2021).

Likewise, using culturally relevant video materials is another technology-based curricular intervention effective for promoting cultural-related outcomes. For example, using video-based activities of real-life examples and self-reflection enhanced cultural competence among undergraduate health professional students at an Australian university (Olson et al., 2016). Similarly, viewing an authentic television program and reflecting in writing and discussion about the observed cultural features can positively change perceptions of the respective culture among students in a foreign language class (Hammer & Swaffar, 2012).

Experiential and Service Learning. Embedding experiential learning into the curriculum has been linked to a range of IC-related student outcomes. This type of learning activity involves “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it” (Kolb, 1984, p. 41). Students engaging in experiential learning activities and programs would have hands-on experiences or “learn by doing” and would be required to reflect on their experiences. An example of this is to incorporate activities such as guest speakers and culturally-specific/relevant case studies in an MBA classroom, which has been found to effectively increase the CQ levels of non-traditional adult students (Weed Harnisch, 2014). Previous literature has also documented the benefits for students to participate in service learning, a type of experiential learning.

Service-learning³ programs and courses with an element of diversity have been associated with IC-related benefits for participating students. For example, after participating in an international service-learning program in which dental students travel to another country and engage in clinical experiences in real-life settings, students showed a perceived increase in their cultural awareness, cross-cultural communication skills, and understanding of the barriers

³ Service learning refers to an “integration of community service activities with academic skills, content, and reflection on the service experience” (Cairn & Kielsmeier, 1999, as cited in Karayan & Gathercoal, 2005, p.79).

to healthcare (Martinez-Mier et al., 2011). Service-learning courses with opportunities for exposure to diversity can also improve students' social and civic attitudes, according to Bowman and Brandenberger (2012). Specifically, the service-learning courses in their study integrated a component that provided students with opportunities to be exposed to diverse people and experiences that challenged their pre-existing beliefs. These novel experiences demonstrated a positive impact on students' orientations towards equality and social responsibility (Bowman & Brandenberger, 2012). Multisite studies have also demonstrated that co-curricular service learning can promote the development of social responsibility and civic behaviour among participating students (Hurtado, 2007; Keen & Hall, 2009). Keen and Hall (2009) further suggest that "the core experience of service is not the service itself but the sustained dialogue across boundaries of perceived difference that happens during service and in reflection along the way" (p. 77). This kind of dialogue seems to share similarities with intergroup dialogue, which is another curricular practice for promoting students' intercultural learning.

Intergroup Dialogues and Multicultural Group Work. Intergroup dialogue, another type of structured practice for promoting student interactions, refers to discussions facilitated by instructors. Intergroup dialogue often involves a small group of students ($n = 12-18$) from two or more social identity groups to explore "commonalities and differences in and between social identity groups" (p. 3) and develop students' "capacities to promote social justice" (Zúñiga et al., 2007, p. viii). Positive outcomes, including increases in participating students' critical thinking and perspective-taking skills (Gurin et al., 2002; Gurin et al., 2004; Hurtado, 2007) have been linked to intergroup dialogue.

Engaging in multicultural group work can also benefit students, even when the class itself does not focus on culture. For example, Sweeney and colleagues (2008) conducted focus group interviews with 107 postgraduate and undergraduate Marketing students at a large

Australian university. In their study, most participants reported that engaging in group work benefited their development of interpersonal and cross-cultural teamwork skills and higher-order learning. However, participants tended to form groups with those who are from cultural backgrounds similar to themselves. As Sweeney et al. (2008) suggest, a way to overcome this issue is to focus student attention on “the learning opportunities of exploring the activity through the eyes of different cultural backgrounds” (p. 129). In addition, coordinating group dynamics and promoting collaboration between group members is important for the desired positive learning outcomes to be realised.

Woods and colleagues (2011) found that multicultural group work in a postgraduate management classroom at an Australian university has potential benefits such as greater preparation for the diverse workplace, creative problem-solving and decision-making skills, and greater understanding of the cultural values and norms of other classmates. Participating in team activities with members from different cultures and culture-related extracurricular activities can also positively influence students’ CQ development (Robledo-Ardila et al., 2016).

A more recent example of the beneficial groupwork experience is an international study tour with undergraduate students from an Australian university, during which students engaged in interdisciplinary teamwork (Hains-Wesson & Ji, 2020). This learning experience was found to enhance employability skills among students, including creativity and management of complexity, as well as agility, which “encompasses the ability to respond and adapt to change in a timely manner so that change quickly becomes the norm” (Mukerjee, 2014, p. 57, as cited in Hains-Wesson & Ji, 2020, p. 660). Researchers further suggest that “when internationalisation of the curriculum (IoC) is purposely embedded into an interdisciplinary, short-term study tour programme it can play a major role in meeting beyond twenty-first century industry skills” (Hains-Wesson & Ji, 2020, p. 668).

The positive effects of working with diverse peers are not limited to face-to-face experiences. Erez and colleagues (2013) found that students' CQ increased over time as a result of engaging in an online, multicultural team project with a sample of four cohorts of graduate management students ($n = 1,221$) from 17 universities across 12 countries. The scope of the study further suggests that the multicultural group work experience can benefit students across multiple contexts and cultures.

Mobility Programs. Many of the researched benefits of co-curricular diversity experience derive from students' engagement in mobility programs such as study abroad programs and international study trips. Specifically, many previous studies have compared students who studied abroad with their counterparts who do not study abroad and found that participating students might experience a "shift towards a more intercultural mindset" (Terzuolo, 2018, p. 90). Students who study abroad might also be more likely to engage in volunteering after graduation (Mitic, 2020).

Other empirical studies also provide support for the positive effect of mobility programs on students' development of cross-cultural skills and competencies. Williams (2005) compared the pre-and post-test results of two skills, intercultural adaptability and sensitivity⁴, among students who study abroad with those who stay on campus. Results confirmed that compared to those who stay on campus, the group of study abroad students showed a greater, positive change in their intercultural communication skills, which suggests that cultural exposure is an important predictor for students' intercultural communication skills (Williams, 2005). Studies on students' CQ have shown support for the positive impact of participating in student mobility programs (Engle & Crowne, 2014; Gökten & Emil, 2019; Rustambekov & Mohan, 2017). Likewise, students who have studied abroad show a higher average level of IC than those who

⁴ These are the two essential skills of intercultural competence, including the ability to respectfully react to others with "verbal and nonverbal sensitivity" (William, 2005, p. 359) during an interaction (Ting-Toomey, 1999).

have not studied abroad (Ramirez R, 2016). Students' intercultural interactions while studying abroad can also positively influence their development of IC (Ramírez, 2019). However, some scholars have challenged the idea that engaging in cultural immersion for a short amount of time abroad can immediately benefit participants (Harrowing et al., 2012). Nevertheless, mobility is not required for students to benefit from intercultural learning experiences.

Workshops and Courses. Pascarella and colleagues (2014) analysed the fourth-year follow-up of a longitudinal pre-test—post-test investigation with 949 students from 17 institutions in the U.S. Results of their analysis revealed that students' critical thinking skills were positively associated with how often they engaged in diversity-related experiences, including cultural awareness workshops and conversations with peers who have different beliefs and values or are from a cultural background other than their own. Importantly, such effects were sustained during students' four-year university programs (Pascarella et al., 2014). Bowman (2010b) further suggests that, compared to those who participated in one diversity course, students who participated in two or more diversity courses had higher well-being scores, greater appreciation for difference and were more likely to engage in intercultural interactions. While this could mean a possible result of attending diversity courses is an increase in these positive outcomes, it is also possible that students who have higher scores and greater appreciation for difference are more likely to attend these courses to begin with. Nevertheless, these studies showed the links between diversity-related activities and positive outcomes.

Peer-Mentoring and Partnership Programs. Student attitudes can also be improved through co-curricular programs, such as peer mentoring and international partnership programs, which pair students from different cultural backgrounds from the same university and a university in another country, respectively. One recent example is a study on a semester-long buddy program that paired students from different cultural backgrounds to complete class

assignments on culture (Gareis et al., 2019). From the pre-, post-, and follow-up survey data, improvements in participants' knowledge of and attitudes towards their buddy's culture were found, and most participants considered the program to be effective for forming intercultural friendships (Gareis et al., 2019).

Similarly, Jon's (2013) study explored the outcomes of two campus programs for promoting student interaction at a Korean university: a buddy program and a program for culture and language exchange. Both programs were found to have a positive and direct impact on domestic students' interactions with international peers, which subsequently enhanced domestic students' IC (Jon, 2013). In a study at an Australian university, Woods and colleagues (2013) explored the outcomes of a short-term peer mentoring program that was designed to help international students adjust to the university, and through which most of these mentoring pairs were cross-cultural. Results showed that after program completion, mentees spent significantly more time with friends from other cultural backgrounds than non-participating students (Woods et al., 2013).

Challenges and Conditions for Success. Despite the large body of literature that recognised the benefits of cultural diversity experiences inside of the classroom, the relationships between these experiences and outcomes are not always clear or straightforward. The extent of success of intercultural learning approaches can vary depending on multiple factors, such as class size, students' year of study and prior experiences with intercultural learning and other factors such as cultural background, or whether they are enrolled as an international or domestic student (Bowman, 2010b; Denson & Zhang, 2010; Engberg et al., 2016; Roksa et al., 2017; Terzuolo, 2018).

The significance of the purposeful design of intercultural group work has been highlighted in previous empirical studies. While much of the empirical literature is supportive of its benefits, multicultural group work does not always lead to positive learning outcomes

and can be a “potentially flawed mechanism” (Burdett, 2014, p. 14) for facilitating students' development of IC and teamwork skills. Effort is also required to purposefully design intercultural group work, which is crucial for its potential benefits to be realised (Cruickshank et al., 2012; Reid & Garson, 2016; Sweeney et al., 2008; Woods et al., 2011).

In a comprehensive study by Cruickshank and colleagues (2012), researchers utilised teacher interviews, student focus groups and evaluation of course material to identify important features of successful strategies of facilitated intercultural interaction in the classroom, especially between international and local students. These features were: ensuring that (a) international students have the “equal footing” to work in class, (b) both groups of students can take as “experts”, and that (c) support for language and learning embedded into the assessments and outcomes (p. 807).

Another example of this is from Reid and Garson's (2016) study on the effectiveness of making multiple intentional revisions to the formation, preparation, and evaluation of a group assignment in a tourism management subject. More particularly, instead of letting students form their groups randomly, instructors formed groups based on students' complementary skills, as well as cultural and gender diversity. The preparation of group work was revised to include activities on “intercultural communication and valuing diversity in teams” (p. 201). In terms of the revision to the assignment evaluation, peer evaluation and self-reflection were added, with a focus on the process of working in a group rather than its outcome. As per the findings, most students' written reflections revealed that these revisions promoted intercultural learning and improved multicultural group work experiences, which confirmed the importance of the purposeful design of such activity (Reid & Garson, 2016). Echoing these findings, Woods et al.'s (2011) study reported that students who participated in multicultural group work emphasised several conditions for the benefits of group work to be realised, including: when the group members respect others' cultures; have patience and open

personality traits; team building skills; and knowledge and understanding of others' cultures. These findings underline the importance of careful design and implementation of teaching and learning interventions.

To conclude, despite the well-established empirical evidence supporting that students can benefit from engaging in cultural diversity activities that are part of their curriculum, the purposeful design of these activities is essential for these educational benefits to be realised. For intercultural learning in the classroom setting, a major challenge for teaching staff is the time and effort required to make changes to the course content. For example, there might not be enough time for teachers to embed intercultural group learning activities into a content-heavy curriculum (Arkoudis & Baik, 2014; Arkoudis et al., 2010; Engberg et al., 2016). Negative experiences with these activities can also lead to negative or poor learning outcomes (Denson & Bowman, 2013; Roksa et al., 2017). Thus, the relationships between classroom diversity experiences and beneficial student outcomes, such as the development of IC, should be examined more thoroughly.

3.2.2 *Interactional Diversity Experiences*

Empirical evidence from psychological studies has demonstrated the importance of promoting intercultural interactions among students. For example, a meta-analysis by Pettigrew and Tropp (2006) which included 515 intergroup contact studies revealed a consistent, positive impact of intergroup contact on attitudes towards members from groups other than their own, and this impact can extend to attitudes towards the outgroup and other novel situations. There has been consistent support from other more recent studies that demonstrated positive links between intergroup contact and outcomes relating to positive intergroup relations, such as outgroup attitudes, empathy, and intergroup trust (Hewstone & Swart, 2011; Lemmer & Wagner, 2015; Pettigrew & Tropp, 2011). The association between positive intergroup contact and improvements in IC has been documented in previous literature.

Meleady and colleagues (2020), for example, tested the relationship between intergroup contact and IC in a series of cross-sectional longitudinal studies. Their findings revealed that positive intergroup contact was longitudinally associated with improvements in IC and that higher IC was associated with a reduction in future negative contact (Meleady et al., 2020).

In the higher education context, previous literature has provided strong empirical evidence for the learning and diversity-related benefits of interactional diversity activities. Amongst the three types of diversity experiences mentioned in Section 3.1, interactional diversity has the most influential and consistent impact on students' educational outcomes (Bowman, 2010a, 2011; Gurin et al., 2002). Previous studies have found positive associations between this type of activities and students' cultural knowledge and understanding (Antonio, 2001), democratic outcomes (Chang et al., 2004), learning and personal development (Hu & Kuh, 2003), intellectual and social self-confidence and retention (Chang, 2001; Chang et al., 2004), as well as leadership skills (Antonio, 2001). Other benefits of engaging in interactional diversity experience include positive effects on students' sense of belonging to the university (Locks et al., 2008) and satisfaction with their overall experience at the university (Chang, 2001).

A more recent study conducted by Roksa and colleagues (2017) adds to evidence supporting the positive links between positive interaction experiences at university and the development of cognitive benefits. Their study analysed longitudinal data collected from three cohorts of students ($n = 2,540$) throughout the four years of their university studies across 43 U.S. higher education institutions. The statistical analysis demonstrated that students' positive diversity interactions (e.g., engaging in meaningful discussions about diversity with diverse students) were positively associated with their need for cognition in their final year of university, which is referred to as one's tendency "to engage in and enjoy effortful cognitive activity" (Cacioppo et al., 1996, p. 197, as cited in Roksa et al., 2017, p. 8). Negative interactions

(e.g., experiencing discrimination), however, were negatively associated with both the need for cognition and critical thinking skills among students in their final year of university (Roksa et al., 2017). These results highlight the importance of purposefully facilitated interactions and ensuring students' experiences are positive.

In addition, programs and activities that aim to foster intercultural interactions among students have been shown to provide additional benefits, including improving students' knowledge of and attitudes towards culture. Muthuswamy and colleagues (2006), for example, examined the effectiveness of a program promoting interactional diversity using a three-group quasi-experiment with a sample of 164 students at a U.S. university. Their results revealed that, compared to those who did not participate in the program, participating students showed more positive attitudes towards cultures, engaged more frequently in intercultural interactions, and had more accurate knowledge regarding culture-related issues. A more recent example, also in the U.S. context, is a semester-long program that paired international and domestic university students for cultural experiences and discussions, of which participating students scored significantly higher on knowledge and identity scales than before engaging (Wickline et al., 2021). Outside of the classroom, community service activities that provide opportunities for positive intercultural interactions with peers can promote learning and development among the participating students (Pascarella & Terenzini, 2005).

3.3 Factors Influencing Students' Cultural Diversity Experiences

Overall, as the previous section has demonstrated, there is a strong empirical base for the benefits of engaging in intercultural interactions among students. As mentioned in Section 1.1.1, although many Australian universities have provided ample opportunities for students to engage in intercultural interactions, many students are still reluctant to engage and frequent interactions among student groups are quite rare (e.g., Arkoudis et al., 2019; Arkoudis & Baik, 2014; Baik, 2018; Marginson et al., 2010; Smart et al., 2000; Volet & Jones, 2012; Volet &

Ang, 2012). Empirical attention has been directed to understanding the causes of this issue, from which numerous factors have been proposed as potential contributors, such as issues with students' English language proficiency, the lack of common ground and shared interests between student groups (Arkoudis & Baik, 2014), and a preference to stay within familiar cultural and language groups (Arkoudis et al., 2010; Eisenclas & Trevaskes, 2007; Volet & Ang, 2012). There are, however, more factors that can influence students' decision to participate in cultural diversity activities at the university.

3.3.1 Previous Experiences With Intercultural Interactions

Individuals' previous exposure to intercultural interactions may influence their tendencies to engage in similar interactions in the future. Social psychology research has identified that an individual's history of direct intergroup contact (Paolini et al., 2006) and imagined contacts⁵ (Asbrock et al., 2013; Turner et al., 2013) can be a positive predictor of their intention to engage in future contact. Individuals with more previous experiences of intergroup contact tend to have less implicit intergroup biases (van Ryn et al., 2015).

In the higher education context, students' pre-university environment and experience of intercultural interactions have been linked with their intercultural interactions during their university studies (Hurtado et al., 2002). In a study with 4,380 students from nine U.S. universities, Saenz et al. (2007) analysed longitudinal survey responses on students' intercultural interactions and outcomes. Pre-university environment was measured as one of the independent variables, which asked students about the racial environment (i.e., neighbourhood, high school, close friends), their extent of previous interaction in high school, and the frequency of studying with peers from different racial/ethnic backgrounds in high school. As per the findings, students' pre-university environment measures were statistically

⁵ This is referred to as the mental stimulations of intergroup interactions (Kauff et al., 2021).

significant predictors of students' positive intercultural interactions during university. The frequency and extent of previous intercultural interactions in high school seem to offer students opportunities to experience and develop skills that in turn might make them more likely to interact with diverse peers at university (Saenz et al., 2007). A study at an Australian university showed that students who have had less frequent interactions with people from diverse backgrounds in their high school felt less comfortable and experienced less joy when interacting with diverse peers at university (Denson & Bowman, 2013).

Students attending the same universities may have various extents of previous cultural exposure before their university studies. This difference may in turn contribute to their predisposition to engage in cultural diversity activities at the university, especially when the activities are not compulsory to their degree programs. Therefore, a holistic picture of student experiences with cultural diversity is needed for a more comprehensive understanding of cultural diversity experiences within the university context. This would include considering both students' experiences of diversity before entering university, and the factors influencing their participation in cultural diversity activities during their university studies.

3.3.2 Homophilic Preference for Interactions

There is an overall tendency for individuals to prefer interacting with those who are similar to themselves in aspects such as cultural or linguistic background. Such a preference acts as a possible explanation for students' reluctance to interact across groups. The concept of homophily, as coined by Lazarsfeld and Merton (1954), refers to the tendency for people to be attracted to those who share similar attributes, beliefs, or personal characteristics. In the higher education setting, previous studies have observed the associations between participants' homophilic tendencies and characteristics such as gender (Godley, 2008), countries of origin (Rienties & Tempelaar, 2018), and socioeconomic status (Wimmer & Lewis, 2010). Homophily can enhance relations between people by fostering trust and reciprocity (Lincoln

& Miller, 1979), and it is possibly based on the language compatibility shared by people from similar demographic backgrounds in contrast to those from different backgrounds (March & Simon, 1958). Earlier research also suggested that similarities between individuals can lead to more frequent interactions and communications as well as more favourable attitudes (Williams & O'Reilly, 1998).

This preference for interaction may be viewed as a means to reduce uncertainty, risk or negative experiences. Homophily can lead individuals to feel more at ease during communications with a higher level of predictability about others' behaviours and values (Hinds et al., 2000). As Hogg (2000) states, "uncertainty in interpersonal (and cross-cultural) communicative contexts is maladaptive and can produce negative reactions" (p. 228). Therefore, the need to reduce uncertainty is, as Grieve and Hogg (1999) suggest, "perhaps the most fundamental motivational process underlying group membership and group behaviour" (p. 928). In support of this view, Pettigrew (2008) notes that uncertainty reduction is "an important mechanism" (p. 188) of intergroup attitudes.

In a similar vein, interacting with others of similar cultures is seen as less energy-consuming and often more rewarding than with people of different cultural backgrounds (Dunne, 2009). This was confirmed by studies in the higher education context. For example, participants from Peacock and Harrison's (2009) focus group study on U.K. university students' preferences in group work commented that it is "much easier" (p. 495) to spend time with members of a similar cultural background. It is thus seen as preferential for individuals to stick with their ingroup, or those who are more like themselves, as a means to reduce the likelihood of negative experiences and adverse emotions. Therefore, it is clear that with available opportunities for intercultural interaction, such interactions might not take place.

A related concept is cultural-emotional connectedness, which refers to the perception that people from the same cultural background would share similar thinking, communication

styles, and sense of humour; thus, people would feel more comfortable interacting with each other with those from the same cultural background (Volet & Ang, 2012). This can make people feel more comfortable interacting with those from the same cultural backgrounds (Volet & Ang, 1998; Volet & Ang, 2012). It is therefore possible that this perception reinforced students' preferences to interact with their co-nationals. When individuals from the same country are absent, this perception automatically extends to those from the nearest culture (Volet & Ang, 2012).

The previous literature has also identified a natural inclination for individuals to seek out interactions that involve a low risk of negative or awkward experiences (Nesdale & Todd, 2000), which is more likely with those whom they share similar values, beliefs, and attitudes with (Kimmel & Volet, 2010). As Dunne (2009) suggests, socialising with others of similar cultures is seen as less energy-consuming and often more rewarding than with people of different cultural backgrounds. Notably, this may not be limited to similarities in cultural backgrounds but in other aspects as well.

In the context of study abroad, Coleman (2013) proposes a model of social network with three concentric circles representing the dynamic progression of friendship forming among students studying away from their home countries. During their time studying abroad, students begin with socialising with their co-nationals; with motivation and time progress, students' social network may eventually include other non-locals (Coleman, 2013). These social circles will additionally broaden to include locals, as the author notes, "if circumstances (including sojourn duration) permit and their own motivations, attitudes, actions and initiatives allow" (Coleman, 2015, p. 44).

While Coleman's (2013) representation of study abroad social networks may be limited to those studying abroad (i.e., international students or students in outbound mobility programs), it adds to the theoretical base describing students' interactional tendencies,

highlighting the importance of motivation in promoting connections among diverse students. The following subsection continues to elaborate on the significance of interest and motivation in individuals' intentions to engage in intercultural interactions.

3.3.3 *Lack of Interest and Motivation*

Another key determinant of individuals' intentions to interact is whether they have the interest and motivation to engage (Stürmer & Benbow, 2017). An individual's intention for intercultural interaction may increase if they perceive the contact to be beneficial, such as helping them learn new skills, form new friendships, and learn about members of the other groups. Motivations of intergroup interactions can involve different categories of interest, including knowledge and understanding, value expression, professional advancement, social development, and personal- and group-image concerns (Stürmer & Benbow, 2017). Interacting with members from different groups may offer unique opportunities to learn new knowledge, skills, and perspectives, which can lead to desirable personal growth by connecting with others (Paolini et al., 2016). In other words, an individual's intention to interact will thus increase if they believe that the interaction will help them achieve these desirable goals and benefits.

3.3.4 *Intergroup Anxiety*

Considering that the paucity of interactions between culturally diverse student groups continues to be an issue for many Australian universities, it is important to understand why some students would actively avoid interacting with diverse peers. IA is an important concept for addressing this issue, as it has been identified by researchers as an underlying cause of contact avoidance (e.g., Pettigrew & Tropp, 2006) and potential outcome (e.g., Barlow et al., 2010; Butz & Plant, 2006; Plant & Butz, 2006; Plant et al., 2008).

IA refers to the feelings of worry or apprehension experienced when anticipating or engaging in interactions in group-based scenarios (Stephan, 2014; Stephan & Stephan, 1985)

It is considered not only a negative affective response to intergroup interaction but also a predictor of avoidance of future interactions (Stephan, 2014). More particularly, as an important psychological construct in understanding intergroup relations, the affective component of IA is considered central, with the frequent concomitance of the cognitive and physiological components (Stephan, 2014).

IA can be caused by cognitive appraisal of expecting negative consequences to result from intergroup interactions (Stephan, 2014). These appraisals are likely to occur due to people's concerns about the potential negative psychological or behavioural consequences of the interaction (e.g., being embarrassed or discriminated against, respectively), the worry of being negatively evaluated by the outgroup (e.g., being rejected), and the disapproval from members of their group for associating with outgroup members (Stephan, 2014). The correlation between the cognitive appraisal component and IA has been supported by empirical findings (e.g., Barlow et al., 2010; Butz & Plant, 2006; Plant & Butz, 2006; Plant et al., 2008). In other words, having negative expectations of intergroup interaction is linked to an increase in intergroup anxiety levels. IA is also often accompanied by physiological responses, such as increased systolic blood pressure (Littleford et al., 2005) and cortisol levels (Trawalter et al., 2012).

In addition, the potential consequences of IA have been categorised by Stephan (2014) into cognitive, affective, and behavioural consequences. Empirical evidence has demonstrated the links between IA and cognitive outcomes such as negative outgroup attitudes (Berrenberg et al., 2002; Pettigrew & Tropp, 2008), affective outcomes such as fear (Van Zomeren et al., 2007) and anger (Butz & Plant, 2006; Plant et al., 2008), as well as behavioural outcomes such as avoiding members from the other groups (Barlow et al., 2010; Bromgard & Stephan, 2006; Duronto et al., 2005). Further, as posited by Stephan (2014), there likely exist reciprocal relationships between IA and its potential consequences. That is, IA can lead to negative

intergroup interaction experiences, while negative interaction experiences can also increase anxiety for future interactions (Stephan, 2014). The mediating role of IA between intergroup contact and outgroup attitudes has been supported by a strong empirical base (Lolliot et al., 2015; Paolini et al., 2004; Stephan et al., 2002; Voci & Hewstone, 2003).

IA has also been “proven to be one of the strongest and most consistent predictors of negative attitudes” (Lolliot et al., 2015, p. 667) towards outgroup members. In a meta-analysis of 515 intergroup contact studies by Pettigrew and Tropp (2008), IA was revealed to be the strongest mediator between intergroup contact and attitudes. Researchers in the field of social psychology have suggested that reducing intergroup anxiety is important for reducing negative attitudes towards the outgroup, such as prejudice (Islam & Hewstone, 1993; Stephan et al., 2002). Moreover, engaging in positive intergroup contact has been shown to reduce feelings of threat and anxiety about future interactions (Blair et al., 2003; Blascovich et al., 2001; Islam & Hewstone, 1993). In other words, this asserts the importance of reducing intergroup anxiety, as it can result in more positive contact outcomes (Brown & Hewstone, 2005). In addition, an increase in IA is likely to occur when the individual has few experiences of previous contact, or when the previous contact has been negative experiences (Stephan, 2014). Therefore, it is possible for someone who has few previous contact experiences to continue avoiding intergroup interactions, and those who have negative feelings after the previous contact might avoid future intergroup interactions as well.

Previous studies on university students’ IA have stressed the significance of IA in determining student experience within higher education settings. For example, Mak et al. (2014) surveyed 247 Australian-born domestic students to examine the quantity and quality of their interactions with international students, as well as to measure their IA, intercultural communication emotions (ICE) and attitudes toward international students. As per the findings, positive intercultural interactions, lower IA levels, and more positive ICE were linked with

positive attitudes toward international students. Further, the quality of interaction had both direct and indirect effects (via IA and ICE) on domestic students' intergroup attitudes. Their study demonstrated that IA has a mediating role in the relation between intergroup interactions and attitudes.

In summary, examining IA is crucial for comprehending university students' cultural diversity experiences, as the previous literature has suggested that IA can be a potential predictor and cause of avoidance of intercultural interactions. In addition, reducing IA levels may contribute to more positive intergroup interactions and outgroup attitudes. To wit, understanding intergroup anxiety can help address the issue of infrequent interactions among diverse student groups at Australian universities and elucidate the reasons why some students avoid interacting outside of their groups.

Taking the available evidence together, it is clear that cultural diversity experiences can be beneficial to students in numerous aspects, but there are factors influencing the extent to which these benefits can be realised. To ensure that students' cultural diversity experiences are beneficial, students need to voluntarily engage in these activities or through intervention. However, a lack of interest among students to engage in intercultural interactions is evident; despite a culturally diverse student population present at the university, students' experiences do not lead to a positive influence on developing IC as expected (Leask & Carroll, 2011). This calls for a more nuanced understanding on the factors that determine students' participation in cultural diversity activities. The following section addresses gaps in the current literature in understanding students' cultural diversity experiences at university.

3.4 Gaps in the Literature

This chapter has presented an overview of scholarly discourse on students' experiences with and benefits of cultural diversity at university, and the challenges in promoting these experiences documented in the previous literature. However, there are several gaps in the

current understanding of these topics, including the time and context of the main conceptualisation and theoretical basis of the research topic, the need for a more holistic understanding of students' exposure to cultural diversity, and the categorisation of student groups.

First, the conceptualisation and theoretical basis (i.e., Gurin et al., 2002) that guided the thinking on the topic of cultural diversity experiences emerged decades ago. Although Gurin et al.'s (2002) work provides guidance and structure for the current study, the thinking, goals, and approaches in higher education have evolved throughout the past few decades; new insights are needed to suit the current social context.

In addition, unlike the U.S. universities where Gurin et al. (2002) conducted their study, most Australian universities are not residential-based, and their students commute rather than live on campus. This could mean that student experience at an Australian university may differ in terms of the types of intercultural interactions and experiences from those at an American one, where this topic has been most studied. For example, in Gurin et al.'s (2002) study, one type of cultural diversity activity is informal interactions with culturally diverse peers outside of the classroom within the university, including interactions at university facilities such as dormitories, cafeterias, and libraries. However, as most students at Australian universities do not live on campus, such interactions may not apply to the Australian context. This may also mean that students at Australian universities spend less time on campus than those studying and living in U.S. higher education institutions. This difference is important to consider, given that the amount of time students spend on campus can be an obstacle to their engagement in intercultural interaction (Arkoudis & Baik, 2014).

Moreover, Gurin et al.'s (2002) study on cultural diversity experiences conducted in the U.S. centres around the interactions among students in different ethnic groups. In the Australian context, different dimensions of intercultural interactions may occur, as presented in

Section 1.1. For example, an Australian student may not only interact with international students from different cultural and linguistic backgrounds, but also with domestic peers from cultural and linguistic backgrounds other than their own. The theoretical framework on university students' cultural diversity experiences is based on a different context than the Australian one. The current study is thus an attempt to add to our understanding of the topic with new insights from the Australian context.

Another gap in the current literature pertains to the broad categorisation of student groups when discussing students' experiences with cultural diversity activities. As briefly discussed in Section 1.1.1, the dichotomy of international versus domestic students is predominantly used in the literature, despite the diversity within each of these two groups, in many aspects such as previous educational experiences and cultural exposure, English language proficiency, and multilingual abilities (Arkoudis & Baik, 2014). For example, a domestic student who grew up in the Western suburbs of Melbourne might have attended a culturally diverse secondary school, and an international student from Japan might have attended a secondary school that was attended only by other Japanese students. Therefore, although previous studies have identified differences in student experience and outcome in these two groups, focusing solely on these two broad groups of students might leave out critical factors that are important for understanding university students' engagement in cultural diversity experiences.

In a similar vein, not many studies have considered the diversity within these two groups in terms of students' prior cultural diversity experiences on their engagement in cultural diversity activities at university. Much of the literature on students' cultural diversity experiences focuses solely on the university context. As outlined in Section 3.3.1, an individual's history of intergroup contact can influence their intention to engage in contact in the future (Paolini et al., 2006), and those with more experiences with interaction tend to have

less implicit intergroup bias (van Ryn et al., 2015). More particularly in the context of higher education, few studies exploring the potential influence of students' previous experience with cultural diversity and the pre-university environment (Saenz et al., 2007) and the frequency of previous interactions with diverse peers (Denson & Bowman, 2013) have found an impact on their tendency to engage in similar activities at the university. Thus, there is a need to consider these characteristics and the potential impact of students' previous cultural exposure on their tendencies to participate in cultural diversity activities at the university.

Taken together, the above-mentioned gaps in the literature call for a more nuanced understanding of students' cultural diversity experiences at Australian universities, and particularly, an investigation into the factors that can influence students' participation in these activities.

3.5 Chapter Summary

This chapter has reviewed the literature on the conceptualisation and empirical studies of students' cultural diversity experiences, as well as the benefits of and challenges in promoting students' active engagement in these experiences. The theoretical and empirical literature reviewed in this chapter clearly positions the importance of supporting curriculum-based initiatives and out-of-class intercultural interactions among students in facilitating their development as interculturally competent individuals. However, literature has also identified some consistent challenges for achieving these aims, as well as factors that may influence students' active participation in and experiences of these activities. Further investigation, however, is needed to gain a more in-depth understanding with new insights into students' cultural diversity experiences from an Australian context and to provide a more holistic picture of students' exposure to cultural diversity. This study will be a response to these needs, and the methodology employed in this study is outlined in the following chapter.

4 Methodology

The previous chapters present a consolidation that contributes to the current understanding of university students' cultural diversity experiences, its benefits and intended outcomes such as intercultural competence (IC), and the factors that can influence the extent to which these benefits can be realised. This chapter begins by introducing the research design of the present study, including the methodological framework and the research site. It then presents details of the two stages of the study, including the sampling strategies, procedure, interview protocols or survey instrument, as well as the data collection and analyses. The chapter concludes with sections on the trustworthiness and limitations of the study.

4.1 Research Aims and Questions

The main goal of this study is to investigate factors influencing students' participation in cultural diversity activities, namely the curriculum-based activities and out-of-class intercultural interactions, at a large, metropolitan university in Australia. It seeks to examine how students engage with these cultural diversity activities and to explore students' perceived impact and challenges of students' engagement in cultural diversity activities at the university. The study also has the purpose of examining the associations between students' engagement in cultural diversity activities and their levels of IC. It also examines how students' participation in cultural diversity activities is linked to their intergroup anxiety (IA) levels, a possible predictor of avoidance of intercultural interaction.

The main research question for this study is: "What are the factors influencing students' engagement in cultural diversity activities at university?". To address this question, two sub-questions guided the investigation:

- How do students engage in cultural diversity activities at university?

- What are the relationships between students' engagement in cultural diversity activities at university and their levels of IC?

4.2 Methodological Framework

The pragmatism approach was selected as the methodology of the present study for two reasons. First, pragmatism enables researchers to use a pluralistic approach and integrate multiple data collection methods to explore the research questions, rather than adhering to a single method or philosophical stance (Creswell & Plano Clark, 2018; Tashakkori & Teddlie, 2003). Second, this approach emphasises the practical outcomes of research; it intends to advance not only the theoretical understanding but also practical insights that are applicable in the real-world setting (Creswell & Plano Clark, 2018). This approach is therefore well suited for the present study, as the exploration focuses on undergraduate students' cultural diversity experience and the factors influencing these experiences, which requires in-depth and comprehensive investigation due to the complexity and nuances of the topic. The goal of this study is to provide insights for institutions, educators, and policymakers on how to enhance the student experience of cultural diversity, which is well-aligned with the focus of the pragmatism approach.

A mixed-method research design with two sequential stages was selected based on deliberate consideration of the focus, aim, and context of the study. Compared to a single-method design, a mixed-methods approach can help to capture a more complete picture of the topic studied by adding insights that might otherwise be missed (Johnson & Onwuegbuzie, 2004). Combining quantitative and qualitative methods can also offset the weakness of each method and utilise the strengths of both methods (Bryman, 2006; Johnson & Onwuegbuzie, 2004). It can also triangulate the data from both quantitative and qualitative methods for corroboration (Bryman, 2006). These strengths of the mixed-method design can help with

reaching a more comprehensive understanding of the phenomenon of study as well as enhancing the research quality (Johnson & Onwuegbuzie, 2004).

In addition, this study uses an exploratory sequential design of the mixed-methods approach. This design is particularly useful for research exploration of a phenomenon (Creswell & Plano Clark, 2018). It begins with a qualitative stage to explore the phenomenon and builds to a sequential, quantitative stage (Creswell et al., 2007). The first stage carries more weight than the second stage, as the survey items used in the second stage were built upon the findings of the first stage.

This design is particularly useful where there is a need for tailoring an existing measure to be specific to a particular culture or participants (Creswell & Plano Clark, 2018). Although there have been empirical explorations of university students' cultural diversity experiences, and guiding theoretical works and measures are available, this study was conducted in a particular context unique from those outlined in the previous literature. More specifically, the present study was conducted during the unprecedented period of the COVID-19 pandemic, which caused many universities in Australia to transform to a virtual campus model. By starting with a qualitative stage, this study first identified questions and variables vital to undergraduate students' cultural diversity experiences at an Australian university both before and during the COVID-19 pandemic, then explored this topic further using a questionnaire suitable for the student cohorts experiencing this context.

4.3 Research Design

The investigation of this study involved two sequential stages. Stage 1 was a qualitative phase that used online semi-structured interviews and focus groups with undergraduate students at a large, metropolitan Australian university. Semi-structured interviews and focus groups were selected due to the conversational style of collecting information. It allows the interviewer to ask follow-up questions based on participants' responses (Hardon et al., 2004),

from which the researcher can delve more deeply into the topic and to gain a thorough understanding of the responses. By identifying the popular types of co-, extra-, and curricular activities related to cultural diversity among students, and the common reasons behind students' participation in these activities, the data collected from Stage 1 shaped the development of some survey items used in Stage 2.

Stage 2 involved an online survey with undergraduate students at the same university to gain an overall picture of students' cultural diversity experiences and factors influencing their participation, as well as statistically examine how these experiences are related to their levels of IC using a survey suitable for the student cohorts experiencing this context. Further details about each stage are presented in Table 4.1.

Table 4.1

Research Design of the Study

| | Stage 1 | Stage 2 |
|---------------|---|--|
| Objectives | To explore: <ul style="list-style-type: none"> • how students engage in cultural diversity experiences at university, the factors that influenced their participation, the self-reported impact from these experiences • areas and variables that need further exploration in Stage 2 | To examine: <ul style="list-style-type: none"> • the types of activities and frequency of students' participation in cultural diversity experiences, and factors influencing their participation • the relations between students' cultural diversity experiences at university and IC |
| Method | Online semi-structured individual interviews and focus groups via Zoom | Online survey via Qualtrics |
| Participants | Undergraduate students at a large, Australian university, who are aged over 18 | Undergraduate students at the same university, who are aged over 18 |
| Data Analysis | Thematic analysis using NVivo software | Statistical analysis using the Statistical Package for the Social Sciences (SPSS) software |

Note. The recruitment of participants for Stage 2 was not limited to those who participated in Stage 1.

4.3.1 COVID-19 Disruptions

It is important to note that the research design of this study has been changed due to the impact of the COVID-19 pandemic. With a focus on undergraduate students' on-campus cultural diversity experiences, a two-stage research project was initially planned for this study. It was expected to begin with a survey in the first stage, followed by interviews and focus groups in the second stage. This iteration of the project received Ethics Application approval in January 2020 with recruitment and data collection of the survey stage to commence in March 2020.

However, the COVID-19 pandemic significantly affected the timeline of the project and led to a major restructuring of the research design. For example, participant recruitment and data collection for the project were postponed from the original timeline because there was a high degree of sensitivity at the research site around student surveying during that time. Also, since the research focus of this project was undergraduate students' on-campus cultural diversity experiences, this was not as relevant for the new context of online learning during the period of extended lockdowns in 2020 and 2021. These delays meant that data collection of the survey stage was delayed significantly, while other tasks such as thesis writing could not proceed beyond the preliminary chapters.

After deliberate consideration of the COVID-19 pandemic situation and the project timeline, it was decided that a redesign and restructure of the project were necessary. The decision was made to carefully restructure this project to avoid the above-mentioned limitations and to adapt to the new context of the virtual campus model at Australian universities. More specifically, the focus of this project was changed from on-campus learning to all formats of cultural diversity experiences, both online and on campus. The research design was also amended to circumvent sensitivities around student surveys; the interview stage was implemented before the survey stage to understand the student experience and to better craft

the survey items for answering the research question. The interview questions and survey instrument were revised according to the redesign of the project and restructure of the research focus.

In addition, the intended sample of participants was expanded from first- and final-year undergraduate students studying Bachelor of Arts and/or Commerce to all undergraduate students at the same research site, to capture a more comprehensive picture of student experience with cultural diversity at the university. Recruitment, advertisement, participant-facing documents, and project dates were also revised accordingly to these changes. An Ethics Amendment was submitted in February 2021 and received approval in March 2021. Sections 4.4 and 4.5 discuss the methodological approach of Stages 1 and 2, respectively, in more detail.

4.3.2 Research Site

As outlined in Section 1.2.2, this study took place at an Australian university (University A) that was selected based on three reasons. First, conducting the current study at a university with a large, culturally diverse student population was of particular importance to the topic of research given that the structural diversity of the university, as mentioned in Section 3.1.1., would provide the necessary conditions and opportunities for intercultural interactions to take place among students (Gurin et al., 2002). In 2021 when the data collection of this study was conducted, University A had a culturally diverse student population of 54,411, of which the 40% of the university student population were from international backgrounds, representing 150 nationalities (University A, 2022). It was thus deemed a suitable site for the current study.

Second, the research site values the importance of cultural diversity and related graduate attributes; this is evident in its strategic orientation as mentioned in Section 1.2.2. For example, the university intends to implement various programs, activities and events that prepare students for “success as leaders, change agents and global citizens” (University A, 2023, p. 24). In its latest Annual Report 2022, the university states that it “is committed to

fostering an environment that values diversity and inclusion, where a culture of respect and equity is supported to flourish” (University A, 2023, p. 38), and that it “aspires to be a vibrant, diverse and inclusive community, and a destination of choice for talented students and staff” (p. 36). Conducting the present study at this research site would help understand whether students are indeed actively engaging and benefiting from these opportunities and experiences offered by their university.

In addition, as mentioned in Section 4.3.1, the research design of the study was impacted by COVID-19 disruption, which led to necessary redesign and restructuring to adapt to the new context of the virtual campus model at Australian universities. As a response to this global crisis, the research site also transformed to offer fully online learning in March 2020 and developed an online Virtual Campus Community (VCC) in April 2020. The VCC aimed to provide students and staff with essential support and services, allowing them to “experience the broad range of expertise, collections and creativity that resides within the University community” (p. 30), while replicating the in-person campus experience as fully as possible (University A, 2021).

