



**AWAY FROM HOME: A MIXED-METHODS STUDY OF WELL-BEING OF
INTERNATIONAL STUDENTS IN THE UK**

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Thesis submitted to Cardiff University in partial fulfilment of the requirements
for the award of the Degree of Doctor of Philosophy (PhD)

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2020



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Summary

Background and Aims: Recently, the number of young adults leaving their homes for their studies has increased, with a high percentage choosing the UK as their destination. To date, the well-being of international and home students who study away from home has not been investigated and evaluated extensively in the context of British universities. As such, this thesis aimed to examine the experiences and well-being of international students in the UK and the effectiveness of applying well-being away strategies on the students' quality of university life and well-being.

Methods: The research was built on the DRIVE model of stress and well-being (Mark & Smith, 2008) and used a mixed-methods approach to address the aims above. It comprised four studies, each designed to address a part of the main research question. **Study I** compared international and home students on a range of variables proposed by the DRIVE model (i.e. positive personality, course demands, control and support, perceived academic stress), quality of university life, the use of studying away strategies and well-being outcomes. **Study II** applied a longitudinal design to identify the change in the well-being of international students during the academic year and the effectiveness of studying away strategies. **Study III** was a pilot randomised controlled trial used to test the effectiveness of the intervention, which was a self-help information sheet to encourage participants to increase their usage of studying away strategies. **Study IV** consisted of semi-structured interviews designed to explore the experiences of 15 international student participants.

Results: The studies revealed several points regarding international students' well-being. First, the well-being process of international and home students were similar in that positive personality, course demands, control and support, perceived academic stress and quality of university life were factors that significantly influenced their well-being. In addition, compared to domestic students, international students reported higher quality of university

life and lower negative well-being, which could be explained by the qualitative data suggesting that international students found the quality of university life to be higher than that in their home countries. International students also reported having fewer financial difficulties and found a better life in the UK. Second, the well-being of international students changed significantly during the academic year, with the highest levels of positive affect recorded before students began their courses and the highest levels of negative affect recorded during the examination period. Third, the use of studying away strategies was associated with positive well-being and higher quality of university life across the quantitative studies. Fourth, limited support was found to support the intervention as a way to encourage the participants to use the studying away strategies. Finally, overall, the findings provided support for the main components of the DRIVE model in explaining the well-being of international students.

Conclusions: This thesis investigated the well-being of international students in depth and provided a comprehensive picture of international students' experiences in the UK. The findings also supported the idea that applying studying away strategies assisted individuals to experience positive well-being and high quality of university life. Of course, future research is needed to examine these strategies in detail, but this research has provided some important insights into the issue of international students' well-being in the UK as well as recommendations for enhancing it.

Acknowledgements

I would like to express my deepest thanks to my supervisor, Professor, Andrew Smith for his endless support and encouragement and for patiently sharing his time and knowledge with me. He is not only my academic mentor but also my model as human being and I am incredibly grateful for your inspiring and insightful advice.

Next, I wish to express my love and appreciation to my family, especially, to my parents, Saad Alharbi and Salima Alhumaidi, my soul-mother, Gigi, and my sisters, Abrar and Nada, for their constant support.

I would also like to thank my colleagues at the Centre for Occupational Health Psychology, specifically, Shffika, Jialin, Michael, Jennifer, Kenisha, Federica and Hasah. I was so lucky to start my PhD journey with people like you. Thank you for all the great moments we have shared.

My special thanks also go to the participants who offered their valuable time to participate in my research.

Finally, I want to thank my external examiner, Dr. Jonathan Houdmont, and my internal examiner, Dr. Rob Honey, for their thorough and careful reading of my thesis and for their extremely helpful feedback on my work.

Publications in Thesis

Sections of Chapters 2, 4 and 5 have been presented in the following publications:

Alharbi, E., & Smith, A.P. (2019) Studying-away strategies: A three-wave longitudinal study of the wellbeing of international students in the United Kingdom. *The European Educational Researcher*, 2(1), 59-77. doi:10.31757/euer.215

Alharbi, E., & Smith, A.P. (2019). Studying away and wellbeing: A comparison study between international and home students in the UK. *International Education Studies*, 12(6), 1-19. doi: //doi.org/10.5539/ies.v12n6p1

Alharbi, E.S., & Smith, A.P. (2018). A review of the literature on stress and wellbeing among international students in English-speaking countries. *International Education Studies*, 11(6),22-44. doi:10.5539/ies. v11n6p22

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CHAPTER 1: INTRODUCTION

1.1 General Introduction

It is now common for young adults to leave their homes for study. Statistics prepared by the United Nations Educational, Scientific and Cultural Organization's (UNESCO) showed that in 2017 there were over 5.3 million international students, with over half of these students enrolled at universities in one of the following six countries: the United States of America, the United Kingdom, Australia, France, Germany, and the Russian Federation. The majority of international students came from China, India, Germany, South Korea, Nigeria, France, Saudi Arabia, and various Central Asian countries (UNESCO Institute for Statistics, 2019).

The United Kingdom is the second most desirable destination for international students, after the USA, and has long been recruiting international students for higher education. Between 2017 and 2018, the number of international students enrolled in UK universities was approximately 458,490, with projected increases in forthcoming years (UK Council for International Student Affairs [UKCISA], 2019). In 1999, the UK Prime Minister launched the first of two initiatives – PMI was to increase the number of international students by 500,000 and “make Britain the first choice for quality” (British Council, 1999, p.18). In 2006, the PMI2 aimed to increase the number of international students, enhance their experiences, and support more UK universities to engage in collaborative partnerships and increase transnational education (Lomer, 2018). In 2013, Sheffield University began a #WeAreInternational campaign to highlight the importance of diversity within the student body, which was supported by over 160 universities across the UK.

Although there are benefits to studying abroad, there are also potential risks and adverse effects. Beginning university or college life is a stressful event, and the experience of studying away from home has been linked to negative outcomes, such as homesickness,

depression, and anxiety. The mental health of university students has been a longstanding global concern, which has resulted in numerous studies (e.g., Bayram & Bilgel, 2008; Neves & Hillman, 2016; Royal College of Psychiatrists, 2011; Stallman, 2010) that show university students are at a higher risk for mental health issues, such as anxiety and depression, when compared with the rest of the population.

Systematic reviews have shown common problems of university students to include anxiety, depression, and high levels of distress (Storrie et al., 2010). Ibrahim et al. (2013) found prevalence rates of depression among university students ranged from 10% to 85%. Similarly, findings from large surveys in 21 countries have shown that annually, approximately 20% of university students suffer from some common mental health condition, such as mood disorders (Auerbach et al., 2016; Auerbach et al., 2018).

Despite the biological basis and genetic tendency of mental health illnesses, environmental factors can also impact mental health. Flatt (2013) identified several factors that contributed to mental distress among university students, including academic pressure, financial burden, technology overuse, and dramatic lifestyle changes (e.g., new living arrangements, separation from family, and change in social support structures). McIntyre et al. (2018) examined academic and non-academic predictors of depression and anxiety among over 1,000 UK undergraduates and found feelings of loneliness to be the strongest predictor of poor mental health. Assessment stress was the strongest academic predictor of anxiety and depression (McIntyre et al., 2018). Additionally, lack of resources, such as time, support, skills, and sleep, and high expectations from self and others were found to be causes of stress among university students (Hurst et al., 2013).

Mental health issues can result in a lack of motivation to learn and poor academic performance (Austin et al., 2010; Chapell et al., 2005; Saklofske et al., 2012), further inducing decline in students' physical health and quality of life (Ribeiro et al., 2018; Whatnall

et al., 2019). Mental health can also contribute to increased substance use and abuse, which plays an associative role in students' well-being (Lanier et al., 2001; World Health Organization [WHO], 2001).

1.1.2 International Versus Home Students' Well-being

In the United Kingdom, the report by the Royal College of Psychiatrists (2011), titled *Mental Health of Students in Higher Education*, stated that universities were under pressure to improve funding through the recruitment of international students. This presents additional challenges to student support services due to increased demands for student counselling, since international students face more distinct difficulties than home students (Arthur, 2004). The report also identified the challenges specific to international students in the UK, including adjusting to a new cultural and academic environment, lack of English language skills, financial constraints that impeded regular visits home, and the pressure of high personal expectations and from family (Royal College of Psychiatrists, 2011).

Previous research on university students showed that both international and home students shared similar challenges. Some of these include separation from family and friends, financial problems, workload concerns, doubts about academic ability, and nervousness, international students faced more challenges and reported higher anxiety compared with their local peers in other countries (Mullins et al., 1995; Ramsey et al., 1999).

Burns (1991) compared first-year Australian and international students, and reported that international students experienced greater difficulties in managing the demands of studies, independent learning, language skills, and time management. Furthermore, Grayson (2008) compared international and home students at four Canadian universities and reported that international students experienced more difficulties in studies and making new friends and had lower levels of social support than home students. Similarly, international students felt lonelier than American students in the United States (Zhou & Cole, 2016). In New

Zealand, international students rated their social and environmental quality of life significantly lower than home students, were less satisfied with their personal relationships and social support, and felt less secure and safe (Henning et al., 2012).

In the context of the UK, only two studies have compared home and international students' mental health, yielding inconsistent results. The more recent study by Jones et al. (2019) compared international and home students in terms of their mental health, loneliness, self-esteem, and life satisfaction and found home students to have significantly lower self-esteem, life satisfaction, and general mental health scores. However, in a larger study by Alsaad (2017), home students recorded higher mental health scores compared to international students.

With a limited number of comparison studies between international and home students, it is challenging to understand and determine the nature and similarities or differences in university students' well-being. More importantly, the context or research setting in terms of the country or university and ethnicity of the sample may contribute to the inconsistent results. Therefore, it is crucial to consider the contextual factors and the services provided by universities or the quality of university life.

Research investigating international students to date has been guided by acculturation or stress and coping method theories and has focused on outcomes of poor adjustment, such as stress or depressive symptoms, rather than well-being as a whole concept (e.g., Fritz et al., 2008; Hechanova-Alampay et al., 2002; Szabo et al., 2016; Tung, 2011). Well-being is the presence of positive emotions, such as happiness, lack of negative emotions, such as anxiety and depression, and a high degree of life satisfaction (Diener, 1984). It is a complex concept, multifaceted and affected by various factors, such as personality, lifestyle, demographics, perceived social support, income, and life events. The event of studying abroad or transitioning to a university can raise or lower an individual's level of well-being, which is

influenced by external factors, such as the new environment or host country, and internal factors, such as the ability to cope with difficulties and social support.

From this perspective, the Sodexo Quality of Life Institution (2014) developed the *Well-Being Away Model* that aimed to help individuals who worked or studied away from home to understand the experience of being away from home and maintaining their level of well-being. The model divides the journey of studying or working away from home into five stages, from pre-departure planning to being back home, and presents several strategies for each stage. Applying these strategies could help students or workers to maintain their level of well-being and adjust to the new environment more easily and with fewer negative outcomes.

1.2 Aims and Objectives

The overarching aims of the present study were to explore the well-being of international students studying in the United Kingdom and examine the effectiveness of studying away strategies on students' well-being and quality of university life. To achieve the research aims, six research objectives were developed. Accordingly, the objectives of the thesis were as follows:

1. Review the literature on stress and well-being of international students in English-speaking countries.
2. Examine the similarities and differences between positive and negative well-being in home and international students.
3. Investigate individual factors that affect the levels of positive and negative aspects of well-being in international students during an academic year and how well-being is affected.
4. Investigate whether applying the studying away strategies is associated with an increase in the quality of university life and the well-being of university students.
5. Explore the challenges faced by international students and their coping strategies

to maintain well-being in the UK.

6. Apply a contemporary conceptual framework to explain and understand the relationships between course demands, control and support perceived academic stress, quality of university life, studying away strategies, individual characteristics (e.g., gender, student status (Home/International) year at university, positive personality and healthy lifestyle, and well-being outcomes.

1.3 Significance of the Research

The topic of well-being has become a major agenda in higher education and other sectors, making it a notable topic of discussion and investigation. In the last five years, particularly after several students at Bristol University committed suicide, over 50 news headlines about university students' mental health have revealed the crises occurring on university campuses (see Figure 1.1).

Figure 1.1

Recent News Headlines Regarding Higher Education Mental Health in the UK

- 'University regulator unveils £14m mental health scheme to reduce student suicides.' (Busby, 2019, *Independent*).
- 'Universities and the NHS must join forces to boost student mental health.' (Raddi, 2019, *The Guardian*).
- 'Universities 'in the dark' over student mental health needs.' (Richardson, 2019, BBC NEWS).
- 'The way universities are run is making us ill: inside the student mental health crisis.' (Shackle, 2019, *The Guardian*).
- 'Proportion of students declaring mental health issues doubles in five years, figures show.' (Turner, 2019, *The Telegraph*)
- 'Majority of students experience mental health issues, says NUS survey.' (Gail, 2015, *The Guardian*)

In light of the report by the Higher Education Policy Institute on the Student Academic Experience Survey (2018), conducted at British universities, Neves and Hillman (2019) reported that the level of well-being of university students has been declining yearly,

suggesting that the issue of university students' well-being need to be better understood to bring about a positive change.

This research therefore aimed to understand the well-being of international students in the British context by using a mixed-methods and a longitudinal design under the DRIVE model framework, and which includes university and personal characteristics, appraisals, individual differences, and positive and negative outcomes. Moreover, although many reviews and studies have shown that international students suffer from stress or depressive symptoms, there is a limited number of tested interventions to help international students to maintain or improve their levels of well-being. This study aimed to develop and examine a self-help intervention based on the *Well-Being Away Model* to assist international students in maintaining their well-being away from home.

Thus, this study aimed to contribute to the existing knowledge base by illuminating the state of international students' well-being away from home in comparison with the well-being of home students. Furthermore, the study investigated the effectiveness of well-being away strategies in terms of maintaining well-being and increasing the quality of university life. The findings would not only address the well-being of international students, being useful to higher education practitioners, but it may also have important implications for people working away from home.

1.4 Key Concepts in the Thesis

This section defines the five key concepts in this thesis: international students, quality of university life, studying away strategies, well-being, and the demands-resources and individual effects (DRIVE) model.

1.4.1 International Students

The term *international students* has many synonyms, including *overseas students* and *foreign students*. The term *international* is often used in the U.S. literature, whereas the terms

overseas and *foreign* are mainly used in the UK and Australian literature (Huang, 2008). All of these terms are used to describe a vast range of individuals, varying in ethnicity, age, language, and religion. In the United Kingdom, European students are considered home students in terms of course fees. In this thesis, the definition provided by the Institute of International Education (2012) has been used:

Students who undertake all or part of their higher education experience in a country other than their home country or who travel across a national boundary to a country other than their home country to undertake all or part of their higher education experience.

Exchange students from the Erasmus programme who study for only one year in the UK have also been included in the study samples.

1.4.2 Quality of university life

The concept of quality of university life in this thesis reflects the conceptualization of quality of college life by Sirgy et al. (2007) that refers to the "overall feeling of satisfaction student's experiences in college" (p. 346). They include three domains of quality of university life satisfaction, related to academic, social, and university facilities and services. The quality of university life in this thesis includes perceived university life as easy and efficient, university promoting a healthy lifestyle, feeling valued in university, bonds among individuals and facilitated by the university, the teaching and learning methods, and the university's physical environment.

1.4.3 Studying Away Strategies

Studying away strategies reflect a total of 14 strategies for the five phases of transition: pre-departure, at university, preparing to return, returning, and back home, as suggested by the *Well-Being Away Model* for managing potential adverse impacts on psychological well-being while away from home. Full details are explained in Chapter 3, Section 3.2.3.

1.4.4 Well-being

The work in this thesis is based on the subjective well-being (SWB) approach. SWB refers to how people evaluate their lives and is defined as an individual's overall state of subjective wellness. SWB consists of three interrelated components: life satisfaction, positive affect and negative affect. Positive and negative effects refer to pleasant and unpleasant moods and emotions, whereas life satisfaction refers to a cognitive sense of satisfaction with life (Diener, 1984; Diener & Suh, 1997). Full details are explained in Chapter 3, Section 3.2.1.

1.4.5 The DRIVE Model

The Demand Resources and Individual Effects Model (DRIVE) model is a transactional model of stress and well-being developed by Mark and Smith (2008). The model shares feature with the job Demands-Control-Support (DCS; Karasek, 1979) and Effort-Reward Imbalance (ERI; Siegrist, 1996) models, but emphasises the role of individual dimensions in influencing an individual's well-being. The DRIVE model was used as the theoretical framework of this research. Full details about the model have been provided in Chapter 3 Section 3.2.2.

1.5 The Structure of the Thesis

Chapter 1 provided a brief background of the research literature on the well-being of university students, specifically international students' well-being as the population under investigation. Definitions were provided for key concepts, the aims and objectives of the thesis were outlined, and the rationale explained for conducting the research.

The next chapter will provide a review of the research literature, conducted through a search of two databases: PsycINFO and PubMed, along with the eight key search terms used to investigate the important issues faced by international students and the role of individual differences in their mental health. Chapter 2 will also provide an overview of the research on

interventions targeted toward international students with an analysis of the limitations and gaps in the literature in terms of mental health methodologies to address issues faced by international students.

Chapter 3 will outline the theoretical frameworks of this research, summarise the methodological issues in the literature, and explain the methodological approach adopted for this research. Both quantitative and qualitative methods were employed across the four studies, and a detailed account of the sampling recruitment, data collection instruments, and analyses strategies will be presented in the chapter.

Chapters 4 to 7 will provide an outline of the methodology and findings from the four empirical studies. The first study, presented in Chapter 4, compared international and home students in terms of their well-being, quality of university life and strategies used wherein further features of the DRIVE model were investigated, including the moderation effects of individual differences between course demands and outcome, and the mediation effects of perceived stress between course demands and negative outcome. This study highlighted the similarities and differences in well-being and quality of university life between the two groups, and provided support for applying the DRIVE model to evaluate and explain students' well-being.

The second study, presented in Chapter 5, used a longitudinal design to investigate the change in the well-being of international students during the academic year at three time points: the beginning of the first semester, the beginning of the second semester, and the end of the second semester. The study also investigated the associations between the common explanatory factors found in the literature, such as demographic variables, English fluency, previous experiences of studying abroad, academic achievements, financial pressures, and positive and negative outcomes. In addition, the study examined the relationships between established variables of the DRIVE model, studying away strategies and well-being

outcomes.

The third study, presented in Chapter 6, was a pilot randomised controlled trial (RCT) study, aimed to evaluate the feasibility of two months of email-based intervention, built on the well-being away strategies in the form of an information sheet on well-being and the quality of university life of international students who had planned to return home during the Easter holiday. Well-being and the use of studying away strategies were assessed before and after the intervention.

The fourth study, presented in Chapter 7, adopted a qualitative study design, which employed a semi-structured interview with 15 international students from eight different countries. The study investigated several topics, including the choice to study in the UK, social and university life, problems or stressors, coping strategies, and use of studying away strategies.

Finally, Chapter 8 will present a discussion and summary of the main findings of the four studies about the aims and objectives of the thesis and the wider research literature. The chapter will focus on the relationship between the findings and research on the well-being of students who leave home to study. The limitations of the research, recommendations, and implications for practice, and recommendations for future research in the context of understanding the well-being of international students in the UK will also be discussed.

1.6 Chapter Summary

This chapter focussed on introducing and providing background to the research and identifying gaps in the literature related to the knowledge and understanding about the well-being of international students. The research aims, objectives, main concepts, and rationale were defined, followed by an overview of the structure of the thesis. The next chapter is focused on understanding the stress and well-being of international students from the perspective of the relevant research literature to date.

CHAPTER 2: REVIEW OF THE RESEARCH

2.1 Chapter Overview

This chapter presents a review of past research on international students' well-being. It addresses the major sources of stress experienced by international students, the role of individual differences in well-being outcomes, and interventions focused on international students' mental health. The final sections in this chapter discuss the limitations and gaps in the current research and link these to the next chapters in this thesis, and place the current research in the context of the available research.

2.2 Introduction and Aims

Although the number of international students has increased and studying abroad is now considered beneficial for gaining life experience, offering a lifetime of benefits and opportunities for personal growth, research on international students has suggested that international students are at high risk of developing mental health issues than students in general (Mori, 2000). The oldest and most cited review of such research by Church (1982) summarised the unique difficulties that international students may face. Church suggested that international students faced more problems than domestic students as a result of adjustment difficulties and highlighted a number of limitations in terms of methodology. These included the absence of baseline data for international students' adjustment, lack of longitudinal design, and a focus on sociological approaches rather than psychological. Twenty-four years later, Andrade (2006) reviewed the literature on factors that influenced the adjustment and academic achievement of international students within several English-speaking countries. Similarly, Zhang and Goodson (2011) reviewed 64 studies analysing the predictors of psychosocial adjustment of international undergraduate and graduate students in the United States; authors conclude that despite the high number of international students in the USA and the contributions they have made to the U.S. educational system and society,

they have received limited attention within psychological research. Smith and Khawaja (2011) also reviewed current acculturative models when applied to international students. More recently, Li et al. (2014) conducted a systemic review of 18 studies, specifically on East Asian international students and their psychological well-being with 13 studies on Chinese international students.

The reviews mentioned above focused on acculturation and adjustment factors, or a single country and a single racial group. Therefore, this review aims to (1) develop an understanding of the sources of stress for international students, and (2) address the impact of individual differences on well-being outcomes.

2.3 Method

2.3.1 Search Strategy

Online literature searches using two databases (PubMed and PsycINFO) were conducted to find research published between 1990 and 2019. Eight keywords were used: 'international students', 'overseas students', 'foreign students', 'studying abroad', 'stress', 'well-being OR well-being', 'mental health', 'subjective well-being' and 'psychological well-being'. Combinations of these terms, such as 'stress and international students' and 'well-being and international students' were also used. The search was limited to studies focused on international students in English-speaking countries (i.e., Australia, Canada, Ireland, New Zealand, the United Kingdom, and the United States) and peer-reviewed articles written in the English language.

2.3.2 Study Selection

Titles and abstracts of original research articles were screened with a focus on articles relevant to the topic of stress and well-being. Both quantitative and qualitative studies were included. Studies were included if they satisfied the following criteria:

- The sample was full-time undergraduate and postgraduate students (studies sampling from English language schools or including short-term and exchange students were excluded).
- The sample included students of different ethnicities (studies that only examined one race, such as East Asian or Black, were excluded).

2.4 Results and Discussion

2.4.1 Characteristics of the Studies

The literature review identified a total of 42 empirical studies, with more than half of the studies conducted in the United States ($n = 25$), ten studies conducted in Australia, three studies conducted in New Zealand, and four studies conducted in the UK. The earliest study was published in 1992, with the majority of studies conducted in the last ten years (2009 to 2019).

Over half of the articles used quantitative research designs with cross-sectional survey methods ($n = 30$). Five studies applied a longitudinal study design, using two to five phases at three months apart as the between data collection points. Three studies employed mixed-methods surveys with open-ended questions either in focus groups or semi-structured interviews. Four studies applied qualitative research designs. The sample sizes ranged from 70 to 948 international students for the quantitative studies and two to 22 for the qualitative studies.

The following sections provide an evaluation of the 42 studies. They have been organised into the following themes: Sources of Stress, Individual Differences, and Mental Health. Some articles have been included under more than one theme. The nature of each study in terms of aims, location, sample, design, methods, and findings are summarised in Table 1.1.

Table 1.1

Matrix of 42 reviewed articles

Authors	Location	Aim	Sample, nationality and size	Design	Measurements	Findings
1. (Mallinckrodt & Leong, 1992)	United States	To investigate the level of stressors and stress symptoms amongst international students and the sources of social support that might be the most useful in coping with stressors.	Graduate international students from different ethnicities and countries <i>n</i> =105	Cross-sectional	A 48-item Life event survey scale; The 33-item Bell Global Psychopathology scale (symptoms of stress and depression); A 58-item measure of physical health symptoms; The educational system services (social support from the academic program); A 19-item measure of Quality of Family Life	All types of social support reduced anxiety, depression and physical symptoms of stress. Relations with faculty members were particularly beneficial for men, whereas tangible support, relations with other students for women.
2. (Cross, 1995)	United States	Examine differences in the independent and interdependent self-construal of American and East Asian students and the influence of these self-construal on coping and stress.	First-year students: East Asian <i>n</i> = 71 American <i>n</i> =79	A cross-sectional study as a part of a larger longitudinal project	The Ego task subscale: 2-time direct coping (describe a situation and how did you deal with it); Relationship satisfaction measure; language ability and a measure of perceived stress.	The self-construal and direct coping were the strongest predictors of stress for East Asian students. Other variables commonly identified in research addressing cross-cultural adaptation (e.g., number of host country friends, relationships with co-nationals, language ability, and previous cross-cultural experience) did not significantly predict stress for the international students.
3. (Sanders & Lushington, 1999)	Australia	Investigate sources of stress among dental students and the relationship between stress and	Australian students <i>n</i> = 161 international	Cross-sectional	Thirty-eight items the Dental Environment stress questionnaire.	Limited support for the negative effect of stress on academic performance and may be due to the

		academic performance.	students $n = 43$		Students' grades measured scholastic performance.	measuring tools used. International students expressed significantly more stress than demotics in terms of language, social isolation, and learning styles.
4. (Tseng & Newton, 2001)	United States	To discover strategies and coping skills intentional student use to adjust and maintain well-being	Two international students: African and Asian	Qualitative; semi-structured Interview.	What is well-being, and how to cope with difficulties?	Students used eight strategies: knowing and understanding self and others, build friendship and relationship with advisors, expand individual worldview, asking for help when needed, English proficiency, use the tactic of "letting go."
5. (Carty et al., 2002)	United States	Investigated issues facing international nursing doctoral students in the US	Students $n = 184$ from 27 countries. and students $n = 5$ from Thailand, Egypt, and Saudi Arabia participated in a focus group.	Mixed-methods (survey and focus group)	Online survey to identify areas of study, how they applied that knowledge on graduation, dissertation topic, and challenges. Focus Group to discuss challenges.	Students faced issues include language problems, financing, lack of support systems and familiarity with the US health care system, and stress from a heavy course load.
6. (Hechanova-Alampay et al., 2002)	United States	Investigated the relationship between adjustment and distress or strain responses during the first six months of the study	Domestic students $n = 188$ international students $n = 106$ from 37 countries.	A longitudinal cross-sectional study with 3 phases of data collection over six months	14-item Adjustment scale (Black & Stephens, 1989); Depression Scale (Radloff, 1977) 12-item from the cultural adaptation pain scale (CAPS); 10-item Self-efficacy scale (Harrison, 1996); 10 items culture distance questions (Bilker et al., 1980); 8-item Social support scale (Ray & Miller, 1994); 8 items to measure the amount of	No significant differences between groups on the level of strain at time 1 (beginning the semester). International student sojourners had greater difficulty in adjusting during their initial transition into the university. Self-efficacy positively correlated with adjustment and negatively with strain.

					interaction with the host nation.	
7. (Yasuda & Duan, 2002)	United States	Investigate the acculturation, ethnic identity, and emotional well-being, of Asian American and Asian international students.	Asian American $n = 63$ Asian international students $n = 55$	Cross-sectional	The 12-item Multigroup Ethnic Identity Measure (Roberts et al., 1999); The 21-item Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Rickard-Figueroa, et al., 1987); The 25-item Depression-Happiness Scale (McGreal & Joseph, 1993)	Asian American students scored higher in acculturation than Asian international students. Asian American and Asian international students differed in acculturation level and ethnic identity, but not in emotional well-being.
8. (Misra et al., 2003)	United States	Examined the relationships among four constructs: life stress, academic stressors, perceived social support, and reactions to stressors of international students	International students from Africa, Asia, and the Middle East $n = 143$	Cross-sectional	The Index of Life Stress (31 items); Student-Life Stress Inventory (51 items), and The Index of Social Support (40-items)	Women exhibited higher reactions to stressors than men. Women had higher emotional and physiological reactions to stressors, while men had higher cognitive reactions. Higher levels of academic stressors were predicted by higher levels of life stress and by lower levels of social support.
9. (Wilton & Constantine, 2003)	United States	To understand the relationships among the length of stay in the US, cultural adjustment difficulties, and psychological distress in a sample of Asian and Latin American students	Asians $n = 66$ Latinos $n = 34$	Cross-sectional	The 59-item CADDC scale to assesses the stressors associated with acculturation; The 33-item General Psychological Distress Checklist	Latin American students reported significantly higher levels of psychological distress compared to Asians. A greater length of stay in the US was associated with lower levels of psychological distress. Higher acculturative distress predicted higher levels of psychological distress.

10. (Yeh & Inose, 2003)	United States	To what extent do international students' age, gender, English fluency, social connectedness, and social support network satisfaction predict acculturative distress?	International undergraduate and graduate students $n = 372$	Cross-sectional	The 36-item Acculturative Stress Scale for International Students (Sandhu & Asrabadi, 1994); The 8-item Social Connectedness Scale (Lee & Robbins, 1995); Social Support Questionnaire- Short Form (Sarason et al., 1987)	European students experienced less acculturative stress than others. English fluency, social support satisfaction, and social connectedness were all predictors of acculturative stress.
11. (Constantine et al., 2004)	United States	To examine self-concealment behaviours and social self-efficacy skills as potential mediating factors in the relationship between acculturative stress and depression.	International students $n = 320$, 25.3% African, 42.5% Asian, and 32.2% Latino.	Cross-sectional	The 10-item Self-Concealment Scale (Larson & Chastain, 1990); The 6-item Social Self-Efficacy Scale (Sherer & Adams, 1983); the 36-item Acculturative Stress Scale for International Students (Sandhu & Asrabadi, 1994); the 20-item Center for Epidemiologic Studies–Depression Scale (Radloff, 1977).	A strong relationship was found between acculturative stress and depression. African international students reported higher levels of acculturative stress and depression than other international students.
12. (Misra & Castillo, 2004)	United States	Compare perceptions of academic stressors and reactions to these stressors between American and international students	American students $n = 249$ international students $n = 143$	Cross-sectional	Academic Stress Scale (51-items).	International students reported lower academic stress and fewer reactions to stressors than American students. Differences in reaction to stress by gender were

also found.

13. (Barron et al., 2007)	United Kingdom	Investigated learning and living issues were facing international students in a major of a Scottish university.	International postgraduate students <i>n</i> =53 from 13 different nationalities	Cross-sectional	the questionnaire was developed to determine the learning and living concerns.	Workload, English language, and exams were the main issues in learning. Chinese students were more concerned about language than other nations. Main living concerns was loneliness or homesickness, especially among Indian and Chinese.
14. (Jung et al., 2007)	United States	Investigate the effects of international students' identity gaps formed in their interaction with Americans on their depression levels.	International students <i>n</i> =218 from a variety of different countries	Cross-sectional	A 12-item Acculturation measure (Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987); Bicultural Involvement Questionnaire-Revised (BIQ-R); A 6-item perceived discrimination index (Sandhu & Asrabadi, 1994); A 6-item Personal-enacted identity gap scale, and a 6-item personal-relational identity gap scale (Jung & Hecht, 2004); The 20-item Center for Epidemiological Study Depression Scale (Radloff (1977); A 10-item Social support scale (Xu & Burleson, 2001); A 6-item Social Undermining Scale (Vinokur, Price, & Caplan, 1996).	The personal-enacted identity gap was found to play a more critical role in international students' psychological well-being Social support did not moderate the effects of either the personal-enacted identity gap or perceived discrimination on depression level.

15. (Nilsson, 2007)	United States	Investigate the relationship between academic and supervision variables for international students in counselling psychology.	International students $n = 73$ from 6 world continents	Cross-sectional	The 21-item College Stress Inventory; The 12-item Counsellor Rating Short Form; The 20-item College Self-Efficacy Inventory; The 17-item International Student Supervision Scale	High academic or course self-efficacy was associated with less academic stress.
16. (Cemalcilar & Falbo, 2008)	United States	Investigated how the acculturation strategies adopted before the transition affected the psychological well-being and adaptation of students after the international transition.	International graduate students $n =$ from 26 different countries	Longitudinal with 2 phases: before arriving and after 21 weeks.	The Acculturation Index by Ward and Rana-Deuba (1999); A 19-item to assess four strategies of acculturation. A measure of psychological well-being (Hudson, 1987); The 18-item Generalized Contentment Scale to measure well-being; The 15-item Sociocultural Adaptation Scale (Ward & Kennedy, (1994); An 8-item academic adaptation developed by the researchers.	No advantage was found for the bicultural adopting strategy before the transition. Students who had expressed a separation strategy before the transition had significantly lower social adaptation. Most of the students experienced significant declines in their psychological well-being after completing three months.
17. (Chavajay & Skowronek, 2008)	United States	To understand the stress international students experience living in a new cultural community	International students ($n = 130$) from 33 different countries	Mixed-method	Acculturative Stress Scale; Four open-ended questions to determine if students felt they weretreated differently, what stressful situations affect their life, what causes them the most stress living in town and/or attending the	Participants reported a lower level of acculturation stress. The findings were mixed between the scales and the four open-ended questions, especially in perceived discrimination.

					university, and under what circumstances are they lonely?	
18. (Fritz et al., 2008)	United States	To test if international students experience anxiety, irritability, and stress being apart from family and friends, school pressure, language, work, and financial difficulties than students with permanent US residency.	Asians $n=71$ Europeans $n=40$ permanent US residents. $n=97$	Mixed-method (Questionnaire and open-ended questions)	The 15-item anxiety scale (Derogatis, 1977); The Student Differential Questionnaire to rate mood level and difficulties with language, social differences, being apart from family and friends, making new friends, and not being able to work. Students also reported their help-seeking behaviours (friends, family, psychologist, God, or no one)	Difficulties among Asian students were in language and to make friends, while European students found being apart from family as stressful. Asian students reported significantly higher anxiety. All three groups reported a level of change in anxiety, irritability, and mood.
19. (Khawaja & Dempsey, 2008)	Australia	To compare international and domestic students on demographic variables, accommodation and financial satisfaction, social and academic stressors, mismatched expectations, dysfunctional coping, and psychological distress.	Domestic $n=86$ international $n=86$	Cross-sectional	Housing Scale (2-items); Financial Scale (2 items); 6-item Academic Situation Scale; 22-item Servqual Scale to measure students' perception of the university's service quality; 10-item Brief Cope Scale; 25-item Personal Resource Questionnaire Scale assessing perceived social support; Hopkins Symptom Checklist (62-item scale, measures psychological distress)	International students showed lower levels of social support, higher mismatched expectations, and greater use of dysfunctional coping strategies which placed them in a more vulnerable situation than the domestic students.

20. (Nilsson et al., 2008)	United States	Investigated the relationship between perfectionism, acculturation, and stress	International students $n=76$ from 12 countries in Asia	Cross-sectional	The 34-item American-International Relations Scale; The 21-item College Stress Inventory F-MPS; The 35-item F-MPS to measure perfectionism	Perfectionism and acculturation predicted stress. Perceived prejudice was the only acculturation variable that explained any unique variance in stress.
21. (Neri & Ville, 2008)	Australia	Investigated how, and to what extent, international students renew their social networks, and whether such investments are positively associated with academic performance and well being	International students $n=173$ from 27 countries	Cross-sectional	A 36 questions survey to measure social capital renewal, well-being at the time of arrival and ended with some free-response questions which focussed on valued services that the university and the local community do or could provide for international students.	Social networks were not associated with improved academic performance but were associated with increased well-being. International students from 'Western' countries are happier than students from non-Western countries. Many students experienced relative unhappiness and disorientation on arrival from overseas.
22. (Rosenthal et al., 2008)	Australia	Examine physical and mental health well-being among international students.	Asian, European, and American $n=948$	Cross-sectional	A measure of the state of health and how this compared to their health before coming to Australia; The 42-item Depression, Anxiety and Stress Scales (Lovibond & Lovibond, 1995); Yes/No questions about self-harm; Four questions on experience of abuse and distress; Risk-taking behaviour was assessed in the following domains: sex-related practices, drug use, alcohol, gambling, and smoking.	Students reported their general state of physical health positively. Students reported low ratings of depression, anxiety, and/or stress. Single students were more anxious than married students, and Asians were more anxious compared to non-Asians. Students who felt their academic progress was below expectation had significantly higher levels of depression and stress.