4.4 Stage 1: Interviews and Focus Groups

Stage 1 aimed to gain insights into addressing how students engage in cultural diversity activities at the university, and to provide insights into the factors that supported or hindered students’ cultural diversity experience. It aimed to do so by exploring the reasons and motive behind students’ participation. It also asked students about their previous exposure to cultural diversity at their previous educational institutions and explored the potential influence of their experiences before attending the current university.

4.4.1 Sampling Strategy

Between March and June 2021, all undergraduate students at a large, culturally diverse Australian university, aged 18 or above, were invited to participate in an online interview or focus group via one of the following recruitment strategies: digital posts on the university's online noticeboard, and flyers posted at numerous locations on-campus. All participants were also invited to share information about this study with their peers as a snowballing technique of recruitment. Students who were interested in participating were asked to complete an expression of interest form, with questions about their contact information. The researcher then contacted prospective interviewees via email with the Plain Language Statement and the Consent Form attached to schedule an interview or focus group. Acknowledging that some participants may prefer to be interviewed in a private or group setting, each potential participant was offered the option of an individual interview or a focus group interview.

4.4.2 Interview Protocols

All interviews, both individual interviews and focus groups, were semi-structured and conducted in English. The interview questions (see Appendix A) included topics such as students' expectations and overall experience of university life, their cultural diversity experiences inside and outside of classrooms, whether they had participated in any cultural diversity activities and factors influencing their participation, cultural diversity experiences before their university attendance, as well as thoughts about possible improvements that university could provide for better students' cultural experience.

Before the commencement of the interview stage, four pilot interviews were conducted with four fellow PhD students at the Melbourne Graduate School of Education to test the clarity of the questions and the length of the interview. Three of these PhD students self-identified as international students, two of whom were from an Asian background. Refinements to the

interview questions have been made based on the feedback from the pilot interviews, such as rephrasing some parts of the interview questions for clarity.

In the interviews and focus groups, students were asked about their experiences of diversity at university, and different phrases were used to capture students' experiences with cultural diversity. For example, questions such as, "In your subjects and classes, have you been involved in any activities or interactions with peers from different cultural or linguistic backgrounds, such as group projects, discussions, etc.?", were aimed to prompt students to think about their previous cultural diversity experiences. Other questions, such as, "Do you think these experiences have changed the way you view interacting or working with people from culturally or linguistically diverse backgrounds?", were included to ask about any self-reported impact students have as an outcome of participating in these activities. Students were also asked to share their experiences related to cultural diversity at their previous educational institutions, using questions such as "What sorts of intercultural learning opportunities were you involved with at this institution (i.e., cultural events, overseas study programs, or international competitions)?" The full set of questions used in interviews and focus groups can be found in Appendix A. All participants were encouraged to elaborate on their responses. Focus group participants were also encouraged to express their agreement or disagreement with each other's responses to the questions.

4.4.3 Procedure

Before the commencement of all interviews and focus groups, prospective participants received a Plain Language Statement (Appendix B) and Consent Form (Appendix C) via email. Only those who signed and returned the Consent Form were included in the interviews and focus groups. All interviews and focus groups were conducted online by the researcher via Zoom between March and June 2021. After the interview or focus group, all participants were asked whether they would be interested in participating in Stage 2, the online survey. Those

who expressed interest in the survey and consented to be contacted via email after Stage 1 received another email inviting them to participate in the online survey in Stage 2. Each interview participant received one A\$10 Amazon digital gift card upon completion.

Participants' individual interviews and focus group responses were audio-recorded and transcribed by the researcher. The de-identified interview data were then thematically analysed to inform some of the items and question choices used in the sequential quantitative stage of this study. The following section discusses the process of thematic analysis and the analytic approach in more detail.

4.4.4 Data Analysis

Thematic analysis, a widely used qualitative method for identifying, analysing, organising, and reporting patterns in a data set (Braun & Clarke, 2006), was selected as the method of data analysis in Stage 1 of the study. The thematic analysis of interview data was conducted with the aid of NVivo software, an analytic software that provides convenience in organising data and can increase the efficiency of coding.

There are two reasons behind the selection of thematic analysis as the method for qualitative data analysis. One advantage of thematic analysis is that it can be used to understand different participants' perspectives, highlight similarities and differences across the data set, and generate unanticipated insights (Braun & Clarke, 2006). The first stage of the study aims to explore students' experiences and perspectives of cultural diversity. It also aims to provide insights into different types of cultural diversity activities that students engaged in at the research site and the factors that influenced their participation in these activities, as well as students' perceived impact from participating in these activities. Considering the aims of the first stage, thematic analysis was deemed as a suitable method.

Further, the thematic analysis also provides a flexible approach to understanding data, which allows the usage of various analytic options (Braun & Clarke, 2006). However, this

flexibility can lead to inconsistency and incoherency when conducting the analysis (Holloway & Todres, 2003).

To meet the trustworthiness criteria, the thematic analysis in Stage 1 was conducted following a six-phase process outlined by Braun and Clarke (2006), including:

1. Familiarising with the data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Producing the report (p. 87)

Before the commencement of data analysis, the researcher listened to the audio recording of each interview and transcribed the interviews verbatim. The data analysis began with reading each interview transcript thoroughly. When reading, the researcher noted the parts that resemble connections with relevant literature and documented initial thoughts about potential codes and themes.

Once the researcher had familiarised themselves with the interview data, they started the second phase by generating a list of initial codes to help organise the data. These codes were adapted from the literature (e.g., cultural empathy, open-mindedness) and guided by the research questions. As further coding proceeded, these codes were modified, elaborated, or removed. To establish a systematic coding process, the researcher also developed a code manual based on the initial codes of the first two interviews before commencing further coding. This codebook includes detailed definitions and exemplar extracts, which can be useful for maintaining consistency in the analytic process and providing clear evidence of the credibility of this study (Nowell et al., 2017).

The third phase of the data analysis involved sorting the initial codes into potential themes and collating all relevant data into each theme (Braun & Clarke, 2006). The fourth phase began once a list of initial codes had been developed. The researcher then started to refine the themes and subthemes in the data. They reviewed the themes at two levels, as suggested by Braun and Clarke (2006): at the level of coded extracts and the level of the entire data set. The researcher first considered whether extracts in each theme formed a coherent pattern and reworked or discharged the themes accordingly. After finishing this process, the researcher reviewed the entire data set to check the validity of the individual theme of the data set and continued to re-code any uncoded data that was missed in the earlier phases. To examine whether and how different themes fit together in the data set, they generated a thematic map and examined how it reflects the meaning evident in the data. In the fifth phase of the analysis, the researcher defined and further refined each theme. More specifically, the focus of this phase was to identify the essence of each theme and determine the aspect(s) of the data that each theme captures (Braun & Clarke, 2006). As the final refinement was completed, the researcher started to report the findings by drafting Chapter 5 of this thesis and concluded the data analysis process.

This study adopted both emic and etic perspectives for the qualitative data analysis. The emic perspective aims to interpret the data “through the eyes of members of the culture being studied” (Willis, 2007, p.100), while the etic perspective aims to explore the data as an outsider. As mentioned in Section 1.2.1, the researcher of this study enrolls at an Australian university as an international student, and there may be shared experiences that allowed the researcher to interpret participants’ responses through an emic perspective as an insider. Meanwhile, because the researcher enrolls in a program (i.e., Doctor of Philosophy) different from the participants (i.e., undergraduate programs), the researcher also took an etic approach using pre-existing

theoretical and empirical work as “the structures and criteria developed outside the culture” (Willis, 2007, p. 100) to understanding participants’ responses.

4.5 Stage 2: Survey

The second stage of the study involved an online survey as a pilot aiming to examine the underlying associations between how frequently students participated in different types of cultural diversity activities and their scores of IC and IA. It also aimed to provide an overall picture of different activities students engaged in at university and the reasons behind their participation. The survey also asked participants about the frequency of their participation in cultural diversity activities in their previous institutions and exposure to cultural diversity in their previous institutions.

4.5.1 *Sampling Strategy*

Between August and December 2021, all undergraduate students at a large, culturally diverse Australian university, aged 18 or above, were invited to participate in an online survey. Recruitment of participants was achieved using digital posts on the university’s online noticeboard, where the digital posts included the Plain Language Statement (Appendix D) and a link to the survey. In addition, as mentioned in Section 4.4.3, all participants of Stage 1 were asked whether they would be interested in participating in Stage 2, and those who expressed interest and consented to be contacted via email after Stage 1 received another email inviting them to participate in Stage 2 with access the Plain Language Statement and a link to the survey.

4.5.2 *Instrument*

The online survey was created by incorporating common themes that emerged from participants’ responses in Stage 1 and added these as question choices, such as the different types of activities that students participated in and the frequently mentioned reasons behind their participation. It also included measurements of IC and IA. The survey was hosted on

Qualtrics, an online survey platform. Before distribution, the survey was piloted and tested with four PhD students at the Melbourne Graduate School of Education before distribution. Based on the feedback received from the pilot testing, refinements were made to the instrument, including the wording of some question statements and the display of the questions. The final survey consisted of six sections, each of which is described below. A copy of the full survey is attached as Appendix E.

Background and Demographic Information. The survey began with questions about the names and levels of the courses that participants are enrolled in, and the proportion of on-campus delivery they have received. The last section of the survey asked for their demographic information, such as age, student status, country (countries) of origin, gender, and language(s) spoken at home. These items provided information on participants' background characteristics.

Cultural Diversity Experience at the Previous Educational Institution. Items in this section asked for participants' experiences with diversity before their university studies. More specifically, participants were asked to indicate the composition of intercultural learning opportunities at the educational institution (e.g., high school) they attended before attending university. In cases where a participant attended multiple educational institutions before university, they were asked to respond while thinking about the institution in which they spent the most time.

For example, participants were asked to respond using a yes-or-no single-choice question on whether the institution they attended was not in their home country and whether it had a large culturally diverse student population. These two items provide information about the characteristics of participants' prior educational institutions. In addition, participants were asked to indicate the frequency of their participation in cultural diversity programs or events at the educational institution they attended before university. An option of "not applicable (these

kinds of opportunities were not offered)” was provided for students who wished to indicate that their lack of experience was due to the unavailability of the programs and events offered.

Together, these three items can contribute to an understanding of participants’ experiences with cultural diversity before entering their current university and were used to examine whether there is potential influence from students’ previous exposure to cultural diversity on the frequency of participating in cultural diversity activities at their current university.

Cultural Diversity Experience at the University. Questions in this section focused on participants’ participation in two types of cultural diversity activities (i.e., classroom and interactional diversity) at the university. Follow-up questions on the frequency and reasons for their engagement were displayed each time participants indicated their engagement in any of the activities listed. An open-ended question was made available after each time participants indicated that they had not participated in a certain type of activity or event, allowing them to share the reasons why they did not engage. These open-ended responses can be indicative of overlooked or underexplored factors that are important for the topic of the study.

Intercultural Competence. To measure participants’ level of IC, all of the 40 items from the Multicultural Personality Questionnaire-Short Form (MPQ-SF) developed by van der Zee et al. (2013) were used. The MPQ-SF was selected for several reasons. First, it consists of five factors aligned well with the intercultural attributes that many Australian universities highlighted in their mission statements, such as cultural awareness and skills for working in a diverse workplace. The Multicultural Personality Questionnaire (MPQ) has been applied in studies with participants from different cultures, including Australia, the Netherlands, Belgium, the U.S., the U.K., France, Germany, Italy, Singapore, China, and New Zealand (Matsumoto & Hwang, 2013). Further, as presented in Section 2.3.3, the measurement invariance of MPQ-SF has been revealed to be reliable among undergraduate students in different cultural groups

in the higher education context (Hofhuis et al., 2020). In addition, the short-form version of the measurement is evidenced by a high correlation with the full-length version of the MPQ while shortening the time required for completion (van der Zee et al., 2013). In this study, the original descriptive statements were adapted for the accuracy of the items and participants were asked to indicate their answers using a 5-point Likert-type scale ranging from 1 (not at all applicable) to 5 (completely applicable).

Intergroup Anxiety. To measure intergroup anxiety (IA) levels, this survey adapted all items from Stephan and Stephan's (1985) Intergroup Anxiety Scale (IAS). This 11-item measure was selected as it is the most widely used scale for measuring IA level (Lolliot et al., 2015; Stephan, 2014), which asks participants to rate the extent to which they experience several emotions when anticipating or engaging in an intergroup interaction: certain (reverse coded), awkward, anxious, self-conscious, happy (reverse coded), accepted (reverse coded), confident (reverse scored), irritated, impatient, defensive suspicious, and careful (Stephan & Stephan, 1985). The IAS is administered by asking participants to indicate their answers using a 10-point Likert-type scale ranging from 1 (not at all) to 10 (extremely).

The IAS has been used in studies in the higher education context across countries such as the U.S., Amsterdam, and the U.K. (Turner et al., 2008). Previous studies have also provided evidence for its reliability (test-retest and internal consistency) and validity (divergent validity and predictive validity) (Lolliot et al., 2015). For example, the test-retest reliability of IAS was reported from a three-wave longitudinal study using a six-item version of the IAS, in which the six-month test-retest correlations (Time 1 to 2: $r = .31$; Time 2 to 3: $r = .37$) and one-year test-retest correlation ($r = .38$) were both significant (Swart et al., 2011). The IAS has also been reported by Stephan and Stephan (1985) to have a high internal consistency ($\alpha = .91$).

Several subsequent studies employed different shorter versions of the IAS, using scales with fewer response options. For example, Paolini et al.'s (2004, Study 1) study used a six-

item version of the IAS, including happy (reverse coded), awkward, self-conscious, confident (reverse coded), and defensive. Participants in Paolini et al.'s (2004) study responded to this six-item version using a rating scale ranging from 1 (not at all) to 4 (extremely). To obtain a comprehensive picture of participants' intergroup anxiety levels, this study will employ Stephan and Stephan's (1985) 11-item IAS with a 5-point rating scale, ranging from 1 (not at all) to 5 (extremely).

4.5.3 Data Analysis

Survey data were downloaded and exported from Qualtrics in the format of .sav and were analysed using the SPSS Statistics program. Responses to at least the first three sections of the survey (progress $\geq 72\%$, as indicated by Qualtrics) were included in the sample for analysis. This means that responses included in this analysis had at least finished the questions about their experience at the university. This inclusion criterion helped with minimising the amount of missing data, especially for inferential statistical analyses that explored underlying associations between students' experiences and their scores on the IC and IA measures.

By examining the descriptive statistics of the data, the analyses aimed to add to our understanding of undergraduate students' cultural diversity experiences before and at university. In addition, as reviewed in Section 3.2.1 and 3.2.2, the literature has documented positive associations between students' IC levels and their frequencies of participation in classroom diversity and interactional diversity activities (e.g., Erez et al., 2012; Etherington, 2014; Gökten & Emil, 2019; Ko, et al., 2015; Robledo-Ardila et al., 2016; Rustambekov & Mohan, 2017). The present study thus hypothesised a positive relation between students' frequency of cultural diversity experiences, both inside and outside of class, at the university and their levels of IC. As discussed in Section 3.3.4, a negative association has been demonstrated between IA levels and the frequency of intercultural interactions in the literature (e.g., Blair et al., 2003; Blascovich et al., 2001; Islam & Hewstone, 1993). However, few

studies have examined whether and how students' IA is linked to their frequency of classroom diversity experiences at the university. Given the existing literature on the benefits of engaging in classroom diversity and promoting intercultural interactions among students, a negative association was thus hypothesised between students' frequency of classroom diversity experiences at the university and their levels of IA. Further, as previous studies have shown the positive links between pre-university exposure to cultural diversity and engaging in intercultural interactions at university (Hurtado et al, 2002; Saenz, 2007), the present study thus hypothesised a positive relationship between students' frequency of cultural diversity activities at previous educational institutions and their frequency of interactional diversity activity (i.e., interaction) at the current university.

Therefore, the three hypotheses below guided the examination of the relationship between the frequency of students' participation in cultural diversity activities and their levels of IC and IA:

- Hypothesis 1: There is a positive relationship between students' frequency of cultural diversity experiences (both inside and outside of class) at the university and their levels of IC.
- Hypothesis 2: There is a negative relationship between students' frequency of cultural diversity experiences (both inside and outside of class) at the university and their levels of IA.
- Hypothesis 3: There is a positive relationship between students' frequency of cultural diversity activities at previous educational institutions and their frequency of interactional diversity activity at the current university.

A series of Spearman's rank-order correlations were selected because some variables are ordinal while others are continuous. An alpha level of .05 was used for all statistical tests.

Furthermore, testing whether different student groups have different levels of needs in terms of development of IC and lowering IA, the analysis also aimed to determine whether there were differences in students' IC and IA levels among different groups. Comparisons were conducted on students' scores on the measurements of IC and IA among different groups including:

- International or domestic students
- Students who speak English at home or those who do not
- Students in the different years of their bachelor's programs
- Students studying different disciplines

These groups were selected for different reasons. First, as outlined in Section 1.1.1, the groups of international and domestic students have been extensively compared in the previous literature, in various aspects such as engagement in intercultural interactions and classroom diversity activities, learning outcomes, as well as overall university experiences. Revisiting this comparison in the current analysis would provide valuable insights into testing the distinctiveness of these two groups and exploring whether students in these two groups have different support needs.

Further, student groups based on their linguistic backgrounds were selected because the literature has discussed the importance of English language proficiency as a factor in determining students' engagement in intercultural interactions (e.g., Arkoudis & Baik, 2014). Conducting a comparison of these two groups can offer insights into whether there are differences in terms of their development of IC and IA.

Comparing the groups of students studying different years of their bachelor's programs would serve as an attempt to uncover variations in students' IC and IA levels in each of these cohorts. As mentioned in Section 1.2.4, a longitudinal design exploring changes throughout students' undergraduate studies was deemed unfeasible due to the time constraint of the PhD

Program. Instead, conducting a comparison of survey data between entry and exit cohorts (i.e., first- and senior-year students) might offer insights into how these groups differ in their levels of IC and IA.

Lastly, as will be detailed in Section 5.2.1, some participants in Stage 1 recognised the differences in the extent of cultural exposure and intercultural learning opportunities provided by different faculties at the same university. This finding from the first stage of this study suggested a need to test whether there were differences among students studying different disciplines in terms of their levels of IC and IA.

In conclusion, making comparisons amongst groups may offer insights for the future, particularly in designing cultural diversity activities that are tailored to students in different groups. If differences in students' levels of IC or IA are identified across groups, these findings can guide universities in better crafting intercultural learning opportunities for specific groups and encouraging students' participation in these opportunities.

For the binary categorical variables (i.e., international/domestic students, students who do/do not speak English at home), independent samples t-tests were used to compare students' scores on the three measures. For variables that have more than two groups, such as year level and discipline of study, one-way ANOVAs were used to compare whether there were differences in scores among these groups.

Before inferential testing, the normality assumption of the data for each group was tested by computing the ratio of skewness to its standard error and the one of kurtosis to its standard error, and the homogeneity of variances was assessed via Levene's Test for Equality of Variances. Descriptive statistics of measures by different student groups can be found in Appendix F. For data that did not meet one or both assumptions, the Welch test or Kruskal-Wallis test was conducted. The Cronbach's alpha values were interpreted following George and Mallery's (2003) rule of thumb: Cronbach's Alpha value above .9 indicates excellent

internal consistency, above .8 is considered good, above .7 is deemed acceptable, above .6 is considered questionable, above .5 is regarded as poor, and falling below .5 is seen as unacceptable. All effect sizes were interpreted according to Cohen's (1988) guideline: correlation coefficient above .5 indicates large effect size, above .3 is considered a medium effect, while below .1 is considered a small effect size; Cohen's *d* above .8 is deemed a large effect size, above .5 is regarded as medium effect, and below .2 indicates a small effect size.

4.6 Trustworthiness

The trustworthiness of this study was enhanced by pilot testing before each stage and incorporating feedback to improve the interview questions and the survey instrument. The pilot testing before each stage also tested the clarity of the interview questions and survey items. By collecting data on the topic of students' cultural diversity experiences using different methods and datasets, the mixed method design helps enhance the trustworthiness of this study through the process of triangulating the data between the two stages (Bryman, 2006; Creswell & Plano Clark, 2017). In addition, as mentioned in Section 4.4.4, thematic analysis of qualitative data collected from Stage 1 was conducted following a six-phase process outlined by Braun and Clarke (2006) to meet the trustworthiness criteria.

4.7 Limitations

In addition to the constraints in the scope of the current study mentioned in Section 1.2.4, there are limitations in the research design of the study. For example, a longitudinal design could offer a more useful method for tracking and observing any changes in undergraduate students' participation in cultural diversity experiences throughout their university studies, which would help examine the effectiveness of participating in cultural diversity activities in promoting students' IC development. However, due to the time constraint of the PhD program, the current study was conducted at one research site with a cross-sectional

design. As an attempt to respond to this limitation, a series of data analyses were conducted to compare the groups of first- and final-year students in terms of their scores on the measurements of IC.

Conducting a single-site study also limits the generalisability of the data. However, this single-site study might provide insights that are specific and applicable to other institutions that share similar characteristics as the research site, such as the diverse composition of the student population, as well as strategies, values, and goals.

In addition, as acknowledged in Section 1.2.1, all data collected in this study was subjective and self-reported by the participants. The experiences and perspectives shared by the participants, particularly in Stage 1, were based on their subjective interpretations. There could be bias in the data reported due to social desirability and false or selective memories. However, such an issue may be inevitable as the topic of the research is the student experience and perspective.

Further, the interview questions and survey items used in this study did not provide students with a definition of cultural diversity experience. Thus, students might have different interpretations and understandings of the related terms. However, due to the exploratory nature of the study, this was deemed suitable as it allowed the researcher to explore participants' perspectives on this topic.

As mentioned in Section 1.2.1, the researcher of the present study also acknowledged that their identity, positionality and personal experience as an international student studying in Australia could have resulted in bias when designing the study, as well as collecting, analysing, and interpreting the data.

Lastly, in addition to the impact of the COVID-19 disruption on the research design as outlined in Section 4.3.1, there have been limitations to the advertisement and recruitment for the project due to the closure of the physical campus mode and the COVID-19 restrictions. All

data collection was conducted online instead of in person. Due to the difficulties and limitations in recruiting participants, both stages of the study were open to all undergraduate students at the same university; participants in the first stage were also invited to complete the survey in the second stage. It is possible for the same student to have engaged in both stages. Participants might change their answers in the second stage to align with the ones they provided in the previous stage (Cohen et al., 2018; Lavrakas, 2008), which may lead to potential biases and impact on their responses.

4.8 Chapter Summary

This chapter outlined the methodology and research design used in this study. It provided details about the selection of each method and approach employed. To understand students' cultural diversity experiences at the university, this study was conducted in two sequential stages using a mixed-methods design. In the first stage, students were interviewed about their cultural diversity experiences before and at university, factors that supported or hindered their participation in cultural diversity activities, and whether they perceived these experiences had influenced them in any way. In the second stage, a survey was conducted to explore the types of activities and frequency of students' participation in cultural diversity experiences, factors influencing their participation, as well as the underlying relations between students' cultural diversity experiences at the university and IC. The following chapter presents findings from the first stage of this study.

5 Students' Perceptions and Experiences of Cultural Diversity

This chapter presents findings from Stage 1 of the study, which was designed to address the research question about how students engage in cultural diversity activities at university, the factors influencing this, and the reasons behind their participation. By collecting and analysing qualitative data through interviews and focus groups, this stage also aimed to explore undergraduate students' perceived impact of their cultural diversity experiences to indicate whether there are benefits related to intercultural competence (IC) from engaging in these activities and to inform the development of some survey items used in Stage 2 of this study.

As reviewed in Section 3.1, students' cultural diversity experience in a higher education setting is categorised into three types by Gurin and colleagues (2002): classroom, interactional, and structural diversity. In Stage 1, classroom and interactional diversity were discussed by students in reference to different activities that students have participated in, whereas structural diversity was discussed in reference to the cultural diversity composition of the university's student population. Therefore, this chapter first presents themes relating to students' experiences with classroom and interactional diversity activities. It then moves on to present themes about the factors influencing students' participation in these activities, as well as the self-reported impact of these experiences. Themes relating to structural diversity will be discussed in Section 5.4.2 as a factor influencing student participation in cultural diversity activities.

This chapter consists of six main sections. The first section presents the participants' profile in this stage. The second and third sections discuss students' experiences of classroom diversity and interactional diversity, respectively. Following this are two sections presenting the factors reported by students that influenced their participation in these activities, which will offer valuable insights into addressing the research question of what influences students' participation in cultural diversity activities. Finally, the chapter concludes with a discussion on

students' perceived impact of cultural diversity experiences. This section will add to our understanding of the impact of cultural diversity experiences on developing IC and related outcomes from the student perspective.

5.1 Participants

A total of 34 interviews and focus groups were conducted online via Zoom with 41 undergraduate students; five of these were focus groups. Table 5.1 presents the enrolment characteristics of the interview participants. Around two-thirds of the participants ($n = 27$) were international students. In terms of year level, around three-quarters ($n = 31$) were in the second or third year of their course. Just over half ($n = 22$) were enrolled in courses within the Faculties of Business and Economics and Science. To protect participants' confidentiality, each participant was assigned a code. A code that starts with the letter P indicates a participant in an individual interview and one that starts with the letter F indicates a focus group participant. These codes can be found in Table 5.2. The length of interviews and focus groups ranges from 27 to 110 minutes.

Table 5.1*Enrolment Characteristics of Interview and Focus Group Participants (N = 41)*

| Enrolment Characteristics | <i>n</i> | % |
|---|----------|----|
| International Student | | |
| Yes | 27 | 66 |
| No | 14 | 34 |
| Year of Study | | |
| First year | 7 | 17 |
| Second year | 14 | 34 |
| Third year | 17 | 42 |
| Fourth year or Honours | 3 | 7 |
| Faculty | | |
| Business and Economics | 11 | 27 |
| Science | 11 | 27 |
| Arts | 9 | 22 |
| Design | 4 | 10 |
| Medicine, Dentistry and Health Sciences | 3 | 7 |
| Veterinary and Agricultural Sciences | 2 | 5 |
| Engineering and Information Technology | 1 | 2 |

Table 5.2*Overview of Interview and Focus Group Participants (N = 41)*

| Participant | Year of Study | Faculty | Enrolment Status |
|-------------|---------------|---|------------------|
| P1 | 3rd | Arts | Domestic |
| P2 | 3rd | Business and Economics | International |
| P3 | 2nd | Arts | International |
| P4 | 2nd | Engineering and Information Technology | International |
| P5 | 3rd | Science | International |
| P6 | 3rd | Medicine, Dentistry and Health Sciences | International |
| P7 | 3rd | Business and Economics | International |
| P8 | 1st | Business and Economics | International |
| P9 | 1st | Business and Economics | Domestic |

| Participant | Year of Study | Faculty | Enrolment Status |
|-------------|---------------|---|------------------|
| P10 | 2nd | Business and Economics | International |
| P11 | 3rd | Business and Economics | International |
| P12 | 3rd | Science | International |
| P13 | 1st | Science | International |
| F1-P1 | 2nd | Business and Economics | International |
| F1-P2 | 3rd | Arts | International |
| P15 | 1st | Science | Domestic |
| P16 | 3rd | Science | International |
| P17 | 3rd | Design | International |
| P18 | 2nd | Arts | Domestic |
| P19 | 3rd | Design | International |
| P20 | 2nd | Business and Economics | International |
| P21 | 4th | Arts | Domestic |
| P22 | 3rd | Design | International |
| F2-P1 | 2nd | Science | International |
| F2-P2 | 1st | Business and Economics | International |
| P24 | 1st | Medicine, Dentistry and Health Sciences | International |
| P25 | 3rd | Business and Economics | International |
| P26 | 1st | Veterinary and Agricultural Sciences | Domestic |
| P27 | 2nd | Veterinary and Agricultural Sciences | Domestic |
| F3-P1 | 2nd | Design | International |
| F3-P2 | 3rd | Science | International |
| P29 | 2nd | Arts | Domestic |
| F4-P1 | 2nd | Arts | Domestic |
| F4-P2 | 2nd | Science | Domestic |
| F4-P3 | Honours | Medicine, Dentistry and Health Sciences | Domestic |
| P31 | 4th | Science | International |
| P32 | 2nd | Business and Economics | Domestic |
| P33 | 3rd | Science | International |
| F5-P1 | 3rd | Arts | Domestic |
| F5-P2 | 3rd | Science | International |
| F5-P3 | 2nd | Arts | Domestic |

5.2 Students' Classroom Diversity Experiences

The first objective of this stage was to explore how students engage in different types of cultural diversity activities at the university. This would provide a foundation for exploring what factors may influence students' participation in such activities.

More than half of the students ($n = 23$) shared that they had engaged in intercultural interactions when working in groups on tasks assigned by their instructors or by engaging in discussions with culturally diverse peers. These experiences were mainly perceived to be positive and valuable experiences, such as “awesome” (P16, third-year, Science, international), “quite interesting” (P2, third-year, Commerce, international), or “it’s been a pleasure” (F5-P2, third-year, Science, international) and “a good multicultural experience overall” (P12, third-year, Science, international).

Some students also recognised these activities as opportunities for intercultural interactions and learning. For example, a student commented, “I met a lot of people from pretty much around the world, and those who were born and raised in Australia”; they added that “definitely there’s a very diverse culture here, which is amazing because I get to learn about their countries, where they [are] from, and different cultures as well” (P33, third-year, Bachelor of Science, international). Other comments on the classroom diversity activities are more specific in terms of the types of activities and benefits acknowledged by students. These will be further detailed below.

5.2.1 *Learning From Culture-Related Contents in Class*

Apart from group project experiences, another means of intercultural learning among participants involved learning from culture-related content and materials in lectures or tutorials, or through discussion on culturally relevant topics with diverse classmates. This was shared by approximately one-third of the students ($n = 12$), in that the content of their lectures or tutorials

included disciplinary knowledge across different cultural contexts, or they had in-class discussions on culture-related topics with their diverse peers. These in-class discussions either took place with the entire class or in smaller groups with several other classmates.

The benefits of these cultural-related content and discussions were recognised by ten students. For example, a domestic student shared that in one of their lectures, the class engaged in a discussion on different cultural practices; one of their classmates from a different cultural background shared their personal experience with female genital mutilation as a cultural practice. As this student elaborated, “There was this whole discussion about western views about this practice and the people who are actually practicing it”; after hearing about this classmate’s experience, the interviewee commented that it was “interesting to have the point of view of someone who has actually experienced it” (P1, third-year, Arts, domestic). This student further elaborated that, through engaging in these discussions in class, they realised “it is important to acknowledge that I’m an outsider [to] other cultures” and that “what I think could be right might be wrong to some other people” (P1, third-year, Arts, domestic).

This was echoed by another domestic student’s comment that having discussions with classmates “from all over the world” on culturally relevant topics was “very interesting and useful”, from which they got to hear “people’s first-hand experiences from all over the world, and from places that I have never been to before”. As this student elaborated:

With a range of different experiences, it creates interesting discussions. Especially because as Arts students, we talk about a lot of real-life examples that we can use and share in discussion. And it’s very interesting and useful to be having these kinds of discussions with people who come from all over the world. (P21, third-year, Arts, domestic)

A similar sentiment was expressed by another domestic student studying Bachelor of Arts, who commented that the in-class discussions on culture-related topics were “always really

valuable”, “because how often do you get the person who is actually in that country talking to you about it?” (P29, second-year, Arts, domestic). According to this student, engaging in these discussions where students “hear other peoples’ perspectives on the topic” can “bring” people “a bit closer” (P29, second-year, Arts, domestic). These responses from students showed that they valued the importance and benefits of engaging in cultural-related content and discussions with diverse classmates as part of their formal curricula.

However, it seems that not all students studying different programs at the same university were provided with the same opportunities for cultural exposure and learning as part of their formal curricula. Four students studying Bachelor of Arts explicitly identified that their bachelor program has a diverse range of culture-related subjects and many opportunities for in-class discussions. Further, students’ commentaries on the Faculty of Arts providing subjects and opportunities for intercultural learning were all positive. As an Arts student explained, the Bachelor of Science program is very “information-based”; “whereas for Arts, you get to discuss your opinions a lot” in classes with diverse peers on different topics, including those related to cultural diversity (P29, second-year, Arts, domestic). Another student studying the same program commented on the Arts subjects and their cohort:

I feel like empathy is something that we [Arts students] learn along the way in our courses. And maybe I’ve been lucky in that sense because I’m more likely to be surrounded by a cohort that is more proactive in being empathetic than maybe a different course cohort would be. (P18, third-year, Arts, domestic)

This comment seems to align with cultural empathy, a factor of intercultural competence (IC). Cultural empathy, as mentioned in Section 2.3.1, refers to the ability to empathise with the feelings, experiences, and behaviours of people from diverse cultural backgrounds. This third-year student shared that, because the Bachelor of Arts degree program provides subjects with cultural diversity-related content and materials, there were opportunities

for intercultural learning as part of the formal curricula. They further noted that, by taking these subjects as part of the degree requirement, it is possible for Arts students to have more experiences with subjects that can foster cultural empathy. This response seems to indicate students may be provided with different extents of opportunities for intercultural interaction and exposure depending on their disciplines of study.

5.2.2 *Intercultural Group Activities*

The benefits and importance of group-based activities in class were largely acknowledged by students. Many viewed these activities, such as group projects and in-class discussions that did not necessarily have a culture-related topic, as opportunities for interacting with peers from culturally diverse backgrounds. For example, a student said that these activities “force us to meet people within our class” (P3, second-year, Arts, international). Students considered group-based activities with diverse peers as valuable opportunities for interaction, but it seems that some of them participated in these activities merely as a requirement of the course.

What is notable is that some of these students mentioned the compulsory nature of the classroom diversity activities in reference to its benefits. As a student explained, “Because the discussion is kind of compulsory and it’s forcing you to join the group and discuss; so I feel in this way it is helping me to involve or to be familiar with cultural diversity” (F3-P2, third-year, Science, international). This was mirrored by another student’s response: “In class group work where the tutor organises in groups, you will be forced to work with some people. I think that was a nice way to be able to talk to people from different cultures” (P17, third-year, Design, international). These responses confirmed that the main way for students to engage in intercultural interactions is through participating in group-based activities in class. Despite it being a required element of the course, students generally valued these activities as beneficial.

However, an important question here is why some students hold negative attitudes towards these activities. This will be discussed in the following section.

5.2.3 Students' Attitudes Towards Classroom Diversity Activities

Despite the largely recognised value of classroom diversity activities, not all students initially held positive views about these experiences. Importantly, having positive experiences with activities such as intercultural group projects positively changed these students' attitudes towards these projects. For example, four students shared that at first, they were "a bit nervous" (P29, second-year, Arts, domestic student; P16, third-year, Science, international), or that they thought it was "daunting" (P1, third-year, Arts, domestic; P17, third-year, Design, international) to work with peers in groups. All the students who mentioned that they initially held less favourable attitudes towards intercultural group projects indicated their views were changed positively upon completion of the projects. Another international student disliked group work at first because it was different from what they were used to in their home country, but they "eventually see the benefits of group projects" (P2, third-year, Commerce, international). Therefore, a possible benefit for students to engage in these activities is that it may lead to positive changes in students' attitudes towards classroom diversity activities upon completion of the tasks.

These positive shifts in students' attitudes may be due to their positive experiences of intercultural collaboration. An international student shared an experience of participating in group-based activities with diverse peers, which positively changed their perceptions of such activities:

I was a bit nervous with working with other people who are not from my cultural background, because I thought it would be a lot harder to connect with each other, and we wouldn't share the same values and all that. But the actual experience is a lot different, because when we were working together with people from different cultural

backgrounds, we compromise with each other, and we just put aside our differences from a cultural aspect. So that's awesome. That definitely gives me more confirmations, or affirmation, to work with other people from different cultural backgrounds, because it showed that the collaboration does work. (P16, third-year, Science, international)

This is also an example of a successful collaboration between students, during which students overcame cultural differences and learned to compromise for the group. Positive experience working with peers from different cultural backgrounds can be beneficial for encouraging students' willingness to participate in similar intercultural collaboration in the future.

5.2.4 Preferences for Working With Familiar and Similar Teammates

Another important aspect to understand is students' preferences for whom to interact with, which would inform us about the underlying tendencies in interactions. These tendencies can imply possible factors that determine students' participation in intercultural interactions. Some participants were asked about their preferences in the group formation for assignments, with questions such as, "In the group project that you had, do you usually get to choose whom to work with, or do your tutors or lecturers usually assign group members for you?" and "When you get to choose your teammates, who do you usually invite to be on your team?". Due to the semi-structured nature of the interviews and focus groups, these questions were not included in the list of interview questions; they were only asked when interviewees mentioned their teams or teammates when sharing their experiences of classroom diversity activities.

Among 20 students who shared their preference in terms of group members, most of them ($n = 15$) showed a tendency to prefer familiar and similar teammates for group assignments. This seems in accord with the previous literature on homophilic preference for interactions as reviewed in Section 3.3.2.

More than half of these 15 students ($n = 9$) preferred to work with those whom they already knew (e.g., friends) or with whom they had collaborated before. As one of them explained, they had collaborated with people from different cultural backgrounds to their own for group assignments, but the collaborations were unpleasant because their teammates “don’t really work hard, so the group assignment just simply becomes kind of an individual assignment” (P4, second-year, Design, international). These experiences led this student to feel “quite nervous” about grouping with classmates from cultural backgrounds different to their own because it seemed to them that people from different cultures would have different work ethics, and this student would prefer to team up with the same group of classmates whom they had positive collaboration before, “so that I won’t worry too much” about whether their teammates would contribute to the group assignment (P4, second-year, Design, international). Among students who preferred to work with familiar classmates, there was a prevalent concern that working with unfamiliar teammates, particularly those from cultural backgrounds other than their own, would indicate uncertainty in whether the collaboration would be productive and pleasant.

In a similar vein, seven students preferred working with peers from the same cultural backgrounds because they assumed people from similar backgrounds would experience relatively fewer difficulties in collaboration and communication. Importantly, all of these students were international, and three attributed their preference to their previous negative collaborations with domestic students.

For instance, a student commented that they would avoid working with domestic students because their previous experience was “a nightmare” where their domestic teammates did not contribute to the group assignment. As this student elaborated, “Because I’ve tried [working with domestic students] and tried to integrate myself to be part of [the group] before, but eventually I just ended up with not a nice experience”, so they would want to avoid working

with diverse peers in the future. Other international students at the same university might have similar experiences, as this student added, “my friends also shared a similar experience; we just don’t want to take that risk” of working with people from different cultures (P5, third-year, Science, international). This view was mirrored by two other students. Communicating with people from similar cultural backgrounds was thought to be more “convenient” (P17, P20) than communicating with those from a different culture. These responses indicated that the quality of previous experiences of cultural diversity activities may be important determinants of whether students would avoid similar interactions in the future.

The sentiment that a shared cultural background is linked to easier communication emerged as a theme from the interviews and focus groups. For example, an international student justified their preference for working with peers from similar cultural backgrounds with the assumption that communicating with people from similar cultures would be easier, or as they said: “It’s easy to communicate and easy to work together” (P4, second-year, Design, international).

This was in accord with another international student’s response, as they commented, “I just feel like it’s easier to connect” and “it just felt easier to connect with people from the same background”; meanwhile, they were aware that such an assumption is inherently incorrect, or “kind of dumb because it’s easy to connect with other people from different cultural backgrounds too” (P16, third-year, Science, international). In elaborating on why they found it easier interacting with people from similar backgrounds, this international student shared:

Because we share the same language, and I mean it’s not like we spoke Indonesian during the class - that will be rude. But sometimes it gets to that point like, you know, sometimes it [my native language] just spills out, and I don’t have to explain myself, like the Indonesian stuff, because the other person will understand. So yeah, I feel like

that's why I mainly chose people from the same culture background. But sometimes I'm kind of opposed to that, because that would kind of shrink my circle. (P16, third-year, Science, international)

While attributing their preference to the shared linguistic background, this student acknowledged the disadvantage of working in a nondiverse group. Taken together, these students' responses emphasised that shared cultural or linguistic backgrounds can be perceived as a reason for more effective communication.

When elaborating on why they felt communicating with peers from similar backgrounds was easier, students mainly pointed to similarities that were assumed to be associated with a shared cultural background. For example, a student commented, "The way of dealing things and the way of thinking would just be more similar among us, so that would make it easier to communicate" (P5, third-year, Science, international). As they further explained, "I'm not saying it's about racial bias or discrimination, but it really just the way of dealing things, or the way of thinking [...] would be different" among students from different cultural backgrounds. Another international student elaborated on their personal experience, that "coming from the same cultural background, I guess it's easier to understand each other because the values and what you've learned in the past might be the same, and that just makes things a lot easier" (P6, third-year, Biomedicine, international). The importance of a shared cultural background was highlighted by these two students, as they assumed that it would automatically mean similarities in aspects such as thinking and handling the assigned tasks.

The above exchanges point to the concept of cultural-emotional connectedness (Volet & Ang, 2012), as defined in Section 3.3.2, refers to the perception that people from the same cultural background would share similar thinking, communication styles, and sense of humour; thus, people would feel more comfortable interacting with each other with those from the same cultural background (Volet & Ang, 2012). This appears to surface from interviewees'

responses in this study, as many seemed to assume a common cultural background would be associated with similarities in other aspects, which in turn can lead to fewer negative interaction experiences.

However, in contrast to this prevalent preference for similar or familiar group members, five students shared that they prefer working with peers from different cultural backgrounds for group assignments. This preference was largely motivated by students' interest in learning about other cultures. For example, an international student shared that, "I personally prefer to work with people from different cultures, so I get to learn about other people, and I get to be exposed to different types of personalities and experiences"; they added that this is not the case for many other students at this university, as they said "but a lot of people would be more comfortable sticking to their own cultures" (P19, third-year, Design, international).

This view was mirrored in another student's comment that having an interest in learning about different cultures was the reason for their tendency to collaborate with diverse peers: "Because I'm really keen in [*sic*] culture diversity, I will say that I'd like to work with people [from] a different background"; they added that they "enjoy talking to people from other cultural backgrounds" (P25, third-year, Commerce, international). During the process of completing a group assignment, this student shared that they "get to talk to them [about] different lifestyles during the group assignment and sometimes we just do chit chat, sharing life [*sic*]" (P25, third-year, Commerce, international). This student showed interest in learning about different cultures and the initiatives in doing so from informal interactions such as having casual conversations with their group mates. What seems interesting is that this student considered informal conversations with diverse peers as opportunities to learn from other people's lives, whereas others without intrinsic interest might not consider this as an opportunity for intercultural learning.

Worth noting is that not all students had pleasant experiences with classroom diversity activities, and understanding these experiences is important for answering the research question of how students engage in classroom diversity activities. These students were prompted to elaborate further on their experiences, and the main reasons for these negative experiences are discussed in the following sections.

5.2.5 Negative Classroom Diversity Experiences

While most students largely valued the classroom diversity activities, some of them made mention of their previous negative experiences with these activities. The main themes of these comments are presented in Table 5.3. These experiences are important to understand as they can provide valuable insights into why some students may actively avoid cultural diversity activities.

Table 5.3

Reasons for Students' Negative Classroom Diversity Experiences

| Themes | <i>n</i> | % |
|--|----------|------|
| Negative intercultural group work experiences | 20 | 48.8 |
| Inactive participation of international students | 5 | 12.2 |
| A lack of interactions among diverse classmates | 2 | 4.9 |

When asked about their group work experiences, almost half of the interviewees ($n = 20, 48.8\%$) responded with negative experiences. Perhaps more concerning is that eight of them viewed their experiences of working with domestic students to be unpleasant, and all but one of these students were international. The main themes surfaced from students' comments on their negative experiences with working in a multicultural group pertain to a) negative experiences with group collaboration and b) unequal work contribution. These two themes are discussed in further detail below.

Negative Collaboration Experiences With Diverse Peers. Students' negative experiences working with peers from different cultural backgrounds as part of their course have a negative impact on attitudes towards such activities. This was particularly the case for some international students who reported that they were treated by their domestic counterparts without respect. For example, two international students shared their experience of collaborating with unfriendly domestic group members. One of them shared their experience of receiving an offensive comment from their domestic group member during the process of collaboration for a group assignment, and that they "felt a bit offended" (P4, second-year, Engineering, international) by the comment.

Another international student reported feeling ignored by their domestic peers during an in-class discussion. This student shared their experiences in two situations:

There was one time I was allocated [into] this group with three local students, and we had to very quickly discuss answers to several questions. They would normally talk among themselves and ignore that I was there. And someone would argue that maybe because I'm not speaking up, so they wouldn't tolerate. But the thing is, I was contributing to the conversation. They were ignoring what I was saying. They were not taking my opinions into account, and they were only talking among themselves. In a different experience, there was another group with two people [...] they would face each other and face away from me in a discussion. Every time I said something, they would just completely ignore what I said and only discuss among themselves. (P19, third-year, Design, international)

In the later part of the interview, this student added that domestic students "would make snap judgments about my linguistic abilities, my background, and things like that" based on "the way I look"; these unfriendly responses they received from their domestic counterparts also discouraged them from engaging in future intercultural interactions, or as they commented,

that “would be a huge hindrance that stops me getting to know people because they [domestic students] make judgments before I get a chance to talk about myself, my ideas, or my values” (P19, third-year, Design, international).

This student’s response shows that their negative experiences with the interaction were due to what they perceived as a lack of respect or negative attitudes from their domestic peers. Such experiences had a negative impact on their attitudes towards intercultural interactions and their tendency to engage in similar interactions in the future. These responses demonstrated that, although the university has provided activities for students to work on group projects with classmates, these experiences might not always be positive and can even have a negative impact on students.

Unequal Contribution to the Group Assignment. In addition, students’ negative classroom diversity experiences might be caused by reasons that are not related to cultures. Particularly, six students attributed their negative collaboration experiences to their teammates’ contributions to group projects. They shared reasons such as students they have worked with did not seem to care about the assignment (P5; P12), contributed less to the assignment (P5; P20; P26), or submitted work late (P4; P20; P22). These experiences made the collaboration difficult for them.

Elaborating on these negative collaboration experiences, most students’ responses attributed the differences to working styles rather than culture, whereas a few others recognised that domestic students might be more likely to have other commitments such as part-time jobs. As an international student elaborated, “Because most of us [international students] get support from parents, so we might not be as busy as them [domestic students]”, which means “we [international students] might not have a really tight working schedule” and “that allows us to be able to respond to other group members more effectively” (P22, third-year, Design, international). From these comments, it seemed that these students did not attribute the negative

experiences to cultural differences and were understanding of the differences they have with their peers in terms of commitment outside of the university study.

5.3 Students' Interactional Diversity Experiences

Students' comments on interactions with culturally diverse peers outside of the classroom centred around their experiences of extracurricular activities online and in-person, rather than interactions that took place in universities' on-campus faculties. One reason for this was due to the impact of the COVID-19 pandemic and related restrictions. Only a few students mentioned their interactions with diverse peers in libraries and cafes before the pandemic, but they specifically mentioned that these interactions were brief and there was no influence from those interactions.

This section thus focuses on the student experience with cultural diversity in the extracurricular aspect of university life, such as activities hosted by student organisations and clubs, as their interactional diversity experience. Students were asked to share not only the frequency of their participation in these activities but also the quality of such interactions. Table 5.4 presents the most common themes in students' responses about their interactional diversity experience. This section explores these responses in more detail.

Table 5.4

Common Themes Relating to Students' Interactional Diversity Experiences

| Themes | <i>n</i> | % |
|--|----------|------|
| Extracurricular activities as intercultural interactions opportunities | 17 | 41.5 |
| Benefits of engaging in extracurricular activities | 14 | 34.1 |
| Overall positive extracurricular experiences | 10 | 24.4 |
| Negative views about extracurricular activities | 6 | 14.6 |
| Infrequent intercultural interactions | 3 | 7.3 |

5.3.1 *Extracurricular Activities as Opportunities for Intercultural Interactions*

One of the major themes that surfaced in the interviews was that extracurricular activities are considered opportunities for students to meet culturally diverse people at the university. More than 40% of the students ($n = 17$) commented that they have interacted with people from diverse cultural backgrounds when participating in in-person and online extracurricular activities, such as events hosted by student clubs and the university, committee meetings of the student union, sports, and online speed-friending events organised by the university. For example, an international student recognised the cultural diversity represented in their club and attributed this to the structural diversity of the university:

In the clubs that I've joined, I would say there are a lot of people from everywhere, almost like a hundred different countries represented in [university's name]. That's something that I really like [about the university]; we get a lot of diversity, we have a lot of options to mix with different people from different backgrounds, and to learn from them, [and] to experience different things together with them. So that was nice.
(P2, third-year, Commerce, international)

Some of the positive comments from students were about the people they met in the activities, and the opportunities to learn about different cultures when participating in activities. More specifically, seven students commented that they met friendly and welcoming peers. As an international student shared in two of the clubs that they joined, "Even though your language is not that good, they [members of the club] still welcome you, and they have a diverse group of people in the committee as well" (P7, third-year, Commerce, international). Other comments ($n = 10$) were more general, such as describing their overall extracurricular experiences as "fun" (P1, third-year, Arts, domestic), "positive" (F4-P1, second-year, Arts, domestic) and "great experience" (P25, third-year, Commerce, international).

Perhaps more important to note is that some students recognised these experiences as opportunities for intercultural learning. More specifically, eight students shared that they learned about different cultures when engaging in activities outside of the classroom. The events hosted by the university and the international committee of the student union, such as the “multinational festival” (P16, third-year, Science, international) and “Winter Fair” (P2, third-year, Commerce, international student) were mentioned by students as examples of learning about different cultures and “a really good way to interact with other people from different cultural backgrounds” (P16, third-year, Science, international). Further, another student felt that although it may not be easy to form long-term connections with peers when participating in extracurricular activities, “at least [...] you still get to talk to different kinds of people, which can help with” learning of cultural diversity (P25, third-year, Commerce, international).

Although most of these comments about extracurricular experiences were positive, some students shared their unpleasant ones. For example, three students felt that they “don’t fit in” (P3, second-year, Arts, international student; P12, third-year, Science, international) and were “not connected” (F2-P2, first-year, Commerce, international) with others. These three students attributed the difficulty in forming and maintaining ongoing connections to the large-scale nature of the extracurricular events, as well as the impact of COVID-19 and the virtual campus.

The challenge of forming ongoing connections was perceived by five interviewees as an issue beyond the classroom. All five of them attributed this to the design of extracurricular events at the university: campus-wide social events, such as “Summer Fest”, are often “one-off” without many opportunities to have “more constant interactions with the same group of people” (F1-P1, second-year, Commerce, international). A downside of these events is the short duration, as the same student explained, “These events only last a couple of hours. And

then, there's another event on another day, which is totally separated, and you'll meet completely new people" (F1-P1, second-year, Commerce, international). No meaningful connection was made due to the short amount of time such extracurricular events last. This sentiment was shared by another student:

For club events, I think it's really difficult that you get to know somebody in that event. It's easy to meet people, but how do you develop a good understanding of others in a short time? Lots of the activities are, so-called, "speed friending events". But I think friendship cannot be sped up - it's gradually developed. (F3-P1, second-year, Design, international)

This comment was echoed by another student in the same focus group, who shared their personal experience with the "speed friending events" hosted by the university:

Speaking of speed friending, I went to one event before. And that one was [with] 20 or 40 people at a long table. When the bell rang, we started talking [to one partner]. And when next time the bell rang, we changed to another partner to talk to. During the session, I met a lot of people, but all of them would just, after one event they were saying, "Oh, we'll definitely catch up another day for coffee or something". But it's just gone for nothing and no message from them. And yeah, I kind of agree with F3-P1 - it's really hard to maintain this kind of connection. (F3-P2, third-year, Science, international)

In explaining that why events and activities that last longer may be more beneficial for friendship forming, a student gave an example of a camping trip, which can "force you to bond with people around you" because "it lasts for a few days"; they added that "the lack of [events like this] is a challenge to meeting new people and getting to know them better" (F1-P1, second-year, Commerce, international). This student emphasised the need to "have more constant interactions with the same group of people" to form ongoing connections. The other

student in the same focus group agreed to this point by elaborating that: “there are all kinds of people around the university to meet with and form friendships – that’s a bit challenging because [the university] is too large”, and “the main challenge [to form connections with diverse peers] is to meet the same people” (F1-P2, third-year, Arts, international) over time.

Likewise, a third-year student made a comparison between these relatively brief extracurricular events and the ongoing peer mentoring program organised by the university, based on their personal experiences with both activities:

I think a lot of the events are designed with a single purpose of getting people to meet each other [...]; it’s just that superficial like “Oh you meet someone, you added him or her on Facebook”, and that’s it. I think the mentoring program are lot better in terms of having an ongoing commitment. (P7, third-year, Commerce, international)

The peer mentoring program mentioned by this student is hosted by the university and aims to help commencing undergraduate students transition into university life by pairing them with a later-year student peer mentor and a group of first-year peers; the regular mentor group sessions organised by the student peer mentors are a space for new students to ask questions and make connections, or as the university, participating students will “build personal connections, get helpful insights, and learn how to connect with the rich array of opportunities, activities and services available” (University A, n.d.). It seems that activities like this, where students meet with the same peer groups regularly throughout their undergraduate study, could help form a sense of cohort.

5.3.2 Reasons for Not Engaging in Extracurricular Activities

When students were asked for their reasons for not engaging in extracurricular activities related to diversity, the most common ones related to external aspects, such as the availability of students’ schedules (i.e., workload and other commitments), and the time and locations of the activities. Other reasons were more personal. For example, a few students attributed their

inactive participation to their lack of interest in the activities and events available, or as one of them commented, “So far there hasn’t been anything that I was interested in” (P3, second-year, international). Another few students expressed their reluctance to participate in extracurricular events activities alone (F5-P1; P13; P25). As a student commented, “I just find it awkward to go into the club alone. I would prefer if I had someone accompany me” (P25, third-year, international)

Worth noting is that three students found the large-scale extracurricular activities overwhelming and intimidating, causing them to avoid participating in the future (F3-P1; F3-P2; P13). All these students were international with a similar sentiment that, because the extracurricular activities were large-scale, they found it “intimidating” and they felt “overwhelmed” (P13, first-year, Science, international).

A student shared their previous experience with attending an event hosted by a sports club on campus in their first year: “There were a lot of people there and they were laughing and talking, but I was not a part of it. It’s really scary for me and I didn’t go [to this kind of extracurricular activities] anymore” (F3-P2, third-year, science, international). When reflecting on their university experience, this third-year international student shared that in their first year, it was difficult for them to actively participate in extracurricular activities and to interact and form connections with diverse peers at the university.

In my first year, I feel a bit isolated because [in] all the classes I have, it seems like all other students met each other before university, and I can’t [get] involved in social activities. Although I actually finished my foundation study here before the university, I got one-and-half-year experience of living here, but it’s still kind of hard for me to communicate or talk with the native, with the locals. (F3-P2, third-year, science, international)

From this student's response, the challenges they experienced in terms of forming connections with peers as part of their university experience contribute to their sense of isolation at university. It also highlights extracurricular activities as part of students' social engagement within the university community, and together with the comments about the intimidating and overwhelming extracurricular activities, suggest the need to take into consideration the atmosphere and scale of the events when designing and hosting these activities.

5.4 Factors Supporting Students' Participation in Cultural Diversity

Activities

In the interviews and focus groups, students were asked to share the factors influencing their engagement in cultural diversity at the university. The frequently mentioned factors that supported students' participation in cultural diversity activities are presented in Table 5.5 and will be discussed in the following section in more detail.

Table 5.5

Factors that Supported Students' Participation in Cultural Diversity Activities

| Factor | <i>n</i> | % |
|--|----------|------|
| Interaction opportunities provided by the university | 24 | 58.5 |
| The structural diversity of the university | 13 | 31.7 |
| Personal initiative or interest | 9 | 22.0 |
| Open-mindedness | 2 | 4.9 |

5.4.1 Intercultural Interaction Opportunities Provided by the University

The most common supportive factor for students' participation in cultural diversity activities, named by 24 students (58.5%), is the opportunities available for intercultural

interactions provided during their time at the university. Under this overarching theme, students' responses varied in terms of the type and roles of these opportunities. Students commented on opportunities for interactions both inside and outside the classroom, including extracurricular events and activities, group assignments, tutorials and laboratory sessions, internships and placements, as well as study abroad and foreign exchange programs.

Amongst these opportunities, extracurricular activities received the most comments from students. More specifically, more than 60% of these 24 students ($n = 15$) considered extracurricular activities at the university as an opportunity for interacting with culturally diverse students, although three students specified that this was only the case before the pandemic. When students shared that they had experiences meeting and interacting with diverse peers through participating in extracurricular activities, these comments were predominately positive. For example, 13 students used terms such as “positive” (F4-P1, second-year, Arts, domestic) and “fun” (P1, third-year, Arts, domestic) to describe their views about extracurricular activities, and as one of them commented, engaging in extracurricular activities “is a very nice way for me to talk to people from other countries” (P17, third-year, Design, international).

5.4.2 Structural Diversity Provides the Condition for Intercultural Interactions

Over one-third of the participants ($n = 13$, 31.7%). considered the culturally diverse student population of the university to provide the environment for intercultural interactions. These students perceived the culturally diverse university as an environment with ample opportunities to encounter diverse peers. More specifically, an international student commented that intercultural interaction in such an environment is more of a “natural process” (P6, third-year, Biomedicine, international). A domestic student who held a similar view explained this idea:

I think the university is quite prestigious, so it has a big national and international draw of students, as opposed to some of the smaller universities that don't have such an appeal overseas; so that definitely brings in a lot of intercultural interactions, just because there are people of all nationalities and backgrounds at the university. (P15, first-year, Science, domestic)

In a related vein, another student commented that the diversity in the student population may vary based on the degree program:

There hasn't been that much cultural diversity in my Honours cohort, which I think was surprising, but I also think this would probably vary depending on the type of degree you're doing. In Science, there is some level of cultural diversity, but not might not be as high as in other degrees. (F4-P3, Honours, Science, domestic)

This notion was supported by another student in the same focus group: "I haven't experienced that much interaction with diversity in this degree" (F4-P1, second-year, Arts, domestic). In these cases, students seemed to attribute the relatively less diverse cohort within their courses to the lack of cultural diversity experiences at the university.

Crucial to note is that some students recognised the need to move beyond providing opportunities for intercultural interactions and learning. Six students specifically shared the view that the university only provides these opportunities without pushing students to engage. Four of these six students also pointed out that because no requirement is in place to ensure or encourage students' participation, "students will just tend to avoid it [...] or stay in their comfort zone" (P5, third-year, Commerce, international) without engaging in any intercultural learning at the university. Similar sentiment was shared by other students, as one of them said: "Honestly, the university offers a lot [of opportunities], but it's not school anymore, right? Universities are more about how you do things, like no one's going to come and push you [to engage in these opportunities], right?" (F2-P1, second-year, Science, international).

This comment on the importance of the individual's initiative in determining their willingness to engage in intercultural interaction was echoed by another second-year student:

I guess a big thing is probably, because it's up to you, up to the individual student to take the initiative to join that club or talk to that person. So if people just don't really want to engage with others or want to shut himself off, then it's their choice and the university can't really do anything about that, beside probably putting you in tutorials where there's a diverse cohort, but I assume this [group arrangement] is by random.
(F5-P3, second-year, Arts, domestic)

It is possible for students to not engage in any cultural diversity activities, especially outside of the class. Another student further elaborated on this point:

It feels like the university is using an excuse that they have given us the opportunities, but students are not necessarily using it. I mean they give us opportunities to work together in class [...] with diverse cultures, but people are still not respectful and don't abide by what the university stands for, I think. (P19, third-year, Design, international)

Therefore, providing opportunities for students to interact does not automatically guarantee positive outcomes nor does it mean students are benefiting from these opportunities. This aligns with the point made by Gurin et al. (2002) that although structural diversity provides the necessary conditions for intercultural interactions, it is insufficient for education benefits to be realised. While the opportunities and environment provided by the university offer a necessary condition for intercultural learning and interactions to take place among students, students need to avail themselves of these opportunities. In these cases, students' interest and motivation in these activities are particularly important in determining their participation. The following section elaborates on the role of intrinsic interest as emerged from interviewees' responses.

5.4.3 *Interest in Cultural Diversity Activities*

Another important factor that can determine students' participation in cultural diversity activities is whether they have the interest and initiative to engage in these activities, as a student commented:

I feel like the university doesn't proactively make you interact with other students - it's just during the course. And even for the clubs, it's more like you yourself have to be willing to step in and to interact. It's not like someone's forcing you, or someone's giving you the chance to do that. (F5-P2, third-year, Science, international)

Four students did not perceive any obstacle in their engagement with cultural diversity at the university, and as one student said, "I think if you want to get involved, there is no barrier to do that" (P31, fourth-year, Science, international). Similarly, the idea that "if the student wants to get involved, [...] there are ample opportunities" for intercultural interaction at this university was shared by eight students. These students' responses reiterate the importance of personal initiative and interest in students' cultural diversity engagement.

In a related vein, more than one-fifth of the students ($n = 9$) considered intrinsic interests in cultural diversity activities to be the enablers of their own or others' participation in such activities. A consensus in these responses appears to be that there are plenty of opportunities for cultural diversity experiences offered at the university, but whether a student engages in these opportunities "really just depends on the person" (P5, third-year, Commerce, international). This was often the case for activities that were not compulsory, such as extracurricular activities.

In addition, a few students reported that their own interest, whether to make friends with diverse peers or to learn about different cultures, was the supportive factor of their participation in intercultural interactions. More specifically, five students responded that their interest in making friends with peers from different cultural backgrounds has encouraged them

to engage in intercultural interactions. Notably, two international students commented, “I came all the way here, so I want to meet people from different places. I didn’t want to meet people from the same background” (P2, third-year, Commerce, international). This idea of being away from their home country seemed to have motivated these international students to avail themselves of opportunities for cultural exposure. As another third-year international student commented, “I came to Australia for study” so “it doesn’t really make sense” to “keep hanging out with the same group of people”. They explained their motive for doing so was that they “want to build more local connections”, which “would be more beneficial for career” (P7, third-year, Commerce, international). This student seemed to recognise the benefits of connecting with diverse peers from the perspective of networking. Taken together, it appears that these students valued the importance of intercultural interactions and had an intrinsic interest that motivated their engagement in these activities.

5.4.4 *Open-Mindedness*

In addition to personal interests, open-mindedness, one of the five factors in van Oudenhoven and van der Zee’s (2000) Multicultural Personality Questionnaire (MPQ), was specifically identified by two students as an attribute that enabled them to engage in intercultural interactions. Both said that they have engaged in interactions with an “open mind” (P10, second-year, Commerce, international). A domestic student elaborated on their definition of being open-minded, demonstrating attributes that aligned with intercultural competence:

I think an important thing is to not assume that the Australian culture is the default and they [students from other cultural backgrounds] should know everything about me and expect them to just say everything about themselves. I think we should just be seeing us as equals; both cultures that might be different from each other should come to the middle, rather than me expecting them to come over to my culture and assimilate. (P29, second year, Arts, domestic student)

This comment demonstrates that the domestic student was aware to not assume that international students have the liability to assimilate into the Australian culture. They seemed to demonstrate important attributes that universities strive to equip their students with, such as cultural empathy, as well as respect for and open-mindedness to cultural differences.

5.5 Factors Hindering Students' Participation in Cultural Diversity

Activities

Apart from the supportive factors, understanding barriers that hinder student engagement is important as it can provide insights into possible areas of improving students' cultural diversity experiences. All interviewees were asked to share any challenges to their engagement in cultural diversity at the university. Table 5.6 shows factors that were identified by students as barriers to their participation in cultural diversity activities at the university.

Table 5.6

Factors that Hindered Students' Participation in Cultural Diversity Activities

| Factor | <i>n</i> | % |
|--|----------|------|
| Communication-related issues | | |
| • Lack of English language proficiency | 18 | 43.9 |
| • Usage of LOTE in class | | |
| • Unfamiliarity of Australian cultural references | | |
| The virtual campus mode | 15 | 36.6 |
| Difficulties in forming connections with diverse peers | | |
| • Difficulties in finding common ground with diverse peers | 12 | 29.3 |
| • Lack of a sense of cohort | | |
| • Preference for interacting with similar peers | | |
| • Tendency to stay in existing friend groups | | |
| Introverted personality and shyness | 7 | 17.1 |

| Factor | <i>n</i> | % |
|---|----------|------|
| Lack of support from the university to encourage students' participation in cultural diversity activities | 6 | 14.6 |
| Other students' attitudes or stereotypes | 4 | 9.8 |
| Less diverse student cohort in the degree of study | 2 | 4.9 |
| Political relationship between Australia and home country | 1 | 2.4 |
| International students' visa restriction | 1 | 2.4 |

5.5.1 *Communication-Related Issues*

The most mentioned barrier to participation in cultural diversity activities, reported by more than 40% of the students ($n = 18$, 43.9%), involves issues during communication with diverse peers. Half of these students noted communication-related issues as the most common reason for their negative experiences of classroom diversity activities. Students' comments on these issues centre around: inadequate English language proficiency, usage of language other than English (LOTE) for academic purposes, and lack of familiarity with the Australian culture.

Inadequate English Language Proficiency. The majority of these 18 students ($n = 14$, 77.8%) referred to difficulties in communicating as or with a non-native speaker of English. The term “language barrier” was used by six students to refer to the difficulties experienced during communication due to their own or others' inadequate English proficiency. All except one of these six students commented that the peers that they worked with were not able to communicate in English “properly” (F2-P2, first-year, Commerce, international), which caused some misunderstandings and difficulties during the collaboration. An international student explained this situation with an example where they worked with a Chinese student “who does not understand a lot of the words in class”:

Often there will be misconceptions because English is not their main language, which means that sometimes they may not use it [English] properly. And in that case,

misunderstandings can happen where one does not understand the true meaning of what that Chinese student is saying. (F2-P2, first-year, Commerce, international)

This student also added that these situations often happen. This student recognised that their peers might be struggling with their non-native language of English, and this may lead to misunderstandings in communication. Such example is not novel in the literature, as scholars have identified inadequate English language proficiency as a stumbling block to intercultural interactions among students (e.g., Eisenclas & Trevaskes, 2007).

Another possible consequence of inadequate English language proficiency is students' lack of participation in activities in class. Four students commented that, compared to local students, international students are often less engaged in discussions due to their English language proficiency. As one of them elaborated:

In group discussions or discussions in class, I found that local students are more willing to speak more. But for some overseas students, they might be concerned about their language ability, so they might not speak as much as the local students. (P22, third-year, Design, international)

The above observation aligns with an experience shared by another international student, who recognised that their own concerns about their English language proficiency and unfamiliarity with the topic in the Australian context have hindered their participation in an active learning experience in their Marine Biology subject. As they explained, "Sometimes I just keep silent because I wasn't sure if I can answer [the questions] correctly, so most of the time I just let the local students answer all the questions. But it wasn't like I'm not trying to participate". They also shared that this might be an explanation for why some international students did not actively participate in class, "There is this language barrier, making the study a little bit more difficult [for international students] than the local students here" (F5-P2, third-year, Science, international). It is likely that other international students also shared similar

experiences; they might have been perceived as reluctant to participate as documented in the literature (Marlina, 2009), although they had the intention to participate in these activities in class.

Lack of Familiarity With the Australian Culture. Another challenge to effective communication amongst diverse students is that some international students are unfamiliar with the Australian culture and related references used during conversation. Indeed, this was reported by five students who identified their lack of familiarity with Australian cultural references as a stumbling block to intercultural interactions. For example, an international student commented that, although many students acknowledged the benefits of engaging in intercultural interactions, their lack of English language proficiency and familiarity with cultural references would “impede, restrict or scare most students away” (P5, third-year, Science, international). This student also commented that the conversational English language used in the social setting is more difficult to understand compared to the one used in classrooms:

...during all these extracurricular activities, people are talking in a casual way; sometimes they use some slang or other ways of expressions, and they are speaking in a quite fast manner. So, if you are just new here [...] with a less fluent English-speaking skill [...], you will just find yourself awkward there, just staying there and listening without talking. I actually initially had quite a few such experiences. Other people were all actively participating and I’m just like a potato. I just can’t feel the value of my existence. (P5, third-year, Science, international)

From this response, the student’s lack of active engagement in extracurricular activities was attributed to not only their language proficiency but also their unfamiliarity with cultural references. These issues seem to have negatively affected international students’ experiences of the event and led to avoidance of future intercultural interactions.

Usage of a Language Other than English in the Academic Setting. The lack of English language proficiency and familiarity with Australian cultural references might lead some students to turn to using their native languages, or languages that they are more familiar with, wherever the situation allows. This might account for another issue that surfaced from interview responses, centring around the usage of a language other than English (LOTE) in class. More specifically, four students described a situation where they were the only one in a group that did not speak the same LOTE as the rest, using the term “language barriers”. Surprisingly, unlike the “international-domestic” distinction of student groups used in much of the literature, this issue was reported by international students, in reference to their international classmates who spoke a different LOTE.

These experiences negatively changed students’ attitudes about collaborations with diverse peers. For example, a first-year international student shared their experience, commenting that they “resent” this kind of situation because members of the group “all communicate in Chinese instead of English”, which as they commented, “would defeat the purpose of coming to university and learning something different”. Moreover, this student added, that if the same situation were to happen again, they have learned to deal with it and encourage other group members to communicate in English by “calling them up and keep asking them questions” (F2-P2, first-year, Commerce, international).

In this situation, the feeling of being excluded or “left out” (P2, third-year, Commerce, international) was shared by two international students, as other group members may “exclude people who don’t understand that [language]”. One of them expressed that it was understandable that others may prefer to communicate in their native languages instead of English:

If there are two Chinese in my group, I’m pretty sure [...] it would be easy for them to speak in Chinese, and that part is [what I am] missing out because I have no idea what

they're talking about, you know? I cannot communicate with them [in Chinese], and that's something that I feel like I'm not connecting with [them], even though yes, we are all doing the same assignment. (P33, third-year, Science, international)

This student also commented that this situation was more difficult to deal with when learning online. This is perhaps due to the nature of the online environment allowing more anonymity and deindividualisation (McKenna & Bargh, 2000). This was echoed by another student:

At least you can ask them [the group members] in person, and they are more obliged to tell you what they are talking about. Whereas if you were to do it online, they don't feel very compelled to explain to you. (F2-P2, first-year, Commerce, international)

These responses pointed to important issues in the online group work that many students may have experienced. In the online environment, students have the option of remaining silent and turning off the camera when interacting with others. This allows anonymity and deindividualisation to take place (McKenna & Bargh, 2000). These features of the online environment might in turn lead to aggravated issues in communication among students when interactive learning activities take place in front of the computers. Indeed, the online campus was identified by students as hindering their engagement in intercultural interactions at the university, which will be detailed below.

5.5.2 The Virtual Campus Mode

Another common factor that hindered students' intercultural interactions was the virtual campus mode, mentioned by 15 students (36.6%). The most common reason for this issue was the limited opportunities for interactions when learning online. As five students commented, there were fewer opportunities to interact with peers in both academic and non-academic settings when the university shifted to the virtual campus mode. Unlike learning on campus, students did not have opportunities to interact with each other before and after lectures or

tutorials when learning remotely. Using Zoom to communicate can also be “very annoying” (P16, third-year, international student) because visual cues might be absent when interacting, and it does not allow conversations to happen simultaneously in one Zoom meeting room. Another issue related to the usage of virtual campus mode is that some students perceived it to be difficult to connect with peers when learning online.

Despite the prevalent preference for on-campus learning among students, the Zoom breakout room was viewed by two students as an environment with opportunities for interactions in an academic setting. As an international student explained, the Zoom breakout room allows smaller-group discussions in a large class, providing students with the opportunities to get to know their classmates:

...for example, in my Psychology class, the class is quite big, and each time we have a breakout room there are at least three or four international people. So that encourages me and everyone to get to know each other more. That’s an hour or a time when all of us are given different people to get to know. You can’t avoid it, but when it happens, [...] it’s quite good. (P3, second-year, Arts, international)

In this sentiment, the benefits of using the online platform to engage in interaction appear to be acknowledged by the student. Possibly, some students, especially those with higher social anxiety, might favour the online environment as it allows time to craft and prepare responses (Weidman et al., 2012). It may also provide an environment that is less pressured than the offline one, especially for those who lack social confidence (Zywica & Danowski, 2008).

Forming Connections on the Virtual Campus. Making connections can be more difficult on the virtual campus, according to seven students. As one of them commented, “It’s already difficult enough to go to class and make friends and do group assignments, but still, it’s better that way compared to the online module” (P33, third-year, Arts, international

student). Compared to the in-person classroom, the online one provided fewer opportunities for informal interactions between students, such as before the lecture begins and afterwards. For example, a student described their experience of online learning, which was similar to four other students:

It's a bit harder to be informal and relaxed on Zoom the way it would be if you were in person. You can talk outside [of] the class, for example, and get to know people. But on Zoom, you just go into the tutorial and just sit there in silence until the tutor comes, with all our video [cameras] off. (P18, second-year, Arts, domestic)

According to this response, students acknowledged that informal intercultural interactions could take place when learning offline, in settings such as outside of the lecture room. These interactional diversity experiences might have been taken away when lectures and tutorials were shifted online, and there are thus fewer opportunities for interactions among diverse students online compared to in-person learning.

In addition, three of these five students considered the absence of visual cues in online interactions as a challenge for forming connections with people. One of them commented that “with most of my classes, people don’t have the cameras turned on, so I can’t really connect with them when I can’t really see how they’re reacting” (P32, second-year, Commerce, domestic student). Perhaps the online method of communicating was unfamiliar to students, especially for meeting and connecting with peers. Nevertheless, a main theme from these comments is that it is difficult to connect with diverse peers, and the online environment accelerated this issue. An important question to address is then what caused the difficulties in forming connections with diverse peers? The following section provides some insights into addressing this question.

5.5.3 *Difficulties in Forming Connections With Peers*

Despite the opportunities for collaborations and culture-focused conversations with diverse peers in class, nine students found it difficult to connect with, and especially, to maintain ongoing connections with their diverse classmates. Due to the challenges in creating ongoing connections with peers, some students felt “a bit isolated” (F3-P2, third-year, Science, international student), or they were “not as close as other students here” (F1-P1, second-year, Commerce, international student). An international student also felt like “everyone was running a rat race”, and that they “really don’t have a support system” because it was hard for them to form “genuine” and long-term friendships at the university (F2-P1, second-year, Science, international). As will be detailed in this section, several issues were identified by interviewees in this study as the potential causes, including, difficulties in finding common ground with diverse peers, a lack of consistent learning cohort, preference for interacting with peers who are similar to themselves, and a tendency to stay within existing friend circles.

Difficulties in Finding Common Ground. From responses in interviews and focus groups, there were perceived difficulties among students in finding similarities with culturally diverse peers. Seven students reported that overall there were difficulties in finding similarities, shared interests, or “common ground” (P15, first-year, Science, domestic) with their peers from different cultural backgrounds. This was evident in the student experience at the university and is one of the most mentioned challenges to students’ intercultural engagement. All except one of these six students were international, and they reported difficulties in making friends or joining a conversation with domestic students. For example, an international student unpacked their observation of friend-making at the university: the culturally diverse student population does not only bring in benefits of cultural learning but also makes it “slightly difficult to maintain or create connections because we are not very similar” (P33, third-year, Science,

international). They also shared an observation that applies to not only themselves but also their classmates:

The only thing that we [students at the university] share in common is that we have that same subject, or we are doing the same assignment. We speak different languages; we come from different cultures around the world. And I felt like a lot of people in [my] class [are] having the same experience as well. I would either be very close with someone they have known for years back in high school or their own country, or they speak the same language, or they [are] having a lot of classes together. (P33, third-year, Science, international)

From these responses, it is clear that students considered friendships to be founded on the basis of similarity. Thus, cultural differences would challenge the formation of friendships between peers. This finding is in parallel with those in the literature on friendship as reproducing or cementing social boundaries, rather than as fostering meaningful intercultural interactions (Bowman & Park, 2014; Lee, 2006; Martin et al., 2010).

The Lack of a Consistent Learning Cohort. The non-cohort characteristic of their undergraduate studies was named by six participants as a possible contributor to the difficulties in connecting with their diverse peers. More specifically, four students attributed this to the design of their course structure, which has led to the infrequency of meeting with the same group of peers throughout their university studies. These students were studying Commerce and Science programs. As a second-year student explained this situation:

...there are so many majors in a Bachelor of Science degree, right? There are hundreds of people doing different majors. It's rare that you're going to meet [a] person who's going to have the same journey as you, taking the same subject in the same semester, so it's not easy for you to form that long-term connection when you have a once-a-week class [with them]. (F2-1, second-year, Science, international)

This student pointed to the variety in the large student population and the variety of subjects offered by the university as the cause for the paucity of connections between diverse peers at the university. This view was echoed by eight others; as one of them commented, because it is rare for a group of students to enrol on the same set of classes together throughout the undergraduate study, “the limitation of the time that we see each other is actually creating difficulties to maintaining the connections that we have or to create a friendship” (P33, third-year, Arts, international). These responses attributed the lack of peer connections to the course structure of their bachelor’s degrees. Notably, most undergraduate students at the research site study broad bachelor’s programs (e.g., Bachelor of Arts or Bachelor of Science). Each program has a variety of subjects for students to choose from, even within the same majors. This feature of the course structure at the research site might have limited the opportunities for students to study with the same group of classmates throughout the undergraduate study.

In addition, three students also commented that there was little incentive to meet with group members again after finishing the project, as a student elaborated, “Group work is assignment-oriented; when the assignment is complete, it’s like a mission is completed. The team is basically founded on that [assignment]” (F3-P1, second-year, Design, international). This was echoed by another student who commented, “Every subject is just a few weeks of doing assignments together and there is no commitment or incentive to meet up with other [group mates] on an ongoing basis” (P7, third-year, Commerce, international). These comments may suggest that some students viewed the groupwork experience as essentially a task to complete for their subject, rather than an opportunity to form connections with their diverse peers.

Preference for Interacting With Similar Peers. As mentioned earlier in this chapter, there was a tendency for students to prefer working with peers from similar backgrounds when completing activities such as group assignments. However, such preference is not only evident

in situations when students choose their teammates for a group assignment, but also outside of class in more informal settings. In this study, six students recognised this preference to exist based on their overall interaction experiences at the university; five of them considered it an obstacle to intercultural interactions.

For example, an international student commented that it is difficult to connect with diverse peers “because usually, people of the same ethnicity would stay in the same group”. They further noted that for students who want to connect with a group of peers from a cultural background other than their own, they might “feel a bit limited sometimes” because they “won’t be able to connect as well as [the rest of the group] do” (F2-2, first-year, Commerce, international). This observation was evident in a domestic student’s experience with in-class group assignments:

I think people of similar cultural backgrounds tend to be drawn to each other, so often you’d feel a bit like an outsider. In tutorials, I notice that [when] we go into small groups, almost automatically I got paired up with another White student, and then a lot of Asian students [were] kind of grouped together. No one asserted it; [it] just kind of happened naturally. And when I go to the other group to ask them how they do this question, they always explain to you, but then just turn back to themselves - so you kind of feel like you’re infringing upon their group. (P15, first-year, Science, domestic)

According to this student’s comment, it appears students forming groups based on their cultural backgrounds seems to be a natural process pre-assumed by both international and domestic students. In a related vein, an international student commented that it is considered more “natural” to ask those who are from the same cultural backgrounds to form a group for assignments (P4, second-year, Design, international); this might indicate that inviting peers from different backgrounds would seem as less natural. These comments seem to resonate with

the issue from an earlier section on some students' intentional decision to work with those from a background similar to their own.

Perhaps more concerning is that some students might "label" others that they have encountered based on the country they are from, and students might prefer interacting with their co-nationals. According to a third-year student's observation:

A lot of people would judge based on where they were from before you could even know them or talk to them. But when you talk to someone, you would be very aware of where they're from, and have that label on the head, like "this person's from this country; that person's from that country". And it's very obvious to see people hanging out with those from their own countries instead. (P19, third-year, Design, international)

As a possible explanation for these preferences, another third-year student commented using the term "comfort zone" (P6, third-year, Biomedicine, international) and provided their observation and interpretation of why some students would prefer to collaborate with similar peers for in-class tasks. This seemed to be based on the assumption that, compared to those from different cultural backgrounds, people would tend to share more similarities with those whom they share a cultural background with, and thus communication between them would be easier. For example, one student commented:

Let's say, in class where you have to choose to work with people, as a Chinese, you would feel more comfortable working with Chinese than other people. First of all, you don't necessarily have to speak English with your peers, because you both come from the same country, and you will use your native language. And sometimes, coming from the same cultural background, I guess it's easier to understand each other because the values and what you've learned in the past might be the same, and that just makes things a lot easier. And you will feel less embarrassed. Although [...] those people are

strangers, I guess it would be easy to get along with someone who has a very similar life. (P6, third-year, Biomedicine, international)

This preference for similarity and familiarity was also mentioned by students in reference to other aspects, such as graduating from the same educational institutions before university. Seven students specifically commented that they or others would tend to stay within the group of students from the same high school, mainly with reference to domestic students. However, once these friend groups have been established, students are less likely to seek new friendships outside of these groups and stay in these pre-existing friend groups.

Tendency to Stay in Pre-Existing Friend Groups. Approximately one-third of the students ($n = 12$, 29.3%) described a tendency for themselves or others to stay in the pre-established friend groups. A student shared their observation of friendship-forming at the university: “Generally, people’s social networks are pretty insular; when they [these social networks] become established at university, they kind of stick with those people, and there’s not much opportunity to meet new people or make new friends” (F4-P3, second-year, Arts, domestic). This view was mirrored by all other students in the same focus group. As one of them commented, “a lot of people kind of stuck to their friendship groups, so [they were] less willing to go to events that help [students] meet new people”, and many students participated in events with their friends, “so they weren’t as open to talking to other people at the event” (F4-P2, second-year, Science, domestic). This situation has “gotten even worse” (F4-P2, second-year, Science, domestic) because of the COVID-19 pandemic and online learning; “a lot of people made friends pre-COVID, and they just stick with that group” (F4-P1, second-year, Arts, domestic).

Taken together, these responses indicate a potential cause of concern regarding the forming of social circles among students. That is, some students may perceive forming connections with diverse peers to be challenging, thus they may prefer interacting with those

who are more similar to themselves, or those whom they are already familiar with. As a possible result, these students may have very limited intercultural interactions besides those that are compulsory in class, leading them to miss out on opportunities to learn about different cultures and develop related competencies. What may have exacerbated this is the virtual campus module, as some students may have formed friend groups before the pandemic and would only limit their interactions within these groups. Such a tendency in how students engage in interactions with peers at university requires further exploration.

5.6 Students' Perceptions of the Impacts of Cultural Diversity

Experiences at University

In the interviews and focus groups, students were asked to reflect on whether their experience with cultural diversity at the university had any impact on them. This question is intended to explore students' experiences of these activities, as well as offer valuable insights into the influence of participating in cultural diversity activities perceived by students. The majority ($n = 34$, 82.9%) responded that their cultural diversity experiences, inside or outside of the classroom, have an impact on them.

In this section, students' perceived impacts of their cultural diversity experiences (see Table 5.7) are discussed in three categories: 1) development in cross-cultural skills and competencies; 2) enhanced preparedness for future interactions; and 3) positive changes in worldviews and attitudes. However, cultural diversity experiences might have negative impacts on six students, while no impact on seven others. The latter part of this section discusses these responses in more detail.

Table 5.7*Students' Perceptions of the Impacts of Cultural Diversity Experiences*

| Impact of cultural diversity experiences | n | % |
|--|----|------|
| Development of cross-cultural skills and competencies | 18 | 43.9 |
| Enhanced preparedness for future interactions | 18 | 43.9 |
| Positive changes in attitudes and worldviews | 15 | 36.6 |
| Negative changes in attitudes and avoidance of future interactions | 6 | 14.6 |

5.6.1 Development in Cross-Cultural Skills and Competencies

In this study, several students acknowledged that their cultural diversity experiences at university were beneficial for the development of cross-cultural skills and competencies. As discussed in Section 1.1, encounters with new ideas that challenge pre-existing beliefs are crucial for traditional-aged undergraduate students, as they are at an important stage of forming their personal and social identities (Gurin et al., 2002). In previous studies, classroom diversity experiences have been recognised by students as opportunities to encounter new ideas and learning practices (e.g., Levin, 2005), and there were positive changes to students' intergroup attitudes (e.g., Montgomery, 2009; Sweeney et al., 2008). These views are evident in interview responses to this study, such as peers from different cultural backgrounds “bring in new perspectives and you [learn to] understand the ways they work and interact” (F1-P1, second-year, Commerce, international).