23. (Sawir et al., 2008)	Australia	Examine loneliness among international students in seven universities.	International students from 30 countries $n = 200$	Qualitative; Interview	different areas touching on the social and economic, e.g., language, friendship, finance, were discussed in between 30-50 mins	One hundred thirty of the participants felt lonely in the first months. Language, lack of cultural fit, and personal characteristics were some of the causes. However, 62 participants answered no trigger.
24. (Hsu et al., 2009)	New Zealand	The links between religion/spirituality and quality of life and whether religion/spirituality could function as a coping mechanism.	International Undergraduate students $n = 164$ domestic Undergraduate students $n = 218$	Cross-sectional	The 26-item Quality of Life questionnaire and a 32-item measure of spirituality (WHOQOL Group, 1998)	Religion was significantly correlated with the psychological quality of life in both groups and social quality of life in international students. Religion/spirituality may act as a coping mechanism amongst international students facing acculturation stress.
25. (Irizarry & Marlowe, 2010)	Australia	The most stressful time as Social work international students	International students $n = 22$	Qualitative; Group discussion for 90 minutes.	Question about challenges, ways to overcome, the positive aspects that you have enjoyed in your course? What would help make your experience at Flinders better? How supported have you felt during your course here?	Common elements that many students report include language, adapting to new teaching methodologies, and trying to integrate into a new social setting. Attending workshops and lunch with other students was helpful.
26. (Kim, 2011)	United States	To identify the types and levels of acculturative stress experienced by international music therapy students in the US and to identify possible predictors of their acculturative stress.	International student $n = 106$ from 25 countries	Cross-sectional	English proficiency scale (3 questions); The 36-item Acculturative stress scale for international students (ASSIS). A measure of Neuroticism (8 items) and Openness to experience (10 items) from the Big Five Inventory; The 22-	The level of acculturative stress among Asian participants was greater than among European participants. Asian participants had significantly higher scores than the Europeans on acculturative stress subscales of perceived discrimination, hate, fear, and Culture Shock. The number of

					item Music therapy student academic stress inventory	years lived in the US was not associated with acculturative stress. Scoring high in neuroticism may experience higher degrees of stress. On the other hand, scoring high in openness experienced less acculturative stress.
27.(Rice et al., 2012)	United States	Investigated the association between self-critical perfectionism, acculturative stress, and depression	Students from China ($n = 129$) and India ($n = 166$) in first semester.	Cross-sectional	A measure of Self-critical perfectionism; The 12-item Discrepancy subscale from the Almost Perfect Scale; The 24-item Acculturative stress scale; The 10-item Short Form of the Center for Epidemiological Studies Depression scale	There were no differences between the groups on self-critical perfectionism or depression, but the Chinese students reported higher levels of acculturative stress. Self-critical perfectionism was positively associated with depression for both groups.
28.(Gardner et al., 2014)	New Zealand	To explore the relationships between levels of spirituality/religiosity, perceived stress, Quality of life, and positive and negative religious coping.	Domestic $n = 45$ international $n = 65$	Cross-sectional	The WHOQOL-BREF contains 26 items. The WHOQOL-SRPB consists of 36 items. The Perceived Stress Scale (PSS). The Brief Religious Coping Scale (Brief RCOPE)	International and domestic students did not differ in terms of perceived stress. Muslim students may tend to use less religious coping strategies in response to stress with time.
29.(Hamamura & Laird, 2014)	United States	Investigated how perfectionism and acculturative stress affect East Asian international students' perceptions and psychological reactions to academic performance and the extent to which maladaptive perfectionism and acculturative stress leads to greater depression in East Asian	East Asian international students $n = 52$ domestic students $n = 126$	Cross-sectional	The 31-item Almost Perfect Scale-Revised; The 20-item Center for Epidemiologic Studies Depression Scale (CES-D, 1977); The 36-item Acculturative Stress Scale for International Students (Sandhu & Asrabadi,	Differences were not statistically significant on levels of depression between the two groups; the only statistically significant difference was for GPA satisfaction domestic students were more satisfied with their GPA. A positive correlation was found between perfectionism and

		international students			1994); Academic performance questionnaire (GPA, their expected GPA, and their satisfaction with their GPA)	depression among both groups. Among East Asian international students, acculturative stress was moderately correlated with GPA satisfaction, perfectionism, and depression.
30. (Liu & Winder, 2014)	United Kingdom	Investigate the experiences of first-year undergraduate international students in the UK.	International students $n = 5$ from 4 countries	Qualitative; Semi-structure interview 30-66 mins	13 questions cover the reasoning behind studying abroad, participants' experiences and expectations, and the reactions to change of culture, difficulties, coping strategies, and relationships.	Social support and interaction with local students play an important role in better adjustment and low-level loneliness. Difficulties encountered by students were related to cultural differences, personal struggles, personality differences, and English language level.
31. (Cho & Yu, 2015)	United States	Investigated the roles of university support in determining international students' well-being.	International students $n = 131$ from 33 countries	Cross-sectional	The measure of University identification; The 4-item organisational identification scale (Cheney, 1983); A 5-item university support scale (Eisenberger et al., 1986); A 3-item School-life satisfaction scale (Scott et al., 1999); A 6-item Student-Life Stress Inventory (Gadzella, 1991).	No significant gender difference on all measures. No significant effect of university identification on psychological stress. University identification positively affected international students' perception of university support and eventually, their school-life satisfaction. University support increased international students' school-life satisfaction and reduced their psychological stress.
32. (Hirai et al., 2015)	United States	To test the relationship between psychological adjustment and perceived control over academic stress, extraversion, and openness, social connectedness.	International students $n = 128$ including Asian (88%), White (7%), Hispanic	A longitudinal cross-sectional study with measures taken at 5-time points	Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995); The 21-item Well-being Scale (Ryff, 1989); 7-item	Sociocultural adjustment difficulties were highest in the beginning and then decreased. The groups with the greatest difficulty reported more distress, lower well-being, and greater sociocultural

			(3%), and Black (2%).			Sociocultural Adaptation Scale (Ward & Kennedy, 1999); The 40-item Academic stress scale (Frazier et al., 2011); Measures of Openness, Extraversion, and Neuroticism; The Social Connectedness in mainstream Society and Ethnic Community Scales (Yoon, Jung, Lee, & Felix-Mora, 2012); English proficiency TOEFL score, and the 12-item Communication Apprehension Scale (McCroskey, 1982)	difficulty. Perceived control over academic stress was one of the most important predictors of psychological adjustment. Neuroticism predicted more distress, lower positive psychological adjustment, and greater socio-cultural adaptation. Openness predicted positive psychological and socio-cultural adjustment trajectories. Extraversion did not predict any adjustment outcomes. Social connectedness with the host member was a significant predictor of positive psychological adjustment.
			**number of participants changed over the five times.				
33. (Szabo et al., 2016)	New Zealand	To determine if primary and secondary coping strategies moderate the relationship between uprooting stress and anxiety.	Asian <i>n</i> =61 Western <i>n</i> =66	Short-term longitudinal design with three months between the two points of measurement	A measure of stress (Jose, Ward, & Liu, 2007). Four items were measuring uprooting difficulties. The COPE Inventory (Carver, Scheier, & Weintraub, 1989). The anxiety and insomnia subscale of the GHQ-28 (Goldberg & Hillier, 1979). A large variety of measures related to cross-cultural adjustment.	Primary coping predicted more symptoms of anxiety while secondary coping reduced the number of symptoms and buffered the negative impact of stress. Asian students reported significantly less uprooting stress than Western students.	
34. (Redfern, 2016)	Australia	Investigate the prevalence of negative psychological symptoms (stress, anxiety, and depression) among international	Australian undergraduates' students <i>n</i> =98 Chinese	Mixed-method (Questionnaire and open-ended questions)	An open-ended item for subjects to describe the main sources of stress anxiety in their life.	Chinese students' levels of both stress and anxiety were significantly higher than for local students. Academic, life balance,	

		students.	undergraduates' students $n=103$		Depression Anxiety Stress Scale (42-items; Lovibond & Lovibond, 1995)	and family factors were found to be the main sources of stress for Chinese students.
35. (Huang & Mussap, 2016)	Australia	Investigate the relationship between trait maladaptive perfectionism, acculturative stress, years in Australia, and depressive symptoms.	International students $n=384$ from 17 Asian countries	Cross-sectional	The 36-item Acculturative Stress Scale for International Students; The 23-item Almost Perfect Scale-Revised (APS-R). The 20-item Centre for Epidemiological Studies Depression Scale.	Findings show that acculturative stress and maladaptive perfectionism are directly associated with increased depressive symptoms.
36. (Hunt et al., 2017)	United States	Investigated the relationship between acculturative stress, alcohol use, and alcohol-related consequences	International students $n=175$ from different countries	Cross-sectional	Daily Drinking Questionnaire (Collins, Parks, & Marlatt, 1985); The 24-item Brief Young Adult Alcohol Consequences Scale (Kahler, Strong, & Read 2005); The 36-item Acculturative Stress Scale (Sandhu & Asrabadi, 1994)	No direct effect between Acculturative stress and alcohol use but Acculturative stress moderated the relationship between alcohol use and related consequences.
37. (Praharso et al., 2017)	Australia	Investigate the relationship between social connectedness, stress, and well-being.	International students $n=79$	A longitudinal study with two-time points. At the start of the semester (T1) and the end of the semester (T2) approximately four months later	A 4-item Social support scale (House, 1981) An adapted version of the Groups Listing Task to determine important group memberships. (Haslam et al., 2008); The 42-item stress subscale of the Depression, Anxiety and Stress Scales (Lovibond & Lovibond,	There was limited evidence for the buffering role of social support as predicted by the Stress Buffering Hypothesis. A loss of social identities as a result of transition had a subsequent decline in well-being level.

					1995); The 5-item Satisfaction with Life Scale (Diener et al., 1985); The 7-item depression subscale of the Depression Anxiety Stress Scales (DASS-21)	
38. (Acharya et al., 2018)	United States	identified stressors associated with depressive symptoms across domestic/international college students.	Domestic students <i>n</i> =450 International students <i>n</i> = 181	Cross-sectional	The Center for Epidemiologic Studies Depression Scale 20-item; The Student Stress Survey (SSS).	International students had higher depressive symptoms than domestic students. Female students had higher depressive symptoms than males. Stressors in social interaction, intrapersonal issues, and academia were significantly related to depression among domestic students. While academic concerns were the only stressor significantly associated with depression among international students
39. (Skromanis et al., 2018)	Australia	Investigated aspects of health and well-being included physical and mental health, social support, environmental satisfaction, substance use, and help-seeking behaviours among international and domestic students.	International <i>n</i> = 382 Australian <i>n</i> =1013	Cross-sectional	The 10-item Kessler Psychological Distress Scale (2002); The Multidimensional Scale of Perceived Social Support The Satisfaction with Life Scale; The (8-item) Environmental Health subscale; The Canadian Problem Gambling Severity Index; The help-seeking behaviours, which were developed by the authors	International students reported poorer life satisfaction, social support, greater dissatisfaction with their environment, higher levels of smoking and illicit drug use, and higher levels of problem gambling behaviours. International students were less likely than domestic students to seek help for mental health and related problems. Domestic students were more likely to rate their health as being fair or poor than international students.

40. (Jones et al., 2019)	United Kingdom	Investigate the differences in mental health predictors between home and international students.	British students <i>n</i> =88 International students <i>n</i> = 134	Cross-sectional	The 8-item UCLA Loneliness Scale (Hays and DiMatteo, 1987); The ten-item Rosenberg Self-Esteem Scale; The five items Satisfaction with Life Scale (Diener et al., 1985); A 12-item General Health Questionnaire (GHQ) (Goldberg and Hillier, 1979).	Life satisfaction, self-esteem, and loneliness predicted mental health scores in both groups. International students reported higher mental health, self-esteem, and life satisfaction scores than home students. No significant difference was found between loneliness scores and home and international students.
41. (Li & Peng, 2019)	United States	Examine the role of perceived social support from home and host country through social networking sites (SNSs) and acculturative stress.	International students <i>n</i> = 322	Cross-sectional	Acculturative stress was measured by a 36-item validated scale developed by Sandhu and Asrabadi (1994); A 6-item Cutrona and Russell (1987)'s social provision scale; Home and host SNS use and face-to-face communication with local measures developed by authors	Neither home nor host media use relates to acculturative stress Perceived social support from home and host countries associated with decreased acculturative stress.
42. (Wawera & McCamley, 2019)	United Kingdom	Examine loneliness among international students in the UK.	Quantitative phase International students <i>n</i> = 61 and <i>n</i> =6 semi-structured interviews	Mixed-method	The de Jong Gierveld loneliness scale (DJGLS) The interview covers three main topics: exploring understandings of loneliness, the student's personal experience of loneliness, and potential coping strategies.	International students reported moderate levels of loneliness. A negative correlation was found between loneliness and the use of university activities.

2.4.2 Sources of stress

Herein, five sources of stress international students faced, the majority related to the acculturation process, including acculturative stress, English -language issues, perceived discrimination, loneliness, and academic stress.

2.4.2.1 Acculturative stress

Acculturative stress is one of the most common stressors discussed in the literature of international students, and it is a result of the acculturation process. Berry (2003) refers to acculturative stress as “a stress reaction in response to life events that are rooted in the experience of acculturation” (p. 294). Acculturative stress may also trigger by other stressors in this section, apart from academic stress.

A total of 11 studies in this review investigative acculturative stress (Chavajay & Skowronek, 2008; Constantine et al., 2004; Hamamura & Laird, 2014; Hunt et al., 2017; Huang & Mussap, 2016; Kim, 2011; Li & Peng, 2019; Poyrazli et al., 2004; Rice et al., 2012; Yeh & Inose, 2003) used the same questionnaire to assess acculturative stress: The Acculturative Stress Scale for International Students (Sandhu & Asrabadi, 1991, 1994, 1998). This questionnaire includes 36 items divided into seven subscales: Perceived Discrimination, Homesickness, Perceived Hate, Fear, Change, Guilt, and Nonspecific. These studies have identified factors that contribute to better adjustment and less acculturative stress including geographic origin, English fluency, social connectedness, satisfaction with one's social support network, and personality traits such as neuroticism and maladaptive perfectionism. For example, East Indian and European students showed lower acculturative stress than Chinese and African students when adjusting to living in the USA, presumably because they have greater familiarity with Western culture and society due to their generally stronger English language abilities (Rice et al., 2012). A recent study by Li and Peng (2019),

investigated perceived social support from home via social networking sites (SNSs) on acculturative stress, found that SNSs use with the host nation led to less acculturative stress.

Importantly, international students are cognizant of the fact that they will be returning home after their studies, such that the stress experienced through the acculturation process is temporary. Thus, students may be able to compartmentalise the acculturation experience by such actions as limiting their interactions with friends and family in their home country. In any case, the stress sojourners experience related to acculturation may likely be less significant than immigrants who have to deal with a new environment and culture in the long term (Jung et al., 2007). Indeed, Smith and Khawaja's (2011) review argue that current models are yet to fully account for the factors that may be associated with acculturation stress among international students.

Hull (1978) argued that academic issues and concerns are more salient for international students. Furthermore, Yasuda and Duan (2002) reported that academic issues are greater source of stress-related mental health problems than issues associated with cultural skills they may need to successfully interact with the host culture.

2.4.2.2 English Language Proficiency

English language proficiency is a fundamental factor in the adjustment of international students living and studying abroad. The language has important implications for academic achievement in terms of understanding lecture content, success in oral and written exams, and everyday communication with people in the host country.

Seven studies investigated the effects of English proficiency on academics, adjustment, and mental health. The majority of the studies used self-assessed English proficiency measures, and one used students' Test of English as a Foreign Language (TOFEL) scores. Three studies (i.e., Barron et al., 2007; Kim, 2011; Liu & Winder, 2014)

found that students had concerns about their language abilities for meeting course requirements. Writing assignments were considered the most difficult, and conducting in-class presentations or discussions was associated with high levels of anxiety. Furthermore, English language proficiency was associated with better adjustment, less acculturative stress and lower scores on depression scales (Constantine et al., 2004; Hirai et al., 2015; Tsenc & Newton, 2001; Yeh & Inose, 2003).

2.4.2.3 Perceived discrimination

Feeling rejected by the people in the host country is also considered to be a source of stress for international students. Four studies examined perceived discrimination or prejudice; Chavajay and Skowronek (2008) reported that 48% of the sample, which consisted of 130 international students from 33 countries, experienced being discriminated against by a member of the host culture, in general places like a supermarket or at the university by students of the host country. Nilsson et al. (2008) examined perceived discrimination using the American-International Relations Scale (AIRS; Sadowsky & Plake, 1991), which assessed the degree to which international students feel unaccepted by the people they encounter in the USA. Their findings indicated a strong relationship between perceived prejudice and stress, which has a negative impact on well-being and self-esteem, making the adjustment process more difficult. Moreover, Wadsworth et al. (2008) found that perceived race discrimination affects personal-enacted identity gaps. This occurs between the personal and enacted frames of identity when an individual perceives themselves in one manner but expresses themselves differently while interacting with others (Jung & Hecht, 2004).

A further study by Nilsson et al. (2008) found that international students may expect challenges in cultural differences with the host culture, including language and communication barriers and issues with local customs. Nevertheless, international students are likely to be less prepared for encounters with prejudice or racism and may find they are

not psychosocially equipped or ready to manage this experience. Indeed, Chen (1999) reported that managing and learning ways to handle racial prejudice might be an essential skill for the adjustment of international students to a host culture.

2.4.2.4 Loneliness

Loneliness can impact an individual's mental health; among international students, loneliness may be a result of poor adjustment, a low level of English language proficiency, or perceived discrimination. Six studies reported on loneliness among international students. Barron et al. (2007) found that loneliness was associated with cultural distance and low English language proficiency. For example, many Chinese students reported loneliness and homesickness as a concern during their first semester in the UK.

In the Australian context, Sawir et al. (2008) interviewed 200 international students and found that 130 of the participants experienced loneliness and/or isolation, especially in the months immediately following their arrival in the host country. Sawir et al. (2008) also identified three kinds of loneliness experienced by international students: personal loneliness due to the loss of contact with their families; social loneliness, due to the loss of networks; and cultural loneliness, triggered by the absence of the preferred cultural and/or linguistic environment.

Later, Wawera and McCamley (2019) investigated loneliness in international students in the UK. Similar to Sawir et al.'s (2008) study, the findings showed that 44 of the 61 international students had experienced symptoms of loneliness since arriving in the host country, and age, gender, relationship, and living status factors were not associated with loneliness. Furthermore, students reported that they experienced symptoms of loneliness not only at the beginning of their stay but also after their close friends had moved away. However, interaction with local students and engagement in university activities seemed to play a role in alleviating loneliness (Liu & Winder, 2014).

2.4.2.5 Academic stress

Eight studies investigated academic stress, which is commonly felt by students all over the world, whether they are studying in their home country or overseas. However, it seems that international students face more academic challenges than their domestic student peers due to the differences between the learning styles or teaching methodologies in their home country and the host country (Chavajay & Skowronek, 2008; Irizarry & Marlowe, 2010; Sanders & Lushington, 1999). For example, Asian students report a problem in applying their critical skills and the way they deal with staff or faculty (Mallinckrodt & Leong, 1992).

International students also experience greater academic stress from frustration due to workload, failure to achieve goals, and feeling like social outcasts, or from the pressure due to competition and deadlines. Academic stress also occurs when too many changes, including rapid changes, disrupt a student's life and goals (Misra et al., 2003).

In comparing between home and international students in academic stress, Khawaja and Dempsey (2008) and Rice et al. (2016) found no significant differences in perceived academic stress between international students and domestic students in the USA and Australia. Interestingly, Misra and Castillo (2004) found that U.S. students reported a higher level of academic stress than international students. They found that this type of stress is more often self-imposed among U.S. students compared to Asian international students. However, international students may have answered questions in a socially desirable manner to avoid the stigma associated with admitting personal inadequacies.

Six studies focused on international students in one subject area, mostly considered professional sciences, such as law, which is culture-based and requires an understanding of a specific culture to understand the legal system. This makes it difficult for international

students that come from countries with different cultures and different values (Svarney,1989). Other studies examined subject areas in which international students had to deal and interact with patients or clients, such as nursing (Sanner et al., 2002), clinical and counselling psychology (Nilsson, 2007), social work (Irizarry & Marlowe, 2010), dentistry (Sanders & Lushington, 1999), and music therapy (Kim, 2011). International students may experience social anxiety, and sometimes clinical work is described as a stressful activity due to language difficulties and misunderstandings as well as the lack of familiarity with the culture, values, and beliefs of the host country's health care system. A systemic review of international health care students found that a lack of cultural awareness had negative consequences on their performance (Mikkonen et al., 2016).

It is worth noting that international students may have high expectations about their academic achievements, as it is common for students studying abroad to have high GPAs in their home countries. These mismatched expectations can lead to stress and depression (Rosenthal et al., 2008). Nevertheless, some international students tend to experience less academic stress and better adjustment. For example, students who report high academic competency and self-efficacy (Nilsson, 2007), and those with higher perceived academic or course control (Hirai et al., 2015).

2.4.3 Individual Differences

The experience of studying abroad can vary between students due to individual differences, which is considered an essential component for understanding stress and well-being outcomes. This section presents a discussion of the primary individual differences found in the reviewed studies, namely gender and ethnicity, coping strategies, social support, personality traits. Perfectionism and two of the Big Five personality traits (neuroticism and openness), self-efficacy, and length of stay in the host country are also discussed.

2.4.3.1 Gender and ethnicity

Findings on gender differences showed that female students were significantly more depressed and anxious than male students (e.g., Acharya et al., 2018; Mallinckrodt & Leong, 1992; Rosenthal et al. 2008; Skromanis et al., 2018). However, Yeh and Inose (2003) found no statistically significant gender differences in acculturative stress.

Furthermore, male and female international students differed significantly in their health risk behaviours in reaction to stressors (smoking and alcohol consumption). Fewer women than men indicated that they smoke (defined as current use of any number of cigarettes) or consumed alcoholic beverages (had one drink within the last week).

In terms of ethnicity, in most of the reviewed studies, the research samples consisted of East Asian students, especially Chinese students. Thus, only a limited number of studies included samples of students of different ethnicities or samples with a variety of ethnicities. Overall, Chinese students comprised 40 percent or more of each study's sample. This is however, understandable as Chinese students constitute the largest group of international students globally.

In comparing European and Asian students, Asians reported higher levels of acculturative stress (Kim, 2011; Poyrazli et al., 2004; Yeh & Inose, 2003). This is likely because European and U.S. societies tend to be considered Western cultures and, thus, fundamentally similar (Poyrazli et al., 2002), or it may be because Europeans encounter less racism and discrimination than Asians or Africans as they have a similar ethnicity and appearance (Yeh & Inose, 2003). Furthermore, European students have less difficulty making friends from the host country and less difficulty speaking the host country's language than Asian students. However, when researchers compared African, Asian, and Latino international students, the African students reported higher levels of acculturative stress and depression than other international students (Constantine et al., 2004).

A further study by Szabo et al. (2016) found that Asian students reported significantly less uprooting stress than Western students. That finding is consistent with the results reported by Fritz et al. (2008) who found that being apart from their family is the most challenging stressor for European international students. Asian students also reported significantly lower levels of stress-related to the psychological disaster in comparison to Latino students. The authors suggested that this might be since cultural values related to how life is experienced and expressed may be different for Asians and Latinos and the limited number of Latino students at a university. Thus, the Latino students did not find many people from their culture, which had an impact on their ability to make friends and receive informal social support (Wilton & Constantine, 2003).

When comparing international students with domestic students, eight reviewed studies showed both differences and similarities. Three studies conducted in the USA found no significant differences between the two groups with regards to strain at the beginning of the semester (i.e., Hechanova-Alampay et al., 2002) or depression (i.e., Hamamura & Laird, 2014). However, in Acharya et al.'s (2018) study, which had a larger sample size ($n = 631$), international students had higher depressive symptoms than domestic American students. Findings from two studies conducted in New Zealand showed international and domestic students did not differ in terms of perceived stress (i.e., Gardner et al., 2014) however; international students reported poor physical health compared to domestic students on the WHO's Quality of Life-BREF (WHOQOL-BREF) scale (Hsu et al., 2009). In the Australian context, international students reported poorer life satisfaction and lower levels of social support than domestic students (Khawaja & Dempsey, 2008; Skromanis et al., 2018). Finally, in the UK, domestic students reported poorer mental health compared to international students (Jones et al., 2019).

2.4.3.2 Personality

Personality traits have a significant impact on how people feel about and react to a stressful situation. Three personality traits were discussed, including perfectionism, neuroticism, and openness.

People with these perfectionism traits have been found to set high standards and high ‘unrealistic’ expectations of themselves and others. As such, there are often discrepancies between their expectations and their actual performance. Being hard with oneself and the fear of making a mistake is correlated with acculturative stress, GPA satisfaction, depression, and stress (e.g., Hamamura & Laird, 2014). Indeed, Huang and Mussap (2016), Nilsson et al. (2008), and Rice et al. (2012) found a significant positive association between self-critical perfectionism and depression and stress symptoms. Moreover, maladaptive perfectionism also increased the level of acculturative stress. Students that report a high level of maladaptive perfectionism are rarely satisfied with their GPA regardless of how academically proficient they objectively appear.

Neuroticism, which is the tendency to experience negative emotions, such as worry or fear, is another personality trait that can affect a student’s level of stress. International students with a high level of neuroticism may experience higher degrees of stress due to the combination of neuroticism and acculturative stress; they may also experience more psychological distress, lower positive psychological adjustment, and greater sociocultural difficulties. In contrast, openness is the tendency to appreciate new values, ideas, or behaviours. International students who were more open to their new environment experienced less acculturative stress and were better able to adjust to their new surroundings; this may help them maintain a sense of well-being (Hirai et al., 2015; Kim, 2011).

2.4.3.3 Self-efficacy

Self-efficacy is a cognitive component, which refers to “an individual's belief in his or her capacity to execute behaviours necessary to produce specific performance attainments” (Bandura, 1997, p. 604). Two reviewed studies investigated self-efficacy and social self-efficacy, international students with high levels of self-efficacy reported better adjustment, less strain (Hechanova-Alampay et al., 2002), and less academic stress (Nilsson, 2007).

2.4.3.4 Coping strategy

Coping strategies are how people react to stressful situations. Lazarus (1993) defined coping as the “on-going cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 237). There are many different types of coping strategies, and their effectiveness depends on the type of stressors and individual encounters. Ten studies investigated coping strategies international students used to cope with difficulties such as adjustment, academic stress, and loneliness.

Tseng and Newton (2001) interviewed African and Asian international students and reported that they used eight strategies to attain well-being and adjust to their new environment: knowing and understanding self and others, building friendships with peers and relationships with advisors, expanding individual worldview, asking for help when needed, English proficiency and letting go problems.

Moreover, Wawera and McCamley (2019) reported that international students coped with loneliness by talking to close family members and friends back home. Szabo et al. (2016) studied how international students coped with uprooting stress and found that primary coping, which refers to attempts to influence objective conditions, predicted increases in symptoms of anxiety, while secondary coping, which refers to attempts to adjust oneself to

objective conditions, reduced the number of symptoms experienced over time and buffered the negative impacts of stress.

In reaction to academic stress, Misra and Castillo (2004) found international students reported greater cognitive reactions (e.g., the use of some effective strategies to reduce stress), whereas US students reported behavioural reactions (e.g., smoking). Moreover, Misra et al. (2003) found female international students had more emotional reactions (i.e. fear and physiological symptoms, such as sweating, trembling, stuttering, body or headaches, and weight loss or gain) and behavioural reactions (crying, self-abuse) to stressors than their male counterparts. The most frequent reactions to stressors among male students were cognitive; thus, their appraisal of stress was intellectual instead of emotional (Misra et al., 2003). Khawaja and Dempsey (2008) also examined how international students and Australian students cope with the challenges of university life, including academic stress. The findings indicated that international students used avoidance, repression, and other passive coping strategies, this might be because the sample reported a high level of mismatched expectations. Khawaja and Dempsey (2008) also highlighted that while the level of distress is similar between international and domestic students but the coping strategies make differences between the two groups.

Two studies examined religion as a coping strategy for stressful events. Specifically, Gardner et al. (2014) and Hsu et al. (2009) found that religion/spirituality might function as a coping mechanism for international students in response to acculturation stress and perceived stress in general. However, the use of religious coping strategies among international Muslim students may decrease over time due to adapting to their new environment.

Overall, research (e.g., Constantine et al., 2004; Lee et al., 2004; Tung, 2011; Wei et al., 2007) has shown the number of mental health problems experienced by international students (e.g., depression) is related to their ability to cope with stressors.

2.4.3.5 Social support

An important factor for international students to manage their transition to a new culture is the level of social support they experience. Social support may be conceptualised as the perceived comfort, caring, esteem, or help an individual has from other people or groups (Cobb, 1976). Eleven studies investigated the role of social support on adjustment, acculturative stress, academic stress, perceived discrimination, and depression.

Several studies (Liu & Winder, 2014; Misra et al., 2003; Poyrazli et al., 2004; Yeh & Inose, 2003) show advantages of social support in facilitating adjustment and academic achievement and managing life stressors. For example, Neri and Ville (2008) found that 25.8% of international students identified the support of family and close friends as being very important to their academic success.

Research in an Australian and American context revealed that international students reported lower levels of social support than domestic students; primarily because domestic students lived with their parents or a close relative (Hechanova-Alampay et al., 2002; Khawaja & Dempsey, 2008; Skromanis et al., 2018). Research has also shown that married students report higher levels of social support than single students (Poyrazli et al., 2004). Moreover, Praharso et al. (2017) argued that when people are far removed from people who provide help and care, the effectiveness of social support may be limited, especially for a life transition such as completing studies in a foreign country and culture.

Research has also shown that rather than the amount of social support, it is the quality and type of social support that alleviates any stress or strain felt by international students when they make the transition to a host culture (Hechanova-Alampay et al., 2002). Furthermore, limited support for the buffering effect of the social support between perceived discrimination and depression or stress (Jung et al., 2007; Praharso et al., 2017).

Finally, Mallinckrodt and Leong (1992) investigated different sources of social support amongst international graduate students in the USA, finding that positive relationships with university faculty members were especially beneficial for male students. In contrast, tangible support, positive relationships with other students, and flexibility in the curriculum were more beneficial for female students.

2.4.3.6 Length of stay

Whereas it is assumed that greater adaptation of international students comes with them spending a long time in a host culture (Adler, 1975; Church, 1982). Ward et al. (1998) and Ward and Rana-Dueba (1999) argued sociocultural adjustment may improve as a function of the length of stay, but the same cannot be said for psychological adjustment.

Indeed, three researchers examined the length of stay; two have shown no significant effects on psychological adjustment relating to the length of an international student's stay in a foreign country (Rosenthal et al., 2008). Similarly, Nilsson et al. (2008) found that the time spent in the USA was unrelated to stress amongst international students. However, Wilton and Constantine (2003) found a negative correlation between length of stay in the USA and cultural adjustment difficulties and general psychological distress of international students.

2.4.4 Mental Health

The World Health Organization (2001) defined mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (p.). Since students frequently have more complex problems today than they did over a decade ago (Benton et al., 2003), improving the mental health of university students has become a fundamental aim of higher education institutions and universities. To achieve this, it is vital to first understand students' experiences, including the processes of stress and factors affecting well-being.

This section discusses studies that have investigated stress and well-being. In general, little attention has been paid to positive well-being and life satisfaction compared negative well-being (e.g., stress, anxiety and depression).

2.4.4.1 Stress, Anxiety and Depression

Most researchers argue that stress is a natural part of being a student at a university due to the demands and change experienced. Additionally, either beginning or ending school/college is one of the 43 events on Holmes and Rahe's (1967) stress scale, which consists of life changes that have been linked to stress-related illness. During the transition to university first year, and in subsequent years, both domestic and international students have similar difficulties in terms of time demands and academic stress. With international students, researchers tend to focus on specific types of stress, such as acculturative stress or academic stress. However, as previously mentioned, acculturation may lead to significant mental health implications for immigrants.

Stress occurs when there is a discrepancy between the demands imposed by a situation and an individual's expectations. In this sense, stress can arise from both positive and negative events because individuals may process and perceive the same event differently due to differing cognitive appraisals. Therefore, stress depends on both primary and secondary appraisals. The primary appraisal indicates the perception of the situation, and the secondary appraisal reflects either abilities or resources for coping (Lazarus & Folkman, 1984).

The findings relating to stress among international students are mixed. In one study by Gardner et al. (2014), New Zealand international Muslim students and domestic students did not differ in terms of perceived stress. Similarly, Khawaja and Dempsey (2008) found no differences between local Australian and international students in their level of stress with both groups reporting similar degrees of emotional distress. Moreover, Chai et al. (2012)

reported that the level of stress shown by international and domestic students in New Zealand was not significantly different from each other.

In contrast, Redfern (2016) found higher levels of stress in Chinese students compared to Australian students. The study entailed a mixed-method design wherein students completed an open-ended item to describe the main sources of stress anxiety in their life and filled out the Depression Anxiety Stress Scale (DASS- 42; Lovibond & Lovibond, 1995). Whereas the findings showed that Australian students displayed 'normal' to 'mild' levels of depression and anxiety, stress levels were found to be 'mild' to 'moderate' in severity. In comparison, the Chinese international students reported significantly higher levels of stress and anxiety than Australian students, with both levels falling in the 'moderate' level of severity range (Lovibond & Lovibond, 1995).

A further study conducted by Fritz et al. (2008) in the USA also found higher levels of stress amongst Asian international students compared to European international students and those with U.S. residency (students holding a green card). Although no differences were found between the three groups on their mood and irritability levels, Asian students reported significantly higher anxiety levels than European students. The authors concluded that Asian students might have reported higher levels of anxiety as a general cultural trait. However, it may also be the case that the measures employed in the study lack validity for assessing anxiety amongst people from an Asian background.

Research has also investigated international students' perceptions about the most significant situation to cause them stress. Chavajay and Skowronek (2008) asked 130 international students in the USA to report what situations in town or on the university campus caused them the most stress. The findings showed that 82% of the students reported concerns predominantly related to social life, with 78% of students reporting feeling lonely. In another study, Redfern (2016) found that Chinese students in Australia felt the main source

of anxiety and stress were academic factors like their study workload and ambiguity over assessment tasks or teaching styles. Students also reported a range of life balance stressors, including a lack of time for relationships and social activities. There was also a report of family stressors that entailed the high expectations and pressure to succeed that students felt from their parents.

A further source of stress reported in the literature is the perception of racial discrimination which may be defined as the excess stress to which individuals from stigmatised groups experience due to their minority position and cultural differences (Harrell, 2000). As argued by Wei et al. (2008), racial discrimination is a distinct source of chronic stress for ethnic minorities that is additional to other general life stressors. In one study, Nilsson et al. (2008) found that perceived prejudice was the only variable that explained unique variance in stress among international students. Nevertheless, Cross (1995) reported that the stress associated with prejudice is moderated English proficiency, having friends from the host country and the home country, or previous travel to a different country.

Overall, it is generally accepted that stress is directly related to many medical conditions, and long-term exposure to daily hassles is also associated with the compromised health status of university students (Calicchia & Graham, 2006; Kim & Seidlitz, 2002). In one study, Hsu et al. (2009) investigated the physical symptoms of being away from home and friends amongst international students and employed the WHO Quality of Life Questionnaire to determine their health-related quality of life in four different domains: physical, psychological, social, and environmental quality of life. Interestingly, the findings showed that international students scored significantly lower than domestic students in the physical domain. However, stress was not assessed in the study such that it is not possible to determine whether international students had a lower physical quality of life due to their exposure to life stressors.

Finally, a study by Misra et al. (2003) put forward a model of stress for international students' population based on the conceptual domains of the stress process including primary and secondary stressors, stress mediators, and stress outcomes. The model further proposed direct and indirect relationships between the four constructs such that *Primary stressors* include life stressors, *Secondary stressors* include academic stressors, mediators include perceived *Social support* to cope with these stressors, and *Reactions to stressors* is the stress outcome that refers to the state of physiological or emotional arousal. The results of their investigation showed that higher levels of academic stressors were predicted by higher levels of life stress and by lower levels of social support. Moreover, higher academic stressors predicted greater reactions to stressors. Overall, the model accounted for a significant amount of variance in reactions to stressors (82%), and all the regression paths in the model were statistically significant. Nevertheless, the model did not include some important aspects in the stress process such as individual difference factors like personality, prejudice, and ethnicity which have also been shown to play an important role in the experience of stress among international students.

Depression and anxiety are generally experienced when people are faced with adjusting to a new environment (Mesidor & Sly, 2016; Mitchell et al., 2007). Research has shown that depression is the most common presenting symptom among international students who have sought help from university counselling services (Wei et al., 2008). Research findings have shown that the stress associated with acculturation, or acculturative stress is positively associated with depression (Rice et al., 2012). Similarly, acculturative stress has also been found to be directly associated with increased depressive symptoms (Constantine et al., 2004; Huang & Mussap, 2016).

Research by Constantine et al. (2004) has also found that problems with English language fluency were negatively associated with depression, such that international students

who rated their English skills as lower were more depressed. Furthermore, Acharya et al. (2018) investigated the association between eight stressors and depressive symptoms. The stressors were labelled as follows: ‘change in social activities’, ‘work with people you don’t know’, ‘change in sleeping habits’, ‘change in eating habits’, ‘increased class workload’, ‘lower grade than anticipated’, ‘placed in an unfamiliar situation’ and ‘change in the living environment’. The finding showed that ‘lower grade than anticipated’ was the only stressor significantly associated with depressive symptoms among international students.

2.4.4.2 Well-being

The focus in the research has generally been on stressors and psychological problems faced by international students, however, this research often neglects to uncover the more positive factors that facilitate health and well-being within the International students’ experience (Outhred & Chester, 2013). In the literature about students in higher education in general and international students specifically, little is known about well-being. Additionally, it is not clear what factors play important roles in maintaining positive well-being and limiting negative feelings. Of the 42 articles, only six partially discussed well-being. Well-being is a stable concept means that people tend to return to their baseline level of well-being even after significant life events (Headey & Wearing, 1989). However, exposure to stressors over long periods leads to serious illness (Chandola et al., 2008). Subjective well-being (SWB) is a multifaceted concept, includes three elements: life satisfaction, positive effects, and negative effects, which are related to emotions and mood. By contrast, psychological well-being (PWB), as Ryff and Singer (2008) defined it, constitutes six aspects: self-acceptance, purpose in life, environmental mastery, positive relationships, personal growth, and autonomy. Moreover, the model of cross-cultural adjustment by Ward and Searle (1991) include psychological and sociocultural dimensions, wherein the psychological adjustment is defined as psychological well-being or satisfaction in a new cultural environment, and

sociocultural adjustment refers to an individual's ability to 'fit in' or interact with members of the host culture.

Findings from a longitudinal study on the adjustment of international students by Cemalcilar and Falbo (2008) showed that positive acculturation was associated with sociocultural adaptation rather than psychological well-being or academic adaptation. Furthermore, a comparison between Asian American and Asian international students revealed that ethnic identity, rather than acculturation, predicted Asian American students' emotional well-being, and neither the ethnic identity nor acculturation predicted Asian international students' emotional well-being (Yasuda & Duan, 2002). In a recent study in the UK by Jones et al. (2019) compared life satisfaction and mental health between British and international students, international students showed higher levels of life satisfaction and mental health than domestic students. The authors emphasised on ensure adequate support and mental health provision is given to both international and home students.

Research has also shown that participating in a club inside or outside of a university, or building friendships with people on or off-campus, could improve the average student's level of general well-being (Neri & Ville, 2008), whereas lower social support and identity loss could decrease well-being (Praharso et al., 2017).

The majority of the studies that discussed well-being among international students considered that feeling happy or establishing and maintaining good social networks were just part of a student's sense of well-being; they emphasised that well-being is multi-dimensional. Moreover, studies often used a five-point Likert scale to rate the level of well-being, such as the level of depression or the level of happiness. However, the studies in this review neglected life satisfaction and other important aspects of students' well-being, particularly in terms of a university's courses and environment, and how these aspects affect their feelings, either positively or negatively.

In a further study, Cho and Yu (2015) investigated the role the University organisational support systems may play in the well-being of international students. It was assumed that international students are heavily dependent on the host university in various ways making the host university the most important source of support. The model put forward included four dimensions, including university identification, university support, school-life satisfaction, and psychological stress. The findings demonstrated the positive effects of university support on two dimensions of international students' psychological well-being: increased international students' school-life satisfaction and a reduction in their psychological stress. It was also found that university identification positively affected international students' perception of university support and ultimately, their school-life satisfaction. In contrast, there was no significant effect of university identification on psychological stress. Although this study focused on school life satisfaction, it did not provide information on the effect of university support on well-being.

2.4.5 Intervention Targeting International Students

Despite the research showing international students facing a variety of challenges, very few interventions have been tested. This lack of interventions aimed to help international students has been reported in several reviews (e.g., Smith & Khawaja, 2011; Zhang & Goodson, 2011) and only a few interventions have been reported in reviews and meta-analyses of interventions targeting the mental health of higher education students in general with a sample of international students included in the test groups.

2.4.5.1 Search Strategies

Studies included in this review had to (1) investigate an intervention that aimed to improve international students experience and mental health, (2) contain interventions using any quantitative design, (3) include samples of undergraduate or postgraduate international

students enrolled in higher education institutions in English-speaking countries without restrictions based on their socio-demographic variables such as ethnicity, and (4) be written in English.

The main keywords search used were “international students” AND “intervention” in fields of title and keywords in two databases PubMed and PsycINFO, Google Scholar was also searched for additional results. In addition to the published articles, theses were included in the research.

2.4.5.2 Result

A total of seven intervention studies were found, three targeting adjustments to the new environment (e.g., social adaptation, institutional attachment, and developed friendship ties with local students) and the other four targeting mental health (e.g., depression, stress, and coping strategies). Three studies took place in the United States, Australia $n = 3$ in and in the United Kingdom $n = 1$, the sample size ranged from 13 to 98 participants and the interventions' length ranged between 1 and 8 months. The majority of interventions were delivered via sessions or face-to-face interventions and only one online intervention. The nature of each study in terms of aims, location, samples, intervention types and length, and findings is summarised in Table 2.2.

Table 2.2*Characteristics of Seven Interventions for International Students*

Authors	Location	Aim	Sample size and ethnicity	Intervention type, length and design	Findings
1. (Westwood & Barker, 1990)	Australia	Investigated the relationship between participation in a peer-pairing program and academic achievement, drop-out rates, and social adaptation among first-year international students in Australia.	Intervention group $n=24$ Control group $n=23$	Peer-pairing program, for Eight month (Post-test)	The intervention group reported significantly higher academic achievement and lower dropout rates than the nonparticipants. No significant difference between the two comparison groups in social adaptation
2. (Abe et al., 1998)	United States	Investigated peer program to improve academic adjustment, social adjustment, personal-emotional adjustment, and institutional attachment of international students	Intervention group $n=28$ Control group $n=32$ 50% of the sample were Asian	One semester Session (Post-test)	The intervention group reported significantly higher social adjustment scores than the nonparticipants. No other significant was found.
3. (Lee, 2008)	United States	Examine the effects of three interventions, namely, expressive art (EA), speech therapy (ST), and interdisciplinary counselling (IC) on adjustment and language difficulties.	EA $n = 14$, ST $n = 14$, IC $n = 13$, and Control group $n = 13$. East Asian	EA -10 sessions each 1 hour and 30 minutes, ST-10 sessions each 1-hour, and combing group attended both sessions with 10 minutes break. (Pre-post-test)	All three interventions were effective in reducing behaviour problems when compared to the control group. Combining both interventions was particularly effective in reducing the most commonly reported mental health concerns, internalising problems, e.g. depression and anxiety.

4. (Tavakoli et al. 2009)	United States	Examined three types of interventions: assertiveness training (AT), private expressive writing (EW), and combination of these two interventions (AT&EW) in improving acculturative stress and physical symptoms of international students.	AT n=28, EW n=26 AT&EW n=24, Control group n=30 East Asian	2.5 months after baseline (pre-post-test)	Assertiveness training significantly decreased negative affect, whereas expressive writing had mixed effects increased both negative and positive affect. The combination of conditions had no effects.
5. (Sakurai et al., 2010).	Australia	Investigate the effectiveness of multicultural intervention programme to help international students to develop a larger network of personal in the new community, a stronger orientation toward the local culture, and better psychological adjustment.	Intervention group n=47 Control group n=51	One session “Bus excursion.” (Post-test)	4 months after the programme, the intervention group developed more friendship ties with local students and sustained their interests in the local culture. The intervention had no impact on the psychological adjustment of students
6. (Smith & Khawaja, 2014)	Australia	Examined a STAR program in increases coping self-efficacy, psychological adaptation, self- social efficacy, and decrease in psychological distress	n=13	Two hours of sessions for four weeks pre-post and one month follow up	Intervention improves psychological adaptation and self-efficacy coping strategy. No other significant was found.
7. (Zheng, 2017)	United Kingdom	An online course based on the life skills package, Living Life to the Full (LLTTF) – Chinese version for experience symptoms of depression and anxiety.	Intervention group n=23 Control group n=22 Asian	Psychoeducational Three months pre-post and follow up six months	The intervention group showed a significant decrease in depression and anxiety scores and improvement in social functions.

2.4.5.2.1 Interventions Targeting Adjustment and Academic Success

Peer support programmes are the most common intervention types used to enhance international students' experiences in the host country. The peer support programme is “a structured programme for establishing a one-to-one association between the visiting student and a host national student to increase personal social adaptation” (Westwood & Barker, 1990, p. 260). Host students are often trained by universities in communication skills, university procedures, and finding resources. Furthermore, the paired students engage in a range of activities such as studying together, participating in family events, and enjoying entertainment. The initial idea behind peer support programmes, known as Excellence in Cultural Experiential Learning and Leadership (EXCELL), aimed to increase sociocultural social skills and self-confidence while helping international students, refugees, or expatriates to quickly adjust to and succeed in their new environment. EXCELL was developed by Marvin Westwood, Ishu Ishiyama, and Michelle Barker, professors at Australian and Canadian universities (Mak et al., 1998).

Westwood and Barker (1990) conducted a four-year project at an Australian and a Canadian university, comparing academic achievement, dropout rate, and social adjustment in international students who had and had not participated in an intervention programme. The findings showed that achievement rates were higher, and dropout rates were lower in the intervention group, but the authors noted that factors such as academic motivation might have impacted these findings. Abe et al. (1998), however, found that a long international peer programme helped international students only in making social adjustments, but had no significant effects on academic or personal adjustment levels. In Australia, a four-month multicultural intervention programme, aiming to increase psychological adjustment and interaction with host students, showed similar results. The results revealed that students who

had participated in the programme developed more friends overall, particularly local friends, compared to the non-participant group, but did not differ significantly in psychological adjustment (Sakurai et al., 2010).

Overall, the research shows that peer support programmes could improve international students' interactions with local students, which enhances adaptation to the host environment, but that they may not necessarily improve psychological adjustment or academic achievement. This might be because the support provided by peers may give the students a sense of belonging and help them to overcome issues, such as loneliness or isolation, but it may not buffer the negative impacts of other stressors.

2.4.5.2.2 Interventions Targeting Mental Health

The interventions used in this section use a psychotherapeutic approach (e.g., cognitive behaviour therapy) via sessions or online self-help courses to overcome issues like stress, anxiety, and depression. For example, Lee (2008) examined the effectiveness of three interventions on adjustment difficulties and language issues. First, expressive arts, in which participants attended sessions of 1 hour and 30 minutes in length for ten weeks, had students engage in different activities such as visual arts, creative writing, and creation of music and video clips to enhance self-understanding and self-empowerment. Second, speech therapy (called accent reduction therapy), where students received 1-hour sessions for ten weeks, aimed to help international students to become better communicators. Finally, a group of participants received both interventions. After ten weeks, the three groups showed significant improvements in communication skills; internalisation of problems (e.g., anxiety and depression), somatic complaints and thought problems; and externalisation of problems (e.g., aggressive behaviour and rule-breaking behaviour) compared to the no-treatment control group. The author emphasised the interdisciplinary expressive group speech therapy

intervention as the most effective in reducing internalised problems, the most commonly reported mental health issue among international students.

Using a similar research design, Tavakoli et al. (2009) tested the effectiveness of three interventions to reduce stress and improve the health of a sample of international students. These included group assertiveness training, where participants attended two 90-minute sessions, private expressive writing, where participants were asked to write in private at home for three 20-minute sessions, and a combination of both interventions. Results showed that assertiveness training led to significantly less negative affect than expressive writing and that there was no significant effect of combining the two interventions. Furthermore, the assertiveness training group showed improvements in physical health as well, but this was not significantly different from the other groups.

Smith and Khawaja (2014) developed the STAR programme, which comprised four weekly 2-hour sessions based on a cognitive-behavioural approach to improve self-efficacy and coping strategies of international students, as these two factors had led to a decrease in acculturative stress and positively impacted adaptation in the past. Thirteen students completed all phases, resulting in significant improvements in psychological adaptation and coping self-efficacy, in particular, the ability to stop unpleasant thoughts and emotions, but no significant differences between participants' total pre and post-depression and anxiety scores.

In a recent study in Scotland by Zheng (2017), the effectiveness of the Living Life to the Full (LLTTF) package for Chinese-speaking international students experiencing symptoms of depression and anxiety was investigated. The online-based intervention course taught key life skills in eight modules: 1) Why do I feel so bad?, 2) I can't be bothered doing anything, 3) Why does everything always go wrong? 4) I'm not good enough (low

confidence), 5) How to fix almost everything, 6) The things you do that mess you up, 7) Are you strong enough to keep your temper? and 8) 10 things you can do to help you feel happier straight away. Each module lasted between 20 and 45 minutes. In addition, the intervention group received weekly emails from a support worker to encourage module completion and practise what was learned. The results gathered three months post-intervention showed improvements in anxiety, depression, and social function scores among the intervention group.

Overall, despite the small sample sizes in these studies, the findings have been encouraging, as they show improvements in student outcomes, specifically, negative emotions. Furthermore, both interventions derived method online, and sessions seemed to have an impact on the international student population. More research is needed on interventions with larger sample sizes.

2.5 Current Research Gaps and Rationale for the Thesis Studies

This literature review aimed to evaluate studies examining stress and well-being among international students. The review outlined the different types of stressors to which international students were exposed and the main individual differences that played an essential role in moderating or mediating levels of stress and well-being. The review also discussed tested interventions targeting adjustment, academic success, and negative emotions in international students. From this analysis, it is evident that there are several gaps in the current research.

First, the majority of the studies focussed on how well international students adjust to their host culture and the factors impacting their stress levels. Although adapting or adjusting to a new environment is a crucial factor influencing mental health, there are debates around the importance of international students adjusting compared to immigrants. Moreover, the

lack of studies considering all dimensions of well-being and knowledge regarding the factors that play a role in international students' well-being, for example, only one study discussed the role of the university.

Second, the findings showed various inconsistencies in focus areas due to reasons such as the lack of a homogenous sample based on country of origin or ethnicity. For example, most of the studies included students from Asian countries, specifically Chinese students, who represent the largest population. However, these results cannot be generalised to other ethnicities. Furthermore, differences existed in the scales used to evaluate student responses or the country or university's society, as some countries and universities have larger numbers of international students than others. Each country differs in the education system and culture, which also may affect the experiences of international students. It should be noted that a limited number of studies have been conducted in the UK. For instance, Jones et al. (2019) stated that there is no previous study has examined the differences between international and home students on general mental health and life satisfaction.

Third, in terms of methodology, despite the benefits of longitudinal designs, comparative studies between host and international students as well as mixed-methods research, were highly limited.

2.6 Limitations

More studies could have been included in the review if the search had been extended to more than two databases and included grey literature, such as theses, dissertations, and reports from the Higher Education institutions.

2.7 Chapter Summary

This chapter has highlighted a range of stressors reported on 42 studies using quantitative or qualitative approaches that affect international students' mental health: including acculturative stress, English-language issues, perceived discrimination, loneliness,

and academic stress. Further, individual differences that play an essential role in well-being outcomes, e.g., demographic variables, coping strategies, personality, and perceived social support were discussed. Seven Interventions that targeted adjustment and well-being of international students and gaps in the current research were also discussed. The following chapter outlines the theoretical frameworks and methodological approach adopted in this thesis.

CHAPTER 3: THEORETICAL FRAMEWORK AND RESEARCH

METHODOLOGY

3.1 Chapter Overview

This chapter is subdivided into three sections; first, the theoretical models that guided this thesis; three theories will be discussed namely, Well-being, Demands–Resources–Individual Effects (DRIVE) stress and well-being model and Well-being away strategies. Following by the research methodology which first gives a brief overview of the design issues highlighted in the previous chapter then outlines the methods of the four empirical studies in the following Chapters 4, 5, 6, and 7 including the measuring instruments used, data collection methods and data analyses procedure. Finally, a brief of characteristics' of an international student will be discussed.

3.2 Theoretical Models

Three theoretical perspectives guided this thesis: subjective well-being, (DRIVE) model, and the Well-being away strategies model, these theories/models determine the focus of this research project and the factors that will be investigated within this thesis. The following will introduce the three models in detail.

3.2.1 *Well-being*

Two main perspectives have been suggested of well-being in psychology. First, *Hedonic* or Subjective well-being (SWB), which has three components: life satisfaction, positive affect, and negative affect. The affective components are guided by emotions and feelings, while life satisfaction is the cognitive part, which is an information-based appraisal of one's life. SWB refers to the presence of pleasant affect (e.g., feelings of happiness), the absence of unpleasant affect (e.g., depressed mood), and the cognitive evaluation of life overall (i.e., life satisfaction). Each component is independent, and the distinction between positive and negative affect is essential, as evidence is conclusive that one is not simply the

inverse of the other (Headey, 2006). Therefore, it should be measured separately to evaluate an individual's level of well-being.

The second perspective is the *Eudaimonic* or Psychological Well-being (PWB), which based on a broader approach presented by Carol Ryff (1989) including six key components: autonomy means a sense of self-determination, environmental mastery reflects a sense of continued growth and development as a person, personal growth means the capacity to manage one's life and surrounding world effectively, self-acceptance which reflects positive evaluation of oneself and one's past, positive relations with others and purpose in life. The PWB is not an end or outcome, but it is a process to a "good life".

The distinction between the SWB and PWB only reflects the two research traditions, and both are similar more than different as both focused on the positive nature and subjective experience of well-being and underlying domains of the same construct. (Kashdan et al., 2008; van de Weijer et al., 2018).

Investigation in this thesis is based on the subjective well-being approach, which has been the most extensively studied of well-being research. SWB is not only a desirable outcome but can also be an important predictor of future life outcomes such as work/ study, health, and social behaviour. For example, Lyubomirsky et al. (2005) found high SWB predicted high health and quality of people's social life in the future, also, people with high SWB were more productive and successful in work (Oishi, 2012). In addition, high SWB correlated with desirable social behaviour and good citizenship behaviour such as donate blood and donate money to charity (Priller & Schupp, 2011, as cited in Diener, 2012). Among university students, high well-being at the starting university predicted high achievement three years later (Yu et al., 2018).

In the research of SWB, several factors have been found in underling the different rating of SWB between individual such as genetic, demographic, e.g., age, gender, and

marital status which account between 8% to 15% of the variance in SWB, income, education, health, social relationship and personality (Diener, 1999). Importantly, the factors that predict SWB might be different across cultures. For example, self-esteem was found to be highly correlated with SWB ($r=.65$) in western culture, whereas weakly correlated with SWB ($r=.15$) in non-western culture (Diener, 2000).

According to the set-point theory, a person's SWB tends to centre on a set point determined by genetics and personality (Kammann, 1983; Lykken & Tellegen, 1996). In this view, positive and negative life events can move individuals' well-being levels above or below their stable baseline. It was thought for a long time that SWB back to the baseline level after three months (Suh et al., 1996). However, this theory has been criticised, later evidence from a meta-analysis (Luhmann et al., 2012) discussed a range of longitudinal studies consider eight life and work events such as marriage, divorce, the birth of a child, unemployment, and disability suggested people who experienced serious negative events, may not invariably return to their baseline level of well-being. Furthermore, different components of well-being may respond differently to life events (Diener et al., 2017).

The adaption to changes to major life events differs across events (stressful or developmental event) and in some cases, the adaption far from complete adaption. Moreover, the adaption processes differ between the components of SWB, in some events emotion components (positive and negative affect) may be faster than the adaption in the cognitive components (life satisfaction), which might be explained by that emotion components related to personality and influenced by other variables such as coping strategies, mood regulation and social support (Diener, 2000; Diener et al., 2006).

In summary, SWB is a multidimensional concept that includes cognitive and emotional components; it is moderately stable over a lifetime; however, major life events affect the

elements of well-being. Factors such as personality, social support, and coping strategies affect SWB and the adaption process.

From SWB theory point of view, predictors of international student's well-being might be different due to their cultures and ethnicities, and as life events have strong effects on SWB international students' well-being change as the event of moving away from home. Factors such as personality, coping strategies, social network, and support system moderate or mediate the association between the life event and well-being.

The next section will discuss the DRIVE model that was originally designed to explain occupational stress and well-being but has been used to explain the well-being of university students. The DRIVE model includes subjective well-being components and work-related variables, e.g. resources and demands, which make it a simple but broader model to investigate well-being (Williams et al., 2017).

3.2.2 The Demand Resources and Individual Effects Model (DRIVE Model)

The DRIVE model is a recent framework to explain stress and well-being and was developed by Mark and Smith (2008). The model is a comprehensive theoretical framework, and shares features with several other models. It shares features with the transactional stress model, such as coping behaviours (Folkman & Lazarus, 1980), or the cognitive, relational approach, which suggests that stress is the psychological and emotional state that is internally represented as part of involving characteristics of the environment. It also shares features with the individual coping style and interactional stress models such as the Effort-Reward Imbalance (ERI) model (Siegrist, 1996) where the high effort (e.g. high workload and overtime) and low reward (e.g. lack of seems form and job insecurity) are held to lead to negative physical and psychological health outcomes. The DRIVE model also builds on the Demand-Control-Support (DCS) model (Johnson & Hall, 1988) where high demands and low control would predict high strain, but that high control and perceived support might mediate

the effect of high demand. Finally, the DRIVE model incorporates features of the Job Demands-Resources (JD-R) model (Demerouti et al., 2001), which assumed that although every job has its own specific job characteristics associated with burnout and motivation, it is still possible to model these characteristics into two broad categories job demands and job resources. Job demands refer to physical, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort. They are the main predictors of negative job strain or depletion of energy health problems. In contrast, job resources refer to physical, social, or organizational aspects of the job that (1) are functional in achieving work-related goals, (2) reduce job demands and the associated physiological and psychological costs, and (3) stimulate personal growth and development and are the most important predictors of work motivation or commitment (Demerouti et al., 2001). Also, the model suggests that demands and resources affect individual health and motivation; they also have joint effects on individual well-being where job resources can buffer the impact of job demands on the strain. The JD-R model was expanded by adding three types of personal resources; organizational-based self-esteem, self-efficacy, and optimism; findings confirmed that personal resources are also important predictors of work motivation and the mediating role of personal resources relationship between job resources and outcomes (work engagement and exhaustion). However, the results did not support the moderating role of personal resources between job demands and exhaustion (Xanthopoulou et al., 2007). Job crafting and self-undermining behaviors were added to the model, the findings illustrated that job crafting increased work engagement and job satisfaction (Tims et al., 2013), while the and self-undermining behaviors lead to high levels of job demands and even higher levels of job strain (Bakker & Wang, 2020).

DRIVE and JD-R are overarching models and aim not only to explain well-being or stress process at work but also to develop effective interventions that help organizations and

employees. The two models include variables related to workplace and individual characteristics and focusing on positive and negative outcome variables (e.g., strain, exhaustion, job satisfaction, motivation, work engagement, wellbeing and health outcomes). Furthermore, DRIVE and JD-R models assume mediating and moderating effects of job and personal resources in the relationship between demands and outcomes. Additionally, the models are flexible to apply for all job environments and have been examined among different populations in different countries.

However, the DRIVE model emphasizes the role of subjective perceptions of stress and individual differences in influencing individual well-being and the mediating role of perceived stress in the relationship between work/study demands and well-being and health outcomes. The DRIVE model includes more than the three personal resources in the JD-R model and covers a large range of individual difference variables such as personality, locus of control, coping style, hardiness, attribution style, demographics, perceived stress, and perceived job satisfaction in the initial and enhanced versions of the model.

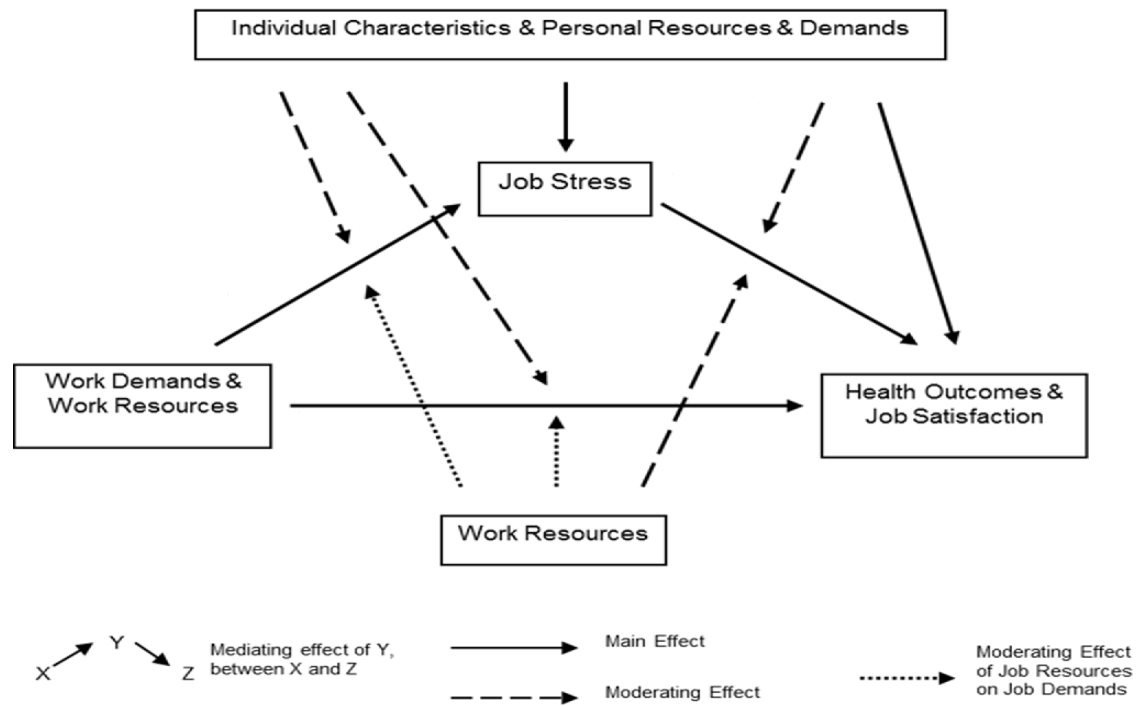
Figure 3.1 shows key relationships between work-related variables, individual differences, and outcomes that summarised in the following:

- Work demands and work resources significantly relate to outcomes and perceived stress.
- Perceived stress significantly predicts the outcomes as well as mediates the relationship between demands and outcomes.
- Work resources are conceptualised as a moderator between works demands and perceived stress and outcomes.
- Individual differences such as personality, coping strategies and demographic variables significantly relate to outcomes and act as a moderator between job

demands and perceived stress, perceived stress and outcomes, and job demands and outcomes (Mark & Smith, 2008).

Figure 3.1

*The Demand Resources and Individual Effects Model**



*Note: Adapted from (Mark & Smith, 2008)

Over the last ten years, the model has been used to explain the stress and well-being within different samples of workers and ethnicities, such as nurses (Mark & Smith, 2012b), university staff in the UK (Williams et al., 2017), British and Jamaican police officers (Nelson, 2017), train crew in the UK (Fan, 2017), immigrant factory workers in Italy (Capasso et al., 2018), Italian nurses (Zurlo et al., 2018) British undergraduate university students (Smith & Firman, 2019), overseas students in the UK (Smith et al., 2018) and Kuwaiti undergraduate university students (Alheneidi, 2019).

Findings from the above-mentioned studies have supported some components of the DRIVE model. For example, Capasso et al. (2016), Galvin and Smith, (2015), and Nelson

(2017) confirmed the direct effects of work characteristics and individual characteristics in predicting health and well-being outcomes, as well as and the mediation effects of perceived job stress /fatigue on the relationship between work demands and outcomes (Fan & Smith, 2018; Galvin & Smith, 2015; Nelson, 2017). However, little evidence has been provided support for the moderation effects of individual differences (i.e. social support) between job demands and negative well-being outcomes (Zurlo et al., 2018) while some studies have failed to find such moderating effects of individual differences between perceived stress and well-being outcomes (Capasso et al., 2016; Mark & Smith, 2012; Nelson 2017; Williams & Smith, 2013).

The strength of the DRIVE model lies in its flexibility, is less complicated, and easily applies in different circumstances by adding or removing factors relevant to the sample and allows assessing the multi-dimensional nature of well-being (Mark & Smith, 2008; Williams et al., 2017). Some factors included in the model are training attitudes (Nor & Smith, 2018), health-related behaviours such as sleep quality and smoking (Smith, 2019; Smith & Firman, 2019), ethnicity, and perceived racial discrimination (Capasso et al., 2018).

Therefore, the DRIVE model is considered a practical tool for assessing the multi-dimensional nature of well-being and was adopted as the conceptual framework that guides the studies in this thesis. The well-being of international students will be explained under the DRIVE model, and features of the (DRIVE) model will be tested in Chapters 4 and 5. Moreover, quality of university life, previous experience of studying abroad, English language proficiency, satisfaction with academic achievement, financial difficulties, and studying away strategies will be included in the model as predictors and the quality of university life as predictors and outcome.

3.2.3 *Studying Away Strategies*

As was mentioned in 3.2.1 well-being is generally stable over a lifetime, but is affected by life events, moving to a new geographic location has been found to decrease well-being (Praharso et al., 2017). Indeed, moving away from home and living independently for the first time considers major life events among university students.

Several factors have been identified as influencing the adaption process such as coping strategies. From this point of view, the well-being away model was developed by the quality of life institute dialogue about the emotional needs and managing subjective well-being of those who study or work away from home and family for a short or long time in less or more challenging environments by Sodexo (2014) in London.

The model aims to inform individuals and organisations to understand the experience of transition away from home and increase the chances of maintaining well-being. The model proposes five phases of transition commencing with *Pre-departure planning*, which includes developing expectations about being away, acknowledging that the coming separation is real, setting up a support network, and, more importantly, planning for contacting and communicating with family at home. The Sodexo researchers raise the idea that people tend to think that current technology will mitigate the separation. Nevertheless, that is not necessarily the case when the person is away and working long hours with little free time. The second phase of the Sodexo model (2014) is labelled *Being away* and includes two main factors. The first factor includes using technology without over-reliance on it. The second involves developing the ability to unwind from work or study, as it is known that dwelling on work- or study-related issues lead to negative effects and other health-related problems. The model also emphasises changing activities and doing something different from studying. For example, a student should exercise in their free time rather than doing something similar to what they usually do, such as surfing the Internet.

The third phase of the model is *Preparing to return*, which is theorised to have a real impact on well-being. One important thing to realise is that people (both the person who is away from home and their family or friends) change, even over short periods and that has an impact on the level of well-being. One factor that could help at this stage is to change activities before returning home.

The fourth phase entails *Returning*, which is the last stage of being away, where increasing the amount of leisure or relaxation time is important. The final stage is *Being back* wherein a student is back at home and needs to readjust to their home country. In theory, disconnections between being back and feeling psychological back affect the level of well-being (Seaton & Jelley, 2015).

There have been two investigations of the effectiveness of the strategies on well-being and quality of work or university life, the first, conducted by Smith et al., (2018) among 400 international students in the UK and the second among 200 workers in the United Arab Emirates. Findings from both surveys show greater use of the strategies associated with greater positive affect, e.g., happiness and satisfaction, quality of the university or working life, and being more efficient in performance (Sodexo, 2018).

3.3 Design Issues in The Literature of International Students' well-being

The review in the previous chapter highlighted five main sources of stress international students faced, namely, acculturative stress, English-language issues, perceived discrimination, loneliness, and academic stress as well as the individual differences variables, e.g., ethnicity, coping strategies, social support, personality traits that might affect the outcomes. The review also identified various gaps that need further investigation and three major design issues.

First, the majority of research has focused on the difficulties or the negative effect, e.g., stress or depression, and only a few published studies on the positive effect, e.g.

happiness or satisfaction. This is likely because of the lack of applying psychological theories—specifically, stress theories, occupational stress, or well-being models. Applying theoretical frameworks will reduce the complexity of the topic and led to a better understanding of the stress and well-being process of university students as well as develop and deliver the appropriate interventions.

Recently, researchers have investigated applying the work-related stress models in learning setting such as universities or school environments. The effort-reward imbalance (ERI) model developed by (Siegrist, 1996) proposes that the imbalance between high work effort or demands and low received reward results in poor well-being and health. Wege et al. (2017) modified the questionnaire version of the ERI model specifically for university students in Germany (ERI- Student) and investigated the validation of the questionnaires among 402 undergraduate medical students. Later, Hilger-Kolb et al. (2018) examined the same questionnaires (ERI- Student) among a larger sample size of 689 university students, only 41% were medical students and the rest from other majors. The results from the two investigations showed that ERI components; effort, reward, and over-commitment were significantly associated with health and mental health, e.g., anxiety and depression outcomes among university students.

Similarly, the (DRIVE) model that is originally developed to investigate occupational stress among workers population has been applied to British and Kuwaiti university students. Two measurement scales were developed/ modified to measure the well-being of university students; first, the Student Well-being Process Questionnaire (WPQ) (Williams et al., 2017) measures related factors impact student well-being including student stressors from the Inventory of College Students' Recent Life Experiences (ICSRLE), personality, perceived social support, positive coping, negative coping, cognitive problems, and positive and negative outcomes. Second, Smith Well-being Questionnaire (SWELL) (Smith & Smith,

2017), which modified to use among international students to measure multiple constructs of study characteristics (e.g., course demands) appraisals (e.g., perceived stress) positive and negative outcomes included health outcome (e.g., illness) and individual factors (e.g., personality). Results from (Smith, 2019; Williams et al., 2017) confirmed the association between established variables of the DRIVE model and well-being outcomes. These results show that applying work-related stress models could be effectively adapted to university international students' contexts.

Second, the lack of comparative studies, either between different ethnicities of international students or between international and home students. The experience of stress and well-being differ between the individual for a variety of reasons which might limit generalisation of findings from many studies in different countries to all international students. The previous chapter shows that the experience of stress differs between international students' ethnicities. For example, European students reported lower acculturative stress comparing to Asian students in the US (Kim, 2011; Poyrazli et al., 2004; Yeh & Inose, 2003). Furthermore, few published evidence compared between international and domestic students, and findings were inconsistent across the countries Australia, the UK, the US, and New Zealand. For instance, no significant differences were found between international and home students in strain, depression, or perceived stress in the USA and New Zealand (Gardner et al., 2014; Hamamura & Laird, 2014; Hechanova-Alampay et al., 2002;) while in Australia international students reported lower life satisfaction than domestic students (Skromanis et al., 2018). In the UK, international students reported higher mental health scores than British students (Jones et al., 2019).

These inconsistent findings across previous studies may be due to: (a) university settings, such as the high percentage of overseas students in the university, support available for international students in an institution, and university location whether in a large city or

small town; (b) the instrument measures used where some are not equally valid and reliable in different cultures; (c) the non-equivalence of the participants' groups either in sample sizes and the ethnicity of the majority of international students sample, demographic attributes variables which can be addressed statistically, language in equivalence or construct in equivalence that refers to a difference in the psychological meaning of a construct among the two groups for a construct such as “coping” (Ægisdóttir et al., 2009).

The comparison studies allow testing theories in different groups and examining whether the relationship between an independent and a dependent variable holds in various contexts. In the topic of the well-being of university students, comparison studies may be more informative particularly in enhancing our understanding of the factors that do and do not contribute to students' well-being and what is common to all students and what is specific to international students. This might help to develop interventions and improve the practices that benefit both groups. Therefore, a broader approach that compares home and international students is needed to identify the well-being processes, and the similarities and differences between home and international groups.

Third, lack of longitudinal study, the journey of studying abroad can be dividing into three stages: pre-departure, post-departure, and post-study (Khanal & Gaulee, 2019). Most published articles focused on the second stage, which gives a snapshot instead of the full picture of international students' experience and results in a lack of understanding of which factors affect students' well-being at each stage and predicting students' well-being in the following stage. The longitudinal design is a powerful research method that allows an understanding of the degree and direction of change over time and estimating the causal effect or direction of certain variables on the outcomes. The few available pieces of evidence showed that the stress or psychological strain changes over time (Cemalcilar & Falbo, 2008; Hechanova-Alampay et al., 2002) this has been linked to adjustment difficulties or transition.

On the other hand, no attention has been made to the change in positive feelings such as happiness and life satisfaction. Thus, more longitudinal studies measure the components of well-being at the different stages or pre-arriving to the host countries until students return home is needed.

3.4. Research Methodology

Research methodology can be identified as “the general research strategy that outlines how a research project is to be undertaken by researchers and, among other things, identifies the methods to be used in it” (Igwenagu, 2016, p. 9). As motioned in Chapter 1, the main aims of this thesis are to understand the well-being of international students' experiences in the UK and the effectiveness of applying studying away strategies on well-being. To satisfy these aims, the mixed-methods approach was used with the initial quantitative at the beginning. Mixed-methods research is defined as “mixture of qualitative and quantitative approaches in many phases in the research process and as a method it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies” (Creswell & Plano Clark, 2007, p. 5)

Several advantages of combining qualitative and quantitative research components such as expand and strengthen a study's conclusions as using various methods of data collection enhance the supplement each other and hence potentially enhance the validity and dependability of the data (Zohrabi, 2013), produce a comprehensive understanding of a topic, provide a complete vision of the problem and contributes to the published literature (Schoonenboom & Johnson, 2017). Additionally, the strengths of one research method compensate for the weaknesses of another (Plastow, 2016).

There are four empirical studies in the next four chapters, three studies use quantitative research approaches, and one study uses a qualitative research approach. Each study has its

own design to achieve related objectives, and all contribute to achieving the main aims and the six objectives of this thesis presented in Chapter 1 see Section 1.2.