More than 40% of the students ($n = 18$, 43.9%) felt that their previous interactions with diverse peers at university had led them to become more aware, respectful, mindful, or understanding of cultural differences. A third-year student, for example, shared that meeting people from different cultures “made me learn a lot about how I should communicate with someone that is not from the same background as me – you have to be more mindful when using words, or [with] the way you phrase the sentence and express your opinions” (P33, third-

year, Science, international). The cultural exposure they had experienced at the university, as noted by another third-year student, led them to recognise that “different people have different work styles and [are from] different cultural backgrounds”, and they learned to “adjust” to these cultural differences (P2, third-year, Commerce, international). These responses could indicate that one of the ways that cultural diversity experiences benefit students is by exposing them to diversity and providing them with the first, necessary step for developing more tolerant attitudes towards cultural differences. Indeed, similar findings were documented in the literature on the outcomes of learning from a culturally relevant curriculum (e.g., Etherington, 2014; Weed Harnish, 2014; Martinez-Mier et al., 2011) and engaging in intercultural interactions outside of class (e.g., Antonio, 2001; Lopez, 2004).

Another third-year student shared their experiences of hearing their classmate speak about cultural practice and came to the realisation that their worldviews and perspectives were “very much influenced by Western views”, which “would make me an outsider in understanding someone else’s situation from a different culture or background” (P1, third-year, Arts, domestic). This student commented that “through studying these subjects”, they learned the “need to make sure they [people from different cultural backgrounds] have a voice in speaking their truth and not just speaking my truth only” (P1, third-year, Arts, domestic).

This comment was mirrored by another domestic student’s experience of taking a foreign language class at university. Through their experiences of language learning, these students realised their international peers might face difficulties in terms of living away from their home countries and studying the undergraduate degrees in their non-native languages. As this student elaborated:

As someone who is trying to learn another language, I just try to be more patient with students who don’t speak English as their first language, or even [those] who are not locals. Because I can imagine how hard it is to move countries and study in our

language, let alone get good grades in that course. So [during] interactions with them, I'll just try to be nice and not to assume that they know certain things that the local students would know. [...] If I were in their shoes, I would want someone else to do the same as well. (F5-P3, second-year, Science, domestic student)

Although none of these students explicitly mentioned cultural empathy as an impact of their cultural diversity experiences, they nevertheless suggest a link between participating in activities such as taking foreign language classes and development in students' cultural empathy and IC. From these responses, it seems clear that these kinds of cultural diversity activities experienced as part of the formal curricula are valued by students as opportunities for cultural exposure and intercultural learning. This finding supports previous literature which has highlighted the benefits of classroom diversity activities as enhancing students' cross-cultural skills and competencies (e.g., Etherington, 2014; Hammer & Swaffar, 2012; Olson et al., 2016).

5.6.2 Enhanced Preparedness for Future Interactions

After working in team-based assignments with peers from different cultural backgrounds, students may develop skills for intercultural collaborations, and become more prepared to work in a diverse workplace. These skills, as mentioned in Section 2.2, are in alignment with the graduate attributes of many Australian universities. More specifically, interactions with diverse peers at the university were reported by 15 students (36.6%) to have prepared them for future interactions in two main aspects. First, eight of these students shared that they have become more confident or felt more comfortable with interacting with diverse people. As some of these students explained, they did not have much experience with intercultural interactions before university, or they thought "it won't be so easy to get along" (P8, first-year, Commerce, international) with diverse peers when they first started their university studies; and their cultural diversity experiences at the university have helped them "become more confident and comfortable" (P8, first-year, Commerce, international) with

working and interacting with diverse peers and “encouraged” (P16, third-year, Science, international) them to engage in interactions in the future. An international student commented that engaging in an intercultural interaction prepared them for the next one, or as they said, “I’m always more confident and comfortable than the last time” (P33, third-year, Science, international). These responses indicate that participating in cultural diversity activities at university can help prepare students for future interactions.

In addition, another eight students commented that through their cultural diversity experiences, they had learned important skills for future intercultural collaborations and/or interactions. This is predominately in reference to their classroom diversity experiences, from which students can “translate” (F1-2, third-year, Arts, international) these experiences at the university to similar intercultural situations in the future. These activities are opportunities that allow students to practice and improve skills required in collaborating within a multicultural team and working in a global workplace. As a student explained, “If I were to go to the workplace and meet similar people, I think I’ll be able to understand them better, given previous interactions” (F1-1, second-year, Commerce, international) they had at the university. This was agreed by another student in the same focus group: “I don’t think I would have any problem” with “working in in the culturally diverse workplace or internationally with people around the world” (F1-2, third-year, Arts, international). Another international student shared that they have learned “a lot of people management skills” (F2-2, first-year, Commerce, international) for communicating with diverse people and dealing with situations where they were the only person who does not speak the same language other than English as the rest of the group. These exchanges support the previous literature on the benefits of cultural diversity experiences in preparing students to work and live in a global society (Woods et al., 2011).

5.6.3 *Positive Changes in Worldviews and Attitudes*

Approximately one-fifth of the interviewees ($n = 8$, 19.5%) reported that they learned about different cultures and broadened their horizons through engaging in cultural diversity activities at university. For example, a second-year student commented that “through the process of working with people from diverse backgrounds, you may know what other people think” and these experiences can be “a supplement to your own way of thinking” (P20, second-year, Commerce, international). Another second-year student described a similar experience: “[when] interacting with all these people from different countries, they bring in new perspectives and you [learn to] understand the ways they work and interact. It’s pretty exciting to learn about how they do things from their home countries and how they bring it over to share with you” (F1-P1, second-year, Commerce, international). These students valued the importance and benefits of engaging in intercultural interactions at university.

Interestingly though, in the present study, all except one comment regarding the benefit of cultural diversity activities in changing worldviews were from international students. While this does not necessarily indicate that domestic students are unaware of the value of cultural diversity experiences in shaping their attitudes and worldviews, it points to an area for further research, considering that a similar result was evident in a previous study at an Australian university by Sawir (2013). More specifically, Sawir’s (2013) study found that teaching staff expressed the concern that domestic students remained unaware of the cultural diversity in their surroundings and often did not recognise the value of participating in cultural diversity activities; the staff also identified a challenge to encourage domestic students to utilise the cultural resources around them. Although it remains unclear whether international and domestic participants in the present study had different perceptions of the availability of intercultural learning opportunities, the results nevertheless are indicative of possible issues regarding students’ attitudes and perceptions of the cultural diversity activities available in the

university context. Such issues may be of particular concern to educators and call for further research into this aspect of the student experience.

The cultural diversity experiences students had at university may also help change their attitudes towards intercultural interactions and people from different cultures. For example, as reported in Section 5.2.3, students shared the sentiment that group work with diverse peers seemed “daunting” (P1, third-year, Arts, domestic; P17, third-year, Design, international) to them. However, upon successful completion of the assignment, their attitude towards multicultural group projects changed positively, and they found these activities to be “a good learning experience” (P1, third-year, Arts, domestic). These comments are in keeping with the previous literature that documented the benefits of cultural diversity experiences in positively changing the worldviews and attitudes towards diversity among students (e.g., Engberg et al., 2016; Gareis et al., 2019).

5.6.4 Negative Changes in Attitudes and Avoidance of Future Interactions

However, worth noting is that not all students responded that their cultural diversity experiences have influenced them positively, and these responses particularly pertain to those within the classroom. As discussed in Section 5.2.5, some students shared their negative classroom diversity experiences. More particularly, five students (12.2%) noted that their previous interactions with diverse peers have changed their preference for future interactions.

Previous negative in-class collaborations with domestic students, as mentioned in Section 5.2.5, made an international student “avoid pairing with other students from a different background” (P5, third-year, Science, international). Two students had experienced previous negative interactions with domestic students, from which they became less “open” (P3, second-year, Arts, international) and would “put a guard up” (P19, third-year, Design, international) to their domestic peers in the future. Two students also shared that their previous interactions

have led them to avoid working in a group where they are the only ones in a group that does not speak the same LOTE as the rest.

These responses show alignment with the previous literature on negative experiences with intercultural interactions. There is a robust base of empirical evidence that has suggested that negative interactions can lead to negative consequences, including avoidance of future interactions, and negative attitudes towards people from groups other than their own (e.g., Mak et al., 2014; Voci et al., 2015). These indicate that the quality of students' cultural diversity experiences has a robust influence in determining the outcomes (Denson & Bowman, 2013). Interviewees' responses in this study, together with previous literature, demonstrate the significance of the quality of the experience may have in changing students' attitudes towards diverse peers and future interactions.

5.6.5 No Perceived Impact From Cultural Diversity Experiences

Over 40% of the students ($n = 18$, 44%) responded that some or all of their experiences of cultural diversity, either inside or outside of the classroom, did not influence them in any way. These responses are of particular importance to unpack, as they offer valuable insights into potential issues and possible areas of consideration for improving student experience and enhancing the effectiveness of these activities.

Seven of these 18 students attributed this to the fact that they had many cultural diversity experiences before university. These seem to highlight that previous exposure to cultural diversity has an influence on students in terms of their cultural diversity experiences at university. Further, all of these seven students shared the idea that having attended culturally diverse educational institutions before university or coming from a culturally diverse background, they “already have some degree of familiarity with culture exchange” (P7, third-year, Commerce, international). Therefore, as one student said, “I don’t think my experience

[at the university] has done much” (F5-P2, third-year, Science, international) in terms of influencing their perspectives on cultural diversity or preparing them for future interactions.

Additionally, six other students explained that there was no influence from their experience because they had not had many interactions with diverse peers. They explained that their cohorts were not culturally diverse, or that the interactions they engaged in were merely focused on the “academic” aspect (i.e., working on group assignments), “rather than actually making connections” (P33, third-year, Science, international) with peers. These responses may lead to the question of whether cultural diversity activities at university are meaningful for intercultural learning and are indeed successful in leading to positive student outcomes.

5.7 Chapter Summary

This chapter discussed the findings from Stage 1 of the present study. The qualitative findings presented in this chapter indicate that the student experience of cultural diversity is of great complexity. Motives behind students’ participation in different types of cultural diversity activities also vary, and some students did not engage out of interest but merely to fulfil their course requirements. While they largely value the benefits of participating in cultural diversity activities, some students had negative experiences that led to negative changes in their attitudes and avoidance of future interactions. As such, it remains unclear whether participating in cultural diversity activities is indeed effective in developing IC and other positive student outcomes. The complexity and diversity in students’ responses point to a need for a quantitative analysis on this topic to examine more broadly how students engage in cultural diversity activities and the factors influencing their participation. The interview findings provide a preliminary understanding of how and why students engage in cultural diversity activities at university. These findings also shaped the design of some survey items used in Stage 2, and the findings are discussed in depth in the next chapter.

6 Cultural Diversity Activities and Intercultural Competence

As mentioned in Section 4.3, data collection and analysis of this study were conducted in a sequential manner; data from the first stage informed the design of some of the survey questions and items in used in second stage; these include the different types of cultural diversity activities and the reasons behind students' participation in these activities at the current research site. In this chapter, findings from the quantitative stage of the study are presented and discussed.

Data collection and analysis of this stage were guided by three objectives. First, the survey aimed to provide an overall picture of undergraduate students' cultural diversity participation at the university, including the popular types of cultural diversity activities among students. This would help address the research question of how students engage in cultural diversity activities at the university. Second, the survey asked students to rank the top three reasons for their participation in each type of these activities, aiming to identify factors that influence their participation. Further, the survey analysis intended to explore any potential associations between how often students participated in different cultural diversity activities and their levels of intercultural competence (IC) and intergroup anxiety (IA) on the measures of these concepts. As a pilot, this stage would contribute to understanding the relationships between cultural diversity experience and IC, as well as IA as a potential factor associated with students' cultural diversity experiences. Lastly, the survey also asked students about the structural diversity of their previous educational institutions before attending university and previous cultural diversity experiences at the institutions. This would offer insights into testing students' previous exposure to cultural diversity as a potential factor associated with their engagement in cultural diversity activities at the university.

6.1 Survey Overview

As detailed in Section 4.5.2, the survey comprised six main sections, including introduction, pre-university experiences, university experience, intercultural competence, affective measurement, and demographic information.

6.1.1 Participants

One hundred and fifty-three students entered the survey, of which 93% provided consent to participate. Ninety-eight participants selected “yes” to the question “Are you an undergraduate or Honours student at [university’s name]”, thus meeting the inclusion criteria for participation. Of these, $n = 59$ completed at least the first three sections of the survey (progress $\geq 72\%$, as indicated by Qualtrics) and were included in the sample for analysis (see Section 4.5.3 for more details). This high dropout rate may be attributed to the length of the survey instrument. Additionally, considering that the survey recruitment was conducted when a series of COVID-19 restrictions were in effect, it is possible that students did not have the time or were relatively less interested in completing the survey.

Table 6.1 provides an overview of the survey participants’ enrolment characteristics and demographic information. Most of the participants had either a small proportion or none of their study delivered on campus (77%), as would be expected during COVID-19 lockdown periods.

Worth noting is that the majority of the sample self-identified as international citizens (54.2%) and domestic students (45.8%). This may be that some students identified themselves as Australian permanent residents or dual citizens, but not Australian citizens. Most of the students who self-identified as domestic students stated that they were either Australian permanent residents or dual citizenships from countries such as the U.S., Canada, or France.

These results suggest that among the participants of this study, there was a large degree of diversity within the broad groups of international and domestic students.

According to the open-ended responses to the questions on citizenship and language spoken at home, the sample includes students from 15 countries, speaking 17 different languages. The most common countries of origin were China ($n = 8$), India ($n = 4$), and Indonesia ($n = 4$). The most commonly spoken language(s) other than English (LOTE) at home were Cantonese and/or Mandarin Chinese ($n = 16$), Indonesian, Malay, or Vietnamese ($n = 4$ each).

Table 6.1

Survey Participants' Characteristics

| Survey Participants (N = 59) | <i>n</i> | % |
|------------------------------|----------|------|
| Year of study | | |
| First | 20 | 33.9 |
| Second | 14 | 23.7 |
| Third | 22 | 37.3 |
| Fourth or Honours | 3 | 5.1 |
| Bachelor's program | | |
| Arts | 21 | 35.6 |
| Science | 18 | 30.5 |
| Commerce | 6 | 10.2 |
| Design | 6 | 10.2 |
| Agriculture | 3 | 5.1 |
| Biomedicine | 3 | 5.1 |
| Oral Health | 1 | 1.7 |
| Other | 1 | 1.7 |
| Gender | | |
| Female | 32 | 54.2 |
| Male | 16 | 27.1 |
| Non-binary or fluid | 2 | 3.4 |
| Prefer not to answer | 3 | 5.1 |
| Missing | 6 | 10.2 |
| Age | | |

| Survey Participants (N = 59) | <i>n</i> | % |
|--|----------|------|
| 18-20 | 27 | 45.8 |
| 21-25 | 21 | 35.6 |
| 26-30 | 2 | 3.4 |
| 35+ | 2 | 3.4 |
| Missing | 7 | 11.9 |
| International student | | |
| Yes | 26 | 44.1 |
| No | 27 | 45.8 |
| Missing | 6 | 10.2 |
| Country/countries of origins | | |
| Australia | 20 | 33.9 |
| Other | 32 | 54.2 |
| Missing | 7 | 11.9 |
| Speak a language other than English at home | | |
| Yes | 36 | 61.0 |
| No | 17 | 28.8 |
| Missing | 6 | 10.2 |

6.1.2 Descriptive Statistics Overview

Table 6.2 presents the descriptive statistics of the IC and IA measurements. The Cronbach's alpha levels of the IC and IA measures were between .71 and .85, which indicates that the internal consistencies range from acceptable to good, respectively (George & Mallery, 2003).

Table 6.2*Descriptive Statistics of the Measures*

| Variable | <i>n</i> | α | Min | Max | Mean | <i>SD</i> | Skewness/SE | Kurtosis/SE |
|--------------------------------|----------|----------|------|------|------|-----------|-------------|-------------|
| MPQ-Short Form (all subscales) | 52 | .84 | 2.58 | 4.03 | 3.21 | .35 | 1.57 | .06 |
| MPQ Cultural Empathy | 53 | .85 | 2.25 | 4.88 | 3.85 | .59 | -1.23 | .29 |
| MPQ Flexibility | 54 | .84 | 1.13 | 4.00 | 2.67 | .65 | -.56 | -.67 |
| MPQ Social Initiative | 53 | .82 | 1.88 | 4.75 | 3.22 | .65 | 1.33 | -.53 |
| MPQ Open-mindedness | 54 | .71 | 2.13 | 4.63 | 3.48 | .53 | .39 | -.27 |
| MPQ Emotional Stability | 54 | .82 | 1.25 | 4.25 | 2.79 | .72 | -.48 | -.48 |
| Intergroup Anxiety | 53 | .79 | 1.27 | 4.00 | 2.59 | .53 | -1.12 | .79 |

As mentioned in Section 4.5.3, a series of tests of normality was conducted before inferential analyses. The values reported by these tests sit within the normality cut-off thresholds of between -2 and +2 for skewness and -7 and +7 for kurtosis (Bryne, 2010; Hair et al., 2010), and thus it was determined that the scores on all measures were normally distributed.

A series of normality tests and homogeneity tests were conducted before comparing the students' scores in different groups. For comparisons based on students' years of study, results of normality tests and homogeneity tests revealed that the students' scores in groups were not normally distributed for the MPQ subscales of Flexibility and Social Initiatives. Similarly, for comparisons based on students' discipline of study, student's scores in three different discipline groups were not normally distributed for the IAS. Therefore, the mean differences were tested using a series of Kruskal-Wallis Tests to determine whether there are significant differences in the scores on these two variables of MPQ and the IAS among students in different groups. For data on other variables, the assumptions of normality and homogeneity of variances were met, and a series of one-way ANOVAs were conducted.

6.2 How do Students Engage in Cultural Diversity Activities at University?

This section presents an overview of the sample's participation in cultural diversity at the university, both inside and outside of the classroom. It also explores the underlying determinants of students' cultural diversity participation. The last section discusses the types of cultural diversity-related activities that students have participated in and the most important reasons that determined their participation.

6.2.1 Types of Cultural Diversity Activities

The survey also aimed to explore what kind of cultural diversity activities were the most popular among respondents, and the reasons that determined their participation. These are important for understanding the different types of activities that students prefer, which may suggest possible factors that can determine students' participation. On a series of multiple-choice questions, students were asked to select all types of cultural diversity activities they had participated in within the university setting.

Table 6.3 presents students' responses regarding their participation in extracurricular and curriculum-based activities related to cultural diversity. For extracurricular activities, the majority ($n = 44$, 74.6%) engaged in at least one type. Among these 44 students, the most popular extracurricular activities were the ones organised by the university ($n = 14$, 31.8%).

Table 6.3*Descriptive Data on Students' Participation in Cultural Diversity Activities*

| Type of Activities | <i>n</i> | % |
|--|----------|------|
| Extracurricular activities | 59 | |
| None | 15 | 25.4 |
| Activities organised by the university | 14 | 23.7 |
| Activities organised by student clubs or organisations | 11 | 18.6 |
| Language classes | 11 | 18.6 |
| Activities organised by people or groups outside of the university | 8 | 13.6 |
| Curriculum-based activities | 59 | |
| None | 21 | 35.6 |
| Language classes | 20 | 33.9 |
| Activities organised by the university | 7 | 11.9 |
| Activities organised by student clubs or organisations | 6 | 10.2 |
| Activities organised by people or groups outside of the university | 2 | 3.3 |
| Study Abroad Program | 2 | 3.3 |
| Missing | 1 | 1.7 |

Note. As these were multiple-choice questions, percentage values do not sum to 100%.

Interestingly, the most popular extracurricular activities differ between the groups of international and domestic students. For example, the most popular types of extracurricular activities among domestic students were activities organised by the university ($n = 8$) and those that were organised by student clubs and organisations ($n = 8$). This was different from international students' responses, among which the most popular types of activities were extracurricular language classes ($n = 6$) and activities organised by people or groups outside of the university ($n = 6$).

For curriculum-based activities, more than 60% of students ($n = 38$, 64.4%) had participated in at least one type of activity. Among these 38 students, over half of them participated in a language class ($n = 20$); interestingly, these students were mainly domestic ($n = 14$), and only a few of them were international ($n = 6$).

However, worth noting is that in both types of activities, the largest percentage of students responded that they did not participate in any relevant activity. This result is of particular concern as it indicates that the activities with opportunities for intercultural learning and interactions were not taken up by students. Likewise, it is also possible that students who participated in various activities did not perceive them as opportunities for intercultural learning and interactions.

More particularly, for extracurricular activities, one quarter of the interviewees ($n = 15$) participants reported not participating in any extracurricular activity related to cultural diversity. In their written responses to the follow-up open-ended question asking them why they have not engaged, six of these 15 respondents mentioned the impact of the COVID-19 pandemic, including a shift to online learning and limited opportunities for participation. Four others attributed this to a lack of advertisement for extracurricular activities at the university, whereas the rest named reasons such as their introverted personality and shyness, lack of interest, and academic workload.

Similarly, 21 respondents (35.5%) indicated that they had not participated in any curriculum-based cultural diversity activity. In their open-ended responses, close to half of these 21 students ($n = 10$, 47.6%) attributed this to the limited opportunities offered as part of their courses, while five others wrote that they lacked interest in the opportunities offered, or as one of them wrote, they “didn’t care enough to” participate. Four other students also indicated that they had not participated in this kind of activity because it was not a compulsory element of their courses. These responses pointed to the importance of interest in determining students’ participation in cultural diversity activities.

Confirming the important role of interest, all of the top three reasons that determined students’ participation in extracurricular and curriculum-based activities pertain to personal interests and initiatives, including 1) the activities seemed interesting to them, 2) they wanted

to meet new people, and 3) they wanted to learn about different cultures. Interest again emerged as a key factor that largely determined students' participation. This signifies the importance of designing opportunities and encouraging students to take part in the opportunities for cultural learning at the university.

6.2.2 Classroom Diversity Experiences

Table 6.4 presents the data on how frequently respondents participated in classroom diversity activities. Survey data indicated that not all respondents have worked frequently with culturally diverse peers in class. More than half (52.5%) of the 59 respondents engaged frequently or very frequently in group activities for their classes with diverse peers, while over one-fifth (22%) rarely had such experiences. Two first-year participants indicated that they never engaged in classroom diversity activities at the university, but none of them wrote a response to the open-ended question asking why this was the case.

Table 6.4

Frequency of Classroom Diversity Activities

| Frequency | <i>n</i> | % |
|---|----------|------|
| Never | 2 | 3.4 |
| Rarely (no more than once a year) | 13 | 22.0 |
| Sometimes (in 1-2 subjects per year) | 12 | 20.3 |
| Frequently (in at least one subject per semester) | 16 | 27.1 |
| Very frequently (in most subjects each semester) | 15 | 25.4 |
| Missing | 1 | 1.7 |
| Total | 59 | 100 |

As mentioned in Section 1.1.1, much of the previous literature on student cultural diversity experience has compared international and domestic students as having different tendencies to engage in cultural diversity. Therefore, it is important for this study to revisit this

comparison to test any differences in patterns of participation for the two groups. There were more international students ($n = 16$) who had frequently or very frequently engaged in classroom diversity activities than their domestic peers ($n = 13$). Twice as many domestic students ($n = 8$) than international students ($n = 4$) selected “rarely” as their frequency of classroom diversity activities. The two students who responded that they never engaged in any classroom diversity activities did not indicate their enrolment status. These results seem to contrast with the literature describing international students as less likely to actively participate in activities such as in-class multicultural group collaboration (Cotton et al., 2013).

Table 6.5 presents an overview of the reasons that determined respondents’ participation in classroom diversity activities. As mentioned in Section 4.5.2, students were presented with a list of reasons and asked to rank up to three reasons for their participation. The majority ($n = 42$, 71.1%) indicated that they engaged in projects or activities with diverse peers in groups because it was a requirement of their course, and most ($n = 36$, 85.7%) of these students considered this reason to be the most important one.

Table 6.5

Reasons of Participation in Classroom Diversity Activities

| Reason | <i>n</i> | % |
|--|----------|------|
| Course requirement | 42 | 71.1 |
| Recommended by my lecturer or tutor | 15 | 25.4 |
| Wanted to meet new people | 15 | 25.4 |
| Seemed interesting | 11 | 18.6 |
| Wanted to learn about different cultures | 9 | 15.2 |
| Other | 9 | 15.2 |
| Recommended by other students | 7 | 11.9 |
| My friends are also participating | 2 | 3.3 |
| Missing | 3 | 5.1 |
| Total | 59 | |

Note. As this was a multiple-choice question, percentage values do not sum to 100%.

Furthermore, approximately one-fourth of the participants (25.4%) indicated recommendations by their instructors as one of the three most important reasons why they engaged in group activities with diverse peers in class. It seems that whether students have experiences working with people from other cultural backgrounds depends largely on how their instructors design the curricular activities.

Reasons related to interests were also selected by some students, such as wanting to meet new people (25.4%), learning about different cultures (15.2%), or that the activity seemed interesting (18.6%). As such, whether students have an interest in intercultural interactions may have determined whether students worked with classmates from different cultural backgrounds. This adds to the literature highlighting the significance of fostering students' interest in intercultural interactions, both outside and inside of class, at the university.

An open-ended space was available for students who selected "other" to write reasons that were not provided as a response choice. Four students wrote that the groups they were in were "randomly assigned" or "generated by my tutor".

6.2.3 *Intercultural Interactions Outside of Class*

Table 6.6 presents an overview of how often the sample engaged in interactions with diverse peers outside of class. Approximately half ($n = 30$, 51%) of the respondents rarely or occasionally interacted with diverse peers outside of class, while 44% ($n = 26$) reported having frequently or very frequently engaged in intercultural interactions. However, three students (5%) indicated that they have never engaged in intercultural interactions outside of class at university. In response to the open-ended question asking for reasons why they did not interact with diverse peers, two of these three students wrote that there is "no opportunity" and it is "difficult" to form peer connections, "especially during online" learning; the other student wrote that they "had friends from high school" that they "interacted with instead".

Table 6.6*Frequency of Intercultural Interactions Outside of Class*

| Frequency | <i>n</i> | % |
|--------------------------------------|----------|------|
| Never | 3 | 5.1 |
| Rarely (a few times per year) | 13 | 22.0 |
| Occasionally (a few times per month) | 17 | 28.8 |
| Frequently (a few times per week) | 17 | 28.8 |
| Very frequently (every day) | 9 | 15.3 |
| Total | 59 | 100 |

When exploring the patterns of participation in intercultural interactions outside of class among the groups of international and domestic students, the two groups did not seem to differ to a large extent in terms of their frequencies of intercultural interactions. While there are slightly more international students ($n = 13$, 50%) who interacted frequently or very frequently with peers from other cultures than domestic students ($n = 12$, 44.4%), there is also a larger percentage of international students ($n = 7$, 26.9%) who never or rarely engaged in intercultural interactions than domestic ($n = 5$, 18.5%). These results seem to indicate the diversity within the groups of international students in terms of their frequency of intercultural interactions at the university, and this group should be explored through a more nuanced lens. Notably, all of the international students who selected “rarely” or “occasionally” came from Asian countries, which have a higher representation in the student population at the university. It is therefore possible that students from an Asian country interacted mainly with those from a similar background.

An overview of the reasons that influenced participants’ participation in intercultural interactions can be found in Table 6.7. Similar to the finding reported earlier regarding the reasons why students engaged in classroom diversity activities, most participants selected reasons related to interests and personal initiatives, such as wanting to meet new people

(57.1%) or learning about different cultures (21.4%), or that it seemed interesting to them (50%). This suggests interest plays a significant part in students' intercultural participation, regardless of whether such interaction is academic-related.

Table 6.7

Reasons of Participating in Intercultural Interactions

| Reason | <i>n</i> | % |
|--|----------|------|
| Wanted to meet new people | 32 | 57.1 |
| Seemed interesting | 28 | 50.0 |
| Wanted to learn about different cultures | 12 | 21.4 |
| My friends are also participating | 12 | 21.4 |
| Other | 10 | 17.9 |
| Course requirement | 6 | 10.7 |
| Recommended by other students | 5 | 8.9 |
| Recommended by my lecturer or tutor | 2 | 3.6 |
| Missing | 3 | 5.1 |
| Total | 59 | |

Note. As this was a multiple-choice question, percentage values do not sum to 100%.

Other responses, such as participating with their friends (21.4%) or because of recommendations from peers (8.9%), suggest that influence from peers also had an impact on many respondents' participation. It is important to note that "course requirement" (10.7%) and "it was recommended by my lecturer or tutor" (3.6%) were considered important reasons for their participation in intercultural interactions for eight respondents. More importantly, all the respondents who selected course requirements also ranked it as the most important reason for their participation in intercultural interactions. These results indicate that a possible way to encourage intercultural learning and interactions among students might be via considering how intercultural interactions opportunities can be incorporated into curriculum-based activities.

Interestingly, among the 12 students who selected “wanted to learn about different cultures”, there was a similar proportion of international ($n = 6$) and domestic students ($n = 5$) (NB. one student did not indicate their enrolment status). Further, all except one of the six international students ranked this reason as the most or second most important influencer of their participation in intercultural interactions. However, only one of the domestic students ranked this as the most important factor.

In addition, it is important to note the potential role of peer influence in determining students’ participation in intercultural interactions, as nine out of the 12 students who indicated that they participated in intercultural interactions because of their friends ranked this reason as the most important. Furthermore, of those students who selected this reason, the majority were domestic students ($n = 8$). All but one domestic student ranked this reason as the most important determinant of their interaction tendency.

The following sections present findings on the potential associations between students’ cultural diversity participation and IC and IA measures. It also elaborates a comparison of scores in the measures between different student groups, aiming to contribute to our understanding of whether certain student groups require additional support for developing IC and lowering IA levels.

6.3 Cultural Diversity Experiences and Intercultural Competence

To determine if there were any relationships between students’ frequency of participation in cultural diversity activities at the university and their scores on the five MPQ subscales (i.e., to test Hypothesis 1 - there is a positive relationship between students’ frequency of cultural diversity experiences, both inside and outside of class at the university and their levels of IC), a series of two-tailed Spearman’s rank-order correlations were computed. Results are presented in Table 6.8.

Table 6.8*Correlation Coefficients for Study Variables*

| Variable | Correlations | | | | | |
|---------------------------------------|--------------|-----|-------|------|-------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Frequency of... | | | | | | |
| 1. Interactional diversity activities | | | | | | |
| 2. Classroom diversity activities | .05 | | | | | |
| MPQ factors | | | | | | |
| 3. Cultural Empathy | .38* | .10 | | | | |
| 4. Flexibility | .01 | .04 | -.29* | | | |
| 5. Social Initiative | .44** | .14 | .46** | -.08 | | |
| 6. Open-mindedness | .43** | .07 | .73** | -.21 | .47** | |
| 7. Emotional Stability | .14 | .18 | -.14 | .31* | .16 | -.05 |

* $p < .05$ (two-tailed); ** $p < 0.01$ (two-tailed)

The results indicated significant positive correlations, with medium effect sizes (Cohen, 1988), between students' frequency of participating in interactional diversity activities and their scores on three of the five MPQ subscales: Cultural Empathy, Social Initiative, and Open-mindedness. These results partially support Hypothesis 1, which predicted that students who interacted more frequently with diverse peers outside of class would have higher scores on the IC subscales. As mentioned in Section 2.3.1, these three traits are categorised by van der Zee and van Oudenhoven (2013) as social-perceptual traits, which are associated with the tendency to view intercultural situations as interesting and positive challenges.

However, the results did not reveal any significant associations between students' frequency of interactional diversity activities and the other two MPQ traits, Flexibility and Emotional Stability. These two traits, as mentioned in Section 2.3.1, are proposed as stress-buffering traits that are associated with how individuals react in unfamiliar or novel situations (van der Zee & van Oudenhoven, 2013). This may indicate that engaging in cultural diversity

activities is beneficial to developing of the social-perceptual traits of IC which facilitate students' willingness to proactively explore opportunities to interact with people from different cultural backgrounds.

On the other hand, the results of two-tailed Spearman rank-order correlations indicated that students' frequency of participation in classroom diversity activities was not significantly related to their scores on the five MPQ subscales. One possible explanation is that many students, as discussed in Section 6.2.2, participated in these activities as a requirement of the course rather than out of interest. It is also possible that the classroom diversity activities that students participated in did not have a primary or explicit focus on intercultural learning or the promotion of intercultural interactions, from which students might not have recognised the benefits associated with these activities.

6.4 Cultural Diversity Experiences and Intergroup Anxiety

This study has the purpose of identifying possible factors that influence students' participation in cultural diversity activities. As outlined in Section 3.3.4, intergroup anxiety (IA) has been discussed extensively in the literature as a predictor of avoidance in intercultural interactions, and it has been demonstrated to have a negative association with the frequency of interactions (Lolliot et al., 2015). Hypothesis 2 of this study predicted a negative relationship between students' frequency of cultural diversity experiences (both inside and outside of class) at the university and their levels of IA. The result of the two-tailed Spearman's rank-order correlations indicated that there was a significant negative relationship, with a medium effect (Cohen, 1988), between students' frequency of intercultural interactions outside of class and their IA levels, $r_s(51) = -.48, p < .001$. This provides partial support for Hypothesis 2 and suggests that students who interacted more frequently with diverse peers outside of class tend to have lower levels of IA when interacting with people from cultural backgrounds other than their own.

However, no association was found between students' frequency of classroom diversity activities and their IA level, $r_s(50) = .049$, $p = .73$. It appears that how frequently students engaged in classroom diversity activities was unrelated to their levels of IA. As mentioned in Section 6.2.2, students participated in these activities mainly because it was a course requirement for academic purposes, rather than out of interest in learning about different cultures.

Another possibility is that the correlational testing conducted does not offer information in terms of the direction of the relationship. Often this kind of activity is beyond the control of the students, as they might be required to fulfill course requirements. When students do have a choice in whether to engage in activities that involve intercultural interactions, the results might be different.

6.5 Cultural Diversity Experiences Before University

Understanding students' prior experiences with cultural diversity activities in previous educational institutions may provide insights into their tendency to engage in similar activities at university. Details about students' pre-university experiences with cultural diversity can be found in Table 6.9. As can be seen in that table, most of the respondents attended the previous institution in their home country (71.2%) and most also indicated that the institution they attended had a large population of international students (74.6%). However, more than half (52.6%) of the respondents had never or rarely engaged in cultural diversity learning at their previous institution. Only 22.1% of the respondents had often or always engaged in cultural diversity learning at the institution before university.

Table 6.9*Cultural Diversity Experiences at Previous Institution*

| Cultural Diversity at Previous Institution (<i>N</i> = 59) | <i>n</i> | % |
|---|----------|------|
| Previous institution had a large population of international students | | |
| Yes | 44 | 74.6 |
| No | 15 | 25.4 |
| Attended the previous institution in home country | | |
| Yes | 42 | 71.2 |
| No | 15 | 25.4 |
| Missing | 2 | 3.4 |
| Frequency of cultural diversity learning at the previous institution | | |
| The opportunity was not offered | 4 | 6.8 |
| Never | 8 | 13.6 |
| Rarely | 19 | 32.2 |
| Sometimes | 15 | 25.4 |
| Often | 7 | 11.9 |
| Always | 6 | 10.2 |

A series of independent samples t-tests were conducted to explore any relationships between students' previous educational institution characteristics and their scores on the measures of IC and IA. The results of the independent samples t-test can be found in Tables 6.10 and 6.11. None of the independent samples t-test results were significant, indicating that there were no statistically significant differences between students' scores on the IC and IA measures based on their enrolment status and characteristics of their previous educational institutions.

Table 6.10*Measurement Scores Based on Enrolment Status at Previous Institution*

| Measure | Attended the previous school in home country | | Attended the previous school overseas | | <i>df</i> | <i>t</i> | <i>p</i> | Cohen's <i>d</i> |
|-------------------------|--|-----------|---------------------------------------|-----------|-----------|----------|----------|------------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| MPQ Cultural Empathy | 3.83 | .61 | 3.94 | .57 | 50 | -.60 | .55 | -.19 |
| MPQ Flexibility | 2.68 | .65 | 2.68 | .69 | 51 | -.05 | .97 | .01 |
| MPQ Social Initiative | 3.20 | .66 | 3.34 | .62 | 50 | -.72 | .48 | -.22 |
| MPQ Open-mindedness | 3.42 | .51 | 3.61 | .59 | 51 | -1.16 | .25 | -.35 |
| MPQ Emotional Stability | 2.88 | .69 | 2.50 | .69 | 51 | 1.80 | .08 | .55 |
| Intergroup Anxiety | 2.59 | .60 | 2.64 | .38 | 49 | -.29 | .78 | -.09 |

Table 6.11*Measurement Scores Based on Characteristic of Previous Institution*

| Measure | Had a large number of international students | | Had a smaller number of international students | | <i>df</i> | <i>t</i> | <i>p</i> | Cohen's <i>d</i> |
|-------------------------|--|-----------|--|-----------|-----------|----------|----------|------------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| MPQ Cultural Empathy | 3.88 | .59 | 3.76 | .62 | 51 | .66 | .51 | .21 |
| MPQ Flexibility | 2.72 | .63 | 2.55 | .73 | 52 | .80 | .43 | .25 |
| MPQ Social Initiative | 3.25 | .62 | 3.16 | .76 | 51 | .42 | .68 | .13 |
| MPQ Open-mindedness | 3.47 | .54 | 3.49 | .50 | 52 | -1.2 | .91 | -.04 |
| MPQ Emotional Stability | 2.85 | .77 | 2.63 | .54 | 52 | .97 | .34 | .30 |
| Intergroup Anxiety | 2.57 | .50 | 2.66 | .65 | 51 | -.58 | .57 | -.18 |

To explore any relationships between students' frequency of engaging in cultural diversity learning before university and their scores on the measures of IC and IA, a series of two-tailed Spearman's rank-order correlations were conducted. The results of Spearman's rank-order correlations can be found in Table 6.12. How often students had the opportunities to engage in cultural diversity learning at their previous institution and their scores on the two measures were revealed by two-tailed Spearman's rank-order correlations. There was no significant relationship between students' frequency of cultural diversity learning at the

previous institution and their scores on MPQ subscales of Cultural Empathy ($r_s(52) = -.017, p = .905$), Flexibility ($r_s(53) = .023, p = .871$), Social Initiatives ($r_s(52) = -.014, p = .92$), Open-mindedness ($r_s(53) = .113, p = .415$, and Emotional Stability ($r_s(53) = .227, p = .098$).

Table 6.12

Descriptive Statistic and Correlation Coefficients for Study Variables

| Variable | <i>n</i> | Mean | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 |
|---|----------|------|-----------|------|-------|------|-------|-------|------|
| 1. Pre-university cultural diversity experience | 59 | 1.59 | 1.23 | | | | | | |
| 2. MPQ Cultural Empathy | 53 | 3.85 | .59 | -.02 | | | | | |
| 3. MPQ Flexibility | 54 | 2.67 | .65 | .02 | -.29* | | | | |
| 4. MPQ Social Initiative | 53 | 3.22 | .65 | -.01 | .46** | -.08 | | | |
| 5. MPQ Open-mindedness | 54 | 3.48 | .53 | .11 | .73** | -.21 | .47** | | |
| 6. MPQ Emotional Stability | 54 | 2.79 | .72 | .23 | -.14 | .31* | .16 | -.05 | |
| 7. Intergroup anxiety | 53 | 2.59 | .53 | -.21 | -.26 | .03 | -.44* | -.32* | -.26 |

* $p < .05$ (two-tailed); ** $p < 0.01$ (two-tailed)

To determine if there is any relationship between students' frequency of engaging in cultural diversity learning before university and their frequency of intercultural interactions at university (i.e., to test Hypothesis 3 - there is a positive relationship between students' frequency of cultural diversity activities at previous educational institutions and their frequency of interactional diversity activity at the current university), a two-tailed Spearman's rank-order correlation was run. No significant relationship was found between the two variables ($r_s = .201, p = .127$).

In sum, whether students had experiences of cultural diversity before attending university was not associated with their scores on the IC and IA measures. There was also inconsistency in the directions of trending between variables.

6.6 Comparing Scores Across Different Student Groups

This section presents the results of inferential statistical tests conducted to examine mean differences in students' scores on the IC and IA measures across four different groups:

enrolment status (i.e., international versus domestic students), language(s) spoken at home, as well as the year and discipline of study at the university.

6.6.1 *International and Domestic Students*

A series of independent sample t-tests were conducted to compare international and domestic students' mean scores on the MPQ and IAS. The results of these analyses are presented in Table 6.13. Overall, international students had higher scores on three out of five MPQ subscales (Cultural Empathy, Social Initiative and Open-mindedness) than domestic students, but there were no statistically significant differences between domestic and international students for any of the measures. This may imply that, students in these two groups are not significantly different from each other in terms of their levels of IC and IA.

Table 6.13

International and Domestic Students' Scores on MPQ and IAS

| Measure | International | | Domestic | | <i>df</i> | <i>t</i> | <i>p</i> | Cohen's <i>d</i> |
|--------------------------------------|---------------|-----------|----------|-----------|-----------|----------|----------|------------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| MPQ Cultural Empathy | 3.92 | .62 | 3.77 | .57 | 47 | .86 | .40 | .24 |
| MPQ Flexibility | 2.64 | .64 | 2.69 | .69 | 48 | -.32 | .75 | -.09 |
| MPQ Social Initiative | 3.32 | .66 | 3.14 | .64 | 47 | .99 | .34 | .28 |
| MPQ Open-mindedness | 3.60 | .55 | 3.32 | .46 | 48 | 2.00 | .05 | .56 |
| MPQ Emotional Stability ^a | 2.66 | .52 | 2.95 | .86 | 48 | -1.48 | .14 | -.41 |
| Intergroup Anxiety | 2.70 | .50 | 2.49 | .55 | 49 | 1.40 | .17 | .39 |

^aWelch's t-test results are reported because Levene's test indicated that the homogeneity of variances assumption was not met for this variable.