3.4.1 Research Design and Objectives

3.4.1.1. Study 1- Comparative cross-sectional survey.

This is an observational study that uses the comparative cross-sectional method, which is the initial stage of this exploratory research uses to determine relationships between two or more variables in different groups, similarities, and contrasts among groups. Besides, the cross-sectional design gives information about the prevalence of the interest outcomes and its use for designing cohort longitudinal studies after (Setia, 2016).

This study has three primary goals, 1) Compare international and home students who are studying away from home on well-being and other related factors that influence well-being namely; positive personality, healthy lifestyle, course demands, control, and support, perceived stress, quality of university life and the use of studying away strategies, 2) Investigate the efficacy of the total use of studying away strategies on well-being and quality of university life, and 3) Investigate university students' well-being via the DRIVE model. Specifically, course demands, control and support, perceived stress, quality of university life on well-being. Mediation roles of perceived stress -as hypothesized by the DRIVE model- on the association between course demands and negative outcomes and quality of university life on the association between studying away strategies and positive outcome are examined. Finally, the moderation role of the individual differences namely, positive personality on the association between course demands and negative outcome, and the moderation role of nationality on the association between studying away strategies and positive well-being are examined.

3.4.1.2 Study 2-Three-wave longitudinal survey.

This study replicates, extends the findings of Study 1, and examine the change of international students' well-being during the academic year at three-time points September, February, and May, the factors that affect international students well-being namely; English fluency, previous experience of studying abroad, financial difficulties and academic achievement and effectiveness of studying away strategies in the related stage. For example, strategies of the pre-departing phase were examined at time 1. The longitudinal design was chosen as it is a comprehensive approach and suited for investigating changes over time in the degree or direction as it involves the repeated observations or examination of a group of people at least one data source at three or more points in time concerning one or more study variables (Plano Clark et al., 2014).

The survey was primarily quantitative, but it also included three open-ended questions, one in each phase investigating the concerns, difficulties international students face, and coping methods international students use. The use of open-ended questions permits the participants to express their perspective using their own language and freely shares their personal experiences, especially when investigating personal issues. Additionally, the responses can explore new aspects of the topic that are not explicitly stated in survey questions (Albudaiwi, 2017, p. 1716).

In sum, this study investigates 1) the level of international students' well-being over the academic year, 2) Whether students' well-being differs according to their English fluency, previous experience of studying abroad, satisfaction with academic achievement, financial difficulty, and the use of studying away strategies during the academic year, 3) The association between the above-mentioned variables and well-being outcomes throughout one academic year and 4) issues international students face and their coping strategies.

3.4.1.3 Study 3- Feasibility randomised controlled trial intervention with pre-post-test.

The study involves a randomised controlled trial with two conditions: an intervention group and a control group with pretest-posttest design. Participants completed the survey measured well-being, the use of studying away strategies, and quality of university life before and two months after the intervention. This study investigates the effectiveness of self-help Internet psychoeducational intervention in the form of an information sheet-based on the studying away strategies on increasing the use of the well-being away strategies among international students.

3.4.1.4 Study 4- Individual semi-structured interview

This study uses a qualitative approach, using a semi-structured interview as a data collection strategy. A semi-structured interview is flexible compared to a structured interview (Zohrabi, 2013), suited to the exploration of personal topics and opinions compared to a focus group, and gives the interviewer greater focus on issues that they deem important to the research topic (Brinkmann, 2014). This study seeks to complement the findings from previous quantitative studies in terms of understanding the study experience of international students in the UK.

To this end, the researcher interviews 14 international students to gain a deeper understanding of what and how they perceive their study in the UK and their well-being. The interview guide includes ten questions related to the experience of studying in the UK starting from the reasons to choose to study in the UK, university and social lives, challenges they face, their Well-being, their use of well-being away strategies, and other coping strategies that they use to overcome issues with studying away from home.

3.4.2. Data Collection

During the initial stage of each study, ethical approvals were obtained from the School of Psychology Ethics Committee. It was planned to collect data via the international student's

office in the university to give an equal chance for each international student to participate. However, due to the university policy, the international student's office was unable to help to send out the survey to international students' email in the university.

The multi-modal approach was used to collect data: online and face-to-face recruited methods were used. In the online method, the participants were recruited via gatekeeper letter sent to the Student's Union office to share information about the study and survey link with 38 international student's societies to send it out to their members, and online advertisements were posted on Facebook and Twitter pages for each society. Also, advertisements were distributed at the university buildings and libraries with information about the study and quick response barcode link to the survey.

Using the second method, the researcher went to Business School and Modern Languages School as they had the highest percentage of international (mostly Chinese) and European students at various times to collect data personally, by handing out the questionnaires face to face with potential participants. The potential participants were approached as they queued for lectures. The researcher introduced herself as a Ph.D. student in the School of Psychology investigating the well-being of international students. Brief explanations of the nature and purpose of the study was given and asked the participants whether they are interested to fill out the survey that takes approximately 10 minutes. At the Business School, Chinese students were reluctant to participate until the researcher was accompanied by a Chinese colleague.

In Study 3 (Chapter 6) email invitations sent to participants who take part in the earlier studies asked to participate in the research if potential participants were interested in taking part in the study.

All participants received an information sheet which included details about the study, instructions (what would happen with their data, how to withdraw, etc.), signed consent

form, completed self-report questionnaires then a debriefing that included contact details of the researcher and the supervisor was provided.

In the qualitative study, Chapter 7, the online method was used as well as recruited using snowball sampling; face-to-face interviews were carried out on the university campus. The participants received an information sheet, and the consent form explained the purpose of the study and stated that they would be participating voluntarily, and they understood what taking part involved.

3.4.2. Measuring Instruments

Three main measures used in the quantitative studies described in chapters 4, 5, and 6 were; the Smith Well-being Questionnaire (Student SWELL), Quality of university life Questionnaire, and Studying away strategies Questionnaire to assess the variables of interest. These measures are single-item measures that can provide valuable information as well as several advantages of using single-item measures, from a psychometric point of view, the use of single-item measures reduces the chance of common method variance, where correlations are observed due to the use of the same response format rather than the content of items (Gogol et al., 2014).

Indeed, single-item measures have been shown comparable or equal predictive validity compared to multiple-item measures in psychological, educational, and organisational research. For instance, single-item measures prove to be a valid and reliable tool and have been used effectively to assess depression (McKenzie & Marks, 1999), psychological stress (Littman et al., 2006), self-efficacy (Hoepfner et al., 2011), self-esteem (Robins et al., 2001), personality (Atroszko, Sawicki, Sendal et al. 2017; Woods & Hampson, 2005), life satisfaction (Gnambs & Buntins, 2017), quality of life (Atroszko, Bagińska et al. 2015; Hyland & Sodergren, 1996; Sloan et al., 2002), social support (Atroszko, Pianka et al. 2015; Blake & McKay, 1986), academic performance

(Leung & Xu, 2013), academic anxiety (Gogol et al., 2014), job satisfaction (Dolbier et al., 2005; Nagy, 2002; Wanous et al., 1997), job stressors (Gilbert & Kelloway, 2014), and workplace well-being (Williams & Smith, 2016).

Additionally, single-item measures can overcome practical constraints, shortened the survey length means less time-consuming for participants and minimised respondent burden (Robins et al., 2001). Thus, the use of single-item measures led to a greater response rate and reduce random and careless responses and skip questions which affect the reliability and the validity of the research results (Credé et al., 2012). Besides, Leung and Xu (2013) suggested that the single-item measures are more appropriate than multidimensional measures to investigate relationships among different combinations of constructs and useful tool assess groups with the limitations of time such as students, patients, and workers. Furthermore, single-items measures have been easily adapted to evaluate different populations. For example, the Well-being Process Questionnaire (WPQ; Williams & Smith, 2012) has been used to measure the well-being of different samples, e.g. university staff (Williams & Smith, 2012), police officers (Nelson, 2017), nurses (Zurlo et al., 2018), and university students (Alheneidi & Smith, 2020; Smith & Firman, 2019).

Despite the above-mentioned advantages, single-item measures are not comprehensive as multidimensional measures as the multidimensional measures represent all facets that constitute the construct, whereas it is impossible when using single-item (Jordan & Turner, 2008).

All measures administered in the English language, and participants complete a battery of question according to the following sections:

3.4.2.1. Demographic Questionnaire

This section included questions related to student characteristics; age, gender (female,

male), marital status (single, married), nationality, ethnicity (White, Asian, Black, Arab, Mixed and other), and year at university (first year, other years).

3.4.2.2 The Smith Well-being Questionnaire (Student SWELL)

The well-being of international students was measured using the Smith Well-being Questionnaire Student version (Student SWELL) see Table 3.1. The Smith Well-being Questionnaire (SWELL) developed by Smith and Smith (2017), designed to measure positive and negative aspects of well-being and is based on the DRIVE well-being model -the framework of this thesis-. The (Student SWELL) consists of 18 items most with a 10 point response scale ranging from 1 (not at all) to 10 (very much) of four established predictors of well-being (positive personality; healthy lifestyle; course demands; and academic control and support) and four outcomes (negative well-being, i.e., anxiety and depression; positive well-being, i.e., happiness and life satisfaction; absence due to illness, and presenteeism, i.e., reduce performance).

The Student SWELL is the student version of the SWELL questionnaire which comprises 21 items most with a 10 point response scale in 21 areas: health-related behaviours; personality, life satisfaction; happiness; life stress; anxiety and depression; musculoskeletal problems; noise; shift work/night work; job demands; job control and support; perceived stress at work; job satisfaction; physical and mental fatigue; illness caused or made worse by work; presenteeism; efficiency at work; work-life balance; happiness at work; anxious/depressed because of work and absenteeism. The SWELL examined among one hundred and fifty-one business outsourcing staffs working in three different countries; the United Kingdom, the United States, and South Africa, and Student SWELL examined among 402 international students in the United Kingdom. Both version SWELL and Student SWELL measures showed a good psychometric and allowed multivariate analysis to identify the key predictors of Well-being (Smith et al., 2018; Smith & Smith, 2017).

Table 3.1*Smith Well-being Questionnaire (Student SWELL)*

Q 1	Health-related behaviours	A healthy lifestyle involves taking exercise, eating a balanced diet, not smoking, not drinking excessive amounts of alcohol, and not being overweight. To what extent do you have a healthy lifestyle? Not at all Very much so 1 2 3 4 5 6 7 8 9 10
Q 2	Personality	People often describe themselves as being positive ("seeing" the glass as half full) or negative ("seeing the glass as half empty"). How would you describe yourself? Very negative Very positive 1 2 3 4 5 6 7 8 9 10
Q 3	Life satisfaction	How satisfied are you with life in general? Not at all Very much so 1 2 3 4 5 6 7 8 9 10
Q 4	Life stress	How much stress have you had in your life in general? Very little A great deal 1 2 3 4 5 6 7 8 9 10
Q 5	Happiness	Would you say you are generally happy? Not at all Very much so 1 2 3 4 5 6 7 8 9 10
Q 6	Anxious/Depressed	Would you say that you generally feel anxious or depressed? Not at all Very much so 1 2 3 4 5 6 7 8 9 10
Q 7	Life worthwhile	Overall, to what extent do you feel the things you do in your life are worthwhile? Not at all Very much so 1 2 3 4 5 6 7 8 9 10
Q 8	Course demands	How demanding do you find your course (e.g. do you have constant pressure, have to work fast, have to put in the great effort)? Not at all demanding Very demanding 1 2 3 4 5 6 7 8 9 10
Q 9	Academic control and support	Do you feel you have control over your academic work and support from staff and fellow students? Not at all Very much so 1 2 3 4 5 6 7 8 9 10
Q 10	Perceived academic stress	How much stress do you have because of your university work? Very little A great deal 1 2 3 4 5 6 7 8 9 10
Q 11	University satisfaction	Are you satisfied with your course? Not at all Very much so 1 2 3 4 5 6 7 8 9 10
Q 12	Physical and mental fatigue	How physically or mentally tired do you get because of your academic work? Not at all tired Very tired 1 2 3 4 5 6 7 8 9 10
Q 13	Illness caused or made worse by academic work	Have you had an illness (either physical or mental) caused or made worse by your academic work? Yes No
Q 14	Presenteeism	Do you ever come to University when you are feeling ill and knowing you can't work as well as you would like to? Yes No
Q 15	Efficiency	How efficiently do you carry out your academic work? Not very efficiently Very efficiently 1 2 3 4 5 6 7 8 9 10
Q 16	Study-life balance	Do you find your academic work interferes with your life outside of the university, or your life outside of university interferes with your course? Never Very often 1 2 3 4 5 6 7 8 9 10
Q 17	Happy at university	Are you happy at university? Never Very often 1 2 3 4 5 6 7 8 9 10
Q 18	Anxious/Depressed because of academic work	Are you anxious or depressed because of academic work? Never Very often 1 2 3 4 5 6 7 8 9 10

3.4.2.3. *Quality of university life Questionnaire*

Quality of university life measured with the Quality of university life questionnaire (Smith et al., 2018). The quality of university life consists of 6 items measured on a 10-point scale ranging from 1 (*not at all*) to 10 (*very much*). This six-item scale measured six elements related to the quality of university life, including the university physical environment, learning and progress, university life easy and efficiency, being valued by the university, bond strength, and university role in promoting a healthy lifestyle. Higher scores indicate more quality of university life and lower scores indicate less quality of university life. Table 3.2 shows the questionnaire.

Table 3.2
Quality of University Life Questionnaire

Q 1	Efficiency	To what extent do you feel that your university life is easy and efficient?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Q 2	Healthy lifestyle	To what extent do you feel that being a student at university promotes a healthy lifestyle through a well-balanced diet and exercise.	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Q 3	Valued by the university	To what extent do you feel you are valued at the university?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Q 4	Physical environment	To what extent does the university provide a good physical environment?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Q 5	Bonds	To what extent does the university strengthen bonds among individuals and facilitate access to culture and entertainment?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Q 6	Learning and progress	To what extent does the university promote learning and progress?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10

3.4.2.4. *Studying away strategies Questionnaire*

Applying the studying away strategies was measured by the Studying away strategies questionnaire (Smith et al., 2018). This scale is composed of 14 items and has five subscales that tap: pre-university preparation strategies; coping away from home strategies; planned adjustment to returning strategies; the journey home strategies; and adapting to being at home

strategies. All items are scored on a 10-point scale ranging from 1 (*not at all*) to 10 (*very much*). Higher scores represent more use of studying away strategies and lower scores represent less use of studying away strategies. Table 3.3 shows the questionnaire.

Table 3.3
Studying away strategies Question

Before you left home:	Q 1	Pre-departure planning	To what extent did you carry out pre-departure planning with family or friends?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 2	Discuss expectations	To what extent did you discuss expectations of how being apart will feel?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 3	Acknowledges the reality of the coming separation	To what extent did you say "goodbye" properly and in a way that acknowledges the reality of the coming separation?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 4	Communications	To what extent did you agree on likely communications while away?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Being at university:	Q 5	Adapting being away	To what extent have you acknowledged and adapted to being away?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 6	Adapting being away without over-reliance on technology	To what extent do you live the reality of being away without over-reliance on technology (your phone, e-mail, Skype or social media)?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 7	Unwind after academic work	To what extent do you make an effort to unwind after academic work?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Preparing to go home:	Q 8	Prepare for return	To what extent do you expect to prepare for your return home?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 9	Change activities	To what extent will you change activities before returning home to help the transition?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 10	Perceptions of changes	To what extent do you consider that you and matters at home, or your perceptions of these, may have changed while you've been away?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Returning:	Q 11	Stage return	To what extent will you "stage" your return (e.g. break up the journey home)?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 12	Relax and unwind	To what extent do you expect to relax and unwind on the journey home?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
Adapting to being back home	Q 13	Time to adjust	To what extent do you expect to take time to adjust to being in the home rather than the university environment?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10
	Q 14	Psychological adjustment	To what extent do you expect to act on the realisation that time may be needed to psychologically adjust to being at home?	Not at all	Very much so	1 2 3 4 5 6 7 8 9 10

3.5 Data Analysis

3.5.1 Quantitative data analysis

Statistical analyses were undertaken using SPSS Version 25 (SPSS, 2018). Under the data analysis in Chapters 4, 5, and 6, exploration of data has been made with standard descriptive statistics including means, standard deviations, frequencies, and percentages, and exploring the relationship between variables. A series of Pearson product-moment correlation coefficient (Pearson's r) were computed to assess the relationships among the variables, Independent t-tests, analyses of variance (ANOVA), multivariate analysis of covariance (MANCOVA), and Chi-square were conducted to examine possible differences between groups (Home students versus international students and intervention group versus control group). A series of multiple heretical regression was used to explore links between predictive and dependent variables or outcomes (positive affect, negative affect, and quality of university life).

Finally, by using the PROCESS macro, the indirect effects hypothesized proposed by the DRIVE model were examined; specifically, possible moderation effects of individual differences between course demands or perceived academic stress and negative outcome. Furthermore, possible mediation effects of perceived academic stress between course demands and negative outcomes as well as the possible mediation effects of the quality of university life between studying away strategies and positive and outcomes were examined.

3.5.2 Qualitative data analysis

Qualitative data in this thesis presented in Chapters 5 and 7, firstly, the data of the open-ended questions in Chapter 5 analysed using thematic-analysis, the responses transcriptions were analysed manually following the six steps guide developed by Braun and Clarke (2006). Secondly, the data of the semi-structured interviews in Chapter 7 were analysed using Interpretative Phenomenological Analysis (IPA) following Pirtkirwicz and Smith's (2012)

guide. Full details of the process of each analysing approach present in Chapter 5, Section 5.3.4, and Chapter 7, Section 7.3.5.

3.6. Characteristics of an International Student

As mentioned in Chapter 1, an international student is an individual who undertakes all or part of their higher education experience in a country other than their home country. International students are a diverse group in terms of their nationality, ethnicity, and many other ways. The background of an individual, including ethnicity or culture has a fundamental impact on mental health, well-being, coping strategies with issues, and their needs (Yanhong Li & Kaye, 1998). Evidence shows that there are demographic factors, personality traits, and social factors associated with studying overseas. Students who study away from home are more likely to be female (Salisbury et al., 2009; Stroud, 2010), healthy and have no disabilities (Twill & Guzzo, 2012), come from high socioeconomic families (Simon & Ainsworth, 2012; Twombly et al., 2012) have a previous experience of studying or attending school or college away from home (Stroud, 2010) and have family members or friends study or live overseas (Lesjak et al., 2015; Simon & Ainsworth, 2012). Concerning personality traits, students who study abroad scored high on openness and agreeableness (Niehoff et al., 2017).

Trahar (2007) points out the term 'International students' does not describe a homogeneous group. Frits et al. (2008) highlighted what called "lumping of culturally diverse groups together syndrome" by investigating stressors, anxiety, and adjustment among Asian and European students and North American students in the USA. Results showed no differences were found between the international students (Asian and European as a group) and the U.S. students in anxiety, academic adjustment, or reported GPA. However, when the international student sample was sub-grouped by regions, a different pattern emerged, Asian students reported greater difficulties in language and making new friends than European

students. In addition, African students reported greater difficulty than other international students' ethnicities in American (Boafo-Arthur, 2014) and British universities (Caldwell & Hyams-Ssekasi, 2016; Hyams-Ssekasi, et al., 2014). Similarly, differences were found in learning style preferences among international students (Barron & Arcodia, 2002). Nevertheless, studies that compared sub-groups of international students on well-being are limited, and findings of studies that investigated ethnicity along with other demographic variables, e.g. age and gender have yielded inconstant results (see Chapter 2 Section 2.4.3). Indeed, Yanhong Li and Kaye (1998) compared Asian and western European students in the UK, concluded that students' characteristics represent the underlying causes of students' needs and problems during studying overseas.

Importantly, despite these previous studies, investigations of the international student's experiences indicted features, or key similarities of international students face challenges such as feelings of separation, adjustment issues, losing social support and the need to develop new friends or support system, loneliness, homesickness, managing personal finances and academic stress. These issues are closely related to moving away from home to study, which is one of the live events that are often characterised as a source of anxiety or stress as students are faced with uncertainty and unfamiliarity.

The experience of uprooting which defines as the process when one leaves one place (forced or self-imposed) to relocate to another place (Brown, 1980), has been highlighted in the literature of transition to colleges or universities among domestic and international students and linked to stress, anxiety, and depression (Brewin et al., 1989; Fisher & Hood, 1988). Hence, a direct comparison between international students and British students who study away from their hometown is required to offer insights into the similarities and differences regarding their well-being process.

3.7. Chapter Summary

This chapter has provided an overview of the theoretical perspectives the work in the thesis builds on. Furthermore, the chapter presents the methodology employed for the following four studies includes the measure instruments, data collection methods, data analysis employed for quantitative and qualitative data. Finally, the chapter highlights the characteristics of an international student. The next four chapters (Chapters 4 through 7) describe in-depth the specific methods used in each study, as well as highlight the findings and results. The next chapter compares home and international students from a variety of ethnicities on a range of variables and well-being outcomes.

CHAPTER 4: A COMPARISON STUDY OF THE WELL-BEING OF INTERNATIONAL AND HOME STUDENTS STUDYING AWAY

4.1 Chapter Overview

The previous chapters have presented an overview of the available literature on international students' experiences abroad and have raised the challenges that international students face that impact their well-being. Furthermore, limitations in the methodology and design of research in the field of international students' well-being have been highlighted, such as the lack of comparison studies between international and home students, particularly in the United Kingdom, and the focus on negative emotions (e.g., stress and anxiety) and neglect of the positive emotions (e.g., happiness).

The present research attempted to fill the gaps in the literature on international students' well-being by comparing international students' well-being to that of home students studying away from their hometown under a comprehensive well-being model. Furthermore, this research investigated the usefulness of studying away strategies in both groups and whether or not applying the strategies had an impact on the students' well-being and the quality of their university life.

The study introduced in this chapter used a cross-sectional design, comparing home and international students on well-being outcomes (i.e., positive and negative affect) and related factors, specifically, positive personality, healthy lifestyle, course demands, control, and support, perceived academic stress, application of studying away strategies and quality of university life. Online questionnaires were administered to assess well-being, quality of university life, and studying away strategies. As this thesis builds on the DRIVE model, several assumptions have been examined, including direct and indirect associations between establish predictors and well-being outcomes. Moderation analyses were performed to determine whether individual differences moderated the relationship between course

demands/perceived academic stress and negative outcome. Similar analyse also conducted to examine which student groups benefitted most from the studying away strategies or achieved an effect on well-being led to testing the moderating effect of student status on the association between studying away strategies and positive outcomes. In addition, the mediating role of perceived academic stress between course demands and negative outcomes and quality of university life between strategies and positive outcomes were examined.

4.2 Introduction and Rationale

The transition to university is commonly considered to be a positive experience, involving new opportunities and self-development. Nevertheless, the transition to higher education is a major stressful life event (Dyson & Renk, 2006; Lu, 1994).

Chapter 2 discussed a wide range of challenges that international students faced, which had led some researchers to report that international students were at a higher risk of developing mental health issues and were more likely to report greater stress, anxiety, and depression than their domestic peers (Abe & Zane, 1990; Poyrazli & Lopez, 2007; Russell et al., 2010; Wu & Hammond, 2011). Some of these challenges or difficulties are unique to international students (Smith & Khawaja, 2011). For example, adjustment to the host country and new education system, the language barrier, an essential factor that affects academic and everyday life, and socio-cultural differences are experienced because of the differences between countries and cultures. However, domestic university students are also likely to face challenges that may trigger mental health issues with varying degrees of impact. Challenges such as academic stress, high workload, time pressure, and financial problems relationship problems, strains for those who study away from home, such as feelings of separation and losing a social support system, are common in both home and international students and can have a significant impact on individual well-being (Mortenson, 2006).

An early investigation, conducted by Fisher et al. (1985), on British students leaving home to pursue studies within their home country found that among first-year students living in residence halls, around 60% of the sample experienced homesickness (i.e., feeling insecure or unhappy in the new environment). Furthermore, students who had reported homesickness were less satisfied with the facilities in the residence halls, academic work, and social relationships. Fisher et al. also highlighted geographical distance as a factor determining homesickness among university students who lived away from home, suggesting that increased distance increased the cost of personal visits home and therefore decreased the individual's control over the feasibility of visiting home. Later, Fisher and Hood (1987) conducted a longitudinal study of university students two months before the beginning of the first semester of university and six weeks into the first semester. The results showed an increase in psychological disturbance and absent-mindedness following the transition, especially for those who had reported homesickness (Fisher & Hood, 1987). Similar findings were reported by Bewick et al. (2010), who found that students' levels of strain increased during university years, and even when the level of strain fell, it did not revert to the pre-university level.

Thorley (2017), under the Institute for Public Policy Research, summarised the findings of the available mental health surveys conducted at British universities with samples of first- and other-year students, including undergraduate and postgraduate students, at different institutes (i.e., YouthSight, National Union of Students of the United Kingdom, Unite Students, YouGov) between 2013 and 2016. The results showed high levels of mental distress. In particular, high levels of stress and anxiety were detected in the university students, and the surveys underlined the need to improve the university counseling services in response to the significant increase in demand.

Investigating mental health requires not only the absence of psychopathology but also a focus on positive indices of functioning, such as subjective well-being (Keyes, 2005; Seligman & Csikszentmihalyi, 2000). Thus far, however, the research has tended to focus on negative emotions (e.g., stress) rather than positive emotions (e.g., happiness). Few studies have used a multi-faceted approach to investigate overall well-being among students attending universities in the UK. Denovan and Macaskill (2017) conducted a longitudinal two-wave survey examining subjective well-being, stressor exposure, and psychological strengths (i.e., optimism, hope, self-control, resilience, and academic self-efficacy) in 192 students, of which 74% were living away from home. The findings showed that life satisfaction and negative affect scores at the beginning of the academic year and six months later remained relatively stable, while the level of positive affect significantly decreased over time. Additionally, students reported higher levels of optimism, lower levels of stressors, and lower levels of negative affect. Furthermore, optimism was found to be a buffer for life stressors.

Smith and colleagues have addressed the topic of British students' well-being under the DRIVE model (Mark & Smith, 2008) and developed the Well-being Process Questionnaire (Students WPQ; Williams et al., 2017), which measured six subscales: stressors, social support, negative coping, positive personality, conscientiousness, and well-being outcomes. In addition, they included factors such as Grade Point Average (GPA) or academic attainment as outcomes. Findings from several studies have shown that positive personality was the strongest predictor of positive well-being and negative coping methods and that stressors predicted negative well-being outcomes (Howells & Smith, 2019; Nor & Smith, 2019; Smith & Izadyar, 2020; Williams et al., 2017), while conscientiousness was the best predictor of academic outcomes (Smith & Firman, 2019; Smith & Izadyar, 2020). Furthermore, they extended the well-being research to include health-related behaviours and

the impact of such behaviours on well-being in university student populations. This included smoking, which was associated with poorer academic performance but not reduced well-being (Smith, 2019); mental fatigue and inadequate sleep, which were significantly associated with reduced well-being and poorer academic attainment (Howells & Smith, 2019; Smith, 2018), alcohol use, which showed that students who consumed more than the recommended amount of alcohol reported lower positive well-being (Smith, 2019); and problematic Internet use, which was associated with reduced well-being (Alheneidi & Smith, 2020). These findings may also be found in international student populations, particularly regarding the students' well-being processes and factors that predict positive and negative well-being.

Evidence found when comparing international and local students in the US, Australia, and New Zealand has sometimes shown inconsistent results. For example, there were no differences between international and home students in terms of academic or study stress, psychological distress, and financial stress (Chai et al., 2012; Kamardeen & Sunindijo, 2018; Khawaja & Dempsey, 2008; Mitchell et al., 2007; Skromanis et al., 2018). Differences were rather reported for social support (i.e. international students had significantly lower social support than home students) and life satisfaction (Hechanova-Alampay et al., 2002; Skromanis et al., 2018).

In the UK context, two studies compared the mental health of international and British students using the General Health Questionnaire (GHQ12 and GHQ28) to measure students' mental health, but the findings were not consistent. Alsaad (2017) compared a total of 796 students at ten universities in England, of which 545 were international students and 251 were British students. The British students reported better general health and perceived higher levels of social support compared to international students. Alsaad (2017) also found that coping flexibility, social support, and coping strategies were predictor variables of

mental health for both international and British students. However, in a comparison of 88 British students and 134 international students, Jones et al. (2019) found that the British students reported lower mental health, self-esteem, and life satisfaction. Furthermore, life satisfaction and self-esteem were significant predictors of mental health for all students. Such inconsistent results may be due to the study's settings and the sample's characteristics, such as the majority white sample 45% in a British sample and 49.7 % were Arab (Middle East) in an international sample in Alsaad's (2017) study. In contrast, the second study's home sample comprised 40.9% black students, and the international group comprised 50% black students.

Another critical factor influencing university students' well-being is quality of university life, which refers to the satisfaction with one's overall university life, including aspects of academic and social life, as well as university facilities and services, and is a significant predictor of well-being (e.g., Smith et al., 2018), student success at university, university recommendation (e.g., Pedro et al., 2016) and student loyalty (e.g., Yu & Kim, 2008). In the UK context, a major project at the University of Leeds, called University Quality of Life and Learning, found that departmental academic support, teaching, resources and facilities, workload, student support, and accommodations were all significant predictors of students' well-being (Audin et al., 2003). Demographic and individual difference variables were also found to affect the perceived quality of student life (Vaez et al., 2004), suggesting that student status (home or international), personality, gender, and year in university could affect the quality of university life outcomes.

Apart from the aforementioned studies, few empirical works have examined the well-being of international students under a comprehensive model, except for acculturation models, and even fewer have compared international and home students on a range of well-being-related factors. Thus, evidence on the topic remains limited, particularly in the UK. The aims of the study described in this chapter were the following:

- (1) Investigate if well-being and other related factors differ between international and local university students.
- (2) Investigate the efficacy of the total use of studying away strategies on well-being and quality of university life.
- (3) Investigate university students' well-being using the DRIVE model, including direct and indirect effects between the predictor variables and outcomes.

Therefore, this study hoped to make a significant contribution to research on well-being by demonstrating the well-being process of international and home students', also potentially assisting university policymakers in designing an intervention that suits the common needs of both groups.

4.3 Methods

4.3.1 Study Design and Ethics

The study used a cross-sectional design and focused on students who studied away from home. The data was collected in the second semester of the academic year between April and May. British students were recruited from the School of Psychology, and international students were recruited online from different schools and universities in both England and Wales, with the sole inclusion criterion being that they had returned home at least once while at university and before completing the survey. Participants completed a questionnaire online using Qualtrics software and received a £10 Amazon voucher for their participation. The survey was designed to take approximately 15 minutes to complete. Approval for the data collection was obtained from the Ethics Committee in the School of Psychology at Cardiff University.

4.3.2 Survey Questionnaire

The questionnaire consisted of six sections, beginning with an informed consent form and instructions, which included information about the study, how the data would be stored, and the voluntary and anonymous nature of participation. Next, participants completed four measures: a demographic questionnaire, the Smith Well-being Questionnaire, the Quality of University Life Questionnaire, and the Studying Away Strategies Questionnaire (see Chapter 3 Section 3.6 for full details).

Demographic Questionnaire. The demographic questionnaire gathered data on the characteristics of the students (e.g., age, gender, year at university, nationality, and ethnicity).

Smith Well-being Questionnaire (Student SWELL). The Smith Well-being Questionnaire Student Version (Student SWELL; Smith et al., 2018) measured seven variables: (a) the positive personal well-being outcomes (i.e., life satisfaction and happiness); (b) the negative personal well-being outcomes (i.e., stress, anxiety, and depression); (c) university course demands, control over academic work and support; (d) positive personality (i.e. optimism); (e) healthy lifestyle and (f) perceived academic stress.

Quality of University Life Questionnaire. The Quality of University Life Questionnaire (Smith et al., 2018) was comprised of six items measuring the positive effects of study efficiency, lifestyle, and bonding and the positive impacts of the physical environment, being valued, learning and progress.

Studying Away Strategies Questionnaire. The Studying Away Strategies Questionnaire (Smith et al., 2018) consisted of 14 items measuring 14 strategies in five stages: (a) pre-university preparation; (b) coping away from home; (c) planned adjustment to returning; (d) the journey home; and (e) adapting to being at home.

Finally, a debriefing was provided, including the researcher's email address for questions or requests to withdraw from the study.

4.3.3 Sample

A total of 510 students participated in this study, of which 23% were British students who were studying away from home and 77% were international students from 89 countries. Regarding ethnicity, 89% of the participants in the home sample and 47% of the international sample self-identified as White. The students' ages for the entire sample ranged from 16 to 50 years ($M = 21.90$, $SD = 3.13$). The sample was 48.8% male and 51.2% female. Table 4.1 provides a summary of the participants' demographic details.

Table 4.1

Demographic Characteristics of Participants

Demographics	British students (<i>n</i> = 119)	International students (<i>n</i> = 391)
Age range	16-31 years	18 -50 years
Mean age (<i>SD</i>)	20.61 (2.23) N (%)	22.28 (3.26) N (%)
Gender		
Male	58 (48.7%)	191 (48.8%)
Female	61 (51.3 %)	200 (51.2%)
Year at university		
First-year	47 (39.5%)	218 (55.5%)
Other year	72 (60.5 %)	173 (44.3%)
Ethnicity		
White	102 (85.7 %)	186 (47.6 %)
Asian	9 (7.5 %)	100 (25.3%)
Mixed race	5 (4.2 %)	5 (1.2%)
Black or African	3 (2.5 %)	55 (14.1%)
Hispanic/Latino	-	34 (8.4%)
Arab	-	9 (2.3%)

4.3.4 Statistical Analyses

Statistical analyses were performed using the Statistical Package for Social Sciences (SPSS) Version 25. Chi-square (χ^2) and *t*-test statistical analyses were conducted to investigate potential differences between international and domestic students in terms of age and gender, Phi ϕ was used as an effect size for Chi-squared and Cohen's *d* for *t*-test

analyses. A correlation analysis between variables was performed for each group to examine the extent to which both groups associated with a healthy lifestyle, positive personality, course demands, control and support, well-being outcomes, and quality of university life. Furthermore, Fisher's *r*-to-*Z* transformation analysis was used to evaluate statistically significant differences in Pearson's correlations of study variables with well-being outcomes between international and British students.

A multivariate analysis of covariance (MANCOVA) was conducted to investigate significant mean differences in the study variables between international and home students. Three hierarchical multiple regressions, using the enter method, were conducted to determine if the demographic variables, perceived stress, university course demands, control and support, quality of university life, and studying away strategies predicted positive affect, negative affect, and quality of university life.

Finally, the theoretical framework of this thesis determined how the relationships between university-related factors, student characteristics, and well-being outcomes should be conceptualised. As explained in Chapter 3, the DRIVE model suggests that individual differences moderate the associations between course demands and outcome, as well as perceived stress and outcome. In addition, the model suggests that the level of perceived academic stress mediates the relationship between course demands and outcome.

Theoretically, the moderating variable changes the direction between the two variables which could have (a) an enhancing effect, where the effect of the predictor on the outcome increases; (b) a buffering effect, where increasing the moderator decreases the effect of the predictor on the outcome; or (c) an antagonistic effect, which reverses the effect of the predictor on the outcome. The investigation of moderating effects was critical not only to test the theoretical framework but also to check whether the relations between the predictor and outcome variables were stronger for one group than for the other, which could lead to an

increase in the understanding of the association between predictors and outcomes. Therefore, the moderating effects of positive personality, gender (male or female), and student status (home or international) on the association between course demands and perceived stress and outcome were examined. Furthermore, the question of which student groups benefitted most from the studying away strategies or achieved an effect on well-being led to testing the moderating effect of student status on the association between studying away strategies and well-being outcome.

Whereas the mediator variable explains the relationship between a predictor and an outcome, meaning there is an indirect pathway between a predictor and an outcome that may partially or entirely account for the association between the predictor and the outcome. As mentioned previously, the DRIVE model suggests that perceived stress mediates the relationship between course demands and outcome. Perceived stress is a cognitive appraisal that refers to the personal interpretation of a situation (e.g., feeling and thoughts). The past research has shown support for the role of perceived stress or fatigue on the relationship between stressful events or negative job characteristics and well-being and health outcomes (Fan & Smith, 2018; Lazarus, 1991; Mark & Smith, 2008; Nelson, 2017). Thus, the present study examined this among university students. Both mediation and moderation analyses were performed using the PROCESS macro version 3.4, developed by Hayes (2018).

4.4 Results

4.4.1 Analyses of Demographics

Chi-square tests were conducted to examine the differences between the international and British students with respect to gender and year at university, and an independent sample *t*-test was conducted to examine the difference between both groups regarding age. The chi-square analyses indicated no significant differences between the international and British

students with regard to gender, $\chi^2(1, N = 510) = 0.28, p = .59, \phi = .02$ and year at university, $\chi^2(1, N = 510) = 0.784, p = .376, \phi = .03$.