This result adds support to the literature (e.g., Jones, 2017) that criticises the use of a binary categorisation of students (i.e., international vs domestic students) that assumes the two groups to be radically distinct from each other while ignoring the similarities and diversity within each group. This is also supported by Lomer and colleagues' (2021) recent literature

review, which uncovered an overwhelming tendency to describe international students as a homogenous group. The usage of this binary categorisation of omits more nuanced details about the student cohort (Lomer et al., 2021).

Interestingly, on average, international students scored higher than domestic students on three IC factors (Cultural Empathy, Social Initiative, Open-mindedness) than domestic students, although these differences were not significant. This could be possibly due to the idea that international students are experiencing cultural differences to a greater extent compared to their local counterparts; these differences in turn challenged international students' pre-existing views and led to greater increases in their IC levels. It is equally possible that international students who travelled overseas to study had made a conscious decision for cultural exposure and thus may be more open to cultural diversity experiences than their local counterparts. It might also be possible that there are differences in students' attitudes towards intercultural learning activities, as previous research found that international students had more favourable attitudes towards intercultural interactions than their domestic peers (Summers & Volet, 2008).

6.6.2 *Linguistic Diversity Groups*

Two groups of students, those who spoke languages other than English at home (LOTE group) and those who spoke English only (English-only group) were compared in terms of their scores on the IC and IA measures using independent samples t-tests. Table 6.14 shows the results of a series of independent samples t-tests.

Table 6.14*Scores on MPQ and IAS in Two Linguistic Diversity Groups*

| Measure | LOTE | | English-only | | <i>df</i> | <i>t</i> | <i>p</i> | Cohen's <i>d</i> |
|--------------------------------------|----------|-----------|--------------|-----------|-----------|----------|----------|------------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| MPQ Cultural Empathy ^a | 3.89 | .68 | 3.75 | .36 | 49 | -.91 | .37 | -.22 |
| MPQ Flexibility | 2.72 | .64 | 2.56 | .72 | 50 | -.81 | .42 | -.24 |
| MPQ Social Initiative | 3.30 | .64 | 3.10 | .68 | 49 | -1.11 | .27 | -.34 |
| MPQ Open-mindedness | 3.49 | .53 | 3.38 | .50 | 50 | -.69 | .49 | -.20 |
| MPQ Emotional Stability ^a | 2.82 | .91 | 2.78 | .91 | 50 | -.17 | .87 | -.06 |
| Intergroup Anxiety | 2.58 | .56 | 2.62 | .49 | 51 | .27 | .79 | .08 |

Note. ^aWelch's t-test results are reported because Levene's test indicated that the homogeneity of variances assumption was not met for this variable.

On average, the LOTE group scored higher on all MPQ subscales and lower on IAS than the English-only group, although the differences were not statistically significant. For MPQ subscales of Cultural Empathy and Emotional Stability, the homogeneity of variances assumption was not met and thus results of a Welch's test are reported. There was also no significant difference between the LOTE group and English-only group in their scores on both Cultural Empathy and Emotional Stability subscales. Similarly, the independent samples t-tests did not reveal significant differences in scores on the IAS between the LOTE group and the English-only group. These results might differ from the findings from previous literature (e.g., Tsang, 2022) that point to English language proficiency as a hindrance for students who are non-native speakers of English to engage in intercultural interactions.

6.6.3 Year of Study

Results of the one-way ANOVAs of measurement scores by year of study are presented in Table 6.15. There were significant differences, with a large effect, in scores on the Emotional Stability subscale of the MPQ among students enrolled in different years of the university. Post hoc test analysis using Tukey's HSD found that fourth-year and Honours students scored

significantly higher on the Emotional Stability scale of the MPQ than first-year students, $F(3, 50) = 1.23, p = .03$.

Table 6.15

One-Way ANOVA of Measurement Scores by Year of Study

| Measure | First | | Second | | Third | | Fourth/Hons. | | <i>F</i> | <i>df1</i> | <i>df2</i> | η^2 |
|---------------------|-------------------|-----------|----------|-----------|----------|-----------|-------------------|-----------|----------|------------|------------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| Cultural Empathy | 3.75 | .64 | 3.88 | .41 | 3.83 | .63 | 4.46 | .62 | 1.25 | 3 | 49 | .07 |
| Open-mindedness | 3.25 | .50 | 3.54 | .56 | 3.57 | .50 | 3.75 | .57 | 1.58 | 3 | 49 | .09 |
| Emotional Stability | 2.52 ^a | .56 | 2.99 | .78 | 2.74 | .70 | 3.75 ^b | .25 | 3.39* | 3 | 50 | .17 |
| Intergroup Anxiety | 2.59 | .51 | 2.59 | .59 | 2.67 | .52 | 2.10 | .45 | 1.02 | 3 | 49 | .06 |

Note. Means that have subscripts differ significantly at the .05 level as indicated by Tukey's HSD.

* $p < .05$, two-tailed

The analysis showed that senior-year students scored higher on the Emotional Stability factor of IC than their counterparts. It is possible that later-year students developed competence in terms of skills for remaining calm and dealing with the novelty in intercultural situations. Although this result alone does not provide clear support for the benefits of cultural diversity experience during university years, it does provide insights into how the entry and exit cohorts differ in terms of IC levels. It is possible that by the end of their university studies, students are more adept at remaining calm when encountering stressful intercultural situations than those who recently commenced their studies, but data are insufficient in drawing this conclusion. In addition, it may well be that senior-year students have higher levels of Emotional Stability not because of intercultural learning at the university, but because their first-year counterparts might be dealing with distress from the recent transition to the new university environment (Schartner, 2016). Nevertheless, this study only provides preliminary insights into the differences between student cohorts. Further investigation with longitudinal data is needed to conclude whether there is a change in students' levels of IC throughout their time at the university.

For other MPQ subscales and IAS, the results of one-way ANOVA and Kruskal-Wallis Tests did not reveal any significant differences in the scores among students enrolled in different years of the university. No significant difference was revealed by one-way ANOVA results among students studying different years of the university and their scores on the MPQ subscale of Cultural Empathy, $F(3,49) = 1.25, p = .301$, and Open-mindedness ($F(3, 50) = 1.58, p = .205$). One-way ANOVA results also indicated that the scores on IAS ($F(3,49) = 1.017, p = .393$) did not significantly differ among students in different years of the university. Results of the Kruskal-Wallis Tests indicated no significant differences among students studying different years of the university and their scores on the MPQ subscale of Flexibility ($H(3) = 1.48, p = .687$) and Social Initiative ($H(3) = .461, p = .927$).

6.6.4 Disciplines of Study

Comparing whether there are differences in students' scores depending on their discipline of study may provide insights into whether the course structure potentially influences students' scores. Students were grouped into three discipline groups for data analysis: science, technology, engineering and mathematics (STEM), humanities and social sciences (HASS), and Health. None of the test results revealed significant differences in scores on all scales across discipline groups. As presented in Table 6.16, the three disciplinary groups did not differ significantly from each other in their scores of MPQ. Similarly, the Kruskal-Wallis Test did not reveal significant differences in students' scores on the IAS across disciplinary groups, $H(2) = 2.371, p = .306$. These results revealed that students studying different disciplines at the university did not significantly differ from each other in terms of their scores on the measurement. Although a few interviewees from Stage 1 recognised that their disciplines (i.e., Arts) involve subjects or topics that are more relevant to cultural diversity than other disciplines (Section 5.2.1), the survey data shows no significant difference in measurement scores across disciplinary groups.

Table 6.16*One-Way ANOVA of Measurement Scores by Discipline*

| Measure | Health | | STEM | | HASS | | <i>F</i> | <i>df1</i> | <i>df2</i> | η^2 |
|---------------------|----------|-----------|----------|-----------|----------|-----------|----------|------------|------------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| Cultural Empathy | 3.41 | 1.09 | 3.91 | .58 | 3.87 | .52 | 1.244 | 2 | 49 | .048 |
| Flexibility | 3.13 | .37 | 2.54 | .68 | 2.70 | .66 | 1.379 | 2 | 50 | .052 |
| Social Initiative | 2.94 | .92 | 3.18 | .72 | 3.31 | .58 | .684 | 2 | 49 | .027 |
| Open-mindedness | 3.06 | .95 | 3.48 | .45 | 3.52 | .50 | 1.329 | 2 | 50 | .050 |
| Emotional Stability | 2.91 | .84 | 2.61 | .76 | 2.90 | .68 | 1.043 | 2 | 50 | .040 |

6.7 Chapter Summary

This chapter presented an analysis of the survey findings providing insight into how and why students engaged in cultural diversity at the university, both outside and inside of class. Although interest and personal initiative seemed to determine many students' participation in cultural diversity activities, course requirements, instructors, and peers also influenced students' participation.

Findings of this stage also revealed a positive association between students' participation in intercultural interactions and their IC levels, as well as a negative association with IA levels. This supports the notion that there are benefits for students to engage in cultural diversity activities at the university. Students' participation in classroom diversity activities was unrelated to their IC and IA, perhaps due to the reason that many students participated in group work as a requirement rather than out of interest. Another possible explanation is that the group activities students engaged in may not have an explicit focus of promoting intercultural interactions and learning. The next chapter discusses and provides a more comprehensive picture of the findings by aggregating the interview and survey stages of the study.

7 Understanding Students' Cultural Diversity Experiences

The present study, as presented in earlier chapters, aimed to add to our understanding of undergraduate students' cultural diversity activities at university and the factors influencing their participation. This chapter discusses key findings from both stages of the study to respond to the research questions. More specifically, to address the research question on how students engage in cultural diversity activities at university, the first part of this chapter explores the reasons behind students' participation in different types of cultural diversity activities, as well as their tendencies in intercultural interactions. The next part elaborates on the findings of intercultural competence (IC) and cultural diversity experiences, as well as students' perceived benefits of engaging in cultural diversity activities. The factors influencing students' participation in cultural diversity activities are discussed by drawing with reference to students' responses in both stages of the study. The findings of the present study identify issues and challenges to positive and meaningful intercultural learning, along with avenues for further consideration and research.

7.1 Students' Cultural Diversity Experiences at the University

Understanding how students engage in cultural diversity activities at university can reveal underlying patterns in terms of the activities that are most popular among students and the reasons behind students' participation. These patterns can in turn provide insights into the factors influencing their participation and areas for enhancing these experiences. From this study, students' cultural diversity experiences at university occur predominantly through classroom diversity activities (e.g., in-class discussion and group work) and interactional diversity activities (e.g., extracurricular activities). Overall, students recognise and value the opportunities for cultural diversity experiences available at the university. However, whether and why students participate in these activities varies to a large extent. There are also prevalent

tendencies among students when interacting. The following sections elaborate on these key points to provide further insights into how students engage in different types of cultural diversity activities at the university.

7.1.1 Motives for Participating in Cultural diversity Activities at University

This study provides further support to the notion that classroom diversity activities and interactional diversity activities are key sites for students to engage in intercultural interactions at university as revealed in previous studies (e.g., Pascarella & Terenzini, 2005). In this study, classroom diversity activities were found to include engaging in group projects and discussions with culturally diverse peers, learning culture-related content and materials, taking foreign language classes, and participating in study abroad or exchange programs. Amongst these activities, the most common appear to be group projects and discussions with diverse peers.

Despite classroom diversity activities (e.g., group projects and discussions with diverse peers) being common among students in this study, the reasons for students partaking in these activities were frequently shaped by the need to complete assigned tasks or learning requirements, rather than through interest in intercultural learning or forming connections with diverse peers. It is worth noting that students consider the compulsory nature of the classroom as beneficial in terms of encouraging them to engage in intercultural interactions.

International diversity activities in this study were found to include participating in extracurricular activities related to cultural diversity, and more generally, engaging in intercultural interactions outside of the classroom at the university. Since these interactional diversity activities are not compulsory, it is unsurprising to find that not all students have this type of cultural diversity experience. More particularly, students in this study engaged in interactional diversity activities mainly out of interest in meeting diverse people and learning about different cultures.

7.1.2 Interaction Tendencies

Understanding the tendencies that are prevalent among students when interacting with diverse peers provides insights into potential issues and challenges to promote these interactions. Students tend to interact with peers who seem similar to themselves or those whom they feel more familiar with, both in and outside the classroom. This finding is in accord with the previous literature (e.g., Hinds et al., 2002) presented in Section 3.3.2. While the similarity is predominately based on shared cultural and linguistic backgrounds between students, familiarity is based on previous positive interactions, such as successful collaborations on group assignments. An additional tendency, particularly for in-class group activities, is that students are more inclined to work with those who seem more competent in completing the group assignments.

As discussed in Section 7.1.1, peer interactions within the classroom context are often motivated by the goal of completing group-based assignments or tasks. A possible explanation of the tendency to seek similarity and familiarity in group mates is to reduce uncertainty and anxiety experienced during the collaboration and avoid posing risks to their assignment performance. Outside of class, interactions can be less structured and generally do not involve grading upon completion, but the preferences for similarity and familiarity still emerge from those interactions. These possible explanations for the interaction tendencies that surfaced from the sample of diverse students in this study are illuminated below.

Tendency to Seek Similarity and Familiarity in Interactions. The preference for similar peers appears to stem from the assumption that people from similar cultural and linguistic backgrounds would be more likely to share other similarities, including speaking the same language other than English (LOTE) or sharing similar work ethics, and thus would lead to fewer difficulties in communication and teamwork. Therefore, by self-selecting into a more culturally homogenous group, students perhaps assume that they would experience fewer

challenges and negative experiences during collaborations. This finding is not novel, as previous investigations have also uncovered preferences among students to stay in a homogenous group (e.g., Hills & Thom, 2005; Strauss et al., 2011; Volet & Ang, 2012).

In addition, students also tend to prefer interacting with those whom they are more familiar with. This is particularly common for classroom diversity activities, where students favour peers with whom they have collaborated before when forming groups for projects, with the assumption that working with strangers would carry the risk of being inadvertently partnered with someone who does not value the academic performance of the group. Unlike the preference for similarity, this preference is not necessarily attributed to cultural differences. Rather, it assumes that without prior interaction or collaboration with the individual, it would be challenging to predict the extent to which negotiation and coordination are required during the collaboration (Goodman & Leyden, 1991).

Although the tendency to seek familiarity when interacting is not necessarily based on cultural backgrounds, it may still be a cause of concern because students who prefer interacting with those who are similar to themselves may also feel more familiar with members from their groups; this may in turn limit students' social circles to more culturally homogenous ones.

Several explanations for these interactional preferences have been proposed in the literature as outlined in Section 3.3.2, including the tendency of homophily (e.g., Godley, 2008; Lazarsfeld & Merton, 1954; Lee et al., 2011; Stehlé et al., 2013; Smith et al., 2014; Weber et al., 2020; Wimmer & Lewis, 2010), the assumption of cultural-emotional connectedness (Volet & Ang, 1998; Volet & Ang, 2012), and a natural tendency to avoid negative experiences (Slavin, 1990). As will be detailed below, these explanations are not mutually exclusive, and they share the similar goal of reducing risk, challenges, and negative experiences in an intercultural setting.

First, the concept of homophily, as presented in Section 3.3.2, refers to the tendency for people to be attracted to those who share similar attributes, beliefs or personal characteristics (Lazarsfeld & Merton, 1954), which can enhance relations between people by fostering trust and reciprocity (Lincoln & Miller, 1979). From the findings of this study, an example of this is where some students, particularly those who were international, shared the sentiment that it was “easy to communicate” (P4, second-year, Design, international) with people from similar cultural backgrounds due to the shared cultural or linguistic backgrounds. The shared cultural background is often associated with a shared linguistic background, thus when interacting with diverse peers who do not speak the same LOTE, “there will be fewer things to talk about” (P33, third-year, Science, international). Another example of this is that some domestic students tend to stay in friend groups with those from their prior schooling.

The second possible explanation pertains to the assumption of cultural-emotional connectedness. As outlined in Section 3.3.2, this refers to the perception that people from the same cultural backgrounds would be more likely to share similarities in aspects such as their thinking, communication styles, and sense of humour (Volet & Ang, 2012), leading to people feeling more comfortable when interacting with those from the same cultural backgrounds (Volet & Ang, 1998; 2012). It is therefore possible that this perception reinforced students’ preferences to interact with their co-nationals. When individuals from the same country are absent, this perception automatically extends to those from the nearest culture (Volet & Ang, 2012). This assumption may explain why some international students reported feeling more comfortable interacting with peers from their international group than with their local counterparts. This finding seems to align with Coleman’s (2013) concentric circles model of study abroad social networks, as outlined in Section 3.3.2. This model posits that students studying abroad tend to connect with their co-nationals or other non-local peers before broadening their social circles to the locals (Coleman 2013; 2015). International students might

find social support within their groups of co-nationals or with those who are also studying abroad.

Further, the previous literature, as mentioned in Section 3.3.2, has identified a natural inclination for individuals to seek out interactions that involve a low risk of negative or awkward experiences (Nesdale & Todd, 2000), which is more likely with those whom they share similar values, beliefs, and attitudes (Kimmel & Volet, 2010). As Dunne (2009) suggests, socialising with others of similar cultures is seen as less energy-consuming and often more rewarding than with people of different cultural backgrounds. Notably, this is not only linked to similarities in cultural backgrounds but also in other aspects (e.g., attending the same high school).

As explained above, the tendency to seek similarity and familiarity in interactions can lead to students staying in social circles with those they perceive as similar or have previously interacted with. Of particular concern is that once established, these social circles might become consolidated, reinforcing social boundaries between diverse groups of students. In other words, students might be less inclined to move outside these social circles to form new connections with culturally diverse peers; they may therefore be likely to “shrink” (P16, third-year, Science, international) their social circles by only interacting with similar others. These findings are in accord with the idea of friendship as consolidating social boundaries between groups rather than promoting interactions among them (Bowman & Park, 2014), resulting in a culturally diverse university campus with a lack of frequent intercultural interactions.

This corroborates findings from a recent study by McKenzie and Baldassar (2017), in which researchers found that from the perspective of domestic students, perceived similarities in aspects such as cultural and linguistic backgrounds were considered as factors facilitating the connections between students; differences in these aspects would act as hindrances to the formation of friendships. Further, domestic students perceived that friendships can be formed

naturally based on similarity and affinity, resulting in the international and domestic bubbles; the cross-group friendships, however, were deemed as unnecessary because domestic students already had friendship groups and “had little reason” (p. 712) to form new friendships with international peers (McKenzie & Baldassar, 2017). Possibly, once students have established their friend circles, they do not see an immediate need to meet new people and form new friendships, resulting in consolidated friendship bubbles (McKenzie & Baldassar, 2017).

In summary, all three of the abovementioned explanations for students’ tendencies in interactions seem to be based on the intention to reduce uncertainty and anxiety and to avoid negative experiences during an interaction. In the section that follows, this inclination to reduce uncertainty and anxiety is discussed in further detail.

Striving to Reduce Uncertainty and Anxiety in Intercultural Situations. When interacting with strangers from a group different to one’s own, an individual may experience a higher level of anxiety (Stephan & Stephan, 1985) and uncertainty (Gudykunst & Shapiro, 1996) than with those from their own. Prior investigation of group memberships and intergroup attitudes has also identified uncertainty reduction to be “perhaps the most fundamental motivational process underlying group membership and group behaviour” (Grieve & Hogg, 1999, p. 928). In addition, the presence of an ingroup member during intercultural interaction can also reduce an individual’s intergroup anxiety levels (Gudykunst, 2005).

These views have been well established with empirical evidence across different contexts. In the classroom setting, for example, working with peers from different cultural backgrounds can result in a heightened level of uncertainty and anxiety among students (Strauss et al., 2011). This uncertainty can be evident when students are required to work on assignments in groups arranged by the instructors or by random allocation (Strauss et al., 2011). Therefore, it is likely that students avoid such encounters by choosing to interact with people whom they perceive as more similar or feel more familiar with. In social settings, anxiety and

uncertainty are linked to an individual's tendency to avoid communication with strangers (Dumont et al., 2005).

In essence, then, students' interaction tendencies, both in and outside of class, may be explained by an underlying drive to reduce uncertainty and anxiety. As revealed in this study, this tendency appears to be compounded if students have had previous unpleasant experiences of this kind. These findings support those in previous studies on collaborative group work. For example, in a study in a computer science classroom conducted more than two decades ago, uncertainty reduction was found to underpin students' preferences for similar, familiar, or competent individuals when self-selecting into groups for the project (Hinds et al., 2000). Put simply, students tend to strive for predictability and choose "a 'sure thing' by grouping with familiar partners, rather than taking the risk" (Hinds et al., 2000, p. 246) of working with peers who might have different work habits and ethics.

Although students' tendencies for social interactions and friendship forming were not a focus of the present study, the findings discussed in this section offer insights into some of the possible reasons behind the limited interactions among diverse students at Australian universities. Despite institutional efforts to promote interactions among diverse student groups such as providing opportunities for intercultural group collaborations and extracurricular activities at the research site of the current study, evidence of the paucity of interactions suggests the need to continue developing strategies and practices to address this issue. To this end, exploring the associations between students' participation in cultural diversity activities and their levels of IC may reveal how these activities benefit students and suggest areas for enhancing students' intercultural experience and growth. The next section will focus on this exploration.

7.2 Intercultural Competence and Cultural Diversity Activities

This study aims to explore whether and how students' participation in cultural diversity activities is related to IC, an intended graduate outcome that many Australian universities value. This exploration was conducted by analysing both qualitative data in Stage 1 and quantitative survey responses in Stage 2. The main points from the findings of these two stages will be discussed in relation to the literature in this section.

Depending on the type of activities, the relations between students' participation in cultural diversity activities and IC levels can vary to a large extent. More precisely, this study only revealed that students' levels of IC were positively correlated with their participation in interactional diversity activities but not classroom diversity activities. This result was unexpected, considering that there is a strong base of empirical evidence supporting the positive student outcomes of classroom diversity activities, including increases in students' levels of IC at the university, as reviewed in Section 3.2.1.

Several potential explanations may account for this lack of relationship between cultural diversity experiences and IC development. The effectiveness of intercultural experiences for developing IC is likely to be dependent on a complex interaction between the context, structure, quality of the experience, the frequency of the contact, and the extensiveness of the relationship (Brewer, 2003). There could be possible influences from numerous variables, but the analyses in this study only provide information about the frequency of students' participation in classroom diversity experiences, and not, for example, the extent to which these experiences were in-depth or meaningful for intercultural learning. As these two factors can influence the implementation and outcomes of cultural diversity activities, they could thus be possible explanations of why classroom experiences in this study were unrelated to IC.

More specifically, the nature and focus of the classroom diversity activities may account for the absence of a relationship between students' frequency of participation in such activities and their IC levels. Students may have engaged in classroom diversity activities without translating them into meaningful intercultural learning (Bennett, 1993), as these activities were described by some as superficial or lacking meaningful intercultural learning, with one student noting that, "sometimes they [the instructors] put us in breakout rooms, but there was nothing profound" (P13, first-year, Science, international) about these activities.

Indeed, even when such activities do intend to promote intercultural learning for students, purposeful design and careful implementation of these activities are required for positive learning outcomes to be realised. As reviewed in Section 3.2.1, the importance of purposefully designed group activities in class has been well established in the previous literature. If not carefully designed and managed, classroom diversity activities that involve intercultural collaborative tasks "can trigger perceived discrimination/bias between groups" (Héliot et al., 2020, p. 28); completing the group work might "produce or exacerbate students' uncertainty, anxiety and fear" (Kudo et al., 2017, p. 112). This study adds support to the existing literature by highlighting the need to purposefully design curriculum-based activities for effective intercultural learning and interactions.

In addition to students' learning motives, the quality of classroom diversity experiences plays an important role in influencing learning outcomes (Denson & Bowman, 2013; Roksa et al., 2017), and it was found to be more influential than quantity in changing attitudes towards members of other groups (Mak et al., 2014; Voci et al., 2015). Based on the interview responses to this study, it is evident that not all students have positive experiences with these activities in class. For example, instances of being treated disrespectfully by their domestic peers during collaboration were shared by several international students in this study. Consequently, students who had unpleasant group work or discussion experiences sought familiar partners

whenever they had a choice to self-select into groups. It is possible that having negative experiences of classroom diversity activities can lead to more negative attitudes towards intercultural collaboration for students, resulting in a tendency to avoid similar activities in the future. Indeed, the strong influence that the quality of cultural diversity experiences may have on the outcome has been highlighted in the previous literature (e.g., Denson & Bowman, 2013).

Furthermore, the methods used to form groups for activities in class, such as random assignment, may lead to students unwillingly participating in these activities as suggested by the previous literature. For example, it is possible that students who have a preference not to work with culturally diverse peers, but who have been repeatedly placed in a group with diverse peers against their will, could develop even more fundamentally negative attitudes towards such activities. This could be of concern then, given that these grouping methods may lead to resentment in class, especially if the students felt as if they were being “used” (Strauss et al., 2011, p. 817) to help their peers (Bacon, et al., 2001). The method of forming groups for academic collaborations might pose an issue in effective intercultural learning through classroom diversity activities. Although students’ attitudes towards different grouping methods were not explored in-depth in this study, these findings may still possibly explain why providing classroom diversity activities as opportunities for intercultural learning does not automatically benefit students and could even be detrimental if not carefully designed.

Finally, despite how these activities are designed and implemented, the extent to which students are interested in such activities can determine whether their experiences indeed transfer to meaningful intercultural experiences. The majority of students in this study reported participating in in-class cultural diversity activities because such activities are required by the course and/or recommended by their lecturers or tutors. This may also indicate that the nature of their participation in such activity might be less likely to stem from intrinsic interest. When such non-voluntary participation does take place, negative experiences may be exacerbated,

resulting in negative contact outcomes (Pettigrew et al., 2011). Although the comments from students in this study on the non-voluntary nature of the classroom diversity activities were in reference to its positive benefits (e.g., encouraging collaboration), it is still an area worth further consideration as students' survey responses showed that the most common reasons for their participation were irrelevant to interest.

In the previous literature, the importance of students' learning motives as a determinant of the effectiveness of learning activities has been documented extensively. For example, Byram's (1997; 2021) model of intercultural communicative competence differentiates those who are "tourists" from "sojourners": tourists explore cultural differences to enrich their lives without fundamentally changing them; sojourners are open to changing their pre-existing views and assumptions from their intercultural encounter. This model may offer some explanations for the unexpected finding of the present study regarding classroom diversity activities and IC.

In the case of intercultural group work, for example, students who were intrinsically interested in and open to cultural differences can be considered sojourners, and their learning outcomes can differ from those of tourists, who were merely "collecting unusual experiences" (Lantz-Deaton, 2017, p. 543) rather than engaging in meaningful intercultural learning. However, Byram's (1997; 2021) model might only offer a partial explanation of students' learning motives in classroom diversity activities, as those who merely participated in these activities for grades or to fulfil course requirements are not included, although it seems clear that these students did not engage in group work with the intention to learn about different cultures.

Worth noting is that the findings from the current study suggest that interactional diversity experiences at university may be effective in developing some, but not all aspects of IC. That is, a positive relationship was uncovered between students' frequency of intercultural interaction and three factors of IC: cultural empathy (CE), open-mindedness (OM), and social

initiative (SI). It is important to address why the other two IC factors, emotional stability (ES) and flexibility (FX), are not linked to students' frequency of intercultural interactions at university.

The differences in IC factors may be attributed to the methodology used in the present study. In the previous literature, the three factors of CE, OM, and SI have been documented as being more prone to change, while the other two factors, ES and FX are more stable over time (Chédru & Delhoume, 2023; Herfst et al., 2008). Possibly, students' scores of ES and FX were not significantly correlated with interaction frequency in this study because development in these two aspects may require a longer period, and this present cross-sectional study might not have captured the changes over time.

Another explanation for why only three IC factors (CE, OM, and SI) were positively correlated with interaction frequency relates to the roles and characteristics of these factors. It is likely for interactional diversity experiences to only contribute to some aspects of IC development, such as students' perception of intercultural situations and their attitudes and behaviours in such situations. As outlined in Section 2.3.1, the IC factors of CE, OM, and SI are social-perceptual traits that predispose individuals to view intercultural situations as interesting or as opportunities for growth, whereas ES and FX are stress-buffering traits that can help reduce the impact of threatening experiences from an interaction (van der Zee & van Oudenhoven, 2013). In a similar line of thought, CE, OM, and SI are pertinent to an individual's sensitivity, attitudes, and behavioural tendency towards cultural differences, whereas ES and FX pertain to their reactions towards the unfamiliarity and stress from an intercultural situation (van der Zee & van Oudenhoven, 2013). Hence, the intercultural interaction students have engaged at university may benefit students in positively changing their attitudes towards intercultural situations.

In addition, given that the correlation testing used in this study did not provide any information on the direction of the relations between variables, it is also likely that students who come into university with higher levels of CE, OM, and SI tend to engage more frequently in interactions with diverse peers at university. In this case, a cycle may have taken place: after engaging in interactions with diverse peers at university, students' attitudes and perceptions of these experiences (CE, OM, SI) were changed in a positive light, and they thus sought out more frequent intercultural interactions. While this suggests positive outcomes result from encouraging students to engage in intercultural interactions, it is equally probable that students with lower levels of CE, OM, and SI may tend to engage less frequently in intercultural interactions at university.

Based on this finding, students who are lower in these IC factors may continue to hold negative attitudes towards interactions and avoid intercultural interactions. Such a tendency may further marginalise those who do not show interest in intercultural interactions, especially when such activities are not compulsory. How we can ensure all students can benefit from engaging in these activities is therefore an important question to address. A possible direction for future research then is to understand different student profiles and design activities to meet students' interests and needs.

Taken together, these findings seem to raise questions about the effectiveness of cultural diversity activities offered at the university, especially those that are part of the formal curricula. While the benefits of an internationalised university experience are valued, it seems that the activities and initiatives provided at the university, particularly those within the classroom, are not linked to the development of IC for its students. Therefore, these findings might question the extent to which the university's strategic statement related to internationalisation of the curriculum (IoC) and internationalisation at home (IaH) has matched the actual experiences of its students.

Although interactions outside of the classroom setting seem to benefit students in developing the attitudinal and behavioural aspects of IC, it remains unclear whether other aspects, such as reactions to the unexpected in intercultural situations, are connected to participation in interactional diversity activities. Further research is needed with a more nuanced investigation into different elements of IC to offer more insights into whether there are differences in terms of the type of activities influencing development in different aspects of IC.

The study also draws on students' perspectives on the impact of engaging in cultural diversity activities at university. Their reflection on the perceived impact of their previous classroom diversity experiences seems to indicate several benefits of the activities. This will be discussed in the section below.

7.2.1 Students' Perceived Impact of Cultural Diversity Experiences

Qualitative data from this study provided evidence for the documented benefits of participating in cultural diversity activities at the university. For example, students in this study acknowledged and valued the importance of engaging in cultural diversity activities. Overall, students perceived cultural diversity activities to have positively influenced them in three main ways: 1) development of cross-cultural skills and competencies; 2) enhanced preparedness for future intercultural interactions; and 3) positive changes in attitudes and worldviews. Each of these topics is discussed further below.

Students acknowledged that their cultural diversity experiences at university were beneficial for the development of cross-cultural skills and competencies, in ways that these are seen as opportunities to encounter new ideas and perspectives. From students' responses, additional benefits of the cultural diversity activities involve increasing their cultural awareness and understanding, becoming more respectful of cultural differences, and developing cultural empathy. Notably, these responses were mainly in reference to students' classroom diversity

activities, which seems to contrast to the lack of statistically significant association between the frequency of engaging in these activities and students' IC as discussed earlier in this section. Nevertheless, these responses largely accord with the previous literature documenting the benefits of cultural diversity activities, both in and outside of class (e.g., Antonio, 2001; Etherington, 2014 Lopez, 2004; Martinez-Mier et al., 2011; Weed Harnish, 2014).

Cultural diversity activities at university are also valued by students as preparing them for future interactions, particularly through developing skills essential for collaboration in a global workplace and helping them become more comfortable and confident with working with diverse people. This is predominately in reference to their classroom diversity experiences, from which students can learn to “translate” (F1-2, third-year, Arts, international) these experiences at the university to similar intercultural situations in the future. Students can become more confident in their own competence to collaborate with people from different cultural backgrounds in a global workplace. The classroom diversity activities that students engaged in are seen as opportunities that allow them to practice and improve skills required in collaborating within a multicultural team and working in a global workplace. These findings corroborate those in the previous literature on intercultural group-based activities, supporting the importance and benefits of such activities (e.g., Spencer-Oatey & Dauber, 2017; Moore & Hampton, 2014).

Additional benefits of cultural diversity activities from the student perspective pertain to the perceived changes in their attitudes towards cultural diversity and their worldviews after participating in cultural diversity activities. More specifically, students can become more open and have a more positive view of working with diverse peers upon completion of an intercultural collaboration for their courses. By partaking in classroom diversity activities, students can learn about culture-related content and engage in culture-related discussion, which in turn may help develop a global perspective and broaden their horizons.

Although the above-mentioned benefits largely aligned with the empirical literature documenting the benefits of cultural diversity activities discussed in Sections 3.2.1 and 3.2.2, these seem contrasting to the finding of quantitative analysis in this study that revealed no link between students' participation in classroom diversity activities and their IC levels. Such contrasting findings suggest this relation to be of great complexity and point to a need for considering the factors that may influence the extent to which students are benefiting from these experiences. The following two sections discuss the structural and personal factors that emerged from this study.

7.3 Structural Factors influencing students' cultural diversity experiences

Based on the findings of this study, the factors that can influence whether and how students participate in cultural diversity activities can be organised into two main types: structural and personal. This section elaborates on the structural factors, including 1) the conditions and opportunities for intercultural interactions provided by the university, 2) the lack of a consistent learning cohort, 3) the virtual campus mode, and 4) peer influence.

7.3.1 Conditions and Opportunities for Intercultural Interactions

A key enabling factor to support students to engage in cultural diversity activities is that universities provide the conditions and opportunities necessary for intercultural interactions and learning to take place. Many students in the present study recognised and highly valued the role of the university as offering a venue and opportunities for intercultural interactions. This includes the structural diversity of the university, as well as the opportunities for intercultural interactions that exist both inside and outside the classroom.

Structural diversity of the university - that is, the existence of cultural diversity in the student population - is viewed by students as a crucial part of the opportunities for intercultural interactions provided by the university. This is in accord with previous research (e.g., Gurin,

1999; Gurin et al., 2002) that values structural diversity as important for creating the necessary environment for intercultural interactions among students. More specifically, the structural diversity of the university, or as a student put it, “the sheer fact that the cohort is kind of diverse” (F5-1, third-year, Arts, domestic), provides the opportunities and conditions for intercultural interactions. Intercultural interaction in such an environment is “more of a by-product” (F2-2, first-year, Commerce, international) of structural diversity.

In addition, the value of structural diversity, as suggested in the literature, depends on whether it indeed leads to promoting intercultural interactions among students (e.g., Gurin et al., 2002; Gurin et al., 2004; Mayhew et al., 2016). Simply putting students from different cultural backgrounds in the same environment does not guarantee intercultural interactions among them (Leask & Carroll, 2011; Marginson et al., 2010; Marginson & Sawir, 2011). In keeping with these arguments, the present study found that providing the conditions and environment for intercultural interactions does not guarantee it will happen. Students’ comments on this topic were often given in combination with other comments highlighting the importance of personal interest and initiative. In particular, they recognise the need to move beyond providing conditions and opportunities for intercultural interactions because students can “do the bare minimum at university” (P3, second-year, Arts, international) and only participate in compulsory activities such as in-class discussion, especially when learning online. Another shared observation is that, despite the student population of the university being culturally diverse, “students will just tend to avoid [interactions with diverse peers] or stay in their comfort zone” (P5, third-year, Commerce, international).

Despite the ample intercultural learning opportunities provided at university, it appears that personal interest and initiative play a more dominant role in deciding whether these opportunities are taken up by students. It seems that students are aware of the importance of

actively engaging in cultural diversity activities beyond attending a culturally diverse university.

In summary, the role of the university in providing opportunities for meaningful intercultural interactions to take place is important. However, whether these opportunities are availed of by students and whether they indeed lead to frequent, positive interactions and beneficial student outcomes are important questions to address. Emerging from this study's findings are several structural factors that may act as obstacles to students' active engagement in cultural diversity activities. The following subsections discuss these factors in more detail.

7.3.2 Lack of a Consistent Learning Cohort

The lack of a consistent learning cohort emerged as a reason for student explanations of the difficulty in connecting with diverse peers. This non-cohort characteristic of students' undergraduate studies was further attributed to the large student population and variety of subjects offered at their faculties. As mentioned in Section 5.5.3, most undergraduate students at the research site study broad bachelor's programs (e.g., Bachelor of Arts or Bachelor of Science), and each program has many different subjects for students to choose from, even within the same majors. It is therefore rare for students to be accompanied by the same group of classmates throughout their undergraduate studies. In this way, the course structure and timetabling of students' programs did not seem to promote connection forming among diverse peers but rather made it even more difficult to do so. Given that the university has a large student population, forming and maintaining connections is even more difficult due to the limited time and rare opportunities to connect with the same group of peers.

Indeed, being able to develop a sense of cohort has been identified in previous literature as a potential facilitator in intercultural interactions, as it can enhance familiarity and acquaintance among diverse students (Kimmel & Volet, 2012). This absence of a sense of cohort can create challenges in forming connections and satisfactory group work experiences

as students do not know their teammates very well (Kimmel & Volet, 2012). The challenges to forming peer connections seemed to be aggravated when learning was shifted online. The online environment is considered as a structural barrier, which will be detailed below.

7.3.3 *The Virtual Campus Mode*

As noted in Section 4.3.1, the data collection for both stages of this study was conducted during the COVID-19 pandemic, and the participants of this study had different proportions of their study being delivered online. Therefore, it is not surprising that the virtual campus mode is a frequently mentioned topic among students in this study. Overall, students tended to disfavour the virtual campus experience over the in-person one, both for academic and social purposes. The virtual campus mode was found to be the second most mentioned hindrance to students' participation in cultural diversity activities at the university. Students perceived online group work and in-class discussions as more difficult compared to in-person ones, particularly in terms of communication with peers. Further, the difficulties in forming connections with peers can be more severe for the virtual campus. According to students in this study, possible explanations for this are the limited opportunities for informal interactions between students and the lack of visual cues when using the online platform.

7.3.4 *Peer Influence*

In this study, peer influence emerges as another potential factor influencing students' decision to participate in culturally diverse activities. Students reported that their inclination to participate in cultural diversity activities, particularly those that are outside of the classroom, would depend on whether they have the company of their friends. In addition, a few students who self-identified as shy or introverted attributed their infrequent participation in cultural diversity activities to the overwhelming nature of large-scale extracurricular events, and a common sentiment among these students is a reluctance to attend such events alone,

emphasising the preference for company. Consequently, their participation often hinges on peer influence. Additionally, some students may avoid these activities due to heightened social anxiety when participating in cultural diversity activities alone. This calls for careful and deliberate consideration when designing activities, as well as a need to cater activities to students with higher levels of social anxiety to encourage their participation, such as hosting smaller-scale events where students meet with the same group of peers for multiple times, instead of large-scale events where students interact briefly within a large group. Together, these responses indicate the impact of peer decisions and attitudes on students' views toward such activities, particularly in cases where these activities are not mandatory.

Apart from peers' tendency to participate, students' level of engagement in an interaction can be dependent on whether others they interact with appear to be friendly and respectful. That is, if the other person shows a friendly and respectful attitude towards the student at the initial stage of interaction, the students themselves would be more open and friendly in return. For example, as an interviewee explained, their attitudes and levels of engagement in the interaction "depends on the response after the first 'hi'" (P11, third-year, Commerce, international). If the other person(s) is "respectful and they understand how to communicate with people from various backgrounds", the student themselves "would be more open to share and contribute"; but if the student feels that other person(s) "are quite disrespectful or ignorant", they "would hold back and not be very comfortable participating" (P19, third-year, Design, international). These responses, coupled with the earlier findings, underscore the impact of peers on students' participation tendencies and attitudes toward cultural diversity activities.

The above findings resonate with those of the previous investigations, which consider peer influence as part of the environmental effects of attending a culturally diverse campus. Denson and Zhang's (2010) study at a U.S. campus, for example, shows that being in an

environment where their peers are more engaged with cultural diversity can benefit students, regardless of how often they engaged in cultural diversity activities at the university; these benefits include the positive ratings of their self-efficacy, academic skills, and self-reported changes in their capacity to engage with cultural differences (Denson & Zhang, 2010). In other words, how frequently their peers engaged in intercultural interactions had an impact on students' engagement in cultural diversity activities.

The influence from peers may also be explained by the social psychology literature on extended intergroup contact theory, which postulates that knowing that an ingroup member has a positive interaction with an outgroup member can improve an individual's intergroup attitude towards the outgroup as a whole (Wright et al., 1997). Empirical work in different cultural contexts has shown that extended contact can effectively improve intergroup attitudes (Paolini et al., 2004). As Kimmel and Volet (2012) revealed in their study at an Australian university, students' attitudes towards intercultural interactions are influenced by the quality of their close peers' experiences in culturally diverse groups. However, it is important to note that the reverse could also happen: an individual can have more negative attitudes towards the outgroup if they were aware that their in-group member had a negative experience with a member of that out-group.

Put simply, peer attitudes towards and experiences of cultural diversity activities might influence students' willingness to engage in such activities. When their peers are less engaged in the opportunities for intercultural learning and interaction, it is equally possible that students themselves might be less likely to engage as well, especially when the activities are not compulsory.

7.4 Personal Factors Influencing Students' Cultural Diversity Experiences

Several factors identified in this study as associated with students' participation in cultural diversity activities are classified as personal factors; these are pertinent to the

individual student rather than structural aspects such as the virtual campus mode. Each of these factors is discussed in more detail below, including 1) attitudes towards and interest in cultural diversity and related activities, 2) intergroup anxiety (IA), 3) exposure to cultural diversity before university, and 4) challenges to effective communication.