The independent samples *t*-test showed a significant difference between the groups in terms of age, with British students being significantly younger (approximately two years) than the international students, $t(505) = 5.21, p < .05, d = 0.6$. Thus, age was controlled as a covariate when comparing the two groups.

4.4.2 Correlation Analysis

Two Pearson product-moment correlations were conducted to examine whether healthy lifestyle, positive personality, course demands, control, and support, perceived academic stress, well-being outcomes and quality of university life were equally correlated in the two samples. The results are presented in Tables 4.2 and 4.3. The correlation coefficients ranged from no relationship to a moderate relationship (.06 –.50).

Many similarities were observed in the pattern of correlations between international and home students. For example, positive personality correlated positively with positive well-being, quality of university life, studying away strategies, and healthy lifestyle, while perceived academic stress was associated with negative well-being, and control and support correlated negatively with negative well-being. Nevertheless, the statistical comparison of the significant Pearson's correlations (Fisher's *r*-to-*Z* transformation analysis), revealed in international students significantly larger correlations of healthy lifestyle (Positive well-being: $Z = 1.81, p = .035$) and quality of university life (Positive well-being: $Z = 1.82, p = .034$) and significantly smaller correlations of positive personality (Positive well-being: $Z = 3.326, p < .001$). No significant differences were found in Pearson's correlations of the study variables and negative outcomes between the two groups.

Moreover, among the home students, course demands were significantly associated with positive affect ($r = .19, p = .010$), and studying away strategies ($r = .22, p = .014$), while

among the international students, course demands were significantly correlated with negative affect ($r = .16, p = .001$) and perceived stress ($r = .20, p = .008$). Studying away strategies and quality of university life were found to have a moderately positive significant correlation in both groups ($r = .51, p < .001$). Furthermore, studying away strategies correlated with positive well-being ($r = .41, p < .001$), in international students, but not significantly in the home student sample ($r = .15, p > .05$).

Table 4.2
Correlations Between Variables for International Students

	1	2	3	4	5	6	7	8	9
1. Healthy lifestyle	1								
2. Positive personality	.238**	1							
3. Course demands	.093	.040	1						
4. Control and support	.396**	.225**	.133**	1					
5. Perceived stress	-.068	-.176**	.207**	-.219**	1				
6. Quality of university life	.445**	.381**	-.090	.517**	-.258**	1			
7. Studying away strategies	.324**	.220**	.048	.349**	-.052	.510**	1		
8. Positive well-being	.472**	.462**	.036	.463**	-.143**	.569**	.415**	1	
9. Negative well-being	-.207**	-.354**	.163**	-.249**	.385**	-.347**	-.079	-.507**	1

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4.3
Correlations Between Variables for Home Students

	1	2	3	4	5	6	7	8	9
1. Healthy lifestyle	1								
2. Positive personality	.323**	1							
3. Course demands	.131	.152	1						
4. Control and support	.147	.399**	.073	1					
5. Perceived stress	-.126	-.038	.518**	-.195*	1				
6. Quality of university life	.128	.364**	.180	.540**	-.170	1			
7. Studying away strategies	.141	.247**	.229*	.330**	.135	.511**	1		
8. Positive well-being	.310**	.692**	.234*	.401**	-.033	.424**	.152	1	
9. Negative well-being	-.161	-.359**	.153	-.254**	.445**	-.280**	.113	-.520**	1

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

4.4.3 Comparisons Between Home and International Students

First, the responses from the two samples were used to determine the internal consistencies of the instruments. The scales demonstrated good psychometric properties; the Cronbach's alpha coefficient for the Quality of University Life Questionnaire was $\alpha = .83$, for the home student sample, $\alpha = .78$, for the international student sample, and $\alpha = .80$, for the entire sample. The Studying Away Strategies Questionnaire Cronbach's alpha was .78 for the Home student's sample, .68 for the International student's sample, and .72 for the entire sample.

A MANCOVA was employed with a positive personality, healthy lifestyle, course demands, perceived stress, academic control, and support, studying away strategies, quality of university life, and well-being outcomes as the dependent variables to investigate group differences. The two groups were the two student groups, and the covariate (control variable) was age.

Before conducting the test, several analyses were performed between all of the dependent variables to test the MANCOVA assumptions. The correlation between the nine dependent variables ranged from .25 to .53, indicating the absence of multicollinearity. The Box's Test of Equality of Covariance Matrices showed a violation of the assumption of homogeneity of covariance across the groups, as Box's M was significant, $F(122, 15040) = 2.62$, $p = .00$, indicating that there were significant differences between the covariance matrices. The large sample size and reduced alpha level (.01) were considered appropriate solutions to the violation of this assumption. Furthermore, Pillai's trace was reported instead of Wilks' Lambda as it is more robust to violation of the homogeneity of variance and preferred for analyses of unequal sample sizes (Tabachnick & Fidell, 2001). Effect sizes for F -statistics were reported as partial eta-square (η_p^2); which range between 0 to 1, whereby a

partial of $\eta_p^2 = .01$ corresponds to a small effect, $\eta_p^2 = .09$ corresponds to a medium effect and $\eta_p^2 = .25$ represents a large effect (Howell, 2002; Tabachnick & Fidell, 2001).

The results showed a statistically significant difference between the groups on the dependent variables after controlling for age, $F(9, 491) = 6.53, p < .0001$, Pillai's Trace = .114, η_p^2 (estimates of effect size) = .11. The results reported in Table 4.4 illustrate that significant differences were found between the international and home students for positive personality $F(9, 491) = 13.9, p < .0001$, partial $\eta_p^2 = .027$, home students reported lower positive personality ($M = 6.08, SD = 1.88$) than international students ($M = 6.76, SD = 1.73$), course demand $F(9, 491) = 7.31, p < .007$, partial $\eta_p^2 = .015$, home students reported higher course demand ($M = 6.08, SD = 1.88$) than international students ($M = 6.76, SD = 1.73$), perceived academic stress $F(9, 491) = 9.22, p = .003$ partial $\eta_p^2 = .019$, home students perceived higher academic stress ($M = 6.08, SD = 1.88$) than international students ($M = 6.76, SD = 1.73$), quality of university life $F(9, 491) = 19.21, p < .0001$ partial $\eta_p^2 = .040$, international students reported higher quality of university life ($M = 38.85, SD = 8.10$) compared to home students ($M = 34.71, SD = 8.90$), studying away strategies $F(9, 491) = 22.48, p < .0001$, partial $\eta_p^2 = .046$, international students reported applying more studying away strategies ($M = 88.49, SD = 13.06$) compared to home students ($M = 81.25, SD = 16.31$), and negative well-being $F(9, 491) = 8.01, p < .0001$ partial $\eta_p^2 = .017$, home students reported higher negative affect ($M = 12.45, SD = 3.86$) than international students ($M = 11.53, SD = 3.42$).

Moreover, the covariate age was significantly related to two dependent variables with an overall $F(8, 492) = 2.995, p = .001$, Pillai's Trace = .046, $\eta_p^2 = .046$. Age was related to healthy lifestyle, $F(1, 21.46) = 5.84, p = .016, \eta_p^2 = .012$; perceived stress, $F(1, 45) = 12.29, p < .001, \eta_p^2 = .026$; and course demands, $F(1, 23) = 8.17, p = .004, \eta_p^2 = .017$.

Table 4. 4*Descriptive statistics and F- tests comparing international and home students.*

Dependent Variables	Student Status	Min	Max	Mean	Std. Deviation	F	P	Partial eta-squared η																																																																																																												
Healthy lifestyle	Home	2	10	6.57	±1.69	.21	.647	.000																																																																																																												
	International	2	10	6.58	±2.02				Positive personality	Home	1	10	6.08	±1.88	13.09	.000	.027	International	1	10	6.76	±1.73	Course demands	Home	3	10	7.01	±1.67	7.31	.007	.015	International	1	10	6.62	±1.69	Control and support	Home	1	10	6.18	±1.80	1.24	.266	.003	International	1	10	6.48	±1.95	Perceived stress	Home	1	10	6.80	±2.03	9.22	.003	.019	International	1	10	6.32	±1.90	Quality of university life	Home	14	53	34.71	±8.90	19.21	.000	.040	International	8	59	38.85	±8.10	Studying away strategies	Home	47	120	81.25	±16.31	22.48	.000	.046	International	43	123	88.49	±13.06	Positive well-being	Home	2	20	12.92	±3.81	1.94	.222	.003	International	4	20	13.48	±3.08	Negative well-being	Home	4	20	12.45	±3.86	8.01	.005	.017	International
Positive personality	Home	1	10	6.08	±1.88	13.09	.000	.027																																																																																																												
	International	1	10	6.76	±1.73				Course demands	Home	3	10	7.01	±1.67	7.31	.007	.015	International	1	10	6.62	±1.69	Control and support	Home	1	10	6.18	±1.80	1.24	.266	.003	International	1	10	6.48	±1.95	Perceived stress	Home	1	10	6.80	±2.03	9.22	.003	.019	International	1	10	6.32	±1.90	Quality of university life	Home	14	53	34.71	±8.90	19.21	.000	.040	International	8	59	38.85	±8.10	Studying away strategies	Home	47	120	81.25	±16.31	22.48	.000	.046	International	43	123	88.49	±13.06	Positive well-being	Home	2	20	12.92	±3.81	1.94	.222	.003	International	4	20	13.48	±3.08	Negative well-being	Home	4	20	12.45	±3.86	8.01	.005	.017	International	2	20	11.53	±3.24										
Course demands	Home	3	10	7.01	±1.67	7.31	.007	.015																																																																																																												
	International	1	10	6.62	±1.69				Control and support	Home	1	10	6.18	±1.80	1.24	.266	.003	International	1	10	6.48	±1.95	Perceived stress	Home	1	10	6.80	±2.03	9.22	.003	.019	International	1	10	6.32	±1.90	Quality of university life	Home	14	53	34.71	±8.90	19.21	.000	.040	International	8	59	38.85	±8.10	Studying away strategies	Home	47	120	81.25	±16.31	22.48	.000	.046	International	43	123	88.49	±13.06	Positive well-being	Home	2	20	12.92	±3.81	1.94	.222	.003	International	4	20	13.48	±3.08	Negative well-being	Home	4	20	12.45	±3.86	8.01	.005	.017	International	2	20	11.53	±3.24																								
Control and support	Home	1	10	6.18	±1.80	1.24	.266	.003																																																																																																												
	International	1	10	6.48	±1.95				Perceived stress	Home	1	10	6.80	±2.03	9.22	.003	.019	International	1	10	6.32	±1.90	Quality of university life	Home	14	53	34.71	±8.90	19.21	.000	.040	International	8	59	38.85	±8.10	Studying away strategies	Home	47	120	81.25	±16.31	22.48	.000	.046	International	43	123	88.49	±13.06	Positive well-being	Home	2	20	12.92	±3.81	1.94	.222	.003	International	4	20	13.48	±3.08	Negative well-being	Home	4	20	12.45	±3.86	8.01	.005	.017	International	2	20	11.53	±3.24																																						
Perceived stress	Home	1	10	6.80	±2.03	9.22	.003	.019																																																																																																												
	International	1	10	6.32	±1.90				Quality of university life	Home	14	53	34.71	±8.90	19.21	.000	.040	International	8	59	38.85	±8.10	Studying away strategies	Home	47	120	81.25	±16.31	22.48	.000	.046	International	43	123	88.49	±13.06	Positive well-being	Home	2	20	12.92	±3.81	1.94	.222	.003	International	4	20	13.48	±3.08	Negative well-being	Home	4	20	12.45	±3.86	8.01	.005	.017	International	2	20	11.53	±3.24																																																				
Quality of university life	Home	14	53	34.71	±8.90	19.21	.000	.040																																																																																																												
	International	8	59	38.85	±8.10				Studying away strategies	Home	47	120	81.25	±16.31	22.48	.000	.046	International	43	123	88.49	±13.06	Positive well-being	Home	2	20	12.92	±3.81	1.94	.222	.003	International	4	20	13.48	±3.08	Negative well-being	Home	4	20	12.45	±3.86	8.01	.005	.017	International	2	20	11.53	±3.24																																																																		
Studying away strategies	Home	47	120	81.25	±16.31	22.48	.000	.046																																																																																																												
	International	43	123	88.49	±13.06				Positive well-being	Home	2	20	12.92	±3.81	1.94	.222	.003	International	4	20	13.48	±3.08	Negative well-being	Home	4	20	12.45	±3.86	8.01	.005	.017	International	2	20	11.53	±3.24																																																																																
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4.4.4 Regression Analysis

Before performing a hierarchical multiple regression, the relevant assumptions of the regression analysis were tested. The formula $N > 50 + 8m$ (m is the number of independent variables), suggested by Tabachnick and Fidell (2014, p.159), was employed. The sample size of 510 was thus deemed appropriate for ten independent variables. Furthermore, none of the independent variables was in combination with another, and the assumption of absence of multicollinearity was also met, as the values of tolerance were between .99 and .49 and

variance inflation factor (VIF) was between 1.92 and 1.02; values higher than 10 for VIF and values less than .10 for tolerance suggest possible multicollinearity (Cohen et al., 2003, p. 423). Multivariate outliers were examined using the Mahalanobis distance, with the critical chi-square value for this test being 29.5. Six participants were above 29.5, and therefore they were removed from further analysis.

Three hierarchical multiple regressions were conducted to investigate the relationships between the predictors and the outcomes of quality of university life, positive well-being, and negative well-being. The first regression was run with the quality of university life as the outcome. Age, dummy variables representing gender (male=0, female=1), student status (British = 0, International = 1) and year at university (first year =0, other years= 1) were entered as predictors in Block 1 as control variables in order to consider their potential effects on model parameters. Healthy lifestyle, positive personality, course demands, control and support, and perceived university stress were entered as predictors in Block 2, and studying away strategies were entered in Block 3 of the regression. Same blocks for the second and third hierarchical regressions were run with positive and negative well-being as the outcomes. In addition, the quality of university life was added at Block 4.

As the DRIVE model proposed that individual differences (i.e., gender, student status, and personality) moderated the relationship between course demands and outcomes and perceived stress and outcomes, these interactions were not included in the hierarchical regression models. Later, Section 4.4.5 will examine the moderation and mediation variables using the PROCESS macro.

4.4.4.1 Predictors of quality of university life

The first hierarchical linear regression analysis was conducted to determine the predictors of the quality of university life; the full results are shown in Table 4.5. The result of the first model of variables entered at Model 1 showed that gender ($\beta=-.108, p=.011$), year

at university ($\beta = -.345, p < .001$) and student status ($\beta = .157, p < .001$) significantly predicted quality of university life. Male students, first-year students, and international students showed a higher score in the quality of university life than home students. The first model explained 18% of the variance in the quality of university life, meaning that 82% of the variation could not be explained by the demographic variables alone.

For the second model analysis of the regression, the model was also significant, $F(9, 458) = 39.23, p < .001$. Positive personality ($\beta = .199, p < .001$), healthy lifestyle ($\beta = .103, p = .011$) and high academic control and support ($\beta = .370, p < .001$). The second model explained 43.5% of the variance in quality of life in the sample.

Finally, the addition of studying away strategies to the regression model explained an additional 7.7% of the variation in the quality of university life and this change in R^2 was also significant, $F(10, 457) = 47.97, p < .001$. When all of the predictors were included in stage three of the regression, neither gender ($\beta = -.043, p = .208$) nor student status ($\beta = .049, p = .166$) was a significant predictor of quality of university life.

Together, the seven independent variables (i.e., year at university, healthy lifestyle, positive personality, low course demands, high academic control and support, and applying more studying away strategies) accounted for 50% of the variance. The most important predictor of quality of university life was the studying away strategies ($\beta = .319, p < .001$), followed by academic control and support ($\beta = .285, p < .001$).

Table 4.5*Hierarchical multiple regression analysis for variables predicting quality of university life*

Predictors variables	Model 1			Model 2			Model 3		
	β	t	Sig	β	t	Sig	β	t	Sig
Age	.051	1.167	.244	.028	.741	.459	.042	1.197	.232
Gender	-.108	-2.568	.011	-.048	-1.306	.192	-.043	-1.262	.208
Student status	.157	3.610	.000	.108	2.882	.004	.049	1.386	.166
Year at university	-.345	-8.088	.000	-.217	-5.827	.000	-.165	-4.680	.000
Healthy lifestyle				.103	2.568	.011	.068	1.812	.071
Positive personality				.199	5.206	.000	.162	4.507	.000
Course demands				-.055	-1.436	.152	-.068	-1.909	.057
Control and support				.370	9.280	.000	.285	7.400	.000
Perceived stress				-.060	-1.508	.132	-.088	-2.394	.017
Studying away strategies							.319	8.481	.000
R ²	.178			.435			.512		
Adjusted R ²	.171			.424			.501		
F	25.01			39.23			47.97		
Sig F	.000			.000			.000		

4.4.4.2 Predictors of positive well-being

A four-block hierarchical multiple regression was conducted with positive well-being as the dependant variable. The same independent variables were entered as in the previous regression, and the quality of university life was included in Block 4.

Model 1 with the demographic variables as predictors explained 5.1% of the variance was in the first year ($\beta = -.180, p < .001$), was a predictor of reported higher positive well-being. The second model was also significant; the R^2 changed from Model 1 to Model 2 was 40.3% reflecting a significant increase in explanation variation, $F(9, 458) = 42.34, p < .001$, accounting for 43.3% of the variance in positive well-being. The regression coefficients showed that students with a healthy lifestyle ($\beta = .217, p < .001$), a positive personality ($\beta = .410,$

$p < .001$) and high academic control and support ($\beta = .261, p < .001$), reported higher positive well-being and year at university were not significant predictors at this stage ($\beta = -.02, p = .58$).

In Model 3, the application of studying away strategies was a significant predictor of well-being ($\beta = .114, p = .004$), and the overall model explained 46.4% of the variation. In the final model, Model 4, of the regression, the model was also significant, $F(11, 456) = 39.65, p < .001$, and explained 49% of the variance in positive well-being. However, in this model, studying away strategies was no longer statistically significant that could indicate a moderation effect of the quality of university on the association between studying away strategies and positive well-being. Positive personality ($\beta = .361, p < .001$) was the best predictor of positive well-being. The regression statistics are presented in Table 4.6.

Table 4.6*Hierarchical multiple regression analysis for variables predicting positive well-being*

Predictors variables	Model 1			Model 2			Model 3			Model 4		
	β	t	Sig	β	t	Sig	β	t	Sig	β	t	Sig
Age	.084	1.801	.072	.042	1.158	.247	.047	1.303	.193	.038	1.067	.286
Gender	-.085	-1.869	.062	-.026	-.728	.467	-.025	-.685	.494	-.015	-.422	.673
Student status	.034	.724	.469	-.023	-.617	.538	-.044	-1.173	.241	-.055	-1.502	.134
Year at university	-.180	-3.931	.000	-.020	-.543	.587	-.001	-.033	.974	.036	.975	.330
Healthy lifestyle				.217	5.518	.000	.204	5.211	.000	.189	4.914	.000
Positive personality				.410	10.913	.000	.397	10.561	.000	.361	9.598	.000
Course demands				.021	.550	.583	.016	.429	.668	.031	.856	.392
Control and support				.261	6.655	.000	.230	5.715	.000	.166	3.982	.000
Perceived stress				-.014	-.361	.718	-.024	-.629	.530	-.004	-.114	.909
Studying away strategies							.114	2.890	.004	.042	1.009	.313
Quality of university life										.226	4.716	.000
R ²	.051			.454			.464			.489		
Adjusted R ²	.043			.443			.452			.477		
F	7.54			42.45			39.39			39.65		
Sig F	.000			.000			.000			.000		

4.4.4.3 Predictors of negative well-being

A four-block multiple regression was conducted to determine the predictors of negative well-being; the full results are shown in Table 4.7. The demographic variables entered in Model 1 significantly predicted negative well-being and accounted for 6% of the variance in negative well-being. The regression coefficients showed that female students reported higher negative well-being, as did British students compared to international students. However, in the second model, none of the variables entered in Model 1 significantly predicted negative well-being. In contrast, all of the independent variables entered into Model 2 were statistically significant and explained 30.7% of the variance in the dependant variable, $F(9, 458) = 22.57, p < .001$. A low healthy lifestyle ($\beta = -.099, p = .02$), low positive personality ($\beta = -.253, p < .001$), high course demands ($\beta = .094, p = .027$), high perceived academic stress ($\beta = -.322, p < .001$) and low control and support ($\beta = -.098, p = .027$).

Adding studying away strategies in Model 3 of the regression did not increase R^2 ; the use of studying away strategies was not a significant predictor in the model ($\beta = .084, p = .059$). When the quality of university life was introduced in Model 4, R^2 showed a small increase of 1.5%, and studying away strategies became a significant predictor ($\beta = .140, p = .004$), this finding suggests a possible suppressor situation. Overall, the model was significant, $F(11, 456) = 20.16, p < .001$ and explained 33% of the variance in negative well-being. The regression coefficients indicated that five variables were significant predictors of negative affect: low positive personality, low healthy lifestyle and low quality of university life, the use of studying away strategies and that the strongest predictor was perceived academic stress ($\beta = .299, p < .001$).

Table 4.7*Hierarchical multiple regression analysis for variables predicting negative well-being*

Predictors	Model 1			Model 2			Model 3			Model 4		
	β	t	Sig	β	t	Sig	β	t	Sig	β	t	Sig
Age	.084	1.812	.071	.035	.840	.402	.038	.930	.353	.046	1.114	.266
Gender	.184	4.065	.000	.063	1.559	.120	.065	1.594	.112	.057	1.422	.156
Student status	-.126	-2.700	.007	-.036	-.859	.391	-.051	-1.213	.226	-.043	-1.019	.309
Year at university	.068	1.480	.140	-.038	-.931	.353	-.025	-.588	.557	-.053	-1.252	.211
Healthy lifestyle				-.099	-2.238	.026	-.108	-2.438	.015	-.097	-2.187	.029
Positive personality				-.253	-5.968	.000	-.263	-6.172	.000	-.235	-5.449	.000
Course demands				.094	2.222	.027	.091	2.144	.033	.079	1.877	.061
Control and support				-.098	-2.220	.027	-.121	-2.643	.008	-.071	-1.494	.136
Perceived stress				.322	7.371	.000	.315	7.186	.000	.299	6.861	.000
Studying away strategies							.084	1.889	.059	.140	2.933	.004
Quality of university life										-.173	-3.144	.002
R ²	.060			.307			.313			.327		
Adjusted R square	.052			.294			.298			.311		
F	7.38			22.57			20.78			20.16		
Sig F	.000			.000			.000			.000		

4.4.5 Moderation and Mediation Analysis

4.4.5.1 Moderation Analysis

Simple moderation (Model 1) was performed using Hayes' PROCESS macro for SPSS (Hayes, 2018) to test the moderation effects of (student status, gender, and positive personality) in the relationship between (perceived stress, course demands, or studying away strategies) and positive or negative well-being. Analyses utilized a bootstrapping approach with 1000 samples, and significance was determined at 95% bias-corrected confidence intervals.

4.4.5.1.1 Student status, gender and positive personality as moderators between perceived academic stress and negative outcome.

None of the interactions between the moderators and perceived university stress were significant. Student status, $\Delta R^2 = .002$, $\Delta F(3, 505) = 1.5$, $p = .22$, $b = -.20$, $t = -1.21$, 95% CI [-.52 to .12], gender, $\Delta R^2 = .002$, $\Delta F(3, 505) = 1.52$, $p = .21$, $b = -.17$, $t = -1.23$, 95% CI [-.45 to .10], and personality, $\Delta R^2 = .005$, $\Delta F(3, 505) = 3.78$, $p = .052$, $b = .06$, $t = 1.94$ -1.21, 95% CI [.00 to .13], indicating that the relationship between perceived academic stress and negative outcome is not moderated by student status, gender or positive personality.

4.4.5.1.2 Student status, gender and positive personality as moderators between course demands and negative outcome.

None of the interactions between the moderators and course demands were significant. Student status, $\Delta R^2 = .00$, $\Delta F(3, 505) = .09$, $p = .8$, $b = -.03$, $t = -.15$, 95% CI [-.45 to .38], gender, $\Delta R^2 = .00$, $\Delta F(3, 505) = .09$, $p = .7$, $b = -.05$, $t = -.30$, $p = .09$, 95% CI [-.41 to .30], and personality, $\Delta R^2 = .003$, $\Delta F(3, 505) = 1.81$, $p = .17$, $b = -.05$, $t = -.134$, $p = .17$, 95% CI [-.13 to .02], indicating that the relationship between course demands and negative outcome is not moderated by student status, gender or positive personality.

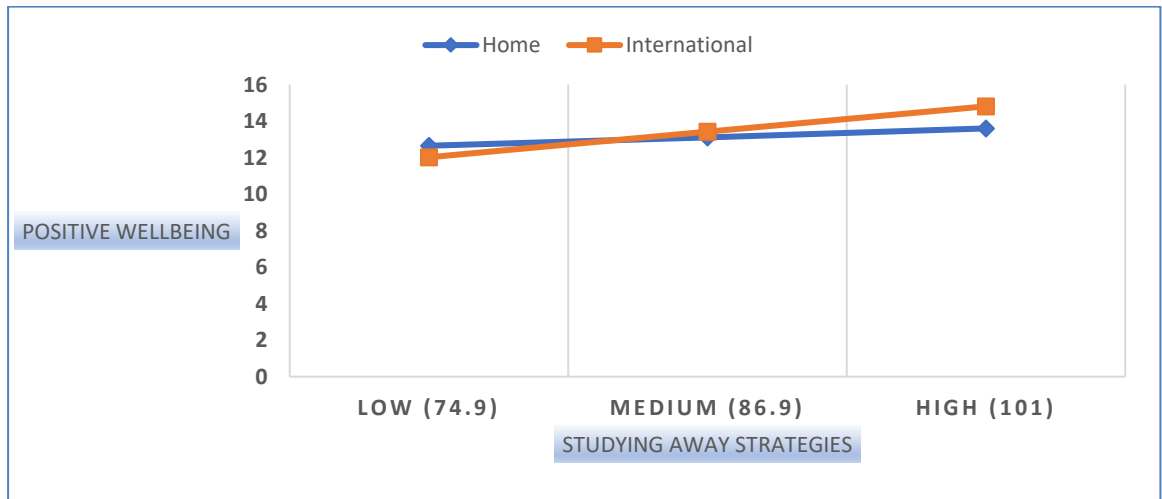
4.4.5.1.3 Student status as a moderator between studying away strategies and positive outcome.

The results indicated that student status changed the strength of the relationship between studying away strategies and positive well-being. The interaction between student status and studying away strategies was significant, $\Delta R^2 = .016$, $\Delta F(3, 496) = 8.95$, $p = .002$. Home students, $b = .036$, $t = 2.02$, $p = .04$, 95% CI [.001 to .071] and international, $b = .099$, $t = 8.2$, $p < .001$, 95% CI [.075 to .123].

The strategies had a stronger effect on international students in increasing the positive outcomes compared to home students. Furthermore, international students who applied a low level of strategies reported lower positive well-being compared to home students who applied the same level of the strategies (see Figure 4.1).

Figure 4.1

Simple slopes for the interaction between student status and studying away strategies predicting positive well-being.



4.4.5.2 Mediation Analysis

To examine the mediating effects of variables of interest, a simple mediation analysis, Model 4 of the PROCESS macro, with the means of 1000 was computed. Significant mediation effects were identified if the Bootstrapped Confidence intervals 95% CI of the indirect effects did not include zero.

4.4.5.2.1 Perceived academic stress as a mediator between course demands and negative outcomes

Table 4.8 shows the unstandardised regression coefficients (B) with the standard errors and confidence intervals for course demands (predictor), perceived stress (mediator), and the negative well-being (outcome). The result revealed a significant relationship between course demands and perceived academic stress, ($\beta=.33$; $p <.001$, CI: .23, .34), further, a significant relationship between course demands and negative well-being ($\beta= .35$; $p <.001$, CI: .17, .53), course demands explained 3% of the variance in negative well-being (R^2 change =0.03; $p <.001$). However, the final step in the mediation showed that the course demands effects is not significant ($\beta=.12$, $p=.16$, CI: -.04, .3) when the perceived academic stress present in the model, indicating that perceived academic stress mediated the effects, of course, demands on negative well-being completely (Figure 4.2). The output indicated that there was a significant indirect effect of course demands on negative well-being through perceived academic stress ($\beta= .23$, CI: .13, .34).

Figure 4.2

Mediating effects of perceived stress on the relationship between course demands and negative well-being

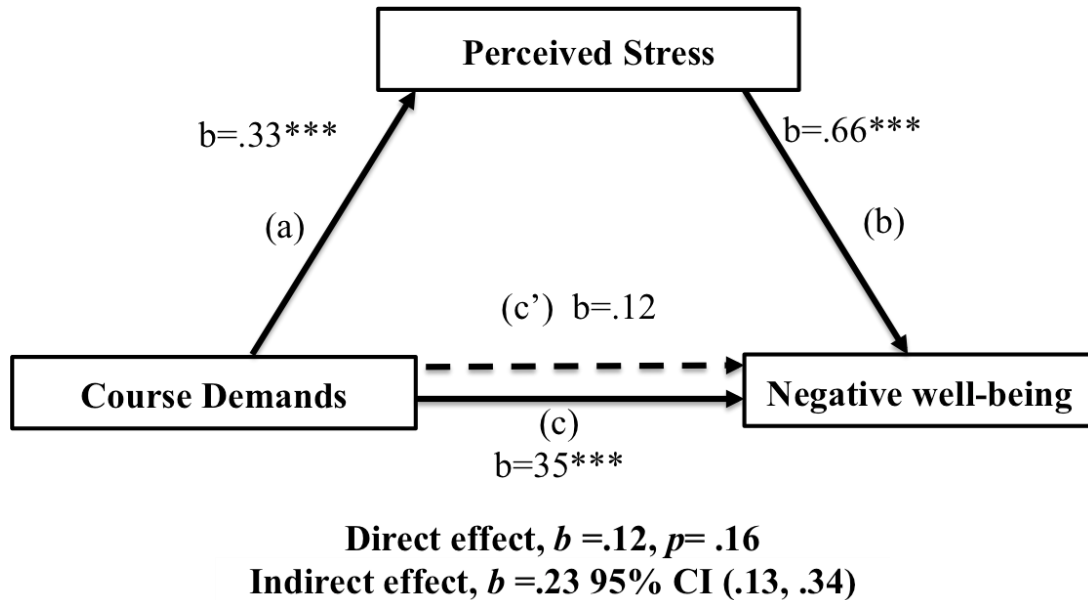


Table 4.8

Mediation effects of perceived academic stress on course demands and negative outcome.

	M	SE	LL 95%CI	UL 95%CI		
Indirect effect						
Bootstrap result	.22	.05	.13	.34		
Steps approach			B	SE	t	p
Step 1: Total effect Course demands → negative well-being (Path c)			.35	.09	3.87	.0001
Step 2: Course demands → Perceived stress (Path a)			.33	.05	6.71	.000
Step 3: Perceived stress → negative well-being (Path b)			.66	.07	9.07	.000
Step 4: Direct effect (Path c')			.12	.08	1.40	.16

Note: Bootstrap sample size = 1,000. Model summary for dependent variable model: $R^2 = .16, F = 49.85, p < 0.001$. B, unstandardised regression coefficient; CI, Confidence Interval; LL, lower limit; M, mean; SE, standard error; UL, upper limit.

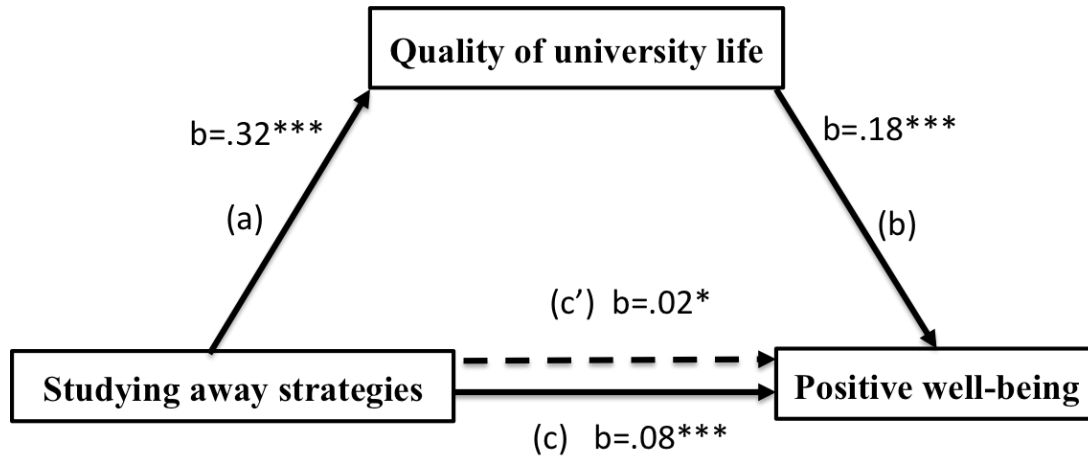
4.4.5.2.2 Quality of university life as a mediator between studying away strategies and positive outcomes

Table 4.9 shows the unstandardised regression coefficients (B) with the standard errors and confidence intervals for studying away strategies (predictor), quality of university life (mediator), and the positive well-being (outcome).

The first step revealed a significant relationship between studying away strategies and quality of university life, ($\beta=.32$; $p <.001$), indicating that applying the studying away strategies was associated with a perceived higher quality of university life. In addition, a significant relationship between studying away strategies and positive well-being ($\beta=.081$; $p <.001$), studying away strategies explained 12% of the variance in positive well-being (R^2 change =.129; $p <.001$). The final step in the mediation showed that together, studying away strategies and quality of university life explained 28% of the variance in positive well-being ($R^2=0.287$; $p <0.001$). The effect of studying away strategies on positive well-being was smaller in step three ($\beta=.02$; $p =.03$) than in step two ($\beta=.08$; $p <.001$); however, it remained significant, indicating that quality of university life partially mediated the effects of studying away strategies on positive well-being (see Figure 4.3). The output indicated that there was a significant indirect effect of studying away strategies on positive well-being through the quality of university life ($\beta = .058$, 95% CI: .04 to .07).

Figure 4.3

Mediating effects of quality of university life on the relationship between studying away strategies and positive well-being.



Direct effect, $b = .023$ $p = .03$
Indirect effect, $b = .058$ 95% CI (.04, .07)

Table 4.9

Mediation effects of quality of university life on studying away strategies and positive outcome.

	M	SE	LL 95%CI	UL 95%CI
Indirect effect				
Bootstrap result	.06	.008	.04	.07
Steps approach				
	B	SE	t	p
	95%CI			
Step 1: Total effect Studying away strategies $s \rightarrow$ Positive well-being (Path c)	.081 [.06, .11]	.01	8.14	.000
Step 2: Studying away strategies \rightarrow Quality of university life (Path a)	.32 [.29, .39]	.02	13.65	.000
Step 3: Quality of university life \rightarrow Positive well-being (Path b)	.18 [.06, .11]	.01	10.28	.000
Step 4: Direct effect (Path c')	.02 [.003, .04]	.10	2.14	.03

Note: Bootstrap sample size = 1,000. Model summary for dependent variable model: $R^2 = .28$, $F = 93.4$, $p < 0.001$: B, unstandardised regression coefficient; CI, Confidence Interval; LL, lower limit; M, mean; SE, standard error; UL, upper limit.

4.5 Discussion

To the best of the researcher's knowledge, there are only two studies that have compared home and international students on mental health status and its predictors in the UK. Within the context of research on student health and well-being, the current study investigated the well-being away from home among university students in terms of positive and negative aspects of well-being and as a function of a range of demographic factors, personality, healthy lifestyle, studying away strategies and university-related factors (i.e. course demands, academic control and support and quality of university life). Moreover, the study also investigated whether the relationship between studying away from home and well-being differed between international and domestic university students. Finally, the study tested key features of the DRIVE stress and well-being model.

4.5.1 Differences and similarities between groups

There were several significant differences between international and home students in terms of positive personality, university course demands, quality of university life, and negative well-being. In contrast to what has been reported in the literature, British students reported higher levels of academic course demands than international students. Possible explanations are financial issues or stressors from working part-time; an increase in part-time work by full-time students has been highlighted in several UK studies and surveys conducted on British university students (e.g., Callender & Kemp, 2000; Cavill, 2014; Hall, 2010; Hunt et al., 2004; NUS, 2008; Smith & Taylor, 1999; Watts & Pickering, 2000). It has been reported that between 35% and 70% of full-time students engaged in term-time employment indicated that they were unable to devote enough time to their studies and their work negatively impacted their academic attainment and university experiences. The more hours students worked, the greater the negative effect on their academic life became (Callender, 2008). Furthermore, TUC (2000) found that students engaged in part-time work had more

stress and trendiness. In general, a significant relationship between term-time employment, financial issues and mental health among university students has been widely reported (e.g., Andrews & Wilding, 2004; Roberts et al., 1999).

The interesting association found between course demands and both positive and negative well-being outcomes in home students confirmed a recent finding by Smith (2019) that high workload, course stress, and positive and negative well-being were related. In a large study of over 1,000 British university students, Smith (2019) found that high workload could lead to both positive and negative outcomes. The author explained that the workload may initially be perceived as stressful, but could also increase students' motivation.