7.4.1 Attitudes Towards and Interest in Cultural Diversity and Related Activities

The present study reveals the important role of attitudes (i.e., valuing the importance of cultural diversity and opportunities for intercultural learning) towards and interest in cultural diversity and related activities. Most interviewees of this study were aware of the benefits and values of cultural diversity and related activities available at the university, both in and outside of class. Interest also emerged as one of the main factors determining students' participation in cultural diversity activities. Further, interest in intercultural learning and interactions is one of the most prevalent reasons behind students' participation in cultural diversity activities, particularly for those that are not compulsory.

The importance of attitudes towards and interest in cultural diversity has been highlighted in previous theoretical work of IC. As mentioned in Section 2.3.2, attitude is considered a key element of IC, and it is theorised to be the starting point of IC development (Deardorff, 2004; 2006). It involves valuing different cultures, withholding judgment, and demonstrating tolerance for ambiguity in intercultural situations. Moreover, in van der Zee and van Oudenhoven's (2013) theoretical foundation of IC mentioned in Section 2.3.1, the social-perpetual trait, or an individual's inclination to view intercultural situations as interesting and positive challenges, is also highlighted.

The findings of this study are also in keeping with those from the literature that suggest an individual's intention to engage in intercultural interaction would increase if they believed that the interaction could help them achieve certain goals, such as making new friends (Turner et al., 2014), learning new skills (Dunne, 2013), or learning about members of the other groups.

The significance of intrinsic interest in student engagement has also been underscored in previous studies (e.g., Hu & Kuh, 2003; Kahu, 2013).

However, the issue here is that, despite the ample opportunities to engage in cultural diversity activities at the university, students who lack interest in these activities can still have limited cultural diversity experiences. Hence, even at a culturally diverse university with a strategic goal of fostering a “high level of intercultural competence” (University A, 2023, p. 28), some students may have minimal cultural diversity experiences beyond mandatory class requirements. From the findings discussed here and in Section 7.3.1, it is clear that this study supports previous literature in arguing that simply providing opportunities for students to engage in cultural diversity activities does not guarantee positive outcomes (Gurin et al., 2004) and that the value of a culturally diverse student composition of a university is dependent on whether it leads to more frequent participation in cultural diversity activities among students (Denson & Zhang, 2010). It is therefore crucial for educators to recognise the need to move beyond creating a culturally diverse environment for students and to focus on cultivating their interest and more positive attitudes towards these activities.

7.4.2 *Intergroup Anxiety*

A negative correlation was revealed between students’ frequency of out-of-class intercultural interactions and their IA levels. That is, students who have lower levels of intergroup anxiety tend to engage more frequently in intercultural interactions outside of class at the university. This aligns with previous literature demonstrating the links between intergroup anxiety and intercultural interactions (Stephan, 2014). Engaging in out-of-class interactions with diverse peers may be beneficial in reducing students’ IA levels. However, the same finding was not found for classroom diversity activities. Possible explanations for this difference in findings may be the nature and focus of these two types of cultural diversity activities.

For classroom diversity activities, there might be other types of stress and anxiety that act as confounding variables to the relation between frequency of participation in classroom diversity activities and IA. Stress related to academic performance, for example, is likely to be evident when students participate in group work with peers from different cultural backgrounds (Summers & Volet, 2008). High-stakes assessments associated with group work can also cause anxiety among students (Summers & Volet, 2008), and there is a tendency for students to hold negative attitudes towards intercultural group work when the assessment has high stakes (Carroll & Li, 2008). Considering that the research site of this study is an academically prestigious institution, it may well be that participants' responses were based on their experiences with high-stakes group assignments, during which academic stresses were heightened. Further, the formation of groups for assignments (i.e., randomised or arranged by instructors) can also produce heightened levels of uncertainty and anxiety experienced by the students (Strauss et al., 2011), which could also affect the relationships tested in this study.

Notably, although this study revealed a negative correlation between levels of IA and frequencies of students' intercultural interaction at university, the direction of this relation between remains unclear. In other words, while it is possible that frequent engagement in interactions with diverse peers lowers students' IA levels, it is equally possible that students with higher levels of IA tend to avoid interactions with diverse peers outside of class. This result again calls for a longitudinal study to elucidate the direction of the relationship between IA and intercultural interactions. Nevertheless, this finding of the study is consistent with the previous literature on IA and intercultural interactions and confirms the importance of considering students' IA levels when understanding their cultural diversity experiences at university.

7.4.3 Cultural Diversity Experiences at the Previous Educational Institution

Regarding students' previous exposure to cultural diversity, this study found inconsistent results from the two stages, suggesting a need for further exploration into whether and how students' previous exposure to cultural diversity is linked to their engagement in cultural diversity activities at university.

More particularly, students' responses in Stage 1 of the study identified their previous experiences before attending university as a factor influencing their participation in similar activities at previous educational institutions, such as making them feel more comfortable and confident or predisposing them with interest in intercultural learning. What seems contrasting is that the statistical analysis in Stage 2 found no relationship between students' experiences with cultural diversity activities at their educational institutions before attending university and their tendency to engage in similar activities at university.

This seems to contrast with the findings of prior investigations (e.g., Saenz, 2005; Saenz et al., 2007), which demonstrate a positive association between previous exposure to cultural diversity and the tendency to engage in intercultural interaction at university as outlined in Section 3.3.1. This difference underscores the influence of intrinsic interest and initiative on participation, emphasising the need to explore how interest shapes students' engagement in cultural diversity activities. That is, it is likely that students who eagerly seek intercultural interactions and learning at the university may have limited prior exposure to cultural diversity, simply due to the lack of opportunities available; meanwhile, those who frequently engaged in these activities solely because these opportunities were available or required rather than out of interest.

It is important to note that in Stage 1, there was a larger proportion of international participants (66%) in the sample compared to their domestic counterparts (34%). This imbalance in the sample may result in overrepresentation of the perspective from the majority

group (i.e., international students) and bias in the data interpretation. In Stage 2, the three items that were used in the survey to measure students' pre-university experiences may not have provided an accurate and comprehensive picture of their actual cultural diversity experiences at previous institutions. For example, students might have engaged in intercultural learning or interactions with diverse people outside of the school context, in addition to the ones within their previous institutions. Just as their cultural diversity experiences at university are of great complexity, previous exposure to cultures is likely to involve factors in addition to the structural diversity and frequency of cultural diversity experiences at their previous institution. The quality of students' previous experiences, for example, may play a part in determining their willingness to participate in similar activities at university (Denson & Bowman, 2013). Moreover, the interview questions and survey items used in this study also did not provide participants with a clear definition of cultural diversity activities. It is likely that students had different interpretations and understandings of this term. A direction for future research is to design a more comprehensive set of items for capturing students' previous cultural diversity experiences. Doing so would help to elucidate the relationships between cultural exposure before university and the tendency to participate in similar activities at university.

7.4.4 Challenges to Effective Communication

This study indicates that communication-related issues can act as a barrier to students' engagement in cultural diversity activities, particularly for those that happen within the classroom setting. More specifically, these communication-related issues pertain to two aspects: inadequate English language proficiency and unfamiliarity with the Australian culture; and usage of a language other than English (LOTE) for academic purposes. Each of these issues is explored in turn below.

First, inadequate English language proficiency acted as a challenge to efficient communication and collaboration among some diverse students. Similar results were

documented in previous studies, in which researchers found that lack of English language proficiency and familiarity with cultural references negatively affect intercultural collaboration in class and communications outside of class (Liang & Schartner, 2022; Moore & Hampton, 2015; Peacock & Harrison, 2009; Popov et al., 2012). Inadequate English language proficiency and unfamiliarity with Australian culture may also hinder students' active engagement in cultural diversity activities both in and outside of class.

These findings resonate with previous literature which has found links between international students' inactive participation in class and their English language proficiency (e.g., Currie, 2007; Elliott & Reynolds, 2012). Students who are non-native speakers of English might be afraid to speak up and prefer to remain silent in group settings (Turner, 2009). Because using English to communicate might seem challenging to some students whose first language is a LOTE, they might turn to using their native language whenever the situation allows, such as during group collaborations for academic purposes.

The use of a LOTE for academic collaboration emerged in the present study as another communication-related issue that hinders students' active participation in intercultural interactions. This issue involving the usage of LOTE in the academic setting refers to students' experiences of working as the only ones in a group where all others spoke the same LOTE. In these cases, interviewees reported feeling excluded as the rest of the group would tend to communicate in the LOTE, and they would tend to avoid a similar situation in the future. Unlike the "international-domestic" distinction of student groups discussed in the literature, this issue was reported by international students, in reference to their international classmates who spoke a different LOTE language. This situation was more adverse online because the online environment allows more anonymity and deindividualisation (McKenna & Bargh, 2000), and students do not feel "obligated" or "compelled to explain" (F2-P2, first-year, Commerce, international) to others who do not speak the language. This seemingly consolidates the social

boundaries between groups of students from different linguistic backgrounds, even though students were participating in collaborations with diverse peers.

This issue differs from those documented in some of the previous literature (e.g., Popov et al., 2012; Volet & Ang, 1998; Volet & Ang, 2012) in that the communication issue documented in this study is not only about language skills but also the feeling of being excluded when others within the group used a LOTE to communicate. As the same issue was documented on Australian university campuses two decades ago (Volet & Ang, 1998), it may be a challenge to successful intercultural collaboration among diverse students.

The findings discussed above signify the importance of addressing issues related to the process of communication between students. English language skills and familiarity with Australian cultural references are important for students to express their ideas and actively engage inside the classroom and outside. For those who perceive this as challenging to do so, they might turn to using a LOTE to communicate whenever possible. However, in the academic setting, this can negatively affect other students' academic experience and contribute to the feeling of being excluded in the process of intercultural collaboration.

7.5 Chapter Summary

This chapter consolidated the main findings from both stages of this study. The findings of this study confirm the need to move beyond providing the conditions for intercultural interactions and learning for students and to ensure students actively engage and benefit from these activities. This is because when participating in these activities, students are more inclined to interact with those who are more similar to themselves or those whom they feel more familiar with, to reduce the uncertainty and the risk of unpleasant experiences. This tendency may result in homogenous groups among students at a large, culturally diverse university. In other words, intercultural interactions among diverse students can still be lacking when there are ample opportunities for cultural diversity activities. This chapter also underlined

the importance of the aims of the cultural diversity activities and the motives of students' participation, which can possibly lead to different levels of effectiveness in developing students' IC as well as lowering their levels of IA. These suggest avenues for future research and further consideration in terms of designing and implementing cultural diversity activities for students.

Furthermore, this study identifies several factors influencing students' participation in cultural diversity activities, which can be categorised into structural and personal factors. Structural factors pertain to the environmental aspects, including enablers such as the necessary setting and availability of activities, programs, and events at the university that allow intercultural interactions to take place, and hinderers such as students' participation such as the lack of consistent learning cohort due to their course structure and timetabling. Personal factors include those that are dependent on the individual student, such as whether they have the attitudes and interest in cultural diversity, their levels of intergroup anxiety, and previous exposure to cultural diversity. Challenges to effective communication may also hinder students' participation as a personal factor. These findings, together with the issues and challenges that surfaced from the investigation on students' cultural diversity experiences, suggest areas for consideration in improving the student experience and producing interculturally competent graduates. The present study's implications will be further elaborated in the next chapter.

8 Taking Note and Moving Forward

The present study investigated undergraduate students' cultural diversity experiences at a large, culturally diverse university in Australia, with the main purpose of addressing the main research questions: What are the factors influencing students' participation in cultural diversity activities at university? This two-stage investigation was guided by the following sub-questions:

- How do students engage in cultural diversity experiences at university?
- What are the relationships between students' participation in cultural diversity activities and their levels of intercultural competence (IC)?

The first stage of this study involved online semi-structured interviews and focus groups with students about their experiences with and perspectives of culturally diverse activities and interactions at the university. Data collected during this stage helped provide an overall picture of students' cultural diversity experiences before and at university, identify factors that supported or hindered their participation, and determine students' self-reported impact of these experiences. The second stage employed survey data to examine the frequency of students' participation in cultural diversity experiences, the different types of experiences they had, and the factors influencing their participation in these experiences. It also aimed to explore the relations between frequency of students' cultural diversity experiences at university and their levels of IC.

Drawing on the findings from both stages, this study identified structural and personal factors that can influence students' participation in cultural diversity activities within the university setting. Structural factors include those that can enable students' engagement in cultural diversity activities, such as providing the necessary conditions and opportunities for cultural diversity activities; and those that can hinder students' participation such as the lack of a consistent learning cohort, the virtual campus mode, and the teaching and learning methods.

Personal factors, on the other hand, can either support or hinder student engagement, depending on the individual students. These include attitudes towards and interests of cultural diversity and related activities, intergroup anxiety (IA), prior exposure to cultural diversity at the previous institution(s), challenges to effective communication.

This study revealed that students' frequency of intercultural interactions outside of class was positively associated with their levels of IC and negatively associated with levels of IA. These findings support literature that has documented benefits for students who engage in cultural diversity activities at the university, as reviewed in Section 3.2.2. However, students' frequency of participation in cultural diversity activities in the classroom was unrelated to their levels of IC and IA. This may be because many students participated in group work as a requirement of their course, rather than out of interest. Other possible explanations are that the group activities students engaged in may not have a focus on promoting intercultural interactions and learning, and students' experiences of these activities were not all positive.

This chapter first presents an overview of the contributions of this study, then discusses several research, practical, and policy implications from the main findings. This chapter also addresses the limitations of the present study and points to areas for consideration and concludes the thesis with possible directions for future research.

8.1 Contributions of the Study

This study sheds light on factors that can influence students' participation in and experiences of cultural diversity activities. It adds new insights for examining students' cultural diversity experiences from an Australian context. In addition, the data collection period (i.e., during the COVID-19 pandemic) offers important insights into how students experienced and perceived the virtual campus mode and their cultural diversity experiences online, despite the student experience with online learning not having been an intended aim of this study. The findings of this study also add to our understanding of students' cultural diversity experiences

by investigating potential factors such as students' IA and their previous cultural diversity experiences at their previous educational institutions before university.

This study confirms the importance of interactional diversity activities for promoting students' IC, as well as lowering their IA levels. It also adds weight to the need to purposefully design and implement cultural diversity activities for intercultural learning and promoting intercultural interactions among students. In addition, its findings also highlight the need to provide the conditions for intercultural interactions and learning for students and ensure students actively engage and benefit from these activities.

8.2 Implications for Research, Practice, and Policy

The findings of this study offer research, practical and policy considerations, which will be detailed further below.

8.2.1 *Research Considerations*

The present study offers several considerations for future research, particularly with relation to conceptualisation and measurement. For example, a conceptual consideration pertains to the use of digital learning platforms and virtual campuses. When cultural diversity activities, both for academic and social purposes, are shifted online, additional efforts would be required, rather than simply changing the delivery format to ensure that these promote active engagement and produce positive outcomes for students. This is because, as revealed in this study, the limited opportunities for social engagement with peers on the virtual campus further exacerbate the difficulties in forming connections at the university. On-campus learning often provides students with the opportunities to meet with and develop or strengthen social relationships with peers and staff. The results of this study underscore areas of students' connection and social engagement when learning online.

The prevalent preference against the virtual campus evident among students in this study suggests the need to improve the student experience of the virtual campus. Given that the data collection was conducted during the COVID-19 pandemic, there is a need for further examination into whether such a preference remains evident in the current post-pandemic era. Considering that most of the literature on students' intercultural interactions focused mainly on the on-campus context, how students engage in such interactions when their classes are delivered in a hybrid mode (i.e., combining both online and in-person delivery) can be an important area for further research. Whether there are factors unique to in the context of a hybrid mode requires further examination influencing students' cultural diversity experiences and development of IC. As many Australian universities offer online delivery in the post-pandemic era, further research is essential to comprehend students' cultural diversity experiences on virtual campuses. This exploration can help identify areas for improving programs and activities to promote student intercultural interactions as well as enhance IC development.

Measurement Considerations. Further investigation on students' cultural diversity experience should consider not only the frequency but also the quality of these experiences. It is possible that students may have had frequent experiences with cultural diversity activities but that not all of them were positive. Importantly, adverse experiences have been linked to negative outcomes and further avoidance of similar experiences. These demonstrate the importance of future research to consider exploring the quality of students' cultural diversity experiences. While semi-structured interviews in this study did provide some information as to the quality of student experience, employing a more systematic measurement for the quality of students' experience is needed in future studies.

An additional direction for future research is to consider developing and employing a more comprehensive measure for students' cultural diversity experiences before university and

explore further whether certain student groups are particularly inclined to avoid interactions at the university. This would be helpful to elucidate whether and how students' extent of previous exposure to cultural diversity may influence engagement in similar activities during their university study.

Further, further research investigating students' cultural diversity experiences at university should consider employ a longitudinal design to measure and compare students' frequency of participation in cultural diversity activities at different times of university as well as their IC and IA levels in the first and last semester of their university study. This would be helpful in providing a more holistic picture of students' cultural diversity experience at university and to examine possible impact of engaging in these activities.

8.2.2 *Practical Considerations*

This study identified areas for improving undergraduate students' experiences with cultural diversity activities, both inside and outside the classroom. Practical implications for classroom and interactional diversity activities are discussed in detail below.

Classroom Diversity Activities. This study revealed that the main way that students currently engage in intercultural learning and interactions is through participating in group-based activities in class, such as group projects and discussions with diverse peers. Although most students shared that they have such experiences, this study questions the effectiveness of these activities in improving students' IC and lowering IA levels, as its findings contradicted the well-established literature that documented benefits for students to engage in these activities. Key implications for improvement include:

- Purposefully designing and implementing the activities to promote intercultural learning and interaction
- Providing students with the opportunities to get to know each other in class
- Ensuring students can contribute to the group task with adequate support

The importance of purposefully designing the tasks and activities for promoting intercultural learning and interactions among students is confirmed based on the findings of this study. Particularly for classroom diversity activities such as group assignments, efforts should be made to purposefully design the task to encourage positive interactions among students, which has been documented in literature crucial for its potential benefits to be realised (Cruickshank et al., 2012; Reid & Garson, 2016; Woods et al., 2011).

Consideration should be given, for example, to group formation for collaboration as part of the subject beyond randomly assigning students into groups or allowing students to form their own groups. In the previous literature, random assignment has also been criticised as “not far off from a game of roulette in casting players onto winning or losing teams” (Bacon et al., 2001, p. 9); it may lead students to unwillingly engage in intercultural interactions. This would possibly result in further resentment of similar activities in the future. In this study, the prevalent preference to work with similar and familiar peers among students indicate that, when letting students chose their own teammates, there likely results in homogenous groups among students. In this way, group work would not encourage students to engage in intercultural interactions with peers, despite a culturally diverse classroom.

Further, this prevalent tendency to prefer interacting with similar and familiar peers among students may stem from the inclination to reduce risk to their academic performance and the likelihood of adverse experiences, as discussed in Section 7.1.2. Therefore, another consideration is to provide students with the opportunities to get to know each other early in the semester or at the initial stage of the task may be a possible way to help them form connections and become more familiar with their teammates. This may in turn reduce students’ feeling that they are risking their academic performance when being put into groups to work with strangers, as reported in the current study. It may also allow the time and space for students to form connections with peers, which would otherwise be difficult to do during class.

Another area for additional efforts pertains to the nature and focus of the classroom diversity activities such as group work and in-class discussion. More particularly, an activity with a goal of engaging students in intercultural learning and facilitating the interactions among them should mention this goal more explicitly when assigning it to students. It may be difficult for students to understand the importance of multicultural perspectives or intercultural interactions when these goals are unclear or not mentioned as part of the assignment. Another possible way is to include the process of intercultural collaboration within the graded elements of the assignment, which may help students see the value of collaborating with diverse peers.

Last, the present study suggests that some international students were conscious about their own English language proficiency and unfamiliarity with Australian cultural references, which hindered their participation in group activities and discussions in class. Previous negative collaboration mentioned by a few students involved unequal contribution to an assignment, which led to students' negative changes in their attitudes towards intercultural collaboration and avoidance of similar activities in the future. Hence, it is important to ensure that adequate support is available for students in need and that students can take on the role of experts and contribute to the task (Cruickshank et al., 2012).

Extracurricular Diversity Activities. While this study revealed extracurricular activities as the most common way for students to engage in intercultural interactions at university, there are several considerations needed for the design and implementation of these activities. For example, effort is required to design and advertise these opportunities, with the consideration that students might be reluctant to participate due to reasons such as academic stress, course structure, as well as the location and time of the activities. As mentioned in Section 3.4, a large part of the current literature focuses on the U.S. context where research sites are residential universities (e.g., Pascarella et al., 2014; Roksa et al., 2017). The present study suggests that promoting student engagement in activities at Australian universities may

require extra effort, as most students at Australian universities commute to campus and hence spend relatively less amount of time on campus. Thus, it is important to consider how to cultivate students' interest in extracurricular activities by understanding their preferences.

The lack of advertisement for cultural diversity activities, particularly those that were extracurricular, can hinder students' participation, based on both interviews and survey responses. This finding suggests the need to reconsider the ways extracurricular activities are advertised. Utilising high-traffic areas on campus, such as food courts and lecture halls, to advertise the events may be a good way to draw students' attention to the activities and events available at the university. Embedding opportunities that promote intercultural interactions among students during the orientation weeks when they first arrive to the university is another possible way to promote interaction and help them form connections with the university community.

8.2.3 Policy Considerations

In this study, one of the structural factors hindering diverse students from forming connections was the lack of a consistent learning cohort due to course structure and timetabling. In this regard, Australian universities that attract large student populations should consider arranging the timetabling and course structure to help foster a sense of cohort among students. An example of this might be to create timetables where the same group of students would enrol in the same series of required subjects together for their major. In addition, universities or faculties can consider organising co-curricular study group programs, where students would meet with the same groups of peers throughout their undergraduate studies.

Another policy consideration pertains to universities' strategic statements. The goals of producing globally competent students are, as mentioned in Chapter 1, on the strategic documents and websites of many Australian universities (Baker et al., 2022). However, the extent of success in achieving this goal remains uncertain, given that this study revealed that

how often students participated in classroom diversity activities was irrelevant to their levels of IC. This discrepancy raises concerns about the effectiveness of the education delivered at the university in producing graduates with “social awareness about global challenges and their readiness for an increasingly digital and changing world” (University A, 2020, p. 10).

More particularly, the lack of association between the frequency of classroom diversity activities and students’ IC levels seems to raise questions about the effectiveness of these activities. Although a further examination of the link between classroom diversity activities and IC levels is needed, it nevertheless suggests that policymakers should critically assess whether these experiences provided at the university may indeed lead to the graduate attribute goals in the university’s strategic documents.

8.3 Limitations of the Study

Several limitations of this study have been acknowledged. First, due to the time frame of the PhD program, this study focuses on one research site with a cross-sectional design. The data collection for both stages of the study was conducted during the COVID-19 pandemic. These limit the generalisability of the data. However, different universities vary in many aspects including their goals, values, and graduate attribute statements. Therefore, this single-site study might provide insights that are specific and applicable to the university it focuses on. The findings of this study may also lay the groundwork for future research to be conducted in other universities in Australia, particularly the ones that have developed a virtual campus mode in response to the COVID-19 pandemic. However, future research should consider conducting a multisite study with students from different universities, to explore any changes in their cultural diversity experiences and scores of IC and IA.

There are many other aspects of the student experience that this study did not focus on. Aspects such as students’ intercultural interactions with staff and other members of the local community can also be key elements in students’ connections and thus are important for future

research to consider. Likewise, interactions with other members of the university and the local communities may also have an impact on students' IC and IA. Due to its scope and limit, this study did not explore some aspects that can be important for IC development, such as reflection (Olson et al., 2016). Thus, further conceptual consideration for future studies should be given to other aspects of the student experience and the process of IC development.

A longitudinal design would be a more useful method for observing any changes in students' diversity engagement and outcomes during their undergraduate studies. Considering the time constraints of the PhD program, this study instead compared the cohorts of first and final-year students, with an attempt to explore changes in their experience and cultural diversity-related outcomes during their university studies. Future research can benefit from a longitudinal approach to observe changes in students' experience of cultural diversity activities and their IC and IA scores at different times of their university years.

Further, the quantitative analyses of this study were conducted based on a relatively small sample size, and this may increase the possibility for a Type II error to occur. It is also possible that important insights might be missing when analysing a relatively small group of students at the research site, and the generalisability of findings may be limited. Moreover, students who expressed interest in participating in the study may have a positive predisposition to these types of activities, which can result in a bias towards the data reported compared to the rest of the student population. A possible alternative to the sampling of participants is to collect data through a compulsory element of students' undergraduate study, such as a survey at the end of the semester, to ensure that the data collected would reflect the student population of the institution.

An additional limitation lies in the data collected in this study. That is, as mentioned in Section 4.7, all data collected in this study was self-reported by participants and based on their subjective perspectives and interpretations of the experiences. There is a possibility for social

desirability bias (Bryman, 2016) to occur among participants, resulting in a tendency to report more positive views and attitudes towards cultural diversity in the quantitative stages and overestimate their self-rating of the three concepts on the survey. However, this may be unavoidable as the study centres around students' experiences and perspectives of cultural diversity activities. Further, both stages of the present study did not provide clear definitions of terms such as "cultural diversity experience" and "cultural diversity activities" for the participants. As acknowledged in Section 4.7, there is the possibility of variations in participants' interpretation and understanding of these terms.

Lastly, the direction of relationships between variables cannot be identified, despite the statistical analyses showing a significant correlation between the frequency of intercultural interactions and scores of IC and IA. Participants of this study may also be those who were more interested in cultural diversity-related topics, and thus the results may be biased. Further research is needed to clarify the connections between these variables.

8.4 Recommendations for Future Research

The findings of this study have suggested several directions for future research endeavours into students' cultural diversity experiences within the university setting. For example, future investigation should consider employing a longitudinal design with samples across different research sites and comparing students' participation in cultural diversity activities at different times of university as well as their IC and IA levels in the first and last semester of their university study. This would help provide a more holistic picture of students' cultural diversity experience at university and examine the possible impact of engaging in these activities with greater generalisability. Another direction is to employ a more comprehensive measure and test its link to their inclination to participate in cultural diversity activities to capture a more accurate picture of students' previous exposure. This would help elucidate whether and how students' extent of previous exposure to cultural diversity may influence

engagement in similar activities during their university study. It could also be helpful to conduct a follow-up qualitative study to comprehend the quantitative findings of the present study and the contrast between some of the findings from the two stages of this study. The findings of the present study also suggest that learning on a virtual campus requires additional effort to ensure students' active engagement in intercultural interactions. Future research is needed to explore students' cultural diversity experiences in the new context of hybrid delivery and to identify possible factors that are unique to this context.

References

- Akdere, M., Acheson, K., & Jiang, Y. (2021). An examination of the effectiveness of virtual reality technology for intercultural competence development. *International Journal of Intercultural Relations*, 82, 109-120.
- Ang, S., Van Dyne, L., & Koh, C. (2006). Personality correlates of the Four-Factor Model of Cultural Intelligence. *Group & Organization Management*, 31(1), 100-123.
<https://doi.org/10.1177/1059601105275267>
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural Intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. *Management and Organization Review*, 3(3), 335-371. <https://doi.org/10.1111/j.1740-8784.2007.00082.x>
- Antonio, A. L. (2001). The role of interracial interaction in the development of leadership skills and cultural knowledge and understanding. *Research in Higher Education*, 42, 593-617.
- Antonio, A. L., Chang, M. J., Hakuta, K., Kenny, D. A., Levin, S., & Milem, J. F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological Science*, 15(8), 507-510.
- American Psychology Association. (n.d.). *APA Dictionary of Psychology*.
<https://dictionary.apa.org/outgroup>
- Arkoudis, S., & Baik, C. (2014). Crossing the interaction divide between international and domestic students in higher education. *HERDSA Review of Higher Education*, 1, 47-62.

- Arkoudis, S., Baik, C., Marginson, S., & Cassidy, E. (2012). *Internationalising the student experience in Australian tertiary education: Developing criteria and indicators*. Melbourne Centre for the Study of Higher Education.
- Arkoudis, S., Dollinger, M., Baik, C., & Patience, A. (2019). International students' experience in Australian higher education: Can we do better? *Higher Education*, 77(5), 799-813. <https://doi.org/10.1007/s10734-018-0302-x>
- Arkoudis, S., Yu, X., Baik, C., Borland, H., Chang, S., Lang, I., Lang, J., Pearce, A., & Watty, K. (2010). *Finding common ground: Enhancing interaction between domestic and international students*. Australian Learning and Teaching Council.
- Arum, S., & Van de Water, J. (1992). *Bridges to the future: Strategies for internationalizing higher education*.
- Asbrock, F., Gutenbrunner, L., & Wagner, U. (2013). Unwilling, but not unaffected—Imagined contact effects for authoritarians and social dominators. *European Journal of Social Psychology*, 43(5), 404-412.
<https://doi.org/https://doi.org/10.1002/ejsp.1956>
- Australian Bureau of Statistics. (2021). *Cultural diversity: Census*.
<https://www.abs.gov.au/statistics/people/people-and-communities/cultural-diversity-census/2021>
- Australian Bureau of Statistics. (2022, June 28). *Understanding and using Ancestry data*. ABS.
<https://www.abs.gov.au/statistics/detailed-methodology-information/information-papers/understanding-and-using-ancestry-data>.
- Australian Bureau of Statistics. (2023, June). *Australia's Population by Country of Birth*. ABS.
<https://www.abs.gov.au/statistics/people/population/australias-population-country-birth/latest-release>.

Australian Catholic University. (n.d.). *ACU Global Strategy 2020-2023*.

<https://www.acu.edu.au/-/media/feature/pagecontent/about/global-strategy/acu-global-strategy-2020-2023.pdf?la=en&hash=BD9378C3BD93F3BFB5209E1C2B0C763E>

Bacon, D. R., Stewart, K. A., & Anderson, E. S. (2001). Methods of Assigning Players to Teams: A review and novel approach. *Simulation & Gaming*, 32(1), 6-17.

<https://doi.org/10.1177/104687810103200102>

Baik, C. (2018, March). The international student experience in Australian higher education: Ongoing challenges and emerging issues. In *Higher Education Forum* (No. 15, pp. 91-103). Research Institute for Higher Education, Hiroshima University.

Baker, S., Kim, H., Marangell, S., Baik, C., Arkoudis, S., Croucher, G., & Laffernis, F. (2022). *Engaging 'diverse' students: An audit of strategies to foster intercultural engagement in Australian public universities*. https://melbourne-cshe.unimelb.edu.au/_data/assets/pdf_file/0004/4143721/diversity-and-inclusion-audit-report-June-2022.pdf

Barlow, F. K., Louis, W. R., & Terry, D. J. (2010). Minority report: Social identity, cognitions of rejection and intergroup anxiety predicting prejudice from one racially marginalized group towards another. *European Journal of Social Psychology*, 40(5), 805-818.

Beelen, J., & Jones, E. (2015). Redefining internationalization at home. In *The European higher education area* (pp. 59-72). Springer, Cham.

Berrenberg, J. L., Finlay, K. A., Stephan, W. G., & Stephan, C. (2002). Prejudice toward people with cancer or AIDS: Applying the Integrated Threat Model. *Journal of Applied Biobehavioral Research*, 7(2), 75-86.

<https://doi.org/https://doi.org/10.1111/j.1751-9861.2002.tb00078.x>

- Bettencourt, L., Dixon, J., & Castro, P. (2019). Understanding how and why spatial segregation endures: A systematic review of recent research on intergroup relations at a micro-ecological scale. *Social Psychological Bulletin*, 14(2).
- Blair, I. V., Park, B., & Bachelor, J. (2003). Understanding intergroup anxiety: Are some people more anxious than others? *Group Processes & Intergroup Relations*, 6(2), 151-169. <https://doi.org/10.1177/1368430203006002002>
- Blascovich, J., Mendes, W. B., Hunter, S. B., Lickel, B., & Kowai-Bell, N. (2001). Perceiver threat in social interactions with stigmatized others. *Journal of Personality and Social Psychology*, 80(2), 253-267. <https://doi.org/10.1037/0022-3514.80.2.253>
- Bonner, A., & Tolhurst, G. (2002). Insider-outsider perspectives of participant observation. *Nurse Res*, 9(4), 7-19. <https://doi.org/10.7748/nr2002.07.9.4.7.c6194>
- Bowman, N. A. (2010a). College diversity experiences and cognitive development: A meta-analysis. *Review of Educational Research*, 80(1), 4-33.
- Bowman, N. A. (2010b). Disequilibrium and resolution: The nonlinear effects of diversity courses on well-being and orientations toward diversity. In *The Review of Higher Education* (Vol. 33, pp. 543-568): Johns Hopkins University Press.
- Bowman, N. A. (2011). Promoting participation in a diverse democracy: A meta-analysis of college diversity experiences and civic engagement. *Review of Educational Research*, 81(1), 29-68.
- Bowman, N. A., & Brandenberger, J. W. (2012). Experiencing the unexpected: Toward a model of college diversity experiences and attitude change. *Review of Higher Education*, 35(2), 179-205.
- Bowman, N. A., & Park, J. J. (2014). Interracial contact on college campuses: Comparing and contrasting predictors of cross-racial interaction and interracial friendship. *The*

Journal of Higher Education, 85(5), 660-690.

<https://doi.org/10.1080/00221546.2014.11777344>

- Bradford, L., Allen, M., & Beisser, K. (1998). An evaluation and meta-analysis of intercultural communication competence research.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Breen, L. (2007). The researcher in the middle?: Negotiating the insider/outsider dichotomy. *ECU Publications*, 19.
- Breen, M. (2012). Privileged migration: American undergraduates, study abroad, academic tourism. *Critical Arts*, 26(1), 82–102.
- Bromgard, G., & Stephan, W. G. (2006). Responses to the stigmatized: disjunctions in affect, cognitions, and behavior. *Journal of Applied Social Psychology*, 36(10), 2436-2448. <https://doi.org/https://doi.org/10.1111/j.0021-9029.2006.00111.x>
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. *Advances in experimental social psychology*, 37(37), 255-343.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1), 97-113. <https://doi.org/10.1177/1468794106058877>
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Byram, M. (2021). *Teaching and Assessing Intercultural Communicative Competence: Revisited*. Multilingual Matters. <https://doi.org/doi:10.21832/9781800410251>
- Burdett, J. (2014). Students achieving intercultural competence through group work: Realised or idealised? *Journal of International Education in Business*, 7(1), 14-30.
- Butz, D. A., & Plant, E. A. (2006). Perceiving outgroup members as unresponsive: Implications for approach-related emotions, intentions, and behavior. *Journal of Personality and social Psychology*, 91(6), 1066.

- Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Multilingual Matters Ltd.
- Byrne, B. M. (2010). Structural equation modeling with AMOS: Basic concepts, applications, and programming. New York: Routledge.
- Bücker, J., Furrer, O., & Peeters Weem, T. (2016). Robustness and cross-cultural equivalence of the Cultural Intelligence Scale (CQS). *Journal of Global Mobility: The Home of Expatriate Management Research*, 4(3), 300-325. <https://doi.org/10.1108/JGM-05-2016-0022>
- Carroll, J., & Li, R. (2008). Assessed group work in culturally diverse groups: Is normative guidance useful in addressing students' worries about grades. *Using Informal and Formal Curricula to Improve Interaction between International and Home Students*, Oxford Brookes University, Oxford, UK.
- Cacioppo, J. T., Petty, R. E., Feinstein, J. A., & Jarvis, W. B. G. (1996). Dispositional differences in cognitive motivation: The life and times of individuals varying in need for cognition. *Psychological Bulletin*, 119(2), 197-253. <https://doi.org/10.1037/0033-2909.119.2.197>
- Chang, M. J. (2001). The positive educational effects of racial diversity on campus. In G. Orfield & M. Kurlaender (Eds.), *Diversity Challenged: Evidence on the Impact of Affirmative Action* (pp. 175-186). Educational Resources Information Centre (ERIC).
- Chang, M. J. (2002). Racial dynamics on campus what student organizations can tell us. *About Campus*, 7(1), 2-8. <https://doi.org/10.1177/108648220200700102>
- Chang, M. J., Astin, A. W., & Kim, D. (2004). Cross-racial Interaction among Undergraduates: Some Consequences, Causes, and Patterns. *Research in Higher Education*, 45(5), 529-553.

- Chen, G.M., & Starosta, W. J. (1996). Intercultural Communication Competence: A Synthesis. *Annals of the International Communication Association*, 19(1), 353-383.
<https://doi.org/10.1080/23808985.1996.11678935>
- Chen, G.M., & Starosta, W. J. (1998). A review of the concept of intercultural awareness. *Human Communication*, 2, 27-54.
- Chédru, M., & Delhoume, C. (2023). How does studying abroad affect engineering students' intercultural competence: A longitudinal case study. *European Journal of Engineering Education*, 48(3), 375-390.
<https://doi.org/10.1080/03043797.2023.2171853>
- City of Melbourne. (n.d.). *Community Profile*. <https://profile.id.com.au/melbourne/birthplace>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates, Publishers.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Coleman, J. A. (2013). Researching whole people and whole lives. *Social and cultural aspects of language learning in study abroad*, 37, 17-44.
- Coleman, J. A. (2015). Social circles during residence abroad: What students do, and who with. *Social interaction, identity and language learning during residence abroad*, 4, 33-52.
- Cotton, D. R. E., George, R., & Joyner, M. (2013). Interaction and influence in culturally mixed groups. *Innovations in Education and Teaching International*, 50(3), 272-283.
<https://doi.org/10.1080/14703297.2012.760773>
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative Research Designs: Selection and Implementation. *The Counseling Psychologist*, 35(2), 236-264.
<https://doi.org/10.1177/0011000006287390>

- Creswell, J.W., & Plano Clark, V.L. (2017). Designing and conducting mixed methods research. Sage Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). Designing and Conducting Mixed Methods Research (3rd ed.). Thousand Oaks, CA: SAGE.
- Crisp, R. J., & Turner, R. N. (2011). *Cognitive adaptation to the experience of social and cultural diversity*. American Psychological Association. doi:10.1037/a0021840.
- Cruickshank, K., Chen, H., & Warren, S. (2012). Increasing international and domestic student interaction through group work: A case study from the humanities. *Higher Education Research & Development*, 31(6), 797-810.
- de Wit, H. (2011). Internationalization misconceptions. *International Higher Education*, 64.
- de Wit, H. (2020). Internationalization of higher education. *Journal of International Students*, 10, i-iv. <https://doi.org/10.32674/jis.v10i1.1893>
- de Wit, H., & Altbach, P. G. (2021). Internationalization in higher education: Global trends and recommendations for its future. In *Higher Education in the Next Decade* (pp. 303-325). Brill.
- de Wit, H., & Jones, E. (2018). Inclusive Internationalization: Improving Access and Equity. *International Higher Education*, 94(0). <https://doi.org/10.6017/ihe.2018.0.10561>
- de Wit, H., & Leask, B. (2017). Global: Internationalization, the curriculum, and the disciplines: International higher education, Special Issue 2015, Number 83. In *Understanding higher education internationalization* (pp. 345-347). Brill.
- 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. <https://doi.org/10.1177/1028315306287002>
- Deardorff, D. K. (2009). Implementing intercultural competence assessment. *The SAGE handbook of intercultural competence(s 2)*, 52.

- Deardorff, D. K. (2020). Intercultural competencies and the global citizen. In *The International Encyclopedia of Higher Education Systems and Institutions* (pp. 1804-1807). Springer.
- Denson, N., & Bowman, N. (2013). University diversity and preparation for a global society: The role of diversity in shaping intergroup attitudes and civic outcomes. *Studies in Higher Education*, 38(4), 555-570. <https://doi.org/10.1080/03075079.2011.584971>
- Denson, N., Bowman, N. A., & Park, J. J. (2017). Preparing students for a diverse, deliberative democracy: College diversity experiences and informed citizenship after college. *Teachers College Record*, 119(8), 1-41. <https://doi.org/10.1177/016146811711900805>
- Denson, N., & Chang, M. J. (2009). Racial diversity matters: The impact of diversity-related student engagement and institutional context. *American Educational Research Journal*, 46(2), 322-353.
- Denson, N., & Zhang, S. (2010). The impact of student experiences with diversity on developing graduate attributes. *Studies in Higher Education*, 35(5), 529-543. <https://doi.org/10.1080/03075070903222658>
- Department of Education. (2023). *International Student Data – full year data*. <https://www.education.gov.au/international-education-data-and-research/resources/international-student-data-full-year-data-based-data-finalised-december-2022>
- Department of Home Affairs. (2024). *Multicultural Framework Review*. <https://www.homeaffairs.gov.au/about-us/our-portfolios/multicultural-framework-review/about-the-multicultural-framework-review>.
- Dervin, F. (2016). *Interculturality in education: A theoretical and methodological toolbox*. Springer.

- Dervin, F., & Liddicoat, A. J. (2013). *Linguistics for intercultural education*. John Benjamins Publishing Company.
- Dietz, G. (2018). Interculturality. In *The International Encyclopedia of Anthropology*, H. Callan (Ed.), 1-19. <https://doi.org/10.1002/9781118924396.wbiea1629>
- Diversity Council Australia. (2020). *Cultural diversity definition*. Diversity Council Australia. <https://www.dca.org.au/resources/cultural-diversity-religion/culture-and-religion-overview>
- Dunne, C. (2009). Host Students' Perspectives of intercultural contact in an Irish university. *Journal of Studies in International Education*, 13(2), 222-239. <https://doi.org/10.1177/1028315308329787>
- Duronto, P. M., Nishida, T., & Nakayama, S.-i. (2005). Uncertainty, anxiety, and avoidance in communication with strangers. *International Journal of Intercultural Relations*, 29(5), 549-560. <https://doi.org/https://doi.org/10.1016/j.ijintrel.2005.08.003>
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford University Press.
- Eisenschlas, S., & Trevaskes, S. (2007). Developing intercultural communication skills through intergroup interaction. *Intercultural Education*, 18(5), 413-425. <https://doi.org/10.1080/14675980701685271>
- Engberg, M. E., Davidson, L. M., Manderino, M., & Jourian, T. J. (2016). Examining the relationship between intercultural engagement and undergraduate students' global perspective. *Multicultural Education Review*, 8(4), 253-274. <https://doi.org/10.1080/2005615X.2016.1237417>
- Engberg, M. E., & Mayhew, M. J. (2007). The influence of first-year "success" courses on student learning and democratic outcomes. *Journal of College Student Development*, 48(3), 241-258.