Furthermore, British students scored significantly higher on negative well-being, which suggests that negative well-being is the outcome of high course demands, low quality of university life, and low positive personality, consistent with the DRIVE model. These findings were consistent with Jones et al.'s (2019) recent study, which found that British students scored significantly lower on mental health, life satisfaction, and self-esteem than international students. The authors explained that institutions might provide better provisions and support to international students than domestic students.

4.5.3 Studying Away Strategies and Well-Being

International students reported higher employment of studying away strategies than home students. The reason for this is likely because the decision to study overseas requires a long process in the pre-departure stage, and students may spend months discussing the idea with their families and close friends, choosing an institution, and awaiting visa approval. Furthermore, short geographical distances between the university and home for home students could make more frequent visits home more feasible for home students, thereby allowing them to meet with family and friends at home, enhancing stability and maintaining their well-being (Chow & Healy, 2008; Tognoli, 2003; Xu et al., 2015). Familiarity with the

context might affect the extents to which students applied studying away strategies in all of the transitional phases: pre-departure, being away, returning home, and being back home.

Importantly, studying away strategies predicted positive well-being; this relationship was moderated by nationality, where the relation between studying away strategies and positive well-being outcome was stronger in international compared to home students. Furthermore, the quality of university life partially mediated the relationship between studying away strategies and positive outcomes. In other words, the process by which studying away strategies influence positive well-being could be explained by the quality of university life.

Regarding negative well-being and studying away strategies, the correlation analysis revealed that studying away strategies was not correlated with negative well-being among both groups. However, the hierarchical multiple regressions showed that studying away strategies predicted negative well-being only at the last model when the quality of university life entered in the model. This might be a case of suppression effect because studying away strategies was uncorrelated with negative well-being, and it was not significant by itself in the regression model 3 ($\beta = .084, p = .059$). Moreover, it correlated significantly with the quality of university life ($r = .51, p < .001$), and the correlation and beta weight had opposite signs (Tabachnick & Fidell, 2013, p.192). This finding highlighted the critical role of the quality of university life on students' well-being. Another possible explanation for this result could be reverse causality when students who have problems such as perceived low quality of university life and high academic stress were likely to use studying away strategies. This finding needs more investigations to confirm the possibility of reverse causation or explain the relationship between studying away strategies, the quality of university life, and negative well-being.

4.5.3 Students Well-being via the DRIVE Model

In general, the data confirmed the key relationships between variables in the DRIVE model. Individual differences (i.e., gender, personality, and healthy lifestyle), course demands, academic control and support, and quality of university life were found to significantly affect the outcomes. Furthermore, the mediatory role of perceived stress between course demands and negative outcomes and the moderator role of individual differences, specifically student status (Home/International), on studying away strategies and positive well-being were supported. However, positive personality had no significant moderator effect on negative outcomes.

The regression analysis showed that several variables predicted positive well-being. The findings showed that students with higher scores in healthy lifestyle, positive personality control and support, and quality of university life reported higher positive well-being. Consistent with this finding, students with a less healthy lifestyle and less positive personality reported higher negative well-being and lower control and support, and those with lower scores in quality of university life showed higher negative well-being. As such, the predictors of student well-being reported in this study were consistent with several lines of research on student well-being. For example, Burriss et al. (2009) reported that optimism was the best predictor of both psychological well-being and lower levels of psychological distress. In their study, being healthy was positively associated with psychological well-being amongst US university students. The findings were also consistent with the research by Cho and Yu (2015), which showed that university support had a positive effect on international students' well-being and school satisfaction. Consistent with most studies that have applied the DRIVE model, perceived stress entirely mediated the effect of course demands on negative outcomes.

In terms of demographic factors predicting well-being, female students reported higher negative outcomes compared to male students. This finding is consistent with previous

research conducted in different countries on university and college students. Stallman (2010) reported that being female was a predictor of mental health problems or distress among Australian university students. Furthermore, second-year students and above attained lower scores for the quality of university life and higher scores for negative outcomes. This finding is consistent with a longitudinal study by Bewick et al. (2010), who found that UK students' anxiety scores peaked in the first term of both the second and final years of university. Students in later years of study are likely experiencing more pressure. In contrast, first-year students perhaps experience a 'honeymoon phase' at university or feel less pressure because their grades do not count. These results support previous findings from several surveys of university students' mental health in the UK (Hubble & Bolton, 2019; Thorley, 2017).

The findings confirmed the mediating role of perceived stress between course demands and negative outcomes. On the other hand, positive personality, along with other demographic factors (e.g. gender and student status), did not moderate the effect of course demands or perceived academic stress on negative well-being.

Overall, the findings from this study supported features of the DRIVE model in the context of university students and international students, and they partially supported the well-being away strategies.

4.5.3 Limitations

Although the results from this study provided some noteworthy findings on the factors that impact the well-being of university students studying away from home, findings must be interpreted in the light of two limitations that reduced the generalisability of the findings. In terms of the participant sample, the home student sample came from only one university and one school, which meant that the findings could not be generalised to all home students, as the particular university setting may not reflect that of other institutions. Additionally, the sample was not representative in the distribution of gender of the school of psychology, as

80% of the students in the school were female. However, I chose to have 50% of the sample male to be balanced with the international students' sample and to be able to test differences between male and female students in the study variables. The full comparison between male and female students have been published in the *Journal of Education Studies* (Alharbi & Smith, 2019).

The second limitation was that the correlational nature of the research design did not provide definitive information on a cause-effect relationship between studying away strategies and well-being. Nevertheless, this limitation will be addressed through a follow-up study reported in the following chapters.

4.6 Chapter Summary

The objective of the current chapter was to contribute to the knowledge about factors that are likely to impact the well-being of students who leave home to pursue higher education qualifications domestically or internationally. When comparing the two groups, the findings were unexpected: the international students found their courses less demanding than home students, scored significantly lower than home students on negative well-being, and experienced better quality of university life.

The findings also showed personality, healthy lifestyle, course demands, control over academic work, support from staff, and quality of university life predicted well-being outcomes. Moreover, studying away strategies predicted positive well-being. However, this relationship was mediated by the quality of the University of Life. Furthermore, key features of the DRIVE model were supported in the findings, such as the mediation effect of perceived stress on the relationship between course demands and negative outcomes. Nevertheless, the results did not support the moderation role of individual differences, particularly gender, personality, and student status, on the association between course demands and perceived stress and negative outcomes.

Finally, the findings showed that well-being processes in the home and international groups were more similar than different. The next chapter presents a longitudinal study that examined international students' well-being throughout the academic year.

CHAPTER 5: A THREE-WAVE LONGITUDINAL STUDY OF THE WELL-BEING OF INTERNATIONAL STUDENTS

5.1 Chapter Overview

This chapter presents an empirical three-wave longitudinal study investigating the well-being of international students during the 2017–18 academic year. This study included the variables used in the previous chapter and also assessed the effects of English language proficiency, the previous experience of studying abroad, academic achievement, and financial difficulties on well-being. The major methodological improvement was the use of a longitudinal design, which gives a better indication of causality.

5.2 Relation to the Study and Aims

From the subjective well-being perspective, life events such as transitioning to a new country and starting university or college affect an individual's well-being (Fisher, 1994; Praherso et al., 2017). Along with the acculturation, theories highlight the importance of time for psychological and sociocultural adaptation and, as a consequence, of its relationship to emotional and social well-being. For example, the U-curve theory of adjustment (Lysgaard, 1955), which considers the central theory of transition research, hypothesizes that the process of transition and adjustment begins with a 'honeymoon' of excitement about the new country followed by 'culture shock,' in which one feels less well-adjusted, and finally 'recovery,' when one begins to feel better adjusted again. However, the pattern of adjustment or stress level of international students differs from other international sojourners (such as immigrants), so this model might not be relevant to international students (Bai, 2016).

As discussed in Chapters 2 and 3, the literature lacks longitudinal research on international students in general and on their well-being specifically. Most of the previous studies used cross-sectional designs, while few investigations employed longitudinal designs

to study university students' well-being. In a few longitudinal studies examining the well-being of students after transitioning to university, British students studying away from home within their country reported higher anxiety, depression, and absentmindedness compared with students who lived in their home town (Fisher & Hood, 1987). Furthermore, homesick students received low scores on adaptation to the college environment. Similarly, Ying and Liese (1991) conducted a three-year project from 1988 to 1990 examining what may have caused a change in students' emotional well-being improvement or decline in depression scores over time among 171 Taiwanese students in the United States. Of the sample, 55% reported a post-arrival decline in well-being; notably, the pre-arrival depression and preparation levels before departing predicted the post-arrival level of depression, and a more accurate understanding of the United States and the transition buffered post-arrival depression (Ying & Liese, 1991). Similar findings of Chinese students in the United Kingdom found that academic preparation before departure reduced academic concerns after arrival in the United Kingdom (Zhou & Todman, 2009). However, a literature gap remains on what would account for international students' well-being and whether personal or psychological factors of international students at the pre-arrival phase could make the transition easier as well as the factors that influence well-being during stages of transition.

Existing research on factors contributing to the mental health of students studying away from home is covered in Chapter 2. In general, well-being is not directly addressed in most investigations. Nevertheless, associations have been drawn between several environmental, personal, and interpersonal factors; levels of satisfaction and aspects of well-being, such as stress or depression, and personality traits, such as extraversion and being (less) neurotic, are linked with low depression scores and high sociocultural adaptation (Hirai et al., 2015; Ward et al., 2009). Furthermore, multicultural personality traits, emotional

stability, and social initiative contributed directly to international students' adjustment well-being (Yakunina et al., 2012).

Berry (2003) identified four strategies of acculturation and stress levels; individuals who had high levels in their home and had host identification (a bicultural strategy) experienced the lowest acculturative stress, whereas individuals who had identification with both home and host culture (a marginalized strategy) experienced the highest acculturative stress. Individuals who had mixed patterns of a high host, low home identity (an assimilated strategy), or a separated strategy where an individual has a high home, low host identity have been found to have intermediate levels of acculturative stress. However, findings from a three-month longitudinal study that measured the psychological well-being at the first week of the semester and then three months later indicated that acculturation strategies had no significant effect on students' psychological well-being or academic adaptation in the United States. Additionally, the students' psychological well-being declined significantly after approximately three months (Cemalcilar & Falbo, 2008).

Previous students' travelling experiences were found to contribute positively to psychological adjustment and low levels of depression, especially at an early stage of transition, as previous abroad exposure enabled individuals to have a clearer expectation of the potential difficulties and gave individuals experience in separation from familiar people and environments (Smiljanic, 2017).

Cognitive factors such as perceived control over academic stress and perceived self-efficacy exhibited powerful relationships to academic performance and personal adjustment in a new environment, and both are linked to high psychological well-being (Bulgan & Çiftçi, 2017; Poyrazli et al., 2002). Furthermore, a social support network of friends, family, and peers; the number of friends in the host country; and engagement in leisure activities were all found to have a positive impact on students' well-being and to increase the sense of

belonging, whereas perceived prejudice and discrimination were found to have a negative impact on well-being (Lee et al., 2010; Mesidor & Sly, 2016; Smith & Khawaja, 2011). Additionally, English language proficiency was linked with a low level of stress and depression and better adjustment inside and outside university classes (Dao et al., 2007; Luo et al., 2019; Sam, 2001; Sawir et al., 2012) and correlated positively with academic achievement (de Araujo, 2011; Smith & Khawaja, 2011). Similarly, Mak et al. (2015) found a positive correlation between student satisfaction with university life and English language proficiency and support from university staff and locals. Conversely, a recent study in the United Kingdom reported that there was no association between English language proficiency and life satisfaction, general mental health, or self-esteem among international students (Jones et al., 2019).

University life is central to the international students' daily lives, with experiences within these institutions exerting a powerful influence on their well-being. Research has shown that receiving clear information about courses, social life, accommodation, and the availability of counselling and learning support services on a university campus before enrolment is linked to students' satisfaction (Alemu & Cordier, 2017; Madden-Dent & Laden, 2016; Sam, 2001). Furthermore, Yong et al. (2013) found a strong association between psychological well-being and academic achievement and satisfaction with life in the new environment among international masters' students in the United Kingdom.

Findings from the comparative cross-sectional study presented in Chapter 4 confirmed many of the above-cited associations. For example, individual factors such as positive personality and healthy lifestyle were significant predictors of well-being outcomes. Furthermore, perceived academic stress and factors related to university characteristics specifically, (course demands, control and support over academic work, and perceived quality of university life) were predictors of students' well-being outcomes in both groups.

Additionally, the data suggested a link between positive well-being and application of studying away strategies and high quality of university life.

Thus, the current study was designed to extend research by measuring the positive and negative well-being at three points in time, investigating to what extent international students' English proficiency, previous experience of studying abroad, satisfaction with academic achievement, financial difficulty, and studying away strategies predicted well-being outcomes. Therefore, this chapter aims to examine the following:

(1) The level of students' well-being over the academic year.

(2) Whether students' well-being differs according to their English fluency, previous experience of studying abroad, satisfaction with academic achievement, financial difficulty, and the use of studying away strategies during the academic year.

(3) The association between the above-mentioned variables and well-being outcomes throughout one academic year.

5.3 Methods

5.3.1 Study Design and Ethics

This longitudinal study mixed-method design included a repeated measure for well-being (positive and negative affect) measured over three time points during the academic year period with one open-ended question completed in each phase. The measurement times were the initial survey during the first month of the first semester, and the follow-up surveys were distributed three months (Time 2) and nine months (Time 3). The full details for each time point are described below in Section 5.3.2.

The online surveys were conducted using Qualtrics software. The survey included information about the study, instruction, and a notice to participants that they have the right not to answer questions they do not want to answer and could withdraw at any time without giving a reason. Participants were also informed that the data would be held confidential only

the researcher and supervisor could access the data. Participants' emails were collected and would only be used to send the next surveys and link the data sets but were removed entirely from the data set. A copy of the questionnaire is provided in Appendix A. Approval for the study was obtained from the Ethics Committee of the School of Psychology, Cardiff University in August 2017, and the data were collected in the 2017–2018 academic year.

5.3.2 Procedure and Measures

5.3.2.1 Phase 1 Overview. Phase 1 occurred during the enrolment week at the beginning of the academic year (September 2017). The participants completed surveys with the following questions:

- Demographic questionnaire. This measure captured the participants' email, age, gender, marital status (Single, Married) if Married students were asked if their family was living with them in the UK (Yes. No), nationality, ethnicity (White, Asian, Black, Mixed, Arab and Other), programme type (Undergraduate, Master, and Ph.D.), year of study (First year, Other years) and experience studying overseas (Yes/ No).
- English language proficiency. One self-reported item “what is your present level of English fluency?” had the following response options: 1 = *very poor*, 2 = *poor*, 3 = *average*, 4 = *good*, and 5 = *very good* (fluent).
- Positive and negative affect. Four items subjectively measured positive and negative affect with a 10-point, ranging from 1 = *not at all* to 10 = *very much*. Negative affect questions were ‘How stressed are you?’ and ‘How depressed you are?’. Positive affect questions were ‘How satisfied you are?’ And ‘How happy you are?’
- *Smith Well-being Questionnaire (SWELL)* (Smith et al., 2018). Single-item questions measure personality, healthy lifestyle, and feelings (positive and negative) over the past six months. The questions were rated on a 10-point ranging from 1 (*Not at all*) to 10 (*very much*). The full scale is presented in Chapter 3, Section 3.4.2.2.

- *Well-being Away Strategies Questionnaire* (Smith et al., 2018). Four questions measuring pre-departure strategies, the items were rated on a 10-point Likert scale, ranging from 1 = *not at all* to 10 = *very much*. The full scale is presented in Chapter 3, Section 3.4.2.
- One open-ended question. ‘What concerns do you have about studying and living in the United Kingdom?’

5.3.2.2 Phase 2 Overview. Occurred at the beginning of the second semester (February 2018), approximately three months and two weeks after the first phase, in this phase, the participants answered the same questions measured positive negative effects at Time 1, questions measure university characteristics and being in university strategies:

- Four positive and negative affect as the same questions in Time 1.
- Eight questions measured course demand, control, and support, illness, stress, and happiness at the University of the (SWELL). The full scale is presented in Chapter 3 Section #.
- *Quality of University Life* (Smith et al., 2018). The full scale is presented in Chapter 3 Section #.
- Three questions measured the use of being in university strategies of well-being away strategies questionnaire (Smith et al., 2018). The full scale is presented in Chapter 3 Section #.
- An open-ended question ‘What is the most difficult challenge you faced in the past four months, and what were your coping strategies?’

5.3.2.3 Phase 3 Overview. Occurred at the end of the academic year (May and June 2018), the participants completed the following survey:

- Four positive and negative affect questions as the same questions in Times 1 and 2.

- Seven questions measuring the use of preparation-to-return, return and being-back strategies of well-being away strategies questionnaire (Smith et al., 2018). The full scale is presented in Chapter 3 Section 3.4.2.2.
- Academic achievement satisfaction. This scale consisted of one item ('To what extent are you satisfied with your academic achievement?') rated on a 10-point scale ranging from 1 = *very dissatisfied* to 10 = *very satisfied*.
- Financial difficulties. This scale rated one item ('To what extent did you face financial difficulties while studying in the United Kingdom?') on a 10-point scale ranging from 1 = *not at all* to 10 = *very much*.
- An open-ended question 'What was the most difficult part of your journey in studying abroad [e.g., pre-arrival, saying goodbye or being away]?'

The students' email as identification was used to link the data files. Only the participants who completed Phase 1 took part in Phase 2, and only those who completed Phase 2 took part in Phase 3.

5.3.3 Participants

The participants' recruitment procedure is shown in Chapter 3 Section 3.4.2. Three hundred and twelve (312) students completed the first questionnaire at the beginning of the academic year (September 2017). The response rate dropped in the second phase (February 2018), when only 135 participants completed the survey. The final sample consisted of 104 students who participated in all three phases of the study, and the attrition rate was 66% from the initial sample. The high attrition rates may be due to invalid email addresses entered at the first phase, participants' lack of interest, high course demands or high level of stress at the second or third waves. An explanation was provided in Section 5.4.1, where second-year and above students declined to participate in the following phases. According to the findings in

Chapter 4, second-year and above students experienced a higher level of negative well-being and course demands compared to first-year students.

The participants in the final sample were from 13 countries (Angola, China, Egypt, German, India, Italy, Jordan, Kuwait, Oman, Malaysia, Pakistan, Saudi Arabia, and Spain), their ages ranged from 18 to 40 years ($M = 26.36$ years), 49 were married, and 80% reported living with their spouse in the UK. The demographics of the samples at different time points are shown in Table 5.1.

Table 5.1*Demographics of the Samples at Each Time Point**

	<i>Time 1</i>		<i>Time 2</i>		<i>Time 3</i>	
	N	percent	N	percent	N	percent
<i>Age M (SD)</i>	26.66 (6.55)		26.61 (6.89)		26.36 (6.40)	
<i>Age range</i>	17-52		18-52		18-40	
<i>Gender</i>						
Male	102	32.7	45	31.9	24	23.1
Female	210	67.3	90	65.2	80	76.9
<i>Marital status</i>						
Single	199	63.8	89	63	61	52.9
Married	113	36.2	46	34.1	43	47.1
<i>Type of programme</i>						
Undergraduate	111	35.6	54	40	28	26.9
Master	115	36.9	42	31.1	40	41.3
PhD	86	27.6	36	26.7	33	31.7
<i>Year at university</i>						
First year	153	49	56	41.5	52	50
Other years	159	51	76	56.3	52	50
<i>English proficiency</i>						
1 very poor	1	.3	0	0	0	0
2 poor	13	4.2	4	3.1	1	1
3 average	94	30.1	30	22.9	33	31.7
4 good	138	44.2	64	48.9	53	51
5 very good (fluent)	66	21.2	33	25.2	17	16.3
<i>Experience of studying abroad</i>						
Yes	134	42.9	55	40.7	44	42.3
No	178	57.1	76	56.3	60	57.7
<i>Ethnicity</i>						
White	54	17.3	30	22.2	18	8.7
Black or African	12	3.8	6	4.6	3	2.9
Mixed	3	1.0	0	0	1	1
Asian	76	24.4	23	17.6	21	19.2
Arab	160	51.3	68	51.9	60	67.3
Other	7	2.2	4	3.1	1	1
Total	312		135		104	

* *Some values are missing***5.3.4 Data Analyses**

The data of this chapter were used in two different ways to address the mentioned aims in Section 5.2 and the natures of the quantitative and qualitative data collected. The missing data rates ranged from 3.85% to 5.92 %, at Time 1, 16 out of 315 participants did not

answer the survey questions completely, at Time 2, 8 out of 135 participants did not answer the survey questions completely, and at Time 3, 4 out of 104 participants did not answer the survey questions completely. This amount is not considered large as it is less than 10%, so the results of subsequent analyses were unlikely to be biased (Bennett, 2001).

Multivariate analysis of variance (MANOVA) was conducted to compare the samples at the different points in the Time 1 data to determine whether the longitudinal samples are representative of the original sample. Pearson correlations were computed to examine the relationship among the variables at each time point, and descriptive statistics were also computed to include means and standard deviations presented in the result section.

In longitudinal analyses, it is often the case that cross-legged or changes scores analyses are conducted. However, in this study, different variables were included at each time point. The new variables at each time point were included in the analyses along with established predictors of the well-being process and the studying away model measured at earlier time points (e.g., positive personality, healthy lifestyle, and studying away strategies at Time 1; course demands, course control, quality of university life, and studying away strategies at Time 2; and financial difficulties and academic achievement at Time 3).

Repeated measures analysis of variance analysis was conducted to investigate changes in the levels of well-being at three points in time using data from participants who completed all three waves. Statistical analyses were performed using Statistical Package for Social Sciences (SPSS) Version 25.

The qualitative data from the three open-ended questions were analysed thematically following the step-by-step guides of Braun and Clarke (2006). First, familiarity with all comments of the open-ended questions for each time was gained; once the researcher was familiar with the data, initial codes or labels were generated. The chosen codes aimed to identify the issues, concerns, and coping strategies the participants noted in their responses as

being important to them. In a third step, the student's comments were organised into themes, and then the themes were reviewed. At the final stage, reports given under each question and responses were counted to use direct quotes to provide evidence of frequency.

5.4 Results

5.4.1 Compare Sample Characteristics at the Three Points in Time (Attrition Analysis)

By using multivariate analysis of variance (MANOVA), the original and final samples were compared in regards to age, gender, marital status, ethnicity, programme type, year of study, and experience studying overseas. The assumptions of MANOVA were checked; there was an absence of multicollinearity, and correlation values ranged from .11 to .54, which showed a small to moderate association between the variables. The Box's M value 48.65 and was associated with a p -value of .989, which means that the assumption of the equality of covariance matrices was met. Results revealed that the only significant difference between the three samples was the year at university indicating that the participants who dropped out were likely to be in second and above years students compared to those who completed the three waves $F(16,1012) = 3.40; p=.034; \text{partial } \eta^2 = .013$, no other significant differences found.

5.4.2 Descriptive Analyses and Correlations Between Study Variables

5.4.2.1 Time 1

Table 5.2 shows the means and standard deviations of the variables at Time 1. Overall, participants reported a moderate level of positive personality ($M = 6.61, SD = 1.76$), healthy lifestyle ($M = 6.61, SD = 1.96$), positive well-being ($M = 13.51, SD = 3.12$), and low level of negative well-being ($M = 10.35, SD = 4.28$). The application of studying away strategies at the pre-departure phase ranged from a high of 7.13 (agreeing on likely

communications while away; $M = 7.13$, $SD = 2.06$) to a low of 5.93 (discussing expectations about being away; $M = 5.93$, $SD = 2.17$). Furthermore, a moderate use of pre-departure planning ($M = 6.60$, $SD = 2.14$), and acknowledgement of the reality of the coming separation ($M = 6.33$, $SD = 2.16$).

Table 5.2

Means and Standard Deviations of the Variables at Time 1

	Min	Max	Mean	SD
Positive well-being 1	4	20	13.51	3.12
Negative well-being 1	2	20	10.53	4.28
Healthy lifestyle	1	10	6.61	1.96
Positive personality	1	10	6.61	1.76
Pre-departure planning	1	10	6.60	2.14
Discuss expectations about being away	1	10	5.93	2.17
Acknowledge the reality of the coming separation	1	10	6.33	2.16
Agree on likely communications while away	1	10	7.13	2.06

Correlation analyses revealed that gender correlated significantly with negative affect ($r = .15$, $p = .03$), where female students reported higher negative emotions. English proficiency was positively correlated with positive affect at the beginning of the academic year ($r = .21$, $p < .001$) and within a year at university where non-first year students reported a higher level of English proficiency ($r = .20$, $p < .001$), and it was negatively correlated with previous experience of studying abroad ($r = -.26$, $p < .001$). Previous experience of studying abroad correlated with negative affect were students who had no experience of studying abroad reported higher negative affect ($r = .12$, $p = .038$).

Moreover, there was a significant correlation between established factors of DRIVE model positive personality and healthy lifestyle with positive affect ($r = .39$, $p < .001$ and $r = .16$, $p = .002$), respectively. Results also showed that the four pre-departure strategies were positively associated r -values ranging from .26 to .53 at $p = < .001$; additionally, discussing expectations about being away from home with family and friends and agreeing on likely communication positively correlated with positive well-being and negatively with negative

well-being at the beginning of the academic year. Correlations between all the variables at Time 1 are shown in Table 5.3.

Table 5.3*Correlation for Study Variables Time1 (N = 312)*

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Positive well-being 1	1												
2. Negative well-being 1	-.364**	1											
3. Age	.054	.137*	1										
4. Gender	-.119*	.146**	-.238**	1									
5. Year at university	.049	-.009	.096	-.041	1								
6. English Proficiency	.210**	-.074	.017	.004	.198**	1							
7. Previous experience of studying abroad	-.021	.115*	-.317**	.122*	-.009	-.260**	1						
8. Healthy lifestyle	.160**	-.098	-.060	.065	-.014	.023	.054	1					
9. Positive personality	.384**	-.175**	.148**	-.124*	.059	.189**	-.083	.241**	1				
10. Pre-departure planning	.111	-.015	-.015	.029	.041	.165**	-.030	.101	.219**	1			
11. Discuss expectations about being away	.122*	.049	.000	.001	.029	.064	.008	.123*	.127*	.529**	1		
12. Acknowledges the reality of the coming separation	.024	.030	.059	-.007	.206**	.117*	-.003	.058	.049	.373**	.308**	1	
13. Agree on likely communications while away	.115*	-.132*	-.119*	-.023	.064	.095	.063	.114	.230**	.263**	.341**	.341**	1

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

5.4.2.2 Time 2

Students reported a moderate level of positive well-being ($M = 12.75$, $SD = 3.72$); however, it was lower than the level of positive well-being at Time 1. Also, students showed a slight decrease in negative well-being compared with Time 1 ($M = 10.11$, $SD = 4.50$). Students scored high in adapting to being away from home ($M = 7.02$, $SD = 1.82$), scored low in adapting to being away without over-reliance on technology ($M = 5.12$, $SD = 2.52$), and scored moderately on unwinding after academic work ($M = 6.02$, $SD = 1.76$). Furthermore, students reported similar scores in course demands and control ($M = 6.69$, $SD = 2.18$) and support over academic work ($M = 6.32$, $SD = 1.95$) and a moderate level of the quality of university life ($M = 32.52$, $SD = 8.59$).

Correlational analyses revealed that positive well-being at Time 2 was significantly positively correlated with control and support over academic work ($r = .20$, $p = .02$), quality of university life ($r = .41$, $p < .001$), and with one strategy of the well-being away model, adapting being away ($r = .30$, $p < .001$). Positive well-being was also negatively correlated with course demands and negative affect ($r = -.22$, $p = .013$). Negative well-being was associated with high course demands ($r = .30$, $p = .001$) and negatively correlated with the quality of university life ($r = -.24$, $p = .006$). Furthermore, the three studying away strategies of being in university had positively associated r -values ranging from .24 to .3. Finally, the quality of university life was found to be moderately correlated to control and support over academic work ($r = .44$, $p < .001$) as well as with adapting to being away ($r = .24$, $p = .007$).

Correlations, means and standard deviations between all the variables at Time 2 are shown in Table 5.4.

Table 5.4*Correlation and Descriptive Statistics for Study Variables Time2 (N = 135)*

	1	2	3	4	5	6	7	8	M	SD	Min-Max
1. Positive well-being T2	—	-.44**	-.21**	.20*	.30**	.07	.16**	.41**	12.75	3.72	2-20
2. Negative well-being T2		—	.29**	-.09	-.05	-.04	-.08	-.24**	10.11	4.50	2-20
3. Course demands			—	-.16	-.04	-.01	.07	-.25**	6.69	2.18	1-10
4. Control and support				—	.22*	.15	.13	.44**	6.32	1.95	2-10
5. Adapting being away					—	.28**	.24**	.24*	7.02	1.82	1-10
6. Adapting being away without reliance on technology						—	.30**	.14	5.12	2.52	1-10
7. Unwind After studying							—	.12	6.02	1.76	1-10
8. Quality of university life								—	32.52	8.59	12-51

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

5.4.2.3. Time 3

At this time point, students scored the lowest positive well-being ($M = 12.20$, $SD = 3.80$) among the three points in time and the highest level of negative well-being ($M = 11.35$, $SD = 4.61$). Furthermore, students reported low financial difficulties ($M = 4.86$, $SD = 2.59$) and a moderate level of satisfaction with academic achievements ($M = 6.11$, $SD = 2.03$).

Overall, students scored moderate and low use of studying away strategies at this time point. They scored moderate in preparing to return home ($M = 5.69$, $SD = 2.25$), unwind and relax on the journey to home ($M = 6.24$, $SD = 2.34$), and awareness that they and people back home may have changed ($M = 6.06$, $SD = 2.20$), and they scored low in staging their return home ($M = 4.52$, $SD = 2.44$), changing activities ($M = 4.23$, $SD = 2.33$), the expected time to adjust to being home ($M = 5.03$, $SD = 2.51$), and expected time to psychologically adjust to being home ($M = 4.93$, $SD = 2.27$).

Table 5.5

Means and Standard Deviations of the Variables at Time 3

	Min	Max	Mean	Standard Deviation
Positive well-being T3	2	20	12.20	3.80
Negative well-being T3	2	20	11.35	4.61
Satisfaction with academic achievements	1	10	6.11	2.03
Financial difficulties	1	10	4.86	2.59
Preparing to return	1	10	5.69	2.25
Change activities	1	10	4.23	2.33
Consider that you and matters at home may change while you've been away.	1	10	6.06	2.20
Stage your return	1	10	4.52	2.44
Unwind and relax on Journey to home	1	10	6.24	2.34
Expected time to adjust being home	1	10	5.03	2.51
Expected time to act on the realisation to psychologically adjusted	1	10	4.93	2.27

Correlational analyses revealed that positive affect at Time 3 was significantly positively correlated with satisfaction with academic achievement ($r = .38, p < .001$) and unwinding and relaxing before being back home ($r = .22, p = .03$), and negatively correlated with financial difficulties ($r = -.30, p = .003$). Negative affect was associated with financial difficulties ($r = .35, p < .001$). Relaxing and unwinding during the journey back home correlated negatively with financial difficulties ($r = -.28, p = .008$) and preparing for the journey back home ($r = .27, p = .009$).

The correlation coefficient revealed a significant correlation between strategies; for example, preparing to return home associated positively with unwinding and relaxing ($r = .27, p = .009$), and change activities strategy was correlated with preparing for the journey back home ($r = .39, p < .001$), expected time needed for adjustment and psychological adjustment ($r = .45, p < .001$), and the awareness that people back home may have changed ($r = .43, p < .001$).

Correlations, means and standard deviations between all the variables at Time 3 are shown in Table 5.6.

Table 5.6*Correlation for Study Variables Time 3 (N = 104)*

Variables	1	2	3	4	5	6	7	8	9	10	11
1.Positive well-being T3	1										
2.Negative well-being T3	-.405**	1									
3.Satisfaction with academic achievements	.387**	-.180	1								
4.Financial difficulties	-.306**	.346**	.006	1							
5. Preparing to return	.193	-.114	.189	.010	1						
6.Change activities	-.174	.154	.041	.033	.178	1					
7.Consider that you and matters at home may change while you've been away.	.144	.127	.080	.017	-.028	.059	1				
8.Stage your return	-.033	-.097	.081	-.098	.160	.390**	.122	1			
9.Unwind and relax on Journey to home	.225*	-.044	.071	-.276**	.272**	.034	-.044	.148	1		
10.Expected time to adjust being home	.137	-.059	.241*	-.075	.041	.249*	.448**	.491**	.066	1	
11.Expected time to act on the realisation to psychologically adjusted	.117	.072	.004	.031	.039	.095	.433**	.361**	.054	.639**	1

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

5.4.3 Regression analyses

Six multiple-regression models were conducted to determine which variables had an impact on students' well-being during the academic year. Positive and negative well-being were included as dependent variables, and different predictor variables were entered into the regression model at each time point along with the predictors of the previous time point. Listwise deletion was used to account for missing values.

The assumptions of multiple regressions were checked, and the outcome variables were checked for normality assumption based on skewness and kurtosis values. All were within the liberal z range of -3.29 and $+3.29$, which is considered acceptable to prove normality for medium-sized samples between 50 and 300 (Kim, 2013). Multicollinearity was tested by running the multicollinearity diagnostic statistics examining tolerance and variance inflation factor (VIF) for each variable. Tolerance values ranging from .750 to .90 and VIF values ranging from 1.044 to 1.229 revealed no multicollinearity among variables. Mahalanobis differences showed no significant outliers, and so accordingly, no cases were removed. Durbin–Watson shows no auto correction; values for the six regression models ranged from 1.98 to 2.20.

However, the outputs should be interpreted with caution, as the sample sizes at Time 2 and Time 3 were relatively small for the number of predictors entered in the model. Besides, because six statistical tests were conducted, there was a possibility of Type I errors. Therefore, the critical p -value was adjusted using the Bonferroni method to control the family-wise error rate (FWER). In the Bonferroni method, the p -value (≤ 0.05) is divided by the number of tests, and only results below that new threshold (.008) are considered to be statistically significant (Chen et al., 2017).

Results from the six multiple regression analyses using the enter method for positive and negative well-being are shown in the following sections.

5.4.3.1 Time 1

The first and second regressions included the following variables as predictors: previous experience of studying abroad, English language proficiency, positive personality, healthy lifestyle, and pre-departure strategies. The overall model for positive well-being was significant $F(5, 293) = 35.05, p < .001$, which explained 37.8% of the variance in positive well-being at Time 1. The best predictors of positive well-being were positive personality ($\beta = .450, p < .001$) followed by the pre-departure strategies ($\beta = .186, p < .001$) and English language proficiency ($\beta = .182, p < .001$). Negative well-being was predicted by low positive personality ($\beta = -2.7, p = .007$), which explained 4.3% of the variance in negative well-being at Time 1. No other significant predictors were found. The full results are shown in Table 5.7.

Table 5.7

A Multiple Regression Analysis Predicting Positive and Negative Well-being at Time 1

Predictors	Positive well-being					Negative well-being				
	B	SD	Beta	t	Sig*	B	SD	Beta	t	Sig*
Previous Experience of Studying Abroad	1.133	.633	.086	1.791	.074	1.127	.816	.083	1.382	.168
English Proficiency	1.417	.388	.182	3.653	.000	.229	.500	.028	.459	.647
Healthy Lifestyle	.237	.159	.072	1.488	.138	-.223	.205	-.065	-1.087	.278
Positive Personality	1.657	.184	.450	8.995	.000	-.645	.238	-.168	-2.715	.007
Pre-departing Strategies	.177	.047	.186	3.776	.000	.026	.060	.026	.433	.665
R = .615 R ² = .378 Adj R ² = .368 F=35.055 sig .000					R = .207 R ² = .043 Adj R ² = .03 F=2.583 sig .026					

* Because the six tests conducted, the p-value has been adjusted to $p < .0083$

5.4.3.2 Time 2

The third and fourth regressions included the previous predictors at Time 1 (previous experience of studying abroad, English language proficiency, positive personality, healthy lifestyle, and pre-departure strategies) as well as four new predictors: academic course

demands, control, and support over academic work, the quality of university life, and studying away strategies at Time 2. The overall model for positive well-being was significant $F(9, 115) = 3.82, p < .001$, which explained 24.5% of the variance of positive well-being at Time 2. The only predictor was the quality of university life ($\beta = .306, p = .003$). The overall model of negative well-being was not significant $F(9,115) = 1.70, p = .098$. The full results are shown in Table 5.8.

Table 5.8

A Multiple Regression Analysis Predicting Positive and Negative Well-being at Time 2

Predictors	Positive well-being					Negative well-being				
	B	SD	Beta	t	Sig*	B	SD	Beta	t	Sig*
English Proficiency	.320	.430	.071	.744	.458	-.426	.557	-.079	-.764	.446
Previous Experience of Studying Abroad	1.06	.646	.145	1.63	.105	-.695	.837	-.080	-.831	.408
Healthy Lifestyle	.039	.166	.021	.236	.814	.163	.215	.074	.759	.450
Positive Personality	.278	.192	.129	1.45	.150	-.178	.248	-.069	-.717	.475
Studying away strategies 1	-.033	.047	-.061	-.704	.283	-.078	.061	-.118	-1.278	.204
Course Demand	-.154	.144	-.095	-1.076	.284	.379	.186	.194	2.038	.044
Control and support	-.032	.174	-.018	-.183	.855	-.035	.226	-.016	-.154	.878
Studying away Strategies 2	.128	.075	.160	1.706	.091	.000	.097	.000	.002	.998
Quality of University Life	.131	.043	.313	3.065	.003	-.084	.055	-.167	-1.524	.130
R = .495 R ² = .245 Adj R ² = .181 F=3.828 sig .000					R = .355 R ² = .126 Adj R ² = .052 F=1.700 sig .098					

* Because the six tests conducted, the p-value has been adjusted to $p < .0083$

5.4.3.3 Time 3

The fifth and sixth regressions included the previous predictors at Time 1 and Time 2 (previous experience of studying abroad, English language proficiency, positive personality, healthy lifestyle, academic course demands, control and support over academic work, the quality of university life, and studying away strategies) along with three new predictors: satisfaction with academic achievement, financial difficulties, and studying away strategies measured at Time 3. The overall model of positive well-being was significant $F(10, 90) = 4.44, p < .001$, which explained 35% of the variance of positive well-being at Time 3. The significant predictors were satisfaction with academic achievement ($\beta = .482, p < .001$) and

fewer financial difficulties ($\beta = -.293, p = .003$). Negative well-being was predicted by financial difficulties ($\beta = -.316, p = .002$) and low academic achievement ($\beta = -.241, p = .014$) The overall model was significant $F(10, 90) = 2.97, p = .003$, which explained 26.4% of the variance of negative well-being at Time 3. The full results are shown in Table 5.9.

Table 5.9

A Multiple Regression Analysis Predicting Positive and Negative Well-being at Time 3

Predictors	Positive well-being					Negative well-being				
	B	SD	Beta	t	Sig*	B	SD	Beta	t	Sig*
English Proficiency	-.066	.484	-.012	-.136	.892	.327	.600	.052	.546	.587
Healthy Lifestyle	-.304	.202	-.142	-1.508	.135	.246	.250	.098	.984	.328
Positive Personality	.109	.206	.050	.527	.600	.078	.256	.031	.305	.761
Course Demands	.107	.174	.059	.616	.539	-.529	.216	-.249	-2.450	.016
Control and Support	.212	.200	.109	1.059	.293	-.431	.249	-.189	-1.732	.087
Quality of University Life	.027	.046	.059	.581	.563	-.017	.057	-.033	-.304	.762
Studying away Strategies 2	-.054	.087	-.058	-.624	.534	.117	.108	.107	1.086	.281
Financial Difficulties	-.423	.132	-.293	-3.195	.002	.533	.164	.316	3.244	.002
Satisfaction with Achievement	.916	.171	.482	5.359	.000	-.534	.212	-.241	-2.517	.014
Studying away Strategies 3	.016	.039	.037	.408	.684	.051	.048	.102	1.055	.295
R = .591 R ² = .350 Adj R ² = .271 F=4.466 sig .000						R = .513 R ² = .264 Adj R ² = .175 F=2.971 sig .003				

* Because the six tests conducted, the p-value has been adjusted to $p < .0083$

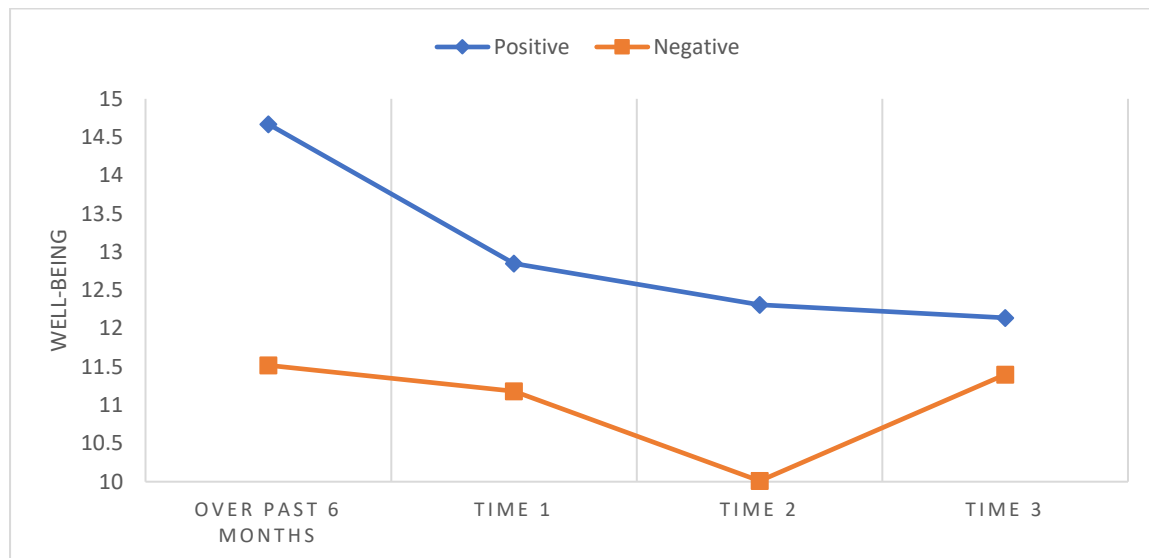
5.4.4. The Changes in Students' Well-Being

Only participants who completed all three waves were used to detect the change in well-being over time. The data included the positive and negative affect measures for the three points in time and Student SWELL positive and negative questions that considered the last six months that students completed at Time 1. Means and standard deviation are shown in Table 5.10; the students broadly reflect a U-shaped curve on negative affect (i.e., decreased and then increased). Figure 5.1 presents a notched box plot of well-being.

Table 5.10*Means and Standard Deviation of Positive and Negative well-being*

	<i>N</i>	Positive well-being				Negative well-being			
		Min	Max	Mean	<i>SD</i>	Min	Max	Mean	<i>SD</i>
Last 6 months	103	5	20	14.66	3.20	3	20	11.52	3.60
Time 1	104	6	20	12.87	3.19	2	20	11.17	4.32
Time 2	103	4	20	12.30	3.62	2	18	10.01	4.37
Time 3	104	2	20	12.20	3.80	2	20	11.35	4.61

Figure 5.1.

Students' Well-Being Scores at Each Time Point

ANOVA for repeated measures with posthoc tests based on Bonferroni correction was used to analyse the modifications on positive well-being and negative well-being scores over time. A *p*-value of 0.05 was taken as statistically significant, and effect sizes were calculated using Cohen's *d*, calculated as $d = (\mu_{\text{time-point } n} - \mu_{\text{baseline}}) / \sigma_{\text{pooled}}$. The assumptions were checked, and residuals were approximately normally distributed. Sphericity assumption was not assumed as the Mauchly's test was significant for the positive affect data $\chi^2(5) = 45.34$, $p = < .001$, and negative affect data $\chi^2(5) = 65.55$, $p = < .001$. Therefore, the Greenhouse–Geisser *F* statistics were reported in the below analyses.

Repeated measures of ANOVA with a Greenhouse–Geisser correction determined that positive well-being means scores that differed statistically significantly between time points $F(2.497, 252.15) = 12.22, p < 0.001$. Post hoc tests using the Bonferroni correction revealed that the positive well-being decreased significantly from pre-semester and throughout the three time points (14.67, $SD = 3.20$ vs. 12.87, $SD = 3.19$), (14.67, $SD = 3.20$ vs. 12.31, $SD = 3.62$), and (14.67, $SD = 3.20$ vs. 12.20, $SD = 3.80$); Cohen's d was .56, .69, and .70, respectively, which was considered a medium effect size. Although the positive well-being reduced at each time slightly, the pairwise comparisons showed no significant differences between time points during the academic year. The full results are shown in Table 5.11.

Table 5.11

Pairwise Comparisons (Bonferroni adjustment) for Positive Affect Scores

(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig.	95% CI	
					Lower	Upper
1	2	1.824*	.285	.000	1.057	2.591
	3	2.363*	.500	.000	1.017	3.709
	4	2.529*	.492	.000	1.205	3.854
2	1	-1.824*	.285	.000	-2.591	-1.057
	3	.539	.485	1.000	-.767	1.845
	4	.706	.473	.830	-.566	1.978
3	1	-2.363*	.500	.000	-3.709	-1.017
	2	-.539	.485	1.000	-1.845	.767
	4	.167	.536	1.000	-1.275	1.609
4	1	-2.529*	.492	.000	-3.854	-1.205
	2	-.706	.473	.830	-1.978	.566
	3	-.167	.536	1.000	-1.609	1.275

The second repeated measures ANOVA with a Greenhouse–Geisser determined that mean negative well-being scores did not significantly differ between time points $F(2.358, 240.480) = 2.789, p = .054$. (See Appendix B).

5.4.5 Responses to Open-ended Questions

The analysis led to the identification of main themes at each time. Time 1 related to the concerns and adjustment issues, Time 2 related to the challenges students encounter and their coping strategies, and Time 3 related to the most difficult part of their journey in studying abroad. Sub themes related to each of these main themes are discussed with quotations from participants below. The complete answers can be found in Appendix C.

At Time 1, 217 participants out of 312 responded to the question, '*What concerns do you have about studying and living in the United Kingdom?*' Responses were varied. Approximately 30 students reported not having any concerns, while many reported that they were happy with their experience in the UK. Others who were studying abroad for the first time identified a number of concerns with the majority indicating they had adjusted to a new environment, including weather, food, and finding accommodation.

The main concern was the food and accommodation since it was the first time to live alone without my family.

Making friendship in order to overcome loneliness and interaction with new people in general, and with British people specifically, expressed the following concerns as students.

I would say that British people don't make any effort to interact with me or trying to develop a deep and strong friendship. This candid, empathetic relationship with people is the one that I am missing, and then it makes me feel vulnerable and alone. The fact that I miss my family and my culture makes me feel that I can't acknowledge that I will have to live here for the next three years. Although I try to get involved with people from different cultures and that I am also part of the Latin American Society, I still feel a lack of belonging to this place.

The impact of language barriers in understanding lectures, asking questions in class, writing essays, and passing exams or in communication with others were also common.

My spoken and written English is not good enough, which brings me difficulty with communicating with teachers and classmates, especially when I'm trying to express my opinion with them.

Difficulties adjusting to the academic culture and grading system in the UK were also reported as concerns.

The educational system in the UK is completely different than the one in Ukraine; it took some time to understand how it works and how I should work within the system.

A few students, particularly European students, reported job concerns, especially after Brexit.

Mostly is a future job opportunity. I am worried about what kind of job am I going to have after I finish my degree in the UK and even what can I probably do when I go back to my country.

Financial pressures due to high living cost and lack of capacity to manage their finances.

Financial expenditures let you feel financially tight accommodation services take large amounts of money in the initial phase.

Being able to manage your own economy is a huge task for oneself knowing that you have to be wise all the time.”

Finally, Black and Muslim students reported concerns of perceived discrimination.

Integrating into the environment and stereotyped for being black/Nigerian/African.

A total of 110 out of 135 participants answered the open-ended question included at Time 2: ‘What was the most difficult challenge you faced in the past four months, and what were your coping strategies?’ Students reported a range of challenges, the majority related to their course of study. Few students reported how they coped with difficulties. Their common coping methods were problem-focused coping strategies and seeking social support. The most common challenge reported was academic demands (including exams, writing essays or theses, assignments, and meeting deadlines).

Probably the most challenging aspect of my life is a good performance on the course. However, I believe that my life at university is easy enough. I do not have any other problems to think about. My parents provide all support I need. Nonetheless, I cannot stop thinking about my university work what, sometimes, causes insomnia. Since the beginning of the second semester, I cannot find a way to relax.

Work overloads and meet the deadline. Strategies: I always stay positive and optimistic and not overthinking. Contact close friend, family as well as having support from colleagues.

Several other participants reported study–life balance issues (especially women students with children) and poor time management, as negatively affecting their study, sleep quality and social life.

Balancing my time as a first-time mother and doing my PhD. Coping strategies: 1. Parents came from abroad to help to look after the baby, so I have more time to work. 2. Lower my expectations. I have to be realistic; I can't do much work like before I have a baby. Set short goals n small tasks to complete each day.

I have trouble keeping a schedule and being disciplined about my work. I have trouble eating and sleeping on time. My only coping strategy has been to try and push myself to fix these issues.”

At this phase, only a few reported loneliness and difficulties in interaction with others.

Staying on campus over the long weekends while everyone else goes home has been one of the biggest challenges for me emotionally. It's hard spending so much time alone sometimes, knowing that you can't just go home to see your family when you'd like. However, I've overcome this, and I enjoy being in my own company. I find activities to do, like shopping and exploring local areas when I'm bored.

A total of 77 out of 104 participants answered the open-ended question included at Time 3: ‘*What was the most difficult part of your journey in studying abroad?*’

The majority of responses reported before arrival in the United Kingdom and the first few weeks were the most difficult part of the journey because of loneliness, homesickness, and concerns about finding accommodation.

Saying goodbye is always the most difficult thing to do. I've missed my family so much during this year abroad. That was the most challenging thing for me. Houseshare comes next. Living with nine people was challenging. It took me a great deal of self-control and patience. I like to live in a clean and quiet environment - especially at night. It wasn't always the case in my house.

Participants also reported several challenges, which are similar to challenges mentioned at Time 1 and Time 2. These were (a) being away from home and friends.

The most challenging part of studying abroad is not able to see friends and family members as often as I would have liked to. Even though I had some friends with me, I felt lonely many times.”

(b) Academic challenges (including adjusting to the UK educational system), and study–life balance.

The hardest would be as usual studying for exams. Honestly, the UK's way of marking papers was so strict. I am not ready, or I still cannot adapt to the process, so my study is quite affected.

Most of the challenges that I face here are academic challenges related to my PhD study. Yes, I remember, there is one challenge that I faced which is taking care of my family while my wife was pregnant.

And (c) financial issues that affect their experience abroad.

Possibly, I was not fully aware of the financial need connected with everyday needs. I wasn't able to socialise with other students (my group of friends) having a maintenance loan at this same level. There was no pressure from anyone's side, however, considering my budget, sometimes, I'd rather stay at home.

5.5 Discussion

This study explored the changes in levels of well-being during the academic year, predictors of well-being, and well-being away strategies among international students in the United Kingdom. There were three unique features of this study. First, it used a three-wave longitudinal design to capture changes in well-being over time. Second, a wide range of demographics, English language proficiency, and previous experience of studying abroad that was drawn from the literature reviewed in Chapter 2 along with the quality of university life, studying away strategies, and the established variables of the DRIVE model (e.g., positive personality, course demands, control, and support) were included to investigate the factors that may have an impact on international students' well-being. Third, the open-ended

questions in each phase enhanced the findings from quantitative data and increased the internal validity of the findings.

5.5.1 Well-Being over Academic Year

Overall, international students reported moderate levels of both aspects of well-being (positive affect and negative affect). Notably, this study demonstrates that positive well-being levels decreased significantly over the academic year; these were significantly lower when compared with positive well-being reported before the students started their course. This might have been caused by increasing academic demands over time as students scored at the lowest level of positive well-being during the exams period. Students also showed a change in the pattern of negative well-being levels during the academic year. A decrease occurred after Time 1 but increased again at Time 3 during the exam period. However, the observed pattern of a decrease and increase in negative well-being over time was not statistically significant. Similar findings were reported by Denovan and Macaskill (2017) where British psychology undergraduates reported significantly lower scores on positive affect from Time 1 at the beginning of the academic year and six months later, whereas the negative well-being scores remained stable over the six months.

This finding is in line with other researchers (e.g., Golden, 1973; Hechanova-Alampay et al., 2002) who found that the moods of students rose and fell with the academic calendar. Additionally, this finding was confirmed by the responses to the open-ended questions at the second time point, as academic issues such as exams, writing essays, and meeting deadlines, which were the main sources of stress for most students. Though some researchers argued that the high level of negative affect at the beginning of the academic year is due to the acculturation process, Hechanova-Alampay et al. (2002) found that both American and international students reported the same U-shape or curvilinear pattern in strain over six months. They attributed it to a ‘semester cycle’ rather than a specific process to

international students because both groups experienced the same pattern. The findings also showed that participants reported higher negative affect in the last six months as compared with the Time 1 data collection. This might be explained by the responses to the Time 3 question, as students found pre-arrival and post-arrival as the most challenging part of their journey due to homesickness, living independently for the first time, finding suitable accommodation, and being able to pass their course.

5.5.2 Factors that Predict Well-Being

Another objective of this study was to determine the factors that predicted well-being at the beginning of the academic year. Unlike the findings by Jones et al. (2019), which stated that English language proficiency did not predict general mental health or life satisfaction among international students in the United Kingdom, in this study, English language proficiency was a predictor of positive affect at Time 1. This inconsistency might be because the majority (45%) of Jones and colleagues' study participants were Black students, and issues with English language proficiency were less concern for Black students compared with other ethnicities (Black, 2006; Hyams-Ssekasi et al., 2014).

The present findings seem to be consistent with those of other studies (e.g., O'Reilly et al., 2010; Yeh & Inose, 2003) that suggest that English language proficiency correlates with positive affect and is a significant predictor of positive affect during the first phase. Students who speak English fluently are more easily able to interact with local and other students, which would help them feel less lonely, and help them to better understand lectures and course materials, which could result in less academic stress.

Gender was correlated with well-being, where female students reported higher negative affect, low positive affect, and low positive personality. This finding was also found in the previous chapter. Moreover, previous experience of studying abroad correlated negatively with negative affect; however, it was not a significant predictor of any of the well-

being outcomes at Time 1. Responses to the first open-ended question showed that participants who study abroad for the first time reported more concerns such as adjusting to the new environment (including weather and food), finding accommodation, interacting with new people and local people, experiencing culture shock, perceiving discrimination, encountering language barriers, expensive living costs, being away from home for the first time, losing social support, feeling lonely, and worrying about passing their course.

Similar to other studies that used the SWELL questionnaire (e.g., Fan & Smith, 2017; Firman & Smith, 2019; Smith & Smith, 2017; Smith et al., 2018; Williams et al., 2017), the present research found that positive affect correlated with a positive personality and healthy lifestyle at Time 1; course demands, control and support, and quality of university life correlated with positive affect and negative affect at Time 2, and satisfaction with academic achievement and financial difficulties correlated with positive affect and negative affect at Time 3.

The predictors of well-being changed for the academic year which was of major interest. Positive personality was the strongest predictor of positive affect at Time 1, high quality of university life was the only predictor of positive affect at Time 2, and satisfaction with academic achievement and financial difficulties predicted both negative and positive affects at Time 3.

5.5.3 Studying Away Strategies and Well-Being

Another central objective of this study was to determine the strategies that predict positive affect. Overall, the majority of strategies were associated with positive well-being in each phase but did not predict positive well-being except in Time 1. This finding provides support to pre-departing strategies in prompting well-being while away from home. Preparation before departing has been highlighted in several studies. For example, a longitudinal study among Chinese students in the United Kingdom showed that pre-departure

preparation led to fewer concerns at the post-arrival stage (Zhou & Todman, 2009). Strategies were limited by three strategies; discussing expectations, acknowledging the coming separation, and developing a support network were all correlated positively, and discussing expectations and developing a support network correlated with positive well-being at Time 1. Meanwhile, clarification is needed as to what kinds of preparation international students undertake and what recommendations students have about the effective strategies at this stage of transition. This will be addressed in the qualitative study presented in Chapter 7.

The findings in this chapter, along with the findings in the previous chapter show that studying away strategies and quality of university life correlate significantly with one another ($r = .40$, or $r = .51$). Nevertheless, it was expected that studying away strategies at Time 2 would not be a significant predictor of positive affect at Time 2 as the quality of university life entered in the regression model. Research, along with the previous chapter, has shown that the quality of university life mediates the association between the strategies and positive outcomes (Smith et al., 2018).

In the final phase, students were asked about using seven strategies related to their preparation to return, the journey home, and the time needed to adjust to being home. Students reported a low level of using the strategies, and the mean scores were between 4 and 6. This was due mainly to the timing of the third phase, which coincided with the second-semester exam period; it might also be due to the lack of awareness of such strategies. None of the strategies was significant predictors of well-being, and only unwinding and relaxing correlated with positive affect at Time 3.

5.6 Limitations

This study has several limitations. First, the high attrition rate meant that the final sample was less than half the size of the initial sample, despite the comparison between the final and initial samples showed no difference in demographic variables. The high dropout

rate resulted from an inability to find a relationship between the variables. Second, the timing of the third data collection may have affected the findings to some extent, but as the sample size decreased by more than half in the second phase, data were collected before the summer break. Third, regarding the sample, more than half of the longitudinal sample was of Arab ethnicity, which might limit generalising the findings to all international students in the United Kingdom. Moreover, it would have been better to collect most of the information at all time points to enable longitudinal analyses to be conducted. To examine returning home strategies, one would also need to collect data after the students had returned home. Finally, this study does not show what is specific to international students and what may be observed in local students as well. For example, the negative effects of financial difficulty and positive effects of academic achievement are likely to be observed in all students.

5.7 Chapter Summary

The current study contributes to knowledge about the well-being of international students in the United Kingdom by identifying patterns of positive and negative well-being at three points in time during the academic year and the effectiveness of study away strategies on well-being outcomes. First, the participants scored the highest on positive well-being before starting their course and on negative affect during the examination period. Second, several variables affected students' well-being, specifically English proficiency, positive personality, quality of university life, satisfaction with academic achievement, and fewer financial difficulties. Third, the study away strategies positively correlated with positive affect; however, only pre-departing strategies predicted positive well-being outcome at Time 1.

As the students in this study reported a low level of application of studying away strategies at Time 3, the next chapter examines the feasibility and potential efficacy of an

information-sheet intervention to increase the usage of the well-being strategies using randomised control trial with a pretest-posttest methodology.

CHAPTER 6: A FEASIBILITY STUDY OF A SELF-HELP INTERVENTION TO CHANGE THE USE OF STUDYING AWAY STRATEGIES OF INTERNATIONAL STUDENTS

6.1 Overview of the Chapter

This chapter presents a feasibility randomised control trial with a pretest-posttest study design. The studies outlined in Chapters 4 and 5 (comparative and longitudinal studies) confirmed associations between positive outcomes and quality of university life and the use or application of studying away strategies. In the previous chapters, the descriptive analysis showed that participants reported low and moderate use of strategy-related stages, such as returning to or being back home, which could be explained by a lack of awareness of the strategies or by the timing of data collection. These findings led to the development of an email-based intervention using an information sheet, which outlined 14 strategies. The information sheet was developed to encourage the intervention group to use the strategies to make the transition to and from home easier and maintain well-being. Therefore, this study aimed to evaluate the feasibility and potential efficacy of using an information sheet to increase the use of studying away strategies and improve students' well-being. To this end, the outcomes of the intervention and control groups were compared.

6.2 Introduction and Rationale

As mentioned in Chapter 2, several studies have shown that international students face numerous academic and socio-cultural challenges and may suffer from stress, anxiety, or depression while studying away. However, only a few interventions have been developed and investigated to support international students. One of the most common intervention types used to help international students is a peer-matching programme. Peer matching programmes involve international and local students exchanging experiences and knowledge about university life and culture, to help international students adjust better to the host

country. Westwood and Barker (1990), Quintrell and Westwood (1994), Abe et al. (1998), Pritchard and Skinner (2002), and Sakurai et al. (2010), examined the effectiveness of these programmes. These researchers found that programmes involving both international and local students could encourage social adjustment by increasing the international students' friendship ties with local students, developing interests in the local culture, and increasing awareness regarding university services on campus. However, none of the studies found significant effects on students' psychological adjustment, academic adjustment, or academic achievement.

Regarding interventions targeting negative emotions, Smith and Khawaja (2015) reported that a cognitive behavioural programme comprised of four weekly two-hour sessions improved psychological adjustment and coping self-efficacy but had no effect on psychological distress. Further, a two-month assertiveness training programme had a positive effect in reducing anxiety and stress in international students (Tavakoli et al., 2009), and ten sessions of speech therapy combined with ten sessions of expressive art, each between one and one and a half hours in duration, effectively decreased depression and anxiety in international students (Lee, 2008). Moreover, a recent study confirmed that cognitive behavioural therapy based on an online life skills course, *Living Life to the Full*, significantly decreased anxiety and depression and improved social functioning among Chinese international students in the UK (Zheng, 2017).

The interventions mentioned above focused on adjustment to a new environment without considering the stages of transition that international students undergo, which could influence one another or require a different form of intervention. In addition, these interventions focused only on decreasing negative emotions (e.g., psychological distress) without considering the promotion of well-being and quality of life or examining any positive outcomes (e.g., happiness or life satisfaction). Moreover, international student participants in

all the aforementioned studies except for Zheng (2017) were required to attend sessions, and the delivery of the interventions was performed on a group basis, while interventions could also have been performed on an individual or self-help basis, targeting individual variables, such as improving the student's lifestyle, coping abilities, or perceived support. The positive impact of these variables on the individual level of well-being has been well documented (Brunsting et al., 2018; Gustems-Carnicer & Calderón, 2013; Praherso et al., 2017; Rosenthal et al., 2008; Stallman, 2010).

Using technology to provide interventions may help to overcome the limitations of traditional interventions and offer advantages in accessibility and sustainability for student populations where all students have access to the Internet, in particular, international students, who are less likely than their domestic peers to seek help for mental health and related problems (Brunsting et al., 2018; Skromanis et al., 2018). This is because of the public or internal stigmas associated with mental illness and lack of knowledge about the services available on university campuses (Gulliver et al., 2010; Hyun et al., 2007; Nina, 2009). An Internet-based intervention is defined as a programme or service delivered through the Internet (e.g., a website, email), designed to create a positive change in behaviour or health status or enhance knowledge or awareness with varying levels of support (e.g., completely unguided, human-supported) given to the user (Barak et al., 2009). Indeed, a meta-analysis by Conley et al. (2016) suggested that Internet- and mobile-based interventions were a feasible method to reach university and college student populations. Additionally, Harrer et al. (2019) and Lattie et al. (2019) conducted meta-analyses on Internet interventions, such as web-based interventions for mental health in university students, and the results were consistent, showing that such interventions had small to moderate effects on reducing depression, anxiety, and stress symptoms and improving students' social and academic functioning.

These and the findings described in the previous chapters posit that studying away strategies were linked to a higher quality of university life and positive well-being. This feasibility trial was intended to evaluate the potential efficacy of the information sheet intervention delivered by e-mail for increasing the usage of studying away strategies. The information sheet contained 14 practical strategies for each of the stages of transition: pre-arrival, at university, preparing to return home, returning, and being back home.

6.3 Methods

6.3.1 Development and Content of the Information Sheet Intervention

Based on the available evidence, psychoeducational and informative interventions delivered by text message, booklet, email or website were effective in changing behaviours or attitudes and increasing knowledge about a topic (Donker et al., 2009; Parrott et al., 2008; Wurdak et al., 2017).

These findings led to the development of an information sheet, based on the well-being away strategies model, delivered via e-mail. Using an RCT design, the intervention group received two weekly email reminders with a short introduction to encourage them to increase their knowledge and usage of the strategies. The email also included one MSWord document containing 14 strategies for each of the following stages: pre-departure, at university, preparing to return home, and being back home (see Figure 6.1). Each stage consisted of relevant and practical strategies. As the intervention targeted international students who had planned to return home during the Easter holiday, the first stage presented in the information sheet was the returning home stage. For example, in this stage, the intervention group was encouraged to increase their leisure time and change up their daily university routine as much as possible. The email was sent from 14 days before the Easter holiday until 21 days after the Easter holiday ended.

Figure 6.1

Email Reminders Sent to Intervention Group and Information Sheet

Dear Student,

Thank you very much for taking part in this research. Our aim is to help students who are studying away from home to maintain well-being and improve their quality of university life. The attached document presents a number of strategies that we would like to encourage you to use before you leave the UK, when you arrive home, pre-departure to the UK, and when you are back in the UK after the end of the Easter holiday. Some of these strategies have been empirically shown to improve the level of quality of university life and well-being.

You may have exams or assignments to complete before or after the Easter holiday. We encourage you to apply these strategies as well as you can without affecting your academic progress. You may already know and use some of these strategies, and some may be new to you.

If you need any further information or have any questions, feel free to contact me.

No need to reply!

Kindest regards,

*Eman Alharbi
PhD student
School of Psychology
Cardiff University*

Studying away strategies

Before you leave the UK

- Prepare for your return home.
- Be aware that both you and the people back home (including family and friends) may have changed.
- Increase your relaxation and leisure activities.
- Try to engage in different activities from your routine (e.g. study less intensely if you can).

When you arrive home

- You may need time to adjust to being back. This is normal; don't worry about it.
- Try to have a 'welcome home' celebration with family and friends.

Before you return to the UK

- Discuss your expectations and feelings about being away from home with your family. This time, you may have more experience than the first time you left.
- Acknowledge that the coming separation is real.
- Set up your support networks with family and friends.
- Agree about likely communication methods.

When you arrive back in the UK

- Don't over-rely on technology to communicate with people back home. Sometimes, it is best for everyone if you don't know about everything happening back home, as you cannot control or change it.
- Develop the ability to unwind after working or studying by balancing your personal and academic life and performing the following activities:
 1. Exercise or join a gym or workout classes, such as those offered at the university sports centre.
 2. Go out with college friends.
 3. Join any of the university or student union clubs and activities that interest you.

6.3.2 Study Design

This study evaluated whether the email-based intervention could be a useful tool for enhancing the usage of studying away strategies and the effect of studying away strategies on well-being and quality of university life. It was designed as a randomised controlled feasibility trial using a pretest-posttest. RCTs were initially employed in medical research and have been used for psychological testing interventions, as some researchers consider the RCTs as are robust and *gold standard* research methods to evaluate the effectiveness of interventions (Carey & Stiles, 2016).

In RCTs, participants are allocated randomly to two groups: control or treatment. The treatment group receives an intervention, while the control group receives no intervention. The results of the outcome measures are then compared between the two groups. It has been argued that an RCT demonstrates whether an intervention has worked, but not whether or how the intervention causes the effect. Thus, including qualitative components within the RCT research methods has been recommended to allow an understanding of how an intervention works and provide evidence of the process of intervention (Hutchison & Styles, 2010). In this study, both qualitative and quantitative questions regarding the intervention's usefulness were included.

6.3.2 Sample

A sample size calculation was not performed, since this was a pilot study. However, recommendations for the sample size of a pilot study vary between 10 (Hill, 1998) and 12 participants per group (Julious, 2005; Van Belle, 2011). Additionally, 10% of the sample has been projected for larger studies (Connelly, 2008; Treece & Treece, 1982). The current study aimed to have at least 12 participants in each group.

Students were recruited using the methods employed in the previous chapters as well as by sending an Invitation email, including information about the study and the

questionnaire link, to all of the international students who had participated in the previous study (Chapter 5). One criterion was added for inclusion: students had to be planning to return home during the Easter holiday from 15 April until 6 May 2019.

At baseline data collection, 74 students completed the questionnaires, and 32 were excluded because they did not meet the criteria or had entered an invalid email address. The remaining 42 participants were randomised into two groups: control ($n = 18$) and intervention ($n = 24$). The randomisation was performed electronically on Microsoft Excel. In the post-intervention data collection, only 14 participants completed the questionnaire: five in the control group and nine in the intervention group. Students who did not complete the post-test measures were excluded from the analysis.

The participants' age ranged from 18 to 49 years of age. There were six males (aged 21 to 49) and eight females (aged 18 to 22). The participants were allocated randomly using Microsoft Excel software to either the intervention ($n = 9$; six females and three males, with a mean age of 20.7 years; $SD = 2.1$) or the control group ($n = 5$; two females and three males, with a mean age of 27.4 years; $SD = 12.5$). The majority were undergraduate students ($n = 11$) of which nine students were in their first year. Participants came from the Middle East (68.8%), Europe (18.8%), and Asia (12.6%). The demographic information for the 14 participants who completed the initial and follow-up measures is presented in Table 6.1.

Table 6.1*Demographic Characteristics of Participants*

Demographics	Intervention Group (n = 9)	Control Group (n = 5)	All (n = 14)
Age range	18–24 years	18–49 years	18–49 years
Mean age (SD)	20.78 (2.16) N (%)	27.40 (12.54) N (%)	N (%)
Gender			
Male	3 (33.3%)	3 (60%)	6 (42.9%)
Female	6 (66.6%)	2 (40%)	8 (57.1%)
Marital status			
Single	9 (100%)	4 (80%)	13
Married	-	1 (20%)	1
Year at university			
First-year	6 (66.7%)	3 (60%)	9 (64.3%)
Other year	3 (33.3%)	2 (40%)	5 (35.7%)
Ethnicity			
White	2 (22.2%)	-	2 (14.3%)
Asian	1 (11.1%)	-	1 (7.1%)
Mixed race	1 (11.1%)	-	1 (7.1%)
Black or African	-	-	-
Hispanic/Latino	-	-	-
Arab	5 (55.6%)	5 (100%)	10 (71.4%)
Previous experience of studying abroad			
	-	1 (20%)	1 (7.1%)
Yes			13 (92.9%)
No	9 (100%)	4 (80%)	
Type of programme			
Undergraduate	7 (77.8%)	4 (80%)	11 (78.6%)
Postgraduate	2 (22.2%)	1 (20%)	3 (21.3%)

6.3.3 Procedure

The study was reviewed and approved by the Ethics Committee of the School of Psychology. At baseline, three weeks before the Easter break, participants completed an online questionnaire using Qualtrics software, which included demographic information and a battery of self-report questionnaires presented in Section 6.3.4. The questionnaires assessed

the use of well-being away strategies, positive and negative well-being, and quality of university life. Once the participants were randomly allocated to the two groups, the intervention group received two weekly email reminders with a short introduction and one MSWord document containing 14 strategies for the four phases of transition: pre-departure, being in university, preparing to return home, and being back, whereas the control group received no emails. The emails were sent starting 14 days before the Easter holiday began until three weeks after the Easter holiday. In the post-intervention data collection, the control and intervention groups completed the same questionnaires at the baseline. As an incentive, participants were invited to enter a draw for a £20 Amazon voucher.

6.3.4 Survey Questionnaires

The survey questionnaire included similar measures to those used in the studies presented in Chapters 4 and 5. The full details of the questionnaires were provided in Chapter 3. The measures included at baseline and post-intervention were:

- **Demographic questionnaire** age, gender, ethnicity, year at university, type of programme, and self-rating of English language proficiency “what is your present level of English fluency?” had the following response options on a 5-point scale (1 = *Poor*, 2 = *Fair*, 3 = *Good*, 4 = *Very good*, 5 = *Excellent*)
- **Smith Well-being Questionnaire** (Smith et al., 2018) was used to measure positive and negative well-being.
- **Quality of university life Questionnaire** (Smith et al., 2018)
- **Studying Away Strategies Questionnaire** (Smith et al., 2018) at the baseline phase. Students were asked to what extent they applied the designated strategies the first time they had come to the UK. At the post-intervention phase, students were asked to what extent they had applied the strategies during the transition in the Easter holiday.

- *At the post-intervention phase, the intervention group was asked three questions related to the intervention usefulness.* a) To what extent did you use the strategies in the information sheet that you received at your email address? (10-point Likert scale with anchors of 1 *Not at all* to 10 *Very much*.) b) Did you find the information sheet useful? (5-point Likert scale with anchors of 1= *Not useful at all*, 2=*Slightly useful*, 3=*Moderately useful*, 4=*Very useful* and 5= *Extremely useful*). c) Which strategy/strategies worked with you and which did not?

6.3.5 Statistical Analyses

The data were analysed using SPSS version 25. Comparisons between groups were performed using chi-square tests for categorical variables and ANOVA and independent samples *t*-tests for continuous variables. For Chi-squared analyses, Phi ϕ was used as an effect size, with 0.10, 0.30, and 0.50 as the thresholds for small, medium, and large effect sizes, respectively (Kim, 2017). For other analyses Cohen's *d* and Hedges' *g* were used to determine effect sizes with the following thresholds: > 0.2 (small), > 0.5 (medium), and > 0.8 (large).

Due to the high attrition rate, the outcome variables were combined; instead of comparing multiple dependent variables (positive affect, negative affect, and quality of university life), the three variables were combined for a single well-being variable that included the sum of three dimensions: positive affect score, plus the quality of university life score, minus a negative affect score. Composite variables were recommended for small sample sizes and to control Type I error - accepting evidence of efficacy when the intervention does not work (Song et al., 2013). Through analysis, the relationships between studying away strategies and well-being and the relationships in change scores between pre and post-intervention for well-being and studying away were examined. Separately, correlations between studying away strategies and well-being were examined for the

intervention and control groups. Finally, using R software (R Core Team, 2014), strip charts of linked observations for well-being and studying away strategies were derived from the data.