- England, K. V. L (1994). Getting personal: Reflexivity, positionality, and feminist research. *The Professional Geographer*, 46(1), 80–89.
- Engle, R. L., & Crowne, K. A. (2014). The impact of international experience on cultural intelligence: An application of contact theory in a structured short-term programme. *Human Resource Development International*, 17(1), 30-46.
- Erez, M., Lisak, A., Harush, R., Glikson, E., Nouri, R., & Shokef, E. (2013). Going global: Developing management students' cultural intelligence and global identity in culturally diverse virtual teams. *Academy of Management Learning and Education*, 12, 330-355. <https://doi.org/10.5465/amle.2012.0200>
- Erikson, E. (1946). Ego development and historical change. *Psychoanalytic Study of the Child*, 2, 359-396.
- Erikson, E. (1956). The problem of ego identity. *Journal of American Psychoanalytic Association*, 4, 56-121.
- Etherington, S. J. (2014). But science is international! Finding time and space to encourage intercultural learning in a content-driven physiology unit. *Advances in Physiology Education*, 38(2), 145-154.
- Fritz, W., Graf, A., Hentze, J., Möllenberg, A., & Chen, G.-M. (2005). An examination of Chen and Starosta's model of intercultural sensitivity in Germany and United States.
- Gareis, E. (2012). Intercultural Friendship: Effects of home and host region. *Journal of International and Intercultural Communication*, 5(4), 309-328. <https://doi.org/10.1080/17513057.2012.691525>
- Gareis, E., Goldman, J., & Merkin, R. (2019). Promoting intercultural friendship among college students. *Journal of International and Intercultural Communication*, 12(1), 1-22. <https://doi.org/10.1080/17513057.2018.1502339>

- George, D., & Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference, 11.0 Update*. Allyn and Bacon.
- George Mwangi, C. A., & Yao, C. W. (2020). US Higher Education Internationalization Through an Equity-Driven Lens. In L. W. Perna (Ed.), *Higher Education: Handbook of Theory and Research: Volume 36* (pp. 1-62). Springer International Publishing.
https://doi.org/10.1007/978-3-030-43030-6_11-1
- Gerrish, K. (1997). Being a 'marginal native': Dilemmas of the participant observer. *Nurse Researcher*, 5(1), 25-34.
- Godley, J. (2008). Preference or propinquity? The relative contribution of selection and opportunity to friendship homophily in college. *Connections*, 1(1), 65–80.
- Goodman, P. S., & Leyden, D. P. (1991). Familiarity and Group Productivity. *Journal of Applied Psychology*, 76, 578-586.
- Gökten, Ö., & Emil, S. (2019). Exploring the effect of Erasmus program on cultural intelligence of university students. *Hacettepe University Journal of Education*, 34(3), 769-785. doi: 10.16986/HUJE.2018045609
- Gregersen-Hermans, J. (2017). Intercultural competence development in higher education. In *Intercultural competence in higher education* (pp. 67-82). Routledge.
- Grieve, P. G., & Hogg, M. A. (1999). Subjective uncertainty and intergroup discrimination in the minimal group situation. *Personality and Social Psychology Bulletin*, 25(8), 926-940. <https://doi.org/10.1177/01461672992511002>
- Gudykunst, W. B. (2005). An Anxiety/Uncertainty Management (AUM) Theory of strangers' intercultural adjustment. In *Theorizing about intercultural communication*. (pp. 419-457). Sage Publications Ltd.

- Gudykunst, W. B., & Shapiro, R. B. (1996). Communication in everyday interpersonal and intergroup encounters. *International Journal of Intercultural Relations*, 20(1), 19-45.
[https://doi.org/https://doi.org/10.1016/0147-1767\(96\)00037-5](https://doi.org/https://doi.org/10.1016/0147-1767(96)00037-5)
- Gurin, P. (1999). Expert report of Patricia Gurin. *Michigan Journal of Race and Law*, 5(1), 363-425.
- Gurin, P., Dey, E., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330-367.
<https://doi.org/10.17763/haer.72.3.01151786u134n051>
- Gurin, P., Nagda, B. A., & Lopez, G. E. (2004). The benefits of diversity in education for democratic citizenship. *Journal of Social Issues*, 60(1), 17-34.
<https://doi.org/10.1111/j.0022-4537.2004.00097.x>
- Hains-Wesson, R., & Ji, K. (2020). Students' perceptions of an interdisciplinary global study tour: Uncovering inexplicit employability skills. *Higher Education Research & Development*, 39(4), 657-671.
- Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2010) Multivariate data analysis (7th ed.). Upper Saddle River, New Jersey: Pearson Educational International.
- Hall, S. (1990). Cultural identity and diaspora. In J. Rutherford (Ed.), *Identity: Community, culture, difference* (pp., 222-237). London, England: Lawrence & Wishart.
- 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. <https://doi.org/https://doi.org/10.1016/j.ijintrel.2007.10.006>
- Hammer, J., & Swaffar, J. (2012). Assessing strategic cultural competency: Holistic approaches to student learning through media. *The Modern Language Journal*, 96(2), 209-233. [https://doi.org/DOI: 10.1111/j.1540-4781.2012.01335.x](https://doi.org/DOI:10.1111/j.1540-4781.2012.01335.x)

- Hardon A., Hodgkin C. & Fresle D. (2004) *How to Investigate the Use of Medicines by Consumers*. World Health Organization and University of Amsterdam.
<http://apps.who.int/medicinedocs/en/d/Js6169e/>
- Hewitt-Taylor, J. (2002). Insider knowledge: Issues in insider research. *Nursing Standard*, 16(46), 33-35.
- Lewin, R. (2009). Introduction: The quest for global citizenship through study abroad. In R. Lewin's (Ed.), *The handbook of practice and research in study abroad: Higher education and the quest for global citizenship* (pp. xiii–xxii). New York: Routledge.
- Harrison, N. (2015). Practice, problems and power in 'internationalisation at home': Critical reflections on recent research evidence. *Teaching in Higher Education*, 20(4), 412-430.
- Harrowing, J., Gregory, D., O'sullivan, P., Lee, B., & Doolittle, L. (2012). A critical analysis of undergraduate students' cultural immersion experiences. *International Nursing Review*, 59(4), 494-501.
- Herfst, S. L., van Oudenhoven, J. P., & Timmerman, M. E. (2008). Intercultural effectiveness training in three Western immigrant countries: A cross-cultural evaluation of critical incidents. *International Journal of Intercultural Relations*, 32(1), 67-80.
<https://doi.org/https://doi.org/10.1016/j.ijintrel.2007.10.001>
- Hewstone, M., & Swart, H. (2011). Fifty-odd years of inter-group contact: From hypothesis to integrated theory. *Br J Soc Psychol*, 50(3), 374-386. <https://doi.org/10.1111/j.2044-8309.2011.02047.x>
- Hills, S., & Thom, V. (2005). Crossing a multicultural divide: Teaching business strategy to students from culturally mixed backgrounds. *Journal of Studies in International Education*, 9(4), 316 - 336.

- Hinds, P. J., Carley, K. M., Krackhardt, D., & Wholey, D. (2000). Choosing work group members: Balancing similarity, competence, and familiarity. *Organizational Behavior and Human Decision Processes*, 81(2), 226-251.
<https://doi.org/https://doi.org/10.1006/obhd.1999.2875>
- Hofhuis, J., Jongerling, J., van der Zee, K. I., & Jansz, J. (2020). Validation of the Multicultural Personality Questionnaire Short Form (MPQ-SF) for use in the context of international education. *PLoS ONE*, 15.
- Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A Motivational Theory of Social Identity Processes. *European Review of Social Psychology*, 11(1), 223-255. <https://doi.org/10.1080/14792772043000040>
- Holliday, A. (1999). Small cultures. *Applied Linguistics*, 20(2), 237-264.
<https://doi.org/10.1093/applin/20.2.237>
- Holloway, I., & Todres, L. (2003). The status of method: Flexibility, consistency and coherence. *Qualitative Research*, 3(3), 345-357.
<https://doi.org/10.1177/1468794103033004>
- Hurtado, S. (2001). Linking diversity and educational purpose: How diversity affects the classroom environment and student development.
- Hurtado, S. (2007). Linking diversity with the educational and civic missions of higher education. *The Review of Higher Education*, 30(2), 185-196.
- Hurtado, S., Engberg, M. E., Ponjuan, L., & Landreman, L. (2002). Students' precollege preparation for participation in a diverse democracy. *Research in Higher Education*, 43(2), 163-186. <https://doi.org/10.1023/A:1014467607253>
- Héliot, Y., Mittelmeier, J., & Rienties, B. (2020). Developing learning relationships in intercultural and multi-disciplinary environments: a mixed method investigation of

- management students' experiences. *Studies in Higher Education*, 45(11), 2356-2370.
<https://doi.org/10.1080/03075079.2019.1610865>
- Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An Integrative Model. *Personality and Social Psychology Bulletin*, 19, 700 - 710.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
<https://doi.org/10.3102/0013189x033007014>
- Jon, J.-E. (2013). Realizing internationalization at home in Korean higher education: Promoting domestic students' interaction with international students and intercultural competence. *Journal of Studies in International Education*, 17(4), 455-470.
- Jones, E. (2017). Problematising and reimagining the notion of 'international student experience'. *Studies in Higher Education*, 42, 933-943.
<https://doi.org/10.1080/03075079.2017.1293880>
- Karayan, S., & Gathercoal, P. (2005). Assessing service-learning in teacher education. *Teacher Education Quarterly*, 32(3), 79–92. <http://www.jstor.org/stable/23478676>
- Kağnici, D. (2011). Teaching multicultural counseling: An example from a Turkish counseling undergraduate program. *Eurasian Journal of Educational Research*. 11. 111-128.
- Keen, C., & Hall, K. (2009). Engaging with difference Matters: Longitudinal Student Outcomes of Co-Curricular Service-Learning Programs. *Journal of Higher Education*, 80(1), 59-79.
- Kimmel, K., & Volet, S. (2010). University Students' Perceptions of and attitudes towards culturally diverse group work: Does context matter? *Journal of Studies in International Education*, 16(2), 157-181. <https://doi.org/10.1177/1028315310373833>

- Kimmel, K., & Volet, S. (2012). University students' perceptions of and attitudes towards culturally diverse group work: Does context matter? *Journal of Studies in International Education*, 16(2), 157-181. <https://doi.org/10.1177/1028315310373833>
- Knight, J. (2008). *Higher education in turmoil: The changing world of internationalization*. Brill.
- Knight, J. (2011). Five myths about internationalization. *International Higher Education*, 0(62). <https://doi.org/10.6017/ihe.2011.62.8532>
- Knight, J. (2013). The changing landscape of higher education internationalisation – for better or worse? *Perspectives: Policy and Practice in Higher Education*, 17(3), 84-90. <https://doi.org/10.1080/13603108.2012.753957>
- Knight, J., & de Wit, H. (2018). Internationalization of Higher Education: Past and Future. *International Higher Education*, 95, 2-4.
- Ko, B., Boswell, B., & Yoon, S. (2015). Developing intercultural competence through global link experiences in physical education. *Physical Education and Sport Pedagogy*, 20(4), 366-380. <https://doi.org/10.1080/17408989.2013.837441>
- Kolb, D. (1984). Experiential learning: Experience as the source of learning and development.
- Kudo, K., Volet, S., & Whitsed, C. (2017). Intercultural relationship development at university: A systematic literature review from an ecological and person-in-context perspective. *Educational Research Review*, 20, 99-116. <https://doi.org/https://doi.org/10.1016/j.edurev.2017.01.001>
- Lane, H. C. (2012). Intercultural learning. In *Encyclopedia of the Sciences of Learning* (pp. 1618-1620). Springer.

- Lantz-Deaton, C. (2017). Internationalisation and the development of students' intercultural competence. *Teaching in Higher Education*, 22(5), 532-550.
<https://doi.org/10.1080/13562517.2016.1273209>
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. Sage Publications.
- Lazarsfeld, P. F., & Merton, R. K. (1954). Friendship as a social process: A substantive and methodological analysis. In M. Berger, T. Abel, & C. H. Page (Eds.), *Freedom and control in modern society*. New York: Van Nostrand.
- Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. *Journal of Studies in International Education*, 13(2), 205-221. <https://doi.org/10.1177/1028315308329786>
- Leask, B. (2015). *Internationalizing the curriculum*. Routledge.
- Leask, B., & Carroll, J. (2011). Moving beyond 'wishing and hoping': Internationalisation and student experiences of inclusion and engagement. *Higher Education Research & Development*, 30(5), 647-659. <https://doi.org/10.1080/07294360.2011.598454>
- Lewin, R. (2009). Introduction: The quest for global citizenship through study abroad. In R. Lewin's (Ed.), *The handbook of practice and research in study abroad: Higher education and the quest for global citizenship* (pp. xiii-xxii). New York: Routledge.
- Ledwith, S., and A. Lee. 1998. Multiculturalism, student group work and assessment. Report of a study carried out in the School of Business with the Equal Opportunities Action Group. Oxford: Brookes University.
- Lee, P.-W. (2006). Bridging cultures: Understanding the construction of relational identity in intercultural friendship. *Journal of Intercultural Communication Research*, 35(1), 3-22.

- Lemmer, G., & Wagner, U. (2015). Can we really reduce ethnic prejudice outside the lab? A meta-analysis of direct and indirect contact interventions. *European Journal of Social Psychology*, 45(2), 152-168. <https://doi.org/10.1002/ejsp.2079>
- Liang, Y., & Schartner, A. (2022). Culturally mixed group work and the development of students' intercultural competence. *Journal of Studies in International Education*, 26(1), 44-60. <https://doi.org/10.1177/1028315320963507>
- Liddicoat, A. J. (2015). Interculturality. In *The International Encyclopedia of Language and Social Interaction* (pp. 1-5).
<https://doi.org/https://doi.org/10.1002/9781118611463.wbielsi048>
- Lincoln, J. R., & Miller, J. (1979). Work and friendship ties in organizations: A comparative analysis of relational networks. *Administrative Science Quarterly*, 24, 181–199.
- Littleford, L. N., Wright, M. O. D., & Sayoc-Parial, M. (2005). White students' intergroup anxiety during same-race and interracial interactions: A multimethod approach. *Basic and Applied Social Psychology*, 27(1), 85-94.
https://doi.org/10.1207/s15324834basp2701_9
- Locks, A. M., Hurtado, S., Bowman, N. A., & Oseguera, L. (2008). Extending notions of campus climate and diversity to students' transition to college. *The Review of Higher Education*, 31(3), 257-285.
- Lomer, S., Mittelmeier, J., & Carmichael-Murphy, P. (2021). Cash cows or pedagogic partners? Mapping pedagogic practices for and with international students. In: Society for Research in Higher Education London.
- Lolliot, S., Fell, B., Schmid, K., Wölfer, R., Swart, H., Voci, A., . . . Hewstone, M. (2015). Chapter 23 - Measures of Intergroup Contact. In G. J. Boyle, D. H. Saklofske, & G. Matthews (Eds.), *Measures of Personality and Social Psychological Constructs* (pp.

- 652-683). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-386915-9.00023-1>
- Lopez, G. E. (2004). Interethnic contact, curriculum, and attitudes in the first year of college. *Journal of Social Issues*, 60(1), 75-94. <https://doi.org/10.1111/j.0022-4537.2004.00100.x>
- MacInnis, C. C., & Page-Gould, E. (2015). How can intergroup interaction be bad if intergroup contact is good? Exploring and reconciling an apparent paradox in the science of intergroup relations. *Perspectives on Psychological Science*, 10(3), 307-327. <https://doi.org/10.1177/1745691614568482>
- Mak, A. S., Brown, P. M., & Wadey, D. (2014). Contact and attitudes toward international students in Australia: Intergroup anxiety and intercultural communication emotions as mediators. *Journal of Cross-Cultural Psychology*, 45(3), 491-504. <https://doi.org/10.1177/0022022113509883>
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.
- Marginson, S., Nyland, C., Sawir, E., & Forbes-Mewett, H. (2010). *International student security*. Cambridge University Press.
- Marginson, S., & Sawir, E. (2011). *Ideas for intercultural education*. <https://doi.org/10.1057/9780230339736>
- Maringe, F., & Woodfield, S. (2013). Contemporary issues on the internationalisation of higher education: Critical and comparative perspectives. *Compare: A Journal of Comparative and International Education*, 43(1), 1-8. <https://doi.org/10.1080/03057925.2013.746545>
- Marlina, R. (2009). "I don't talk or I decide not to talk? Is it my culture?"—International students' experiences of tutorial participation. *International Journal of Educational Research*, 48(4), 235-244. <https://doi.org/https://doi.org/10.1016/j.ijer.2009.11.001>

- Martinez-Mier, E., Soto-Rojas, A., Stelzner, S., Lorant, D., Riner, M., & Yoder, K. (2011). An international, multidisciplinary, service-learning program: An option in the dental school curriculum [Original Research Paper]. *Education for Health*, 24(1), 259-259.
- Martin, J. N., Trego, A. B., & Nakayama, T. K. (2010). College students' racial attitudes and friendship diversity. *Howard Journal of Communications*, 21(2), 97-118.
- Matsumoto, D., & Hwang, H. C. (2013). Assessing cross-cultural competence: A review of available tests. *Journal of Cross-Cultural Psychology*, 44(6), 849-873.
<https://doi.org/10.1177/0022022113492891>
- Matsumoto, D., LeRoux, J., Ratzlaff, C., Tatani, H., Uchida, H., Kim, C., & Araki, S. (2001). Development and validation of a measure of intercultural adjustment potential in Japanese sojourners: The Intercultural Adjustment Potential Scale (ICAPS). *International Journal of Intercultural Relations*, 25(5), 483-510.
[https://doi.org/10.1016/S0147-1767\(01\)00019-0](https://doi.org/10.1016/S0147-1767(01)00019-0)
- Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A., Wolniak, G. C., Pascarella, E. T., & Terenzini, P. T. (2016). *How college affects students: 21st century evidence that higher education works*. John Wiley & Sons, Incorporated.
- McKenna, K. Y. A., & Bargh, J. A. (2000). Plan 9 From Cyberspace: The implications of the internet for personality and social psychology. *Personality and Social Psychology Review*, 4(1), 57-75. https://doi.org/10.1207/s15327957pspr0401_6
- McKenzie, L., & Baldassar, L. (2017). Missing friendships: understanding the absent relationships of local and international students at an Australian university. *Higher Education*, 74(4), 701-715. <https://doi.org/10.1007/s10734-016-0073-1>
- Meleady, R., Seger, C. R., & Vermue, M. (2020). Evidence of a dynamic association between intergroup contact and intercultural competence. *Group Processes & Intergroup Relations*, 24(8), 1427-1447. <https://doi.org/10.1177/1368430220940400>

- Milem, J. F., & Umbach, P. D. (2003). The influence of precollege factors on students' predispositions regarding diversity activities in college. *Journal of College Student Development, 44*(5), 611-624.
- Mitic, R. R. (2020). Global Learning for local serving: Establishing the links between study abroad and post-college volunteering. *Research in Higher Education, 61*(5), 603-627. <https://doi.org/https://doi.org/10.1007/s11162-020-09604-w>
- Montgomery, C. (2009). A decade of internationalisation: Has it influenced students' views of cross-cultural group work at university? *Journal of Studies in International Education, 13*(2), 256-270. <https://doi.org/10.1177/1028315308329790>
- Moore, P., & Hampton, G. (2015). 'It's a bit of a generalisation, but ...': Participant perspectives on intercultural group assessment in higher education. *Assessment & Evaluation in Higher Education, 40*(3), 390-406. <https://doi.org/10.1080/02602938.2014.919437>
- Mukerjee, S. (2014). Agility: A crucial capability for universities in times of disruptive change and innovation. *Australian Universities' Review, 56*(1), 56-60. <https://www.learntechlib.org/p/154480/>.
- Muthuswamy, N., Levine, T. R., & Gazel, J. (2006). Interaction-based diversity initiative outcomes: An evaluation of an initiative aimed at bridging the racial divide on a college campus. *Communication Education, 55*(1), 105-121.
- Nelson Laird, T. F. (2005). College students' experiences with diversity and their effects on academic self-confidence, social agency, and disposition toward critical thinking. *Research in Higher Education, 46*(4), 365-387. <https://doi.org/10.1007/s11162-005-2966-1>

- Nesdale, D., & Todd, P. (2000). Effect of contact on intercultural acceptance: A field study. *International Journal of Intercultural Relations*, 24(3), 341-360.
[https://doi.org/https://doi.org/10.1016/S0147-1767\(00\)00005-5](https://doi.org/https://doi.org/10.1016/S0147-1767(00)00005-5)
- Norton, A., Cherastidtham, I., & Mackey, W. (2018). *Mapping Australian higher education 2018*. Grattan Institute.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1609406917733847. <https://doi.org/10.1177/1609406917733847>
- Nussbaum, M. (1997). *Cultivating humanity: a classical defence of reform in liberal education*. Cambridge MS: Harvard University Press.
- Nussbaum, M. C. (2010). *Not for profit: why democracy needs the humanities* (Vol. 2). Princeton: Princeton University Press.
- OECD. (2017). Definitions and classifications of the OECD international education statistics. In *OECD Handbook for Internationally Comparative Education Statistics*.
- OECD. (2019). *Education at a Glance 2019*.
<https://doi.org/doi:https://doi.org/10.1787/f8d7880d-en>
- Olson, R., Bidewell, J., Dune, T., & Lessey, N. (2016). Developing cultural competence through self-reflection in interprofessional education: Findings from an Australian university. *Journal of Interprofessional Care*, 30(3), 347-354.
<https://doi.org/10.3109/13561820.2016.1144583>
- Ott, D. L., & Michailova, S. (2018). Cultural intelligence: A review and new research Avenues. *International Journal of Management Reviews*, 20(1), 99-119.
<https://doi.org/10.1111/ijmr.12118>
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group

- friendship. *Journal of Personality and Social Psychology*, 95(5), 1080-1094.
<https://doi.org/10.1037/0022-3514.95.5.1080>
- Paolini, S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgments of Catholics and Protestants in Northern Ireland: The mediating role of an anxiety-reduction mechanism. *Personality & Social Psychology Bulletin*, 30, 770-786. <https://doi.org/10.1177/0146167203262848>
- Paolini, S., Hewstone, M., Voci, A., Harwood, J., & Cairns, E. (2006). Intergroup contact and the promotion of intergroup harmony: The influence of intergroup emotions. In *Social Identities* (pp. 209-238). Psychology Press.
- Paolini, S., Wright, S. C., Dys-Steenbergen, O., & Favara, I. (2016). Self-expansion and intergroup contact: Expectancies and motives to self-expand lead to greater interest in outgroup contact and more positive intergroup relations. *Journal of Social Issues*, 72(3), 450-471. <https://doi.org/https://doi.org/10.1111/josi.12176>
- Parsons, R. L. (2008). *The effects of the internationalisation of universities on domestic students*. [Griffith University]. <https://doi.org/10.25904/1912/825>
- Parsons, R. L. (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., Martin, G. L., Hanson, J. M., Trolan, T. L., Gillig, B., & Blaich, C. (2014). Effects of diversity experiences on critical thinking skills over 4 years of college. *Journal of College Student Development*, 55(1), 86-92.
- Pascarella, E. T., Palmer, B., Moye, M., & Pierson, C. T. (2001). Do diversity experiences influence the development of critical thinking? *Journal of College Student Development*, 42(3), 257.

- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research. Volume 2*. ERIC.
- Peacock, N., & Harrison, N. (2009). "It's so much easier to go with what's easy": "Mindfulness" and the discourse between home and international students in the United Kingdom. *Journal of Studies in International Education*, 13(4), 487-508.
- Pettigrew, T. F. (2008). Future directions for intergroup contact theory and research. *International Journal of Intercultural Relations*, 32(3), 187-199.
<https://doi.org/https://doi.org/10.1016/j.ijintrel.2007.12.002>
- Pettigrew, T. F., & Tropp, L. R. (2006). A Meta-analytic test of Intergroup Contact Theory. 90(5), 751-783.
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology*, 38(6), 922-934. <https://doi.org/10.1002/ejsp.504>
- Pettigrew, T. F., & Tropp, L. R. (2011). *When groups meet: The dynamics of intergroup contact*. Psychology Press.
- Piaget, J. (1971). The theory of stages in cognitive development. In D. R. F. Green, M.P.; Flamer, G.B.; (Ed.), *Measurement and Piaget* (pp. 1-111). New York: McGraw-Hill.
- Piaget, J. (1985). *The Equilibration of Cognitive Structures: The Central Problem of Intellectual Development*. Chicago: University of Chicago Press.
- Piller, I. (2016). *Linguistic diversity and social justice: An introduction to applied sociolinguistics*. Oxford University Press.
- Pike, G. R., & Kuh, G. D. (2006). Relationships among structural diversity, informal peer interactions and perceptions of the campus environment. *Review of Higher Education: Journal of the Association for the Study of Higher Education*, 29(4), 425-450.
<https://doi.org/10.1353/rhe.2006.0037>

- Plant, E. A., & Butz, D. A. (2006). The causes and consequences of an avoidance-focus for interracial interactions. *Personality and Social Psychology Bulletin*, 32(6), 833-846.
- Plant, E. A., Butz, D. A., & Tartakovsky, M. (2008). Interethnic interactions: Expectancies, emotions, and behavioral intentions. *Group Processes & Intergroup Relations*, 11(4), 555-574. <https://doi.org/10.1177/1368430208095827>
- Popov, V., Brinkman, D., Biemans, H. J. A., Mulder, M., Kuznetsov, A., & Noroozi, O. (2012). Multicultural student group work in higher education: An explorative case study on challenges as perceived by students. *International Journal of Intercultural Relations*, 36(2), 302-317. <https://doi.org/https://doi.org/10.1016/j.ijintrel.2011.09.004>
- Ramirez R, E. (2016). Impact on Intercultural competence When studying abroad and the moderating role of personality. *Journal of Teaching in International Business*, 27(2/3), 88-105.
- Ramírez, E. (2019). Influence of students' interactions abroad on developing intercultural competence. *Journal of Teaching in International Business*, 30(1), 57-76.
- Reid, R., & Garson, K. (2016). Rethinking multicultural group work as intercultural learning. *Journal of Studies in International Education*, 21(3), 195-212. <https://doi.org/10.1177/1028315316662981>
- Robledo-Ardila, C., Aguilar-Barrientos, S., & Román-Calderón, J. P. (2016). Education-related factors in cultural intelligence development: A Colombian study. *Journal of Teaching in International Business*, 27(1), 41-58. <https://doi.org/10.1080/08975930.2016.1172541>
- Rienties, B., & Tempelaar, D. (2018). Turning Groups Inside Out: A Social Network Perspective. *Journal of the Learning Sciences*, 27, 4, 550-579.

- Roksa, J., Kilgo, C. A., Trolan, T. L., Pascarella, E. T., Blaich, C., & Wise, K. S. (2017). Engaging with diversity: How positive and negative diversity interactions influence students' cognitive outcomes. *The Journal of Higher Education*, 88(3), 297-322.
- Rothman, S., Lipset, S. M., & Nevitte, N. (2003). Does enrollment diversity improve university education? *International Journal of Public Opinion Research*, 15(1), 8-26.
<https://doi.org/10.1093/ijpor/15.1.8>
- Ruble, D. (1994). Development changes in achievement evaluation: Motivational implications of self-other differences. *Child Development*, 65, 1095-1110.
- Rustambekov, E., & Mohan, R. (2017). Cultural immersion trip to Southeast Asia: A study of cross-cultural intelligence. *Journal of Teaching in International Business*, 28(2), 87-103.
- Saenz, V. B., Ngai, H. N., & Hurtado, S. (2007). Factors influencing positive interactions across race for African American, Asian American, Latino, and White College students. *Research in Higher Education*, 48(1), 1-38. <https://doi.org/10.1007/s11162-006-9026-3>
- Schartner, A. (2016). The effect of study abroad on intercultural competence: a longitudinal case study of international postgraduate students at a British university. *Journal of Multilingual and Multicultural Development*, 37(4), 402-418.
<https://doi.org/10.1080/01434632.2015.1073737>
- Sawir, E. (2013). Internationalisation of higher education curriculum: The contribution of international students. *Globalisation, Societies and Education*, 11(3), 359-378.
- Smart, D., Volet, S., & Ang, G. (2000). Fostering social cohesion in universities: Bridging the cultural divide.

- Smith, J. A., McPherson, M. and Smith-Lovin, L. 2014. Social distance in the United States: Sex, race, religion, age, and education homophily among confidants, 1985 to 2004. *American Sociological Review*, 79, 3, 432-456.
- Spencer-Oatey, H., & Franklin, P. (2009). Intercultural interaction: A multidisciplinary approach to intercultural communication. In: Palgrave Macmillan.
- Spencer-Oatey, H., & Franklin, P. (2014). Intercultural interaction. In *The Encyclopedia of Applied Linguistics* (pp. 1-6).
<https://doi.org/https://doi.org/10.1002/9781405198431.wbeal1446>
- Stehlé, J., Charbonnier, F., Picard, T., Cattuto, C. and Barrat, A. 2013. Gender homophily from spatial behavior in a primary school: A sociometric study. *Social Networks*, 35, 4, 604-613.
- Stephan, W. G. (2014). Intergroup anxiety: Theory, research, and practice. *Personality and Social Psychology Review*, 18(3), 239-255.
<https://doi.org/10.1177/1088868314530518>
- Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Ervin, K. S., Jackson, L. A., . . . Renfro, C. L. (2002). The role of threats in the racial attitudes of blacks and whites. *Personality and Social Psychology Bulletin*, 28(9), 1242-1254.
<https://doi.org/10.1177/01461672022812009>
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41(3), 157-175. <https://doi.org/10.1111/j.1540-4560.1985.tb01134.x>
- Strauss, P., U, A., & Young, S. (2011). 'I know the type of people I work well with': Student anxiety in multicultural group projects. *Studies in Higher Education*, 36(7), 815-829.
- Stürmer, S., & Benbow, A. E. F. (2017). Psychological foundations of xenophilia: Understanding and measuring the motivational functions of exploratory cross-cultural

- contact. *Personality and Social Psychology Bulletin*, 43(11), 1487-1502.
<https://doi.org/10.1177/0146167217722555>
- Summers, M., & Volet, S. (2008). Students' attitudes towards culturally mixed groups on international campuses: Impact of participation in diverse and non-diverse groups. *33*(4), 357-370.
- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study in South Africa. *Journal of Personality and Social Psychology*, 101(6), 1221–1238. <https://doi.org/10.1037/a0024450>
- Sweeney, A., Weaven, S., & Herington, C. (2008). Multicultural influences on group learning: A qualitative higher education study. *Assessment & Evaluation in Higher Education*, 33(2), 119-132. <https://doi.org/10.1080/02602930601125665>
- Söderqvist, M. (2002). *Internationalisation and its management at higher-education institutions. Applying conceptual, content and discourse analysis*. Helsinki School of Economics.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks: Sage.
- Terenzini, P. T., Pascarella, E. T., Springer, L., Nora, A., & Palmer, B. (1996). Attitudes toward campus diversity: participation in a racial or cultural awareness workshop. *The Review of Higher Education*, 20, 53 - 68.
- Terzuolo, E. R. (2018). Intercultural development in study abroad: Influence of student and program characteristics. *International Journal of Intercultural Relations*, 65, 86-95.
- Ting-Toomey, S. (1999). *Communicating across cultures*. The Guilford Press, New York, 261.
- Trawalter, S., Adam, E. K., Chase-Lansdale, P. L., & Richeson, J. A. (2012). Concerns about appearing prejudiced get under the skin: Stress responses to interracial contact in the

- moment and across time. *Journal of Experimental Social Psychology*, 48(3), 682-693.
<https://doi.org/https://doi.org/10.1016/j.jesp.2011.12.003>
- Tsang, A. (2022). Examining the relationship between language and cross-cultural encounters: Avenues for promoting intercultural interaction. *Journal of Multilingual and Multicultural Development*, 43(2), 98-110.
<https://doi.org/10.1080/01434632.2020.1725526>
- Turner, R. N., Hewstone, M., Voci, A., & Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology*, 95(4), 843-860. <https://doi.org/10.1037/a0011434>
- Turner, R. N., West, K., & Christie, Z. (2013). Out-group trust, intergroup anxiety, and out-group attitude as mediators of the effect of imagined intergroup contact on intergroup behavioral tendencies. *Journal of Applied Social Psychology*, 43, E196-E205.
- Turner, Y. (2009). "Knowing me, knowing you," Is there nothing we can do?: Pedagogic challenges in using group work to create an intercultural learning space. *Journal of Studies in International Education*, 13(2), 240-255.
<https://doi.org/10.1177/1028315308329789>
- Univeristy A. (2020). *Advancing Melbourne 2030*.
https://about.unimelb.edu.au/_data/assets/pdf_file/0023/132629/Advancing-Melbourne.pdf
- Univeristy A. (2021). *Annual report 2020*.
https://about.unimelb.edu.au/_data/assets/pdf_file/0023/349142/University-of-Melbourne-2020-Annual-Report.pdf

Univeristy A. (2022). *Annual report 2021*.

https://about.unimelb.edu.au/__data/assets/pdf_file/0035/388664/University-of-Melbourne-Annual-Report_2021_final_-2023.pdf

Univeristy A. (2023). *Annual report 2022*.

https://www.annualreport.about.unimelb.edu.au/files/ugd/0ac31a_4d258468697b48f8a432cd7adfd47ab8.pdf

Univeristy A. (2022). *Facts and figures*. <https://about.unimelb.edu.au/facts-and-figures>

Univeristy A. (n.d.). *Melbourne peer mentor program*.

<https://students.unimelb.edu.au/student-life/peer-mentor-program>

Universities Australia. (2022). *2022 Higher Education Facts and Figures*.

https://universitiesaustralia.edu.au/wp-content/uploads/2022/09/220207-HE-Facts-and-Figures-2022_2.0.pdf

University of Adelaide. (2020). *International plan*. <https://www.adelaide.edu.au/global-engagement/ua/media/1287/international-plan.pdf>

Van Der Wende, M. C. (2001). Internationalisation policies: About new trends and contrasting paradigms. *Higher Education Policy*, 14(3), 249-259.

[https://doi.org/10.1016/S0952-8733\(01\)00018-6](https://doi.org/10.1016/S0952-8733(01)00018-6)

van der Zee, K., & van Oudenhoven, J. P. (2013). Culture shock or challenge? The role of personality as a determinant of intercultural competence. *Journal of Cross-Cultural Psychology*, 44(6), 928-940. <https://doi.org/10.1177/0022022113493138>

van der Zee, K., van Oudenhoven, J. P., Ponterotto, J. G., & Fietzer, A. W. (2013).

Multicultural Personality Questionnaire: Development of a short form. *Journal of Personality Assessment*, 95(1), 118-124.

<https://doi.org/10.1080/00223891.2012.718302>

- van der Zee, K. I., & van Oudenhoven, J. P. (2000). The Multicultural Personality Questionnaire: A multidimensional instrument of multicultural effectiveness. *European Journal of Personality*, 14(4), 291-309.
- van der Zee, K. I., & van Oudenhoven, J. P. (2001). The Multicultural Personality Questionnaire: Reliability and validity of self- and other ratings of multicultural effectiveness. *Journal of Research in Personality*, 35(3), 278-288.
<https://doi.org/https://doi.org/10.1006/jrpe.2001.2320>
- van Ryn, M., Hardeman, R., Phelan, S. M., Burgess, D. J., Dovidio, J. F., Herrin, J., . . . Przedworski, J. M. (2015). Medical school experiences associated with change in implicit racial bias among 3547 students: A medical student CHANGES Study Report. *Journal of General Internal Medicine*, 30(12), 1748-1756.
<https://doi.org/10.1007/s11606-015-3447-7>
- Van Zomeren, M., Fischer, A. H., & Spears, R. (2007). Testing the limits of tolerance: How intergroup anxiety amplifies negative and offensive responses to out-group-initiated contact. *Personality and Social Psychology Bulletin*, 33(12), 1686-1699.
<https://doi.org/10.1177/0146167207307485>
- 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.
<https://doi.org/10.1177/1368430203006001011>
- Voci, A., Hewstone, M., Swart, H., & Veneziani, C. A. (2015). Refining the association between intergroup contact and intergroup forgiveness in Northern Ireland: Type of contact, prior conflict experience, and group identification. *Group Processes & Intergroup Relations*, 18(5), 589-608. <https://doi.org/10.1177/1368430215577001>

- Volet, S., & Ang, G. (1998). Culturally mixed groups on international campuses: an Opportunity for Inter-Cultural Learning. *Higher Education Research & Development*, 17, 5-23.
- Volet, S., & Jones, C. (2012). Cultural transitions in Higher Education: Individual adaptation, transformation and engagement. In A. K. Stuart & C. U. Timothy (Eds.), *Transitions Across Schools and Cultures* (Vol. 17, pp. 241-284). Emerald Group Publishing Limited. [https://doi.org/10.1108/S0749-7423\(2012\)0000017012](https://doi.org/10.1108/S0749-7423(2012)0000017012)
- Volet, S. E., & Ang, G. (2012). Culturally mixed groups on international campuses: An opportunity for inter-cultural learning. *Higher Education Research & Development*, 31(1), 21-37. <https://doi.org/10.1080/07294360.2012.642838>
- Weber, H., Schwenzer, M., & Hillmert, S. (2020). Homophily in the formation and development of learning networks among university students. *Network Science*, 8(4), 469–491. doi:10.1017/nws.2020.10
- Weed Harnisch, A. S. (2014). Improving cultural intelligence through experiential learning in nontraditional adult students at a private Mid-Atlantic university MBA program. [Doctoral dissertation, Wilmington University]. ProQuest. <https://www.proquest.com/openview/bbff0c06c1f1e8eee9fdf0b7df0e17f5/1?pq-origsite=gscholar&cbl=18750>
- Wei, Y., Spencer-Rodgers, J., Anderson, E., & Peng, K. (2021). The effects of a cross-cultural psychology course on perceived intercultural competence. *Teaching of Psychology*, 48(3), 221–227. <https://doi.org/10.1177/0098628320977273>
- Weidman, A. C., Fernandez, K. C., Levinson, C. A., Augustine, A. A., Larsen, R. J., & Rodebaugh, T. L. (2012). Compensatory internet use among individuals higher in social anxiety and its implications for well-being. *Personality and individual differences*, 53(3), 191–195. <https://doi.org/10.1016/j.paid.2012.03.003>

- Wickline, V., Wiese, D. L., & Aggarwal, P. (2021). Increasing intercultural competence among psychology students using experiential learning activities with international student partners. *Scholarship of Teaching and Learning in Psychology*. Advance online publication. <https://doi.org/10.1037/stl0000288>
- 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. <https://doi.org/10.1177/1028315305277681>
- Williams, K. Y., & O'Reilly, C. A. (1998). Demography and diversity in organizations: A review of 40 years of research. In B. Staw & L. Cummings (Eds.), *Research in organizational behavior* (Vol. 20). Greenwich, CT: JAI.
- Willis, Jerry W. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. Thousand Oaks, CA: Sage.
- Wimmer, A., & Lewis, K. (2010). Beyond and below racial homophily: Erg models of a friendship network documented on facebook. *American Journal of Sociology*, 116(2), 583-642.
- Wood, T. E., & Sherman, M. J. (2001). Is campus racial diversity correlated with educational benefits? *Academic Questions*, 14(3), 72-88.
- Woods, P., Barker, M., & Hibbins, R. T. (2011). Tapping the benefits of multicultural group work: An exploratory study of postgraduate management students. *The International Journal of Management Education*, 9(2), 59-70. <http://dx.doi.org/10.3794/ijme.92.317>
- Woods, P., Poropat, A., Barker, M., Hills, R., Hibbins, R., & Borbasi, S. (2013). Building friendship through a cross-cultural mentoring program. *International Journal of Intercultural Relations*, 37(5), 523-535. <https://doi.org/10.1016/j.ijintrel.2013.08.004>

- Wright, S.C., Aron, A., McLaughlin-Volpe, T. & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73(1), 73–90. <https://doi.org/10.1037/0022-3514.73.1.73>
- Zúñiga, X., Nagda, B., Chesler, M., & Cytron-Walker, A. (2007). Intergroup dialogue in higher education: Meaningful learning about social justice. *ASHE Higher Education Report*, 32, 1-128.
- Zúñiga, X., Williams, E. A., & Berger, J. B. (2005). Action-oriented democratic outcomes: The impact of student involvement with campus diversity. *Journal of College Student Development*, 46(6), 660-678.
- Zywica, J., & Danowski, J.A. (2008). The faces of Facebookers: Investigating social enhancement and social compensation hypotheses; Predicting Facebook and offline popularity from sociability and self-Esteem, and mapping the meanings of popularity with semantic networks. *Journal of Computer-Mediated Communication*, 14, 1-34.