6.4 Results

6.4.1 Comparison Between Intervention and Control Groups at Baseline and Follow-Up

Comparison data of sample characteristics between the intervention and control groups at baseline and post-intervention is shown in Table 6.2. The Shapiro-Wilk test results confirmed the normality of the data for each group at pretest and posttest. Parametric statistical methods were applied to measures with p values less than 0.05 is statistically significant. A one-way ANOVA was used to compare the results of continuous variables between the two groups at baseline. The control group ($M = 29.5, SD = 9.3$) was significantly older than the intervention group ($M = 22.7, SD = 4.1$), $F(1, 40) = 10.05, p = .003$, Cohen's $d = 0.9$. However, age was not significantly different between the two groups in the follow-up, $F(1, 13) = 2.5, p = .137$, Hedges' $g = 0.8$. Chi-square analyses indicated no significant differences between the two groups for gender, $\chi^2(1, N = 14) = .933, p = .33, \phi = .25$; year at university, $\chi^2(1, N = 14) = 0.062, p = .80, \phi = .06$; type of programme, $\chi^2(1, N = 14) = 0.009, p = .92, \phi = .02$; or prior experience of studying abroad, $\chi^2(1, N = 14) = 1.93, p = .16, \phi = .37$.

The dropout rate for the trial was high (68.2%). Dropout rates were similar between groups, as 13 participants in the control group and 15 in the intervention group did not return to the post-intervention questionnaire. An attrition analysis indicated a significant difference in terms of the year at university between those who remained in the study and those who dropped out. Specifically, those who had completed both questionnaires were likely to be in their first year compared to those who dropped out, $\chi^2(1, N = 14) = 4.289, p = .038, \phi = .55$ which indicated large effect size, with no other significant differences found.

Table 6.2*Comparison of Sample Characteristics Between Initial and Final Phase*

Variables	Initial phase		Final phase		p-value
	Intervention Group n = 24	Control Group n = 18	Intervention Group n = 9	Control Group n = 5	
Age	M = 22.79 SD = 4.12	M = 29.56 SD = 9.33	M = 20.7 SD = 2.1	M = 27.4 SD = 12.5	ns
Gender					ns
Male	5	11	3	3	
Female	19	7	6	2	
Marital status					ns
Single	22	11	9	4	
Married	2	7	-	1	
Year at university					.03
First-year	12	5	6	3	
Other years	12	12	3	2	
Type of programme					ns
Undergraduate	16	9	7	4	
Postgraduate	8	8	2	1	
Experience of studying abroad					ns
Yes	2	7	-	1	
No	22	11	9	4	
Well-being	M = 36.5 SD = 17.2	M = 37.1 SD = 15.2	M = 46.00 SD = 9.46	M = 45.00 SD = 8.57	ns

6.4.2 Pretest–posttest Intervention

An independent samples *t*-test revealed no significant differences existed between intervention and control groups in terms of levels of well-being ($M = 38.2$, $SD = 14.3$, $n = 9$, $M = 45.4$, $SD = 11.3$, $n = 5$), $t(12) = -.960$, $p = .356$, or the use of studying away strategies ($M = 79.5$, $SD = 20.5$, $n = 9$, $M = 84.8$, $SD = 10.84$, $n = 5$), $t(12) = -.53$, $p = 0.6$ at baseline. Pearson's correlation coefficient was used to determine the relationship between studying away strategies and well-being values at the baseline. There was a moderately significant positive correlation, $r = .573$, $p = .032$, confirming that use of studying away strategies was associated with more positive well-being.

In the post-intervention, the association between studying away strategies and well-being was stronger with a higher p -value and a significant Pearson's correlation coefficient ($r = .656, p = .011$). Both groups showed a non-significant increase in the use of studying away strategies compared to the baseline phase, the increase was greater in the intervention group ($M = 88, SD = 9.46$ vs. $M = 79.5, SD = 20.5$) than in the control group ($M = 94, SD = 12.8$ vs. $M = 86, SD = 11.7$), with an effect size of Hedges' $g = 0.56$. However, no difference was found between the intervention and control groups in well-being, $t(13) = .19, p = .84$ or use of studying away strategies $t(13) = -.64, p = .53$, respectively.

6.4.3 Change scores

Change scores of well-being and studying away strategies between the baseline and post-intervention were also examined for both groups. The intervention group's well-being increased, $M = 7.77, SD = 13.94$, and use of studying away strategies increased, $M = 8.44, SD = 27.4$. However, the control group's well-being slightly decreased, $M = -0.40, SD = 3.84$, and the use of studying away strategies increased, $M = 7.2, SD = 6.2$. Furthermore, a positive significant correlation coefficient between change scores of studying away strategies and well-being among the intervention group ($r = .655, p = .028$). In contrast, there was a negative but non-significant correlation between change scores of studying away strategies and well-being in the control group ($r = -.823, p = .087$). These results may be due to the small sample size; statistically significant results may be found with larger sample sizes. Moreover, the negative correlation in the control group might be due to the potential of reverse causality with those who have problems being more likely to use studying away strategies.

Although the well-being scores for the intervention group increased, two independent sample t -tests showed no significant difference in the scores of well-being at post-intervention for the intervention group, $M = 46.00, SD = 9.46$, or control group, $M = 45.00,$

$SD = 8.57$, $t(13) = .195$, $p = .84$. A lack of significance ($p < .05$) does not necessarily mean a lack of effect and graphical displays are recommended when reporting non-significant results because they provide a full picture of the data (Ho et al., 2018).

Strip charts of linked observations for well-being and studying away strategies are shown in Figures 6.2 and 6.3, respectively, and indicate that six participants from the intervention group showed an increase in well-being when applying the study away strategies, while the control group showed a decrease or slight increase in well-being. Furthermore, although both groups showed an increase in applying the studying away strategies at Time 2, the intervention group showed a greater increase than the control group.

Figure 6.2

Strip Charts of Linked Observations for Well-being

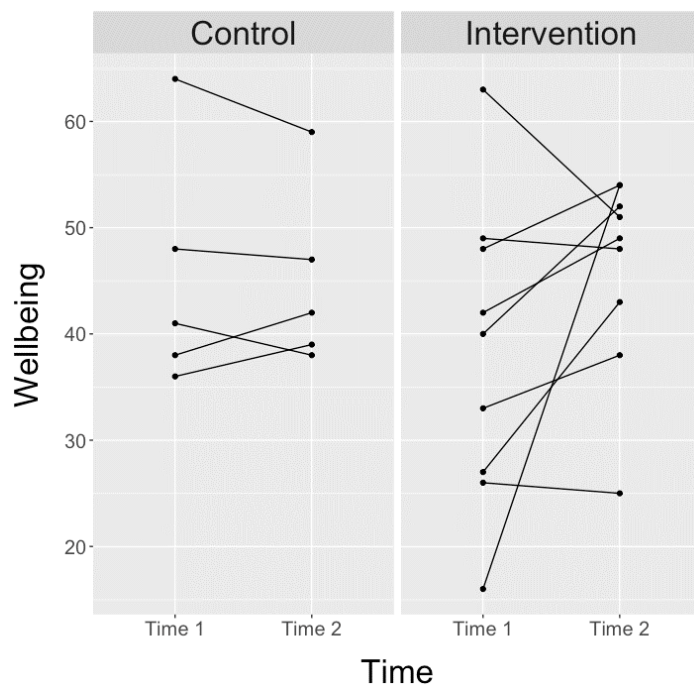
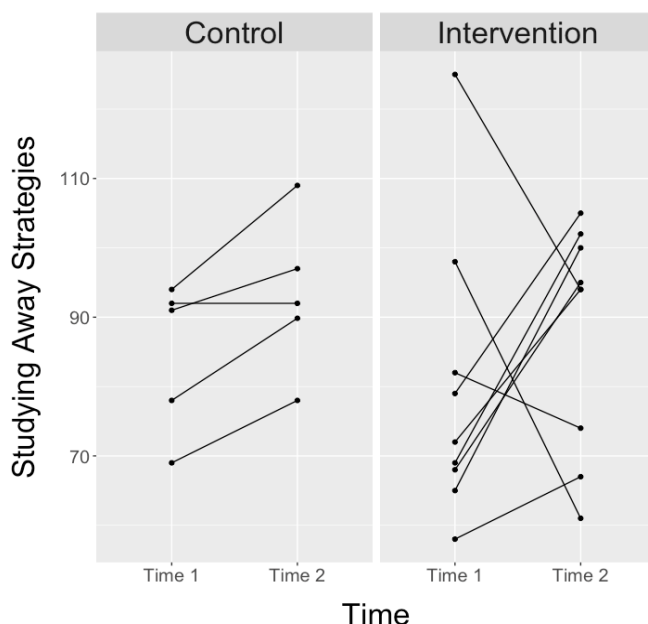


Figure 6.3

Strip Charts of Linked Observations Studying Away Strategies



6.4.3 Intervention Group Feedback

Intervention group participants rated the usefulness of the information sheet between 3 to 4 (*very to moderately useful*). Of the six participants who answered the qualitative feedback, three found the information sheet helpful: “*I did apply lots of the strategies I found it useful*” and two other answers reported specific strategies were useful: “*Unwind after university and social gathering*” and “*Joining the gym and celebrate returning home*”.

Two students reported that they did not use the strategies due to exams:

*I thought most of them were common sense, but I did find many of them useful. I couldn't quite get to use most of them as I'm swamped with exams work. However, as I grow older, I find it easier to bid my farewells to others, **and** I read them, but I didn't actually put them in action. It's not because they are not useful. I just didn't try.*

One negative feedback suggested that the strategies were not useful:

This advice is for the ideal world scenario. Not everyone can understand the pain of being an international student, and calling home is not always a possibility.

6.5 Discussion

This study aimed to evaluate the feasibility and potential effectiveness of an information sheet intervention on increasing the use of studying away strategies and improving well-being among international students using an RCT design. This study was conducted before and after the Easter holiday, which was meant to allow participants to use the strategies in each of the five phases of transition. This study also identified issues that must be addressed when designing future trials, specifically the high attrition rate and the use of a qualitative approach to identify the usefulness of the intervention.

Outcome analyses revealed that the two-month intervention had an impact, increasing the usage of studying away strategies and the well-being of the intervention group participants. However, there were no significant observable impacts of the information sheet intervention when compared to the control group. Consistent with previous chapters in this thesis, studying away strategies were positively correlated with well-being, at both pre-test and post-test in this trial. The information sheet seemed to help the intervention group to increase the use of studying away strategies. Nevertheless, a high dropout rate of 68.2% resulted in very small sample size and a lack of significance in the correlations comparing the groups. The intervention group also reported higher use of studying away strategies post-intervention ($M = 88, SD = 16.2$) compared to when they first came to the UK ($M = 79, SD = 20$), and higher positive well-being in the post-test ($M = 46, SD = 9.4$) compared to the pre-test ($M = 38.2, SD = 14.3$). On the other hand, the control group showed a slightly decreased in well-being ($M = -0.40, SD = 3.84$) and increased in the use of studying away strategies ($M = 7.2, SD = 6.2$). Additionally, a negative correlation between change scores of well-being and the use of studying away strategies, this finding is similar to the findings presented in Chapter 4 Section 4.4.4.3, where high negative well-being leads to the use of the strategies.

The findings also supported growing evidence from several reviews and meta-analyses (e.g., Davies et al., 2014; Farrer et al., 2013) that suggested that Internet-based interventions with various types of text, websites, audio, could be effective in improving depression, anxiety, and stress outcomes among university students.

These findings encourage further testing of Internet-based, self-help, or passive psychoeducational interventions to help international students throughout the transition and stay abroad. Prior research has shown that interventions, including programmes or sessions targeting international students, had a positive impact and showed improvement in adjustment or interactions with other students, but did not have an impact on reducing psychological distress or improving well-being (Elemo & Türküm, 2019; Smith & Khawaja, 2014). Combining face-to-face sessions or programmes with Internet-based interventions could lead to improved outcomes in terms of well-being and other aspects of international students studying abroad experiences.

It is worth noting that both groups showed an increase in the application of studying away strategies than they had the first time they came to the UK. This may be because longer stays away from home could make students more aware of such strategies. Indeed, the literature on international students has linked the length of stay in the host country with positive outcomes, where the more extended the stay in the host country, the better the adjustment, such as lower reported levels of depression or anxiety (Adler, 1975; Church, 1982; Li et al., 2014; Zhang & Goodson, 2011).

Although four of the six responses to the open-ended question regarding the effectiveness of the information sheet strategies were mostly positive, the comments were not as useful as expected. One comment showed that course demands might impact students' abilities to apply some of the strategies, such as unwinding. This may be due to lack of a study-life balance or high course demands that render students unable to find free time

during the day. Another possibility is a lack of time-management skills, which has an impact on students' well-being as well. One negative comment indicated that some international students faced challenges that affected them more than being away from home, which would require more than an educational or informative intervention.

Based on the effect size of the intervention effect, a power analysis was conducted using G*Power, Version 3.1 (Faul et al., 2009) to determine the sample size required to detect difference in a future trial, with a power of 80% using a two-sided 0.05 significance level. The result showed a sample size of 51 participants would be needed in each group to confirm the changes in the outcome measure. Additionally, it is important to enhance participants' adherence by personalising the email reminders and including examples of the benefits of such strategies, which could minimise the attrition rate and maximise intervention effectiveness. Although the intervention content delivered in various ways, such as via a website, email was not a communication medium strongly linked to the outcomes (Donker et al., 2009). Using a smartphone or tablet applications with a diary study allowed for the measurement of the number of times students accessed and used the strategies. It is also essential to identify whether any personal or academic factors mediate the processes or possibly create barriers to apply the strategies, thereby affecting the outcomes. Conducting a focus group discussion or interview after completing an intervention would also provide individual-level insight into how strategies are used over time, and could allow for a more informed interpretation of intervention usage and better feedback on which strategy or strategies are most helpful to international students and their well-being.

6.6 Limitations

The major limitation of this study was the small sample size due to the high dropout rate, which resulted in a lack of power and the need to combine variables. Second, two months may not have been adequate time to observe the full impact of the intervention on

well-being and whether the impact was sustained over time, especially considering that Chapter 5 showed that students' well-being changed over the academic year. Different results may be found among international students who recently arrived in the UK, as all of the students in this trial had already spent at least eight months in the UK.

6.7 Chapter Summary

This chapter explored the feasibility and potential efficacy of an Internet-based intervention via an information sheet based on the well-being away model to increase the use of these strategies. Consistent with previous chapters, the results showed an association between studying away strategies and well-being and quality of university life. Moreover, the intervention had an impact on applying more strategies, and responses to open-ended questions highlighted that strategies were generally positive, however, students need to improve their time-management skills to be able to apply some strategies. These findings are encouraging for the field of well-being interventions in general and well-being away from home in particular.

CHAPTER 7: AN INTERVIEW STUDY OF THE WELL-BEING OF INTERNATIONAL STUDENTS IN THE UK

7.1 Chapter Overview

This chapter describes the final study of this thesis, which used semi-structured interviews with 15 international students from eight different countries. Data were collected regarding the students' study experiences in the UK; specifically, their experiences before arrival, their university and social life, sources of stress, coping strategies, and maintenance of well-being while away. The data was analysed using the Interpretative Phenomenological Analysis (IPA) approach. Finally, the findings will be discussed within the context of the findings from the previous studies conducted for this thesis and the existing literature.

7.2 Rationale for the Study

Reviews focusing on international students' experiences (e.g., De Araujo, 2011; Smith & Khawaja, 2011), including the review presented in Chapter 2, have demonstrated the lack of qualitative evidence regarding international students' experiences and the need for employing qualitative research methods to understand the transition experience. Furthermore, although quantitative studies have provided insight into international students' experiences, they have limitations. For example, instruments designed and developed for certain cultures may bias the interpretations and evaluations of data collected from other cultures, leading to inaccurate conclusions being drawn (Khawaja et al., 2008). In addition, quantitative research does not allow the participants to give explanations. The qualitative approach methods can overcome these limitations and encourage individuals to report their actual experiences using their own words.

Tseng and Newton's (2002) study is one of the oldest qualitative studies that has examined the well-being of international students in the USA. They interviewed two

international students (Asian and African) about the strategies that the students used to attain well-being. The students reported eight different strategies (e.g., knowing self and others, making friends, expanding individual worldview, asking for help, improving English skills) and explained that their well-being perspective was influenced and enhanced by achieving specific study abroad goals, such as completing school work and planning their careers. While this study demonstrated the strategies students used to maintain well-being, it mainly focused on one stage of transition without offering a full detailed picture of the students' experiences abroad or the challenges that they faced during their transition to the USA.

Indeed, Sawir et al. (2008) argued that the literature of international students focused on academic experience and neglected the lived experiences that influenced not only students' health or well-being, but also their academic performance. The researchers conducted a large-scale interview study with 200 international students in Australia. The findings showed that two-thirds of the sample had experienced issues of loneliness or isolation in the early months that they spent in the host country. Similarly, Khawaja and Stallman (2011) conducted the first qualitative study that used focus groups, with 22 international students in Australia divided into four groups. The aim was to explore the students' lived experiences and coping strategies. The thematic analysis showed that students faced several challenges in all aspects of life, including adjustment issues, discrimination, culture shock, social isolation, English language difficulties, mismatched expectations, trouble finding employment, and general psychological stress. Furthermore, students had not expected to face such challenges and were not equipped with the skills to overcome them. Khawaja and Stallman (2011) recommended that future students psychologically prepare before departing their home countries by improving their knowledge about the education system, region, and host culture, as well as prepare themselves for an independent lifestyle.

Certain challenges have been reported consistently across studies and across cultures, such as financial challenges, which have been linked to homesickness and reduced time for study or social activities (Evivie, 2009). Due to the students' financial situations, many have been forced to work while studying, and the perceived lack of social support has been attributed to the cultural gaps found in their surrounding environments. However, in a study of 50 first-year African students in the UK, Caldwell and Hyams-Ssekasi (2016) discovered challenges specific to African international students that had not previously been acknowledged. Through individual interviews with the participants, the researchers uncovered that obtaining the necessary student visa was a complicated and stressful process, and over two-thirds of the participants had had their visa applications denied before eventually attaining them. According to the researchers, the unpredictability of the application process was most likely part of the reason that students failed to prepare themselves for their departure, later resulting in major difficulties when transitioning into the UK.

The initial stage, in particular, has been linked with negative emotions not only by African students, but also by students from different regions such as Asia, Europe, and the Middle East (Brown & Holloway, 2008), but so far, there has been little evidence about what makes the transition easier. The findings from interview and focus-group studies have indicated that the pre-arrival phase may have an impact on the initial stage of the transition. Furthermore, they have shown that applying acculturation theories, such as the U-Curve model (Lysgaard, 1955), was not suitable for explaining the acculturation experience of international students.

Within the context of this thesis, the quantitative studies described in the previous chapters have shown that unlike in the existing literature, the international student sample in the comparative study reported significantly less academic demand and lower negative well-

being compared to home students. In a more detailed investigation of international students' well-being, the longitudinal study found that international students reported a moderate level of positive well-being. Nevertheless, the level continued to decrease throughout the academic year. Factors such as higher English language proficiency, previous experience studying overseas, and the use of pre-departure planning strategies were associated with high positive affect at the beginning of the academic year. While levels of negative well-being did not remain stable throughout the year, negative affect was high at the beginning of the academic year, decreased at the second semester, and reached its peak at the end of the year around final examination periods. Factors such as high course demands, perceived academic stress, financial difficulties, and low satisfaction with academic achievement predicted negative well-being. Additionally, in the pilot RTC study, one participant reported that international students experienced a 'pain that not everyone can understand.'

The current study seeks to complement the findings from previous quantitative studies regarding the study abroad experiences of international students in the UK before departing their home country and after arriving in the UK, the difficulties and issues they face, their well-being, their use of well-being away strategies and other coping strategies to overcome issues with studying away from home. With this research goal, a qualitative research approach was taken in the form of semi-structured interviews, which were expected to provide rich and valuable data for understanding the well-being of international students, as well as to confirm or clarify the findings from the quantitative studies of this thesis. More importantly, it was hoped that this study would provide insights into the effective development of interventions to improve and maintain the well-being of international students.

7.3 Methods

This section describes the study design, participants' recruitment, setting and sample characteristics, data collection procedure, including the interview schedule and steps followed to analyse the data.

7.3.1 Study Design and Ethics

As mentioned earlier, this study used a qualitative approach, in the form of semi-structured interviews, as the method of data collection. IPA offers a flexible approach to understanding people's experiences; it was designed as a unique method to conduct qualitative research, offering a comprehensive practical guide for conducting qualitative analyses (Smith & Osborn, 2015). The central aim of IPA is to explore in detail the process of a specific phenomenon in the lifeworld by focusing on how individuals make sense of their experiences (Smith & Osborn, 2015). As the aim of this study was to explore the lived experiences of international students and examine how they face difficulties and maintain their well-being, IPA was deemed an appropriate instrument for analysis. To ensure the validity of the interviews, two pilot interviews were conducted with international students to verify whether the interview questions were clear. Minor changes were made to the questions in response to the pilot interviews to ensure clarity, and one question related to the pre-arrival stage was added.

To ensure confidence in the findings and improve the quality and credibility of the investigation, this study has followed several guidelines for evaluating qualitative research methods developed by Elliott et al. (1999), Tracy and Hinrichs (2017), and Yardley (2000). These guidelines apply to all qualitative research, regardless of the methodology employed. The criteria applied to this study are described below.

First, the principles of good research practice were applied to this study, such as applying for ethics approval, gaining approval from the Ethics Committee of the School of

Psychology, and ensuring confidentiality by setting up a password for the interview audio and MSWord document transcript files as well as using numerical codes in place of participants' real names. Second, Chapters 2, 4, 5, and 6 demonstrated the vast literature that was examined before conducting this study. Third, the methods, including participant recruitment, participants' demographic information, data collection procedures, interview settings, questions, and data analysis, are described in the following sections. Fourth, it was ensured that no established relationship between the researcher and students existed before the study. Fifth, the interviews were recorded using two devices: one high-quality audio device and Voice Memo, a recording application on the Apple iPhone 6 Plus. Sixth, quotes from the interview transcripts are provided for each theme, derived from the findings to allow the reader to reflect on the interpretations and consider possible alternatives. Finally, as an international student, I expected to share similar life experiences as described by the participants and thus endeavoured not to project my thoughts and emotions onto the participants or the research process and remained self-aware of my preconceptions.

7.3.2 Participant Recruitment

A purposive (or selective) sampling method was used in this study. Participants were recruited through social networking sites (i.e., Facebook) international students' group page, direct communication, and emails to the gatekeepers of student union societies. In the final case, the gatekeeper forwarded the email to the members of their respective society. In addition, snowball sampling was also employed, as there was some difficulty in recruiting participants; three of the participants were recruited using this technique. The inclusion criteria for participation were that the student was a full-time European or international student and able to communicate in English.

7.3.3 Setting and Sample Characteristics

The study was conducted at Cardiff University which is one of the top 24 public research universities in the UK. At the time of this study (November/December 2018), approximately 8,620 European and international students enrolled, representing over 130 countries and accounted for 25% of the student population at the university.

A total of 15 participants, both males ($n = 5$) and female ($n = 10$), took part in this investigation from both undergraduate and postgraduate levels. The participants represented a reasonably homogeneous cohort, with the majority of the sample being master's level students. Ages ranged between 18 and 33 ($M = 24.8$, $SD=4.17$). Only two of the students interviewed were married, both of whom were females from Saudi Arabia, and one student reported his marital status as "other". The range of duration of stay in the UK was between two months and 12 months. Regarding the previous studying abroad experiences, only two students had studied abroad before, both of whom were Chinese and both of whom completed the final semester of their undergraduate degrees in the UK in an exchange programme for one semester in 2016. One student (Participant 16) worked part-time, and one (Participant 5) worked on a casual basis. The participants' ethnicities varied, including Asian, White, Black, and Arab, and they came from eight different countries: China, Egypt, Germany, Greece, India, Kenya, Pakistan, and Saudi Arabia. Three of the participants spoke English as their first language. Table 7.1 provides the demographics of the participants.

Table 7.1*Demographic Characteristics of Participants*

<i>N</i>	<i>Gender</i>	<i>Age</i>	<i>Marital status</i>	<i>Nationality</i>	<i>First language(s)</i>	<i>Experience of studying abroad</i>	<i>Type of programme</i>	<i>Major</i>	<i>Length of stay in the UK</i>
1	Male	22	Single	Indian	Hindi	No	Master	Computer sciences	2 months
2	Female	29	Married	Saudi Arabian	Arabic	No	Master	Physiotherapy	12 months
3	Female	20	Single	German	German	No	Undergraduate	Mathematics	2 months
4	Female	25	Single	Chinese	Chinese	No	Doctorate	Psychology	11 months
5	Female	22	Single	Chinese	Chinese	Yes	Master	Education	4 months
6	Female	26	Single	Kenyan	English	No	Master	Law	2 months
7	Female	22	Single	Chinese	Chinese	Yes	Master	Physiotherapy	4 months
8	Female	24	Single	Egyptian	Arabic	Yes	Master	Physiotherapy	3 months
9	Male	33	Other	Pakistani	Urdu	No	Master	Information security	3 months
10	Male	27	Single	Kenyan	English	No	Master	Law	2 months
11	Female	23	Single	Kenyan	English & Swahili	No	Master	Environmental policy	2 months
12	Female	18	Single	Greek	Greek	No	Undergraduate	BMus jazz	3 months
13	Male	26	Single	Pakistani	Urdu	No	Master	Law	3 months
14	Female	32	Married	Saudi Arabian	Arabic	No	Doctorate	English literature	8 months
15	Male	23	Single	Indian	English	No	Master	Law	3 months

7.3.4 Data Collection

Fifteen in-depth semi-structured interviews were conducted during the first semester in the 2018–2019 academic year. Participants decided the date, time, and location of the interviews, which were all conducted in quiet or private rooms on the university campus (i.e., a study room at any of the university libraries or the researcher’s office). At the beginning of the interviews, prior to recording, the researcher introduced herself, explained the general purpose of the interview and the anonymity of responses, gave the participants a consent form, and informed the participants that the interviews would be recorded using a voice recorder and later destroyed after transcription. Participants were also informed of their right to not answer any questions if they felt uncomfortable and of their right to withdraw without giving any reasons. Finally, participants completed confidential questionnaires and provided demographic information regarding their age, gender, marital status, nationality, ethnicity, the programme of study, major, first language, prior study abroad experience, length of stay in the UK, and if they felt comfortable conversing in English (Appendix D). General questions were asked at the beginning of the interview as a warm-up and to allow the participants to relax. Following the warm-up, the researcher followed the interview schedule, which contained ten open-ended questions focused on multiple areas, including the following: pre-arrival, social and university life as an international student in the UK, sources of stress, coping strategies, and methods used to maintain well-being. The interview questions and prompts are presented in Box 7.1.

At the end of the interview, participants were allowed to highlight any concerns they had about the interview or issues and experiences not previously mentioned or addressed in the interview questions. No concerns were raised by any of the participants. Finally, the participants were debriefed about the study’s aims (Appendix D) and given £5 (GBP) for

their participation. The interviews were of varying length, ranging from 20 minutes to 45 minutes, with an average time of 25 minutes.

Figure.7.1

Interview Schedule

1. Why did you choose the UK to complete your education?
2. Can you tell me how you prepared for studying in the UK?
3. Have you adapted to life in the UK?
4. Could you describe your experience as an international student?
Prompt: Consider things related to your university/academic life and social life.
5. What are the problems and stressors you experience as an international student?
6. What are the best coping methods to deal with stress as an international student?
7. If I were a student from your home country, what would you tell me about what it takes to be happy and successful at university?
8. From your perspective, what are the important elements are for maintaining well-being as an international student?
9. Do you think this experience (studying away from home) may change you and the people back home, such as family and friends, while you are away?
10. Do you expect that you will need time to adjust when you return home after living and studying in the UK?
11. We have covered a number of things in this interview, but is there anything else you would like us to know?

End of interview. I would like to thank you for your time today, and I wish you the very best in your degree. Do you have any questions you would like to ask me?

Please note responses will be anonymised in all written work

7.3.5 Data Analysis Procedures

Following the Cardiff University School of Psychology and British Psychological Society's (BPS's) ethical guidelines, participants were identified using numerical codes, rather than their names, to ensure their anonymity. The researcher transcribed all of the interviews manually using Microsoft Word. This process took three months to complete and resulted in 80 pages and 37,361 words. The verbatim transcription focused on recording the content of the interviews, and no corrections were made to the personal language or grammar mistakes students used in their speech. Nonverbal communication was not noted in the transcripts.

The IPA practical guide (Pirtkirwicz & Smith, 2012) was employed to analyse the transcripts. Each transcript was read several times, and the right margin of the transcripts was used for initial notes and comments regarding major points of interest, including descriptive notes on what the participant had said, summaries, and comments. The initial notes and comments were later transformed into themes, which were then reviewed and consolidated into a finite list of distinctive themes. Next, the themes were clustered into major groups and subdivided into sub-themes according to common meanings. These sub-themes were validated by checking with each transcript to ensure the broader themes linked back to the participants' responses. The themes and sub-themes were then supplemented with direct quotations and excerpts from the transcriptions of the interviews. Without attempting to clarify the participants' messages or correct the participants' grammar, the quotes were used to ensure the theme titles adequately represented the international students' experiences provided the basis for valid analyses.

7.4 Results

The IPA for the 15 interviews covered the overall experience of the international students. Five themes were derived from the analysis with constituent sub-themes. The

following sections will introduce each theme and sub-theme with example quotes extracted directly from the transcripts without any editing. The five major themes found in the participants' responses were the following:

- Experiences before coming to the UK
- Social and university life
- Sources of stress
- Coping strategies
- Maintenance of well-being

7.4.1 Theme 1: Experiences Before Coming to the UK

This theme involved the factors influencing the decision to study in the UK, student concerns, and preparations. It was sub-divided into two sub-themes, which were factors influencing the decision to study abroad and concerns surrounding this decision.

7.4.1.1 Factors Influencing International Students to Study in the UK. The participants in this study chose to study in the UK because the quality of education was higher in the UK compared with education in their home countries. Furthermore, other influencing factors included having relatives or friends who had completed their degrees or who had lived in the UK, shorter master's degree programmes, and wanting to gain new perspectives in life.

The main reason is that I only need 18 months to graduate if I chose another country maybe I need more, three years, so studying in British (Britain) is quite quick also the quality the education quality in the UK is quite high compared with other countries. (P7, Female, Chinese)

The quality of the education here was much better than home and my sister studied here she did a masters here in Cardiff, so she told me about it a good place to study'. (P10, Male, Indian)

I did not come here just for a master's degree. It was like to get a new perspective of life experience, that was the main reason I came here not just for a degree. (P 15, Male, Indian)

One participant studied in British schools back in their home country and commented on the welcoming attitudes of British society toward Muslim students.

I went to a British school or British system, and I was surrounded with British teachers all my school years so I was always influenced by the British system and it is true that most of the good universities in various subjects are located here, so it was always in my mind to come and study here plus I know it's a very welcoming country towards Muslims, so I knew it was a place I would not face any racial act or something like this I also wanted a place that I could get a good education as well as be comfortable, so the UK was my choice. (P8, Female, Egyptian)

Three students who were studying for a degree in law stated that the law in their home countries was derived from British law, which was the reason they chose to study in the UK.

I'm a lawyer I did my undergraduate in Pakistan, and our law is similar to the UK law, so it makes sense for me to pursue a Master in the UK. (P13, Male, Pakistani)

The course I'm doing is a law, and the UK is a common law country, so the laws that are here are similar to the one back home. So, I had to choose a country that the laws I'm going to be taught will be applicable to my country. (P6, Female, Kenyan)

The short distance between the UK and the students' own countries was also mentioned as a factor influencing students' decisions to study in the UK.

It is an only 5-hour flight from home that's a major thing for me. (P14, Female, Saudi Arabian)

I have figured out many things to decide whether to study in the UK or in anywhere else in the world so the first option becomes the UK because the first thing was the degree was one year and the second thing was this centre of the world where you can go home many times in 6 or 7 hours in any given time, and there are flights available. (P9, Male, Pakistani)

7.4.1.2 Concerns Students had Before Arriving in the UK. Students mentioned several concerns, the majority of which were related to the course. In particular, concerns about their ability to pass their courses, understand the lectures or materials, and communicate with other students or supervisors were prevalent.

Most concern part is the study part, I know doing a PhD is a little bit stressful I am afraid I will fall behind because of my language barrier and maybe different study environment. (P4, Female, Chinese)

Going to study into a higher level of education is always very hard I was worried about the gaps I might have in my knowledge, extra studying that I might need to do, how would I be able to get on with the lectures and the system here, so that was worrying at the beginning. (P8, Female, Egyptian)

I was a little bit concerned about the degree itself like whether I would find it easy or hard. (P12, Female, Greek)

Other concerns included worries about accommodation, roommates, and being lonely.

I was worry about where to stay and what will be the life and who will be my roommates and all, so it was quite difficult. (P1, Male, Indian)

Because this is the first time, I will be away from my family for an extended period of time, so I thought I'd be very lonely here. (P10, Male, Kenyan)

Healthcare in the UK and the cost of living were mentioned by only one student who was pregnant when she first came to the UK.

I had two concerns firstly, the cost of living here and hospitals here, when I came, I was pregnant and was having first-child. (P2, Female, Saudi Arabian)

However, participants who had previous experiences of studying abroad were not worried about being away from home or about their coursework.

I was not worried because it is my second time here in the UK, the first time I came to the UK I was super worried about understanding professors in the class and finishing all the course, those the concerns I had in the first time but not this time. (P5, Female, Chinese)

7.4.2 Theme 2: Social and University Life

The second theme focused on the social and university lives of students studying abroad in the UK.

7.4.2.1 Social Life. All 15 participants claimed that the most difficult part of their study abroad experience was at the beginning.

I really felt very overwhelmed in the first two weeks so I wouldn't say I found it easy, but after a few weeks I just get to hang of it, and I get along with my roommates. (P15, Male, Indian)

At the beginning, it was a huge change for someone who has an oriented family and lots of close friends. It was very difficult coming out of my shell and making new friends here, but once I realise, I'm here for a limited time, and I wanted to meet new people so once I did that was easier, but it was difficult in the beginning. (P13, Male, Pakistani)

I think for around three days after my sister left is loneliness and missing home, so those kinds of distract me from class, being lonely it can be painful the first few days before you find people you can interact with. (P6, Female, Kenyan)

The majority of participants stated that they felt lonely at some stage; a few joined student union societies or used social networking to contact people back home, and one student used apps, such as Meetup, to meet people from his field.

I came here I didn't know anyone I didn't have any friends but the good with me I'm very social, so I join the Kenyan society and other societies that I'm interested in so that (got) to make friends, so I have friends now. (P6, Female, Kenyan)

Sometimes, in the beginning, there're some people you miss a little more, and you really do miss them I didn't really experience homesickness myself maybe that's because I was talking to my parents every day in Skype call, so it's a better chance you see them as well, and it's not the same as just a phone call. (P12, Female, Greek)

One of the Kenyan participants mentioned that it was easy to interact with other international students, but not with British students both inside and outside of the classroom.

I have come to realise that people can easily interact with other international students the locals are friendly, but they have their own groups, and it's very difficult to enter that, so you just end up hanging out mostly with international students even Europeans from their content. (P10, Male, Kenyan)

Another Kenyan student reported that she had been expecting to interact with students in her class, but that she later felt lonely.

I was expecting of finding very friendly people who will be interested to know what are you doing, why did you come here, they want to learn about your culture, they want to learn why you came here and the experience back in Kenya. In Cardiff people are friendly in the city centre, the streets, everywhere but in my class, it's different because I think people mind their own business and people are already in groups maybe they were together in the same school, and you find yourself being lonely because you don't have anyone to share with. I remember when the first time I used to approach someone

you try to ask a question and they brush over you because I think maybe they didn't know you're doing the same course together. (P11, Female, Kenyan)

7.4.2.2 University Life. Generally, students were satisfied with their courses and class sizes, felt supported, and were content with the resources available to them from the university.

I feel like I get a lot more support here comparing back home. If you have a question, you can always ask people, and it is smaller and closer than back on my home university I had like 6-7 hundred people in so, of course, you don't ask questions then. Here it is a lot smaller, and the connections are closer also they call the lecturer by the first name. (P3, Female, German)

I studied in India, so India is like having a huge, huge subject and huge syllables, so I think that I'm not feeling as difficult as in India it's easy for me here. (P1, Male, Indian)

The way the lecturers teach, how they make sure that we all get to understand something, it's very much different from where I came from because back in my home country the lecturer come and speak and go, but here you find that after every one hour you're made to go in groups discuss then we share our opinion to the class also having a personal tutor once you have a personal tutor it feels so good because you can go ask any question. for me because I never did essays and reports in my undergraduate, I didn't know how to write, and my personal