Appendices

Appendix A. Interview Questions – Individual Interview and Focus Group

| Interview Question | Follow-Up Question | Key Point |
|---|--------------------|--|
| <p>Could you start by sharing a bit about yourself?</p> <p>What major are you studying? What program/year are you in? Are you an international student? Why did you choose to study at [name of the university]?</p> <p>Have you had any on-campus experience at [name of the university]? Or have you only been in classes online?</p> <p>How has your overall experience at university been so far?</p> <p>1. What was your expectations of university life when you started?</p> <p>1a. To what extent has your actual experience matched with your expectations?</p> | | <p>To understand participant's overall experience at university and their expectation of university experience</p> |
| <p>Now, let's focus on your cultural diversity experiences at university.</p> <ul style="list-style-type: none"> • Which it's your experiences with students from different cultural and linguistical backgrounds • And [name of the university] has a diverse student population with many international and domestic students from a range of different cultural and linguistic backgrounds. <p>2. So, in your subjects and classes, have you been involved in any activities or interactions with peers from different cultural / linguistic backgrounds (such as group project, discussions, etc.)?</p> | | <p>To explore possible influence of engaging in activities related to classroom diversity</p> |

| | | |
|--|---|--|
| <p>2a) Do you think these experiences have changed the way you view interacting or working with people from culturally or linguistically diverse backgrounds?</p> <ul style="list-style-type: none"> • If yes => In what ways? • If they say their views haven't changed: Can you explain why not? Or what else do you think you learned from the activities? | | |
| <p>3. What about outside of your classes? What activities/events/programs have you been involved in where you were able to interact with students from diverse backgrounds?</p> <ul style="list-style-type: none"> • If they have been involved: How have these experiences changed the way you view interacting or working with people from diverse backgrounds? • If they haven't been involved: Why do you think you haven't been involved in any activities like this? | | <p>To understand participant's experience of engaging in activities related to interaction diversity</p> |
| <p>4. Now, could you tell me about your experiences with students from diverse backgrounds before coming to the University of Melbourne (i.e., in secondary school, college, or other educational institution)?</p> | <p>The educational institution you attended:</p> <ul style="list-style-type: none"> • Was it in your home country? • Did it have a large population of students who were born in another country than you were, or who spoke different languages to you? • What sorts of intercultural learning opportunities were you involved with at this institution (i.e., cultural events, overseas study programs, or international | <p>To explore possible influence from participant's pre-university experience with cultural diversity</p> |

| | | |
|--|---|---|
| | competitions)? (If none → why didn't you get involved?) | |
| <p>5. Overall, at this university, what has helped you to interact with diverse students?</p> <ul style="list-style-type: none"> • And what are the main barriers or challenges to interacting with diverse students? • What are the difficulties? | | To understand participant's experience with interaction diversity (factors) |
| <p>6. For the last question of this interview, imagine that you were the person in charge of this university. What would you do to improve students' experiences with people from culturally and linguistically diverse backgrounds?</p> <ul style="list-style-type: none"> • Both on campus and online <p>7. Is there anything else that you would like to share about cultural diversity at university?</p> | | To provide insights into how the university could do to improve students' experiences with people from culturally and linguistically diverse backgrounds |
| 8. Would you be interested in participating in a follow-up survey on the same topic? | | Recruitment for survey |

Appendix B. Plain Language Statement – Interview and Focus Group

Project: University Students' Cultural Diversity Experiences and Graduate Outcomes

Associate Professor Chi Baik (Responsible researcher)

T: +61383444212 Email: cbaik@unimelb.edu.au

Dr Tracii Ryan (Co-researcher)

T: +61390353050 Email: tracii.ryan@unimelb.edu.au

Ms Jiadi Cai (PhD student)

T: +61390354174 Email: jiadi@student.unimelb.edu.au

Introduction

Thank you for your interest in participating in this research project. This document provides you with further information about the project, so that you can decide if you would like to take part in this research.

Please take the time to read this information carefully. If you have questions about anything you don't understand or want to know more about, please email student researcher at jiadi@student.unimelb.edu.au.

What is this research about?

The above research project is being conducted by Ms Jiadi Cai (PhD student) as part of her PhD research and supervised by Associate Professor Chi Baik (Supervisor) and Dr Tracii Ryan (Co-supervisor) of Melbourne Graduate School of Education at the University of Melbourne. This project aims to explore undergraduate students' experiences with cultural diversity at university, and the outcomes of such experiences. It attempts to examine the universities' diversity-related graduate outcomes and provide insights into improving the learning environment for students to develop skills and abilities to work with people from diverse backgrounds in cross-cultural settings.

What will I be asked to do?

Should you agree to participate, you will be given a choice of an individual interview or a focus group interview. The interview will be conducted by the student researcher online via Zoom and should take less than 45 minutes. In the individual interview or the focus group, you will be asked to share your experience with cultural diversity before and at university, and your perspective on how the university could improve the learning environment for development and growth associated with cultural diversity. Your answers will be audio-recorded. You will receive one \$10 voucher for your participation in this interview.

At the conclusion of this interview, we will ask if you are willing to participate in a voluntary online survey (approximately 15-20 minutes) on the same topic. If you are willing to participate and consent to being contacted by the student researcher, you will receive an email with the link to the online survey later this year. The survey is not a required element of your interview participation.

For first-year students, at the end of the interview or focus group we will also ask if you consent to being contacted by the student researcher to participate in two voluntary interviews during your subsequent years at the university. Each interview should take less than 45 minutes and will be on the same topics as the initial interview/focus group. Your answers will be audio-recorded. You will receive one \$10 voucher for your participation per

interview. Providing your consent to be contacted for subsequent interviews does not mean you are obligated to participate.

What are the possible benefits?

This project will contribute to the understanding of undergraduate students' experiences with cultural diversity at university, and the outcomes of such experiences. Findings of this project will also help policy makers and educators better understand and improve the learning environment for developing students' skills and abilities to work with people from diverse backgrounds in cross-cultural settings.

What are the possible risks?

We do not expect any risks since the questions are not of a sensitive nature. However, if you feel distressed, please contact the University's Counselling and Psychological Services by phone on: 8344 6927 or online via <https://services.unimelb.edu.au/counsel#appointments>. The following websites also offer support and assistance for psychological distress: www.beyondblue.org.au; www.orygen.org.au; <http://www.lifeline.org.au/>

Do I have to take part?

Participation in this project is completely voluntary. Should you wish to withdraw from this study at any stage, you are free to do so anytime. If you would like to participate, please indicate that you have read and understood this information by signing the accompanying consent form.

Will I hear about the results of this project?

Once the thesis arising from this research has been completed, we will be happy to provide you with a brief summary of the findings upon application. Interested participants could email Jiadi Cai (jiadi@student.unimelb.edu.au) for a summary of the findings from this project. The results may also be presented at academic conferences and may be submitted for publication in peer reviewed journals.

What will happen to information about me?

Please be assured that the anonymity and the confidentiality of your responses will be protected to the fullest possible extent, within the limits of the law. We will remove any references to personal information that might allow someone to identify you. Any data you provided will be kept securely at the University of Melbourne for five years from the date of the last publication arising from this study, before being destroyed.

Where can I get further information?

If you would like more information about the project, please contact the researchers: Ms Jiadi Cai (jiadi@student.unimelb.edu.au), Associate Professor Chi Baik (cbaik@unimelb.edu.au), or Dr Tracii Ryan (tracii.ryan@unimelb.edu.au), Melbourne Centre for the Study of Higher Education.

Who can I contact if I have any concerns about the project?

This research project has been approved by the Human Research Ethics Committee of The University of Melbourne (HREC 1955895.1). If you have any concerns or complaints about the conduct of this research project, which you do not wish to discuss with the research team, you should contact the Manager, Human Research Ethics, Research Ethics and Integrity, University of Melbourne, VIC 3010. Tel: +61 3 8344 2073 or Email: HumanEthics-complaints@unimelb.edu.au. All complaints will be treated confidentially. In any

correspondence, please provide the name of the research team or the name or ethics ID number (1955895.1) of the research project.

Appendix C. Consent Form – Interview and Focus Group

Project: University Students' Cultural Diversity Experiences and Graduate Outcomes

Responsible Researcher: Associate Professor Chi Baik

Additional Researchers: Dr Tracii Ryan (Co-supervisor); Ms Jiadi Cai (PhD student)

Name of Participant: _____

1. I consent to participate in this project, the details of which have been explained to me, and I have been provided with a copy of the Plain Language Statement to keep.
2. I understand that the purpose of this research is to explore undergraduate students' experiences with cultural diversity at university, and the outcomes of such experiences.
3. I understand that my participation in this project is for research purposes only.
4. I acknowledge that the possible effects of participating in this research project have been explained to my satisfaction.
5. I understand that my focus group or interview will last about 45 minutes and will be audio recorded.
6. I understand that my participation is voluntary and that I am free to withdraw from this project anytime without explanation or prejudice and to withdraw any unprocessed data that I have provided.
7. I understand that the data from this research will be stored at the University of Melbourne and will be destroyed 5 years following the final publication.
8. I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements; my data will be password protected and accessible only by the named researchers.
9. I understand that after I sign and return this consent form, it will be retained by the researcher.

Participant Signature: _____ Date: _____

Appendix D. Plain Language Statement - Survey

Project: University Students' Cultural Diversity Experiences and Graduate Outcomes

Associate Professor Chi Baik (Responsible researcher)

T: +61383444212 Email: cbaik@unimelb.edu.au

Dr Tracii Ryan (Co-researcher)

T: +61390353050 Email: tracii.ryan@unimelb.edu.au

Ms Jiadi Cai (PhD student)

T: +61390354174 Email: jiadi@student.unimelb.edu.au

Introduction

Thank you for your interest in participating in this research project. This document provides you with further information about the project, so that you can decide if you would like to take part in this research.

Please take the time to read this information carefully. If you have questions about anything you don't understand or want to know more about, please email student researcher at jiadi@student.unimelb.edu.au.

What is this research about?

The above research project is being conducted by Ms Jiadi Cai (PhD student) as part of her PhD research and supervised by Associate Professor Chi Baik (Supervisor) and Dr Tracii Ryan (Co-supervisor) of Melbourne Graduate School of Education at the University of Melbourne. This project aims to explore undergraduate students' experiences with cultural diversity at university, and the outcomes of such experiences. It attempts to examine the universities' diversity-related graduate outcomes and provide insights into improving the learning environment for students to develop skills and abilities to work with people from diverse backgrounds in cross-cultural settings.

What will I be asked to do?

Should you agree to participate, you will be asked to answer an anonymous online survey (approximately 15-20 minutes) about your background and experiences with cultural diversity at the university.

What are the possible benefits?

This project will contribute to the understanding of undergraduate students' experiences with cultural diversity at university, and the outcomes of such experiences. Findings of this project will also help policy makers and educators better understand and improve the learning environment for developing students' skills and abilities to work with people from diverse backgrounds in cross-cultural settings.

What are the possible risks?

We do not expect any risks since the questions are not of a sensitive nature. However, if you feel distressed, please contact the University's Counselling and Psychological Services by phone on: 8344 6927 or online via <https://services.unimelb.edu.au/counsel#appointments>. The following websites also offer support and assistance for psychological distress: www.beyondblue.org.au; www.orygen.org.au; <http://www.lifeline.org.au/>

Do I have to take part?

Participation in this project is completely voluntary and you can withdraw at any point in the survey. You can also leave blank any question you do not want to answer. However, you will not be able to withdraw after submitting your survey response, as the survey is anonymous. If you would like to participate, please indicate that you have read and understood this information by signing the accompanying consent form.

Will I hear about the results of this project?

Once the thesis arising from this research has been completed, we will be happy to provide you with a brief summary of the findings upon application. Interested participants could email Jiadi Cai (jiadi@student.unimelb.edu.au) for a summary of the findings from this project. The results may also be presented at academic conferences and may be submitted for publication in peer reviewed journals.

What will happen to information about me?

Please be assured that the anonymity and the confidentiality of your responses will be protected to the fullest possible extent, within the limits of the law. We will remove any references to personal information that might allow someone to identify you. Any data you provided will be kept securely at the University of Melbourne for five years from the date of the last publication arising from this study, before being destroyed.

Where can I get further information?

If you would like more information about the project, please contact the researchers: Ms Jiadi Cai (jiadi@student.unimelb.edu.au), Associate Professor Chi Baik (cbaik@unimelb.edu.au), or Dr Tracii Ryan (tracii.ryan@unimelb.edu.au), Melbourne Centre for the Study of Higher Education.

Who can I contact if I have any concerns about the project?

This research project has been approved by the Human Research Ethics Committee of The University of Melbourne (HREC 1955895.1). If you have any concerns or complaints about the conduct of this research project, which you do not wish to discuss with the research team, you should contact the Manager, Human Research Ethics, Research Ethics and Integrity, University of Melbourne, VIC 3010. Tel: +61 3 8344 2073 or Email: HumanEthics-complaints@unimelb.edu.au. All complaints will be treated confidentially. In any correspondence, please provide the name of the research team or the name or ethics ID number (1955895.1) of the research project.

University Students' Cultural Diversity Experiences and Graduate Outcomes

Start of Block: PLS and Consent

Q1

University Students' Cultural Diversity Experiences and Graduate Outcomes

This survey is part of a research project that aims to explore undergraduate students' experiences with cultural diversity at university, and the outcomes of such experiences. By participating in the survey and answering questions about your experiences with cultural diversity at university, you will help us better understand the student experience and shed light on what can be done to improve the learning environment for students to work with people from diverse backgrounds in cross-cultural settings.

Please be assured that the anonymity and the confidentiality of your responses will be protected to the fullest possible extent, within the limits of the law. Any data will only be accessed by the named researchers on the project and we will remove any references to personal information that might allow someone to identify you. Any data you provided will be kept securely at the University of Melbourne for five years from the date of the last publication arising from this study, before being destroyed.

Participation in this project is completely voluntary. Should you wish to withdraw from this study at any stage, you are free to do so anytime. You can also leave blank any question you do not want to answer. The survey will take approximately 15-20 minutes to complete.

Once the study has been completed, we will be happy to provide you with a brief summary of the findings on request. The findings from the study will also be presented at academic conferences and in academic publications.

If you would like more information about the project, please contact the researchers: Ms Jiadi Cai (jiadi@student.unimelb.edu.au), Associate Professor Chi Baik (cbaik@unimelb.edu.au), or Dr Tracii Ryan (tracii.ryan@unimelb.edu.au), Melbourne Centre for the Study of Higher Education. The survey has been approved by the Human Research Ethics Committee of The University of Melbourne (HREC 1955895.1). If you have any concerns about the conduct of this research project, please contact the Manager, Human Research Ethics, Research Ethics and Integrity, University of Melbourne, VIC 3010. Tel: +61 3 8344 2073 or Email: HumanEthics-complaints@unimelb.edu.au.

We do not expect the survey will cause any distress as the questions are not of a sensitive nature. However, if you do experience any distress, please contact the University's Counselling and Psychological Services by phone on: 8344 6927 or online via <https://services.unimelb.edu.au/counsel#appointments>. The following websites also offer support and

assistance for psychological distress: www.beyondblue.org.au;
www.orygen.org.au; <http://www.lifeline.org.au/>

Please click [here](#) to download and read a copy of the Plain Language Statement before deciding whether to continue. If you do decide to continue, please read the information in the document before clicking the 'NEXT>' button to enter the survey. If you would rather not continue, please close the browser window.

Page Break

Q2 Giving your consent to participate I acknowledge that I have read and understood the information provided about this research project. I understand that: I am free to withdraw my participation from the study at any time during the survey by closing the browser window. The survey is anonymous, and I cannot be identified by the information I provide. My participation in the survey will not affect my classes or assessment in any way. If you agree to participate in this study and you are **18 years or older**, please select 'I agree' below and go to the next page.

- ☐ I agree (4)
- ☐ I do not agree (5)

Display This Question:

If Q2 != I agree

Q3 Thank you for your interest in this research project. Unfortunately, you are not eligible to participate as you either did not meet the inclusion criteria, or you did not provide consent. Any data you provided will be removed prior to analysis. If you have any questions, please contact the student researcher via email at jiadi@student.unimelb.edu.au

Skip To: End of Survey If Q3 Is Displayed

End of Block: PLS and Consent

Start of Block: Introduction

Q4 Thank you for agreeing to participate in this research project! You will be asked a range of questions about your experience with cultural diversity at the University of Melbourne. By cultural diversity, we mean a variety of cultures or ethnicities. There are no right or wrong answers and if you do not want to answer any question, you can leave it blank.
Section 1 of the survey asks a few questions to gather some background information about you.

Q5 Are you an undergraduate or Honours student at the University of Melbourne?

- ☐ Yes (1)
- ☐ No (2)

Display This Question:

If Q5 != Yes

Q6 Thank you for your interest in this research project. Unfortunately, you are not eligible to participate as you either did not meet the inclusion criteria, or you did not provide consent. Any data

you provided will be removed prior to analysis. If you have any questions, please contact the student researcher via email at jiadi@student.unimelb.edu.au

Skip To: End of Survey If Q6 Is Displayed

End of Block: Introduction

Start of Block: Introduction

Q7 What level are you currently completing in your undergraduate degree?

- ☐ Level 1 (first year) (1)
 - ☐ Level 2 (second year) (2)
 - ☐ Level 3 (third year) (3)
 - ☐ Level 4 (Honours) (8)
-

Q8 Which course(s) are you currently studying?

- ☐ Bachelor of Agriculture (1)
 - ☐ Bachelor of Arts (2)
 - ☐ Bachelor of Biomedicine (3)
 - ☐ Bachelor of Commerce (13)
 - ☐ Bachelor of Design (14)
 - ☐ Bachelor of Environments (15)
 - ☐ Bachelor of Fine Arts (16)
 - ☐ Bachelor of Medical Science (17)
 - ☐ Bachelor of Music (18)
 - ☐ Bachelor of Oral Health (19)
 - ☐ Bachelor of Science (20)
 - ☐ Other, please specify: (21) _____
-

Q9 What proportion of your study has been delivered **on campus** at this university?

- ☐ None on campus (1)
- ☐ A small proportion on campus (2)
- ☐ About half on campus (3)
- ☐ Mostly on campus (4)
- ☐ Entirely on campus (5)

End of Block: Introduction

Start of Block: Pre-university Experiences

Q10 Section 2 of the survey asks questions about your experience with cultural diversity before coming to the University of Melbourne (i.e., at secondary school, college, or another educational institution).

If you went to multiple educational institutions, please answer these questions while thinking about the institution in which you spent the most time.

Q11 Which of the statements below are true for the educational institution you attended before coming to the University of Melbourne?

| | Yes (1) | No (2) |
|--|-----------------------|-----------------------|
| The educational institution I attended was in my home country. (1) | <input type="radio"/> | <input type="radio"/> |
| The educational institution I attended had a large population of students from backgrounds that were culturally or linguistically diverse to my own. (2) | <input type="radio"/> | <input type="radio"/> |

Q12 How often did you participate in cultural diversity programs or events (i.e., cultural events, overseas study programs, and international competitions) at the educational institution you attended before the University of Melbourne?

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Sometimes (3)
- ☐ Often (4)
- ☐ Always (5)
- ☐ Not applicable (these kinds of opportunities were not offered) (7)

End of Block: Pre-university Experiences

Start of Block: University Experience

Q13 Section 3 of the survey asks questions about your experience with cultural diversity during your time as a student at the University of Melbourne.

Q14 During your time at this university, which of the following cultural diversity programs or events have you participated in that were **NOT part of your course**?

Select all that apply:

- ☐ Activities/events organised by student clubs/organisations (1)
- ☐ Activities/events organised by the university (5)
- ☐ Activities/events organised by people/groups NOT part of the university (2)
- ☐ Foreign language class(es) (10)
- ☐ Other, please specify: (4) _____
- ☒ None of the above (7)

Display This Question:

If Q14 = None of the above

Q15 In a few words or sentences, write why you have NOT participated in any cultural diversity programs or events that were **NOT part of your course**:

Display This Question:

If Q14 = Activities/events organised by student clubs/organisations



Q16 Why did you choose to participate in activities/events organised by student clubs/organisations that were NOT part of your course?

Please rank up to three reasons (it's okay to choose just one or two):

- ☐ I had to do it as a requirement of my Bachelor's course (1)
- ☐ It was recommended by my lecturer/tutor (2)
- ☐ It was recommended by other students (3)
- ☐ It seemed interesting to me (4)
- ☐ I wanted to learn about different cultures (5)
- ☐ I wanted to meet new people (6)
- ☐ I participated because my friend(s) is/are in it (7)
- ☐ Free food was provided (8)
- ☐ Other reason(s), please specify: (9)

Display This Question:

If Q14 = Activities/events organised by the university



Q17 Why did you choose to participate in activities/events organised by the university that were NOT part of your course?

Please rank up to three reasons (it's okay to choose just one or two):

- ☐ I had to do it as a requirement of my Bachelor's course (1)
- ☐ It was recommended by my lecturer/tutor (2)
- ☐ It was recommended by other students (3)
- ☐ It seemed interesting to me (4)
- ☐ I wanted to learn about different cultures (5)
- ☐ I wanted to meet new people (6)
- ☐ I participated because my friend(s) is/are in it (7)
- ☐ Free food was provided (8)
- ☐ Other reason(s), please specify: (9)

Display This Question:

If Q14 = Activities/events organised by people/groups NOT part of the university



Q18 Why did you choose to participate in **activities/events organised by people/groups NOT part of the university that were NOT part of your course?**

Please rank up to three reasons (it's okay to choose just one or two):

_____ I had to do it as a requirement of my Bachelor's course (1)

_____ It was recommended by my lecturer/tutor (2)

_____ It was recommended by other students (3)

_____ It seemed interesting to me (4)

_____ I wanted to learn about different cultures (5)

_____ I wanted to meet new people (6)

_____ I participated because my friend(s) is/are in it (7)

_____ Free food was provided (8)

_____ Other reason(s), please specify: (9)

Display This Question:

If Q14 = Foreign language class(es)



Q19 Why did you choose to participate in **foreign language class(es) that were NOT part of your course?**

Please rank up to three reasons (it's okay to choose just one or two):

_____ I had to do it as a requirement of my Bachelor's degree (1)

_____ It was recommended by my lecturer/tutor (2)

_____ It was recommended by other students (3)

_____ It seemed interesting to me (4)

_____ I wanted to learn about different cultures (5)

_____ I wanted to meet new people (6)

_____ I participated because my friend(s) is/are in it (7)

_____ Free food was provided (8)

_____ Other reason(s), please specify: (9)

Display This Question:

If Q14 = Other, please specify:



Q20 Why did you choose to participate in **other** ($\{Q14/ChoiceTextEntryValue/4\}$) **that were NOT part of your course?**

Please rank up to three reasons (it's okay to choose just one or two):

_____ I had to do it as a requirement of my Bachelor's degree (1)

_____ It was recommended by my lecturer/tutor (2)

_____ It was recommended by other students (3)

_____ It seemed interesting to me (4)

_____ I wanted to learn about different cultures (5)

_____ I wanted to meet new people (6)

_____ I participated because my friend(s) is/are in it (7)

_____ Free food was provided (8)

_____ Other reason(s), please specify: (9)

Page Break

Q21 During your time at this university, which of the following cultural diversity programs or events have you participated in **as part of your course**?

Select all that apply:

- ☐ Activities/events organised by student clubs/organisations (21)
- ☐ Activities/events organised by the university (17)
- ☐ Activities/events organised by people/groups NOT part of the university (18)
- ☐ Foreign language class(es) (16)
- ☐ Study abroad and/or exchange program(s) (15)
- ☐ Other, please specify: (19) _____
- ☒ None of the above (20)

Display This Question:

If Q21 = None of the above

Q22 In a few words or sentences, write why you have NOT participated in any cultural diversity programs or events **as part of your course**:

Display This Question:

If Q21 = Activities/events organised by student clubs/organisations



Q23 Why did you participate in **activities/events organised by student clubs/organisations as part of your course?** Please rank up to three reasons (it's okay to choose just one or two):

- ☐ I had to do it as a requirement of my Bachelor's degree (1)
- ☐ It was recommended by my lecturer/tutor (2)
- ☐ It was recommended by other students (3)
- ☐ It seemed interesting to me (4)
- ☐ I wanted to learn about different cultures (5)
- ☐ I wanted to meet new people (6)
- ☐ I participated because my friend(s) is/are in it (7)
- ☐ Free food was provided (8)
- ☐ Other reason(s), please specify: (9)

Display This Question:

If Q21 = Activities/events organised by the university



Q24 Why did you participate in **activities/events organised by the university as part of your course?** Please rank up to three reasons (it's okay to choose just one or two):

- ☐ I had to do it as a requirement of my Bachelor's degree (1)
- ☐ It was recommended by my lecturer/tutor (2)
- ☐ It was recommended by other students (3)
- ☐ It seemed interesting to me (4)
- ☐ I wanted to learn about different cultures (5)
- ☐ I wanted to meet new people (6)
- ☐ I participated because my friend(s) is/are in it (7)
- ☐ Free food was provided (8)
- ☐ Other reason(s), please specify: (9)

Display This Question:

If Q21 = Activities/events organised by people/groups NOT part of the university



Q25 Why did you participate in **activities/events organised by people/groups NOT part of the university as part of your course**? Please rank up to three reasons (it's okay to choose just one or two):

- ☐ I had to do it as a requirement of my Bachelor's degree (1)
- ☐ It was recommended by my lecturer/tutor (2)
- ☐ It was recommended by other students (3)
- ☐ It seemed interesting to me (4)
- ☐ I wanted to learn about different cultures (5)
- ☐ I wanted to meet new people (6)
- ☐ I participated because my friend(s) is/are in it (7)
- ☐ Free food was provided (8)
- ☐ Other reason(s), please specify: (9)

Display This Question:

If Q21 = Foreign language class(es)



Q26 Why did you participate in **foreign language class(es) as part of your course**? Please rank up to three reasons (it's okay to choose just one or two):

- ☐ I had to do it as a requirement of my Bachelor's degree (1)
- ☐ It was recommended by my lecturer/tutor (2)
- ☐ It was recommended by other students (3)
- ☐ It seemed interesting to me (4)
- ☐ I wanted to learn about different cultures (5)
- ☐ I wanted to meet new people (6)
- ☐ I participated because my friend(s) is/are in it (7)
- ☐ Other reason(s), please specify: (8)

Display This Question:

If Q21 = Study abroad and/or exchange program(s)



Q27 Why did you participate in **study abroad and/or exchange program(s) as part of your course**? Please rank **up to** three reasons (it's okay to choose just one or two):

- ☐ I had to do it as a requirement of my Bachelor's degree (1)
 - ☐ It was recommended by my lecturer/tutor (2)
 - ☐ It was recommended by other students (3)
 - ☐ It seemed interesting to me (4)
 - ☐ I wanted to learn about different cultures (5)
 - ☐ I wanted to meet new people (6)
 - ☐ I participated because my friend(s) is/are in it (7)
 - ☐ Other reason(s), please specify: (8)
-

Display This Question:

If Q21 = Other, please specify:

*

Q28 Why did you participate in **other** (**#{Q21/ChoiceTextEntryValue/19}**) as part of your course? Please rank up to three reasons (it's okay to choose just one or two):

_____ I had to do it as a requirement of my Bachelor's degree (1)

_____ It was recommended by my lecturer/tutor (2)

_____ It was recommended by other students (3)

_____ It seemed interesting to me (4)

_____ I wanted to learn about different cultures (5)

_____ I wanted to meet new people (6)

_____ I participated because my friend(s) is/are in it (7)

_____ Free food was provided (8)

_____ Other reason(s), please specify: (9)

Page Break

Q29 What proportion of the cultural diversity programs and/or events that you participated in were delivered **online**?

- ☐ None online (1)
- ☐ A small proportion online (2)
- ☐ About half online (3)
- ☐ Mostly online (4)
- ☐ Entirely online (5)

Q30 During your time at this university, how often have you taken part in **group** projects or **activities with peers** from cultural backgrounds other than your own? Select one from the following:

- ☐ Never (4)
- ☐ Rarely (no more than once a year) (3)
- ☐ Sometimes (in 1-2 subjects per year) (5)
- ☐ Frequently (in at least one subject per semester) (2)
- ☐ Very frequently (in most of my subjects in each semester) (1)

Display This Question:

If Q30 = Never

Q31 In a few words or sentences, write why you have NOT taken part in **group projects or activities with peers** from cultural backgrounds other than your own:

Display This Question:

If Q30 != Never



Q32 Why did you choose to participate in **group projects or activities with peers** from cultural backgrounds other than your own? Please rank up to three reasons (it's okay to choose just one or two):

- _____ I had to do it as a requirement of my Bachelor's degree (10)
- _____ It was recommended by my lecturer/tutor (2)
- _____ It was recommended by other students (7)
- _____ It seemed interesting to me (8)
- _____ I wanted to learn about different cultures (3)
- _____ I wanted to meet new people (9)
- _____ I participated because my friend(s) is/are in it (4)
- _____ Other reason(s), please specify: (5)

Page Break

Q33 During your time at this university, how often have you **interacted with peers** from cultural backgrounds other than your own outside of class? Select one from the following:

- ☐ Never (4)
- ☐ Rarely (a few times per year) (3)
- ☐ Occasionally (a few times per month) (5)
- ☐ Frequently (a few times per week) (2)
- ☐ Very frequently (every day) (1)

Display This Question:

If Q33 = Never

Q34 In a few words or sentences, write why you have **NOT interacted with peers** from cultural backgrounds other than your own **outside of class**:

Display This Question:

If Q33 != Never



Q35 Why did you choose to **interact with peers** from cultural backgrounds other than your own outside of class? Please rank up to three reasons (it's okay to choose just one or two):

- _____ I had to do it as a requirement of my Bachelor's degree (6)
- _____ It was recommended by my lecturer/tutor (2)
- _____ It was recommended by other students (7)
- _____ It seemed interesting to me (9)
- _____ I wanted to learn about different cultures (3)
- _____ I wanted to meet new people (8)
- _____ I participated because my friend(s) is/are in it (4)
- _____ Other reason(s), please specify: (5)

End of Block: University Experience

Start of Block: Personality and Working Style

Q36 You are halfway through the survey! Section 4 of the survey asks questions about your personality and how you interact with people from different cultural backgrounds. To what extent do

the following statements apply to you? Please indicate your answer using the response scale provided. *When interacting with people from different cultural backgrounds, I am someone who...*

| | not at all applicable (1) | hardly applicable (2) | moderately applicable (3) | largely applicable (4) | completely applicable (5) |
|--|------------------------------|--------------------------|------------------------------|---------------------------|------------------------------|
| Sympathises with others (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Tries out various approaches (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Finds it difficult to make contacts (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is reserved (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Likes routine (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sets others at ease (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Takes the lead (7) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is often the driving force behind things (8) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is looking for new ways to attain their goal (9) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Makes contacts easily (10) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Keeps calm when things don't go well (11) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Has a feeling for what is appropriate in a specific culture (12) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Seeks contact with people from a different background (13) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Has fixed habits (14) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Likes to imagine solutions for problems (15) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is insecure (16) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Wants to know exactly what will happen (17) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Enjoys other people's stories (18) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Starts a new life easily (19) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is under pressure (20) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Gets upset easily (21) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Leaves the initiative to others to make contacts (22) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Pays attention to the emotions of others (23) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Looks for regularity in life (24) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is nervous (25) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Functions best in a familiar setting (26) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is a good listener (27) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Works according to plan (28) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is inclined to speak out (29) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Has a broad range of interests (30) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is apt to feel lonely (31) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Enjoys getting to know others profoundly (32) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Takes initiatives (33) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is not easily hurt (34) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Works mostly according to a strict scheme (35) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Notices when someone is in trouble (36) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Senses when others get irritated (37) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Worries (38) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Works according to strict rules (39) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is a trendsetter in societal developments (40) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

End of Block: Personality and Working Style

Start of Block: Affective Outcomes Measurement

Q37 Section 5 of the survey asks about the emotional reactions you might experience during certain situations at university, as well as your feelings toward the university.

Q38 If you were the only member of your cultural group and you were interacting with people from a different cultural group (i.e., talking with them, working on a project with them), how would you feel

compared to occasions when you are interacting with people from your own cultural group? Please indicate your answer using the response scale provided. *When working with people from different cultural backgrounds to my own, I would feel...*

| | not at all (84) | (85) | neutral (86) | (87) | extremely (90) |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Certain (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Awkward (29) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Self-conscious (50) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Happy (51) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Accepted (52) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Confident (53) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Irritated (30) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Impatient (54) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Defensive (31) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Suspicious (56) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Careful (57) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Page Break

Q39 Please select your level of agreement with the statements below.

| | completely disagree (1) | somewhat disagree (2) | neither disagree nor agree (6) | somewhat agree (3) | completely agree (4) |
|--|----------------------------|--------------------------|--------------------------------------|-----------------------|-------------------------|
| People at the University of Melbourne notice when I am good at something. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Other students in this university take my opinions seriously. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| People at this university are friendly to me. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I am included in lots of activities at this university. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Other students at this university like me the way I am. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I like to think of myself as similar to others at the University of Melbourne. (6) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| People at this university care if I am absent. (7) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I feel like my ideas count at this university. (8) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I feel like I matter to people at this university (9) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

People really
listen to me
when I am at
this
university.
(10)

☐ ☐ ☐ ☐ ☐

End of Block: Affective Outcomes Measurement

Start of Block: Demographic Information

Q40 Thank you very much for your participation so far. This is the last section of the survey!

Section 6 of the survey asks for some information about you. Please be assured that your responses are anonymous and will NOT be identifiable.

Q41 Are you enrolled as an international student?

- ☐ Yes (1)
- ☐ No (2)

Q42 What is your country/countries of citizenship?

- ☐ Australia (1)
- ☐ Other, please specify: (2) _____

Q43 What is your gender?

- ☐ Male (1)
 - ☐ Female (2)
 - ☐ Non-binary or fluid (3)
 - ☐ Prefer not to answer (4)
-

Q44 Do you speak a language other than English at home?

(If you speak more than one language at home, please indicate the one that is spoken most often)

- ☐ No, English only (1)
 - ☐ Yes, please specify: (2) _____
-

Q45 Please indicate your age:

- ☐ 18-20 years old (1)
 - ☐ 21-25 years old (2)
 - ☐ 26-30 years old (3)
 - ☐ 31-34 years old (4)
 - ☐ 35 years and older (5)
-

Page Break

Q46 That was the final question! Thank you for your participation.

If you feel distressed, please contact the University's Counselling and Psychological Services by phone on: 8344 6927 or online via <https://services.unimelb.edu.au/counsel#appointments>.

The following websites also offer support and assistance for psychological distress: www.beyondblue.org.au; www.orygen.org.au; <http://www.lifeline.org.au/>

End of Block: Demographic Information

Appendix F. Descriptive Statistics of Measures by Student Groups

1) Descriptive statistics of measures by student status groups

| | <i>n</i> | Min | Max | Mean | <i>SD</i> | Skewness/SE | Kurtosis/SE |
|--------------------------------|----------|------|------|------|-----------|-------------|-------------|
| MPQ Cultural Empathy scores | | | | | | | |
| International | 24 | 2.38 | 4.75 | 3.92 | .62 | -1.26 | .03 |
| Domestic | 27 | 2.25 | 4.88 | 3.77 | .57 | -.48 | 1.02 |
| Total | 51 | 2.25 | 4.88 | 3.84 | .60 | -1.10 | .23 |
| MPQ Flexibility scores | | | | | | | |
| International | 25 | 1.25 | 3.75 | 2.64 | .64 | -.57 | -.60 |
| Domestic | 27 | 1.13 | 4.00 | 2.69 | .69 | -.21 | -.44 |
| Total | 52 | 1.13 | 4.00 | 2.67 | .66 | -.45 | -.76 |
| MPQ Social Initiative scores | | | | | | | |
| International | 25 | 2.38 | 4.75 | 3.32 | .66 | 1.59 | -.19 |
| Domestic | 26 | 1.88 | 4.38 | 3.14 | .64 | .43 | -.70 |
| Total | 51 | 1.88 | 4.75 | 3.23 | .65 | 1.35 | -.45 |
| MPQ Openmindedness scores | | | | | | | |
| International | 25 | 2.75 | 4.63 | 3.60 | .55 | .38 | -1.13 |
| Domestic | 27 | 2.13 | 4.38 | 3.32 | .46 | -.44 | 1.18 |
| Total | 52 | 2.13 | 4.63 | 3.45 | .52 | .50 | -.10 |
| MPQ Emotional Stability scores | | | | | | | |
| International | 25 | 1.50 | 3.50 | 2.66 | .52 | -1.34 | -.02 |
| Domestic | 27 | 1.25 | 4.25 | 2.95 | .86 | -1.05 | -.77 |
| Total | 52 | 1.25 | 4.25 | 2.81 | .73 | -.63 | -.53 |
| IAS scores | | | | | | | |
| International | 26 | 1.82 | 4.00 | 2.70 | .50 | .88 | .73 |
| Domestic | 27 | 1.27 | 3.27 | 2.49 | .55 | -1.96 | -.31 |
| Total | 53 | 1.27 | 4.00 | 2.59 | .53 | -1.12 | .79 |

2) Descriptive statistics of measures by linguistic diversity groups

| | <i>n</i> | Min | Max | Mean | <i>SD</i> | Skewness/SE | Kurtosis/SE |
|------------------------------|----------|------|------|------|-----------|-------------|-------------|
| MPQ Cultural Empathy scores | | | | | | | |
| English only | 16 | 3.13 | 4.38 | 3.75 | .36 | -.38 | -.52 |
| LOTE | 35 | 2.25 | 4.88 | 3.88 | .68 | -1.26 | -.23 |
| Total | 51 | 2.25 | 4.88 | 3.84 | .60 | -1.10 | .23 |
| MPQ Cultural Empathy scores | | | | | | | |
| English only | 17 | 1.13 | 3.63 | 2.56 | .72 | -1.05 | -.21 |
| LOTE | 35 | 1.63 | 4.00 | 2.72 | .64 | .43 | -1.21 |
| Total | 52 | 1.13 | 4.00 | 2.67 | .66 | -.45 | -.76 |
| MPQ Social Initiative scores | | | | | | | |
| English only | 16 | 2.38 | 4.75 | 3.08 | .68 | 2.09 | 1.11 |
| LOTE | 35 | 1.88 | 4.63 | 3.30 | .64 | .44 | -.43 |

| | | | | | | | |
|--------------------------------|----|------|------|------|-----|-------|-------|
| Total | 51 | 1.88 | 4.75 | 3.23 | .65 | 1.35 | -.45 |
| MPQ Openmindedness scores | | | | | | | |
| English only | 17 | 2.63 | 4.63 | 3.38 | .50 | 1.50 | .88 |
| LOTE | 35 | 2.13 | 4.50 | 3.49 | .53 | -.24 | -.04 |
| Total | 52 | 2.13 | 4.63 | 3.45 | .52 | .50 | -.10 |
| MPQ Emotional Stability scores | | | | | | | |
| English only | 17 | 1.25 | 4.13 | 2.78 | .91 | -.06 | -1.06 |
| LOTE | 35 | 1.38 | 4.25 | 2.82 | .64 | -.92 | .52 |
| Total | 52 | 1.25 | 4.25 | 2.81 | .73 | -.63 | -.53 |
| IAS scores | | | | | | | |
| English only | 17 | 1.64 | 3.27 | 2.62 | .49 | -1.60 | -.53 |
| LOTE | 36 | 1.27 | 4.00 | 2.58 | .56 | -.52 | 1.17 |
| Total | 53 | 1.27 | 4.00 | 2.59 | .53 | -1.12 | .79 |

3) Descriptive statistics of measures by year of study

| | <i>n</i> | Min | Max | Mean | <i>SD</i> | Skewness/SE | Kurtosis/SE |
|--------------------------------|----------|------|------|------|-----------|-------------|-------------|
| MPQ Cultural Empathy scores | | | | | | | |
| First | 16 | 2.25 | 4.75 | 3.75 | .64 | -.70 | .70 |
| Second | 13 | 3.25 | 4.75 | 3.88 | .41 | .98 | .31 |
| Third | 21 | 2.38 | 4.63 | 3.83 | .63 | -1.13 | -.29 |
| Fourth or Honours | 3 | 3.75 | 4.88 | 4.46 | .62 | -1.35 | / |
| Total | 53 | 2.25 | 4.88 | 3.85 | .59 | -1.23 | .29 |
| MPQ Flexibility scores | | | | | | | |
| First | 16 | 1.75 | 3.63 | 2.77 | .66 | .31 | -1.33 |
| Second | 14 | 1.25 | 4.00 | 2.54 | .79 | .41 | -.63 |
| Third | 21 | 1.13 | 3.75 | 2.73 | .60 | -2.13 | 1.47 |
| Fourth or Honours | 3 | 2.25 | 2.75 | 2.46 | .26 | 1.06 | . |
| Total | 54 | 1.13 | 4.00 | 2.67 | .65 | -.56 | -.67 |
| MPQ Social Initiative scores | | | | | | | |
| First | 16 | 1.88 | 4.38 | 3.16 | .63 | -.12 | .10 |
| Second | 14 | 2.38 | 4.75 | 3.26 | .69 | 2.15 | 1.00 |
| Third | 20 | 2.38 | 4.38 | 3.21 | .63 | .75 | -.93 |
| Fourth or Honours | 3 | 2.38 | 4.13 | 3.50 | .98 | -1.39 | . |
| Total | 53 | 1.88 | 4.75 | 3.22 | .65 | 1.33 | -.53 |
| MPQ Openmindedness scores | | | | | | | |
| First | 16 | 2.13 | 4.00 | 3.25 | .50 | -.79 | .23 |
| Second | 14 | 2.63 | 4.63 | 3.54 | .56 | .40 | -.41 |
| Third | 21 | 3.00 | 4.50 | 3.57 | .50 | 1.00 | -.93 |
| Fourth or Honours | 3 | 3.25 | 4.38 | 3.75 | .57 | .76 | . |
| Total | 54 | 2.13 | 4.63 | 3.48 | .53 | .39 | -.27 |
| MPQ Emotional Stability scores | | | | | | | |
| First | 16 | 1.38 | 3.13 | 2.52 | .56 | -1.36 | -.69 |

| | | | | | | | |
|-------------------|----|------|------|------|-----|-------|------|
| Second | 14 | 1.50 | 4.25 | 2.99 | .78 | -.52 | -.62 |
| Third | 21 | 1.25 | 4.13 | 2.74 | .70 | -.41 | .65 |
| Fourth or Honours | 3 | 3.50 | 4.00 | 3.75 | .25 | .00 | . |
| Total | 54 | 1.25 | 4.25 | 2.79 | .72 | -.48 | -.48 |
| IAS Scores | | | | | | | |
| First | 16 | 1.27 | 3.55 | 2.59 | .51 | -1.53 | 1.98 |
| Second | 14 | 1.36 | 3.27 | 2.59 | .59 | -1.50 | -.39 |
| Third | 20 | 1.64 | 4.00 | 2.67 | .52 | .50 | 1.71 |
| Fourth or Honours | 3 | 1.64 | 2.55 | 2.09 | .45 | .00 | / |
| Total | 53 | 1.27 | 4.00 | 2.59 | .53 | -1.12 | .79 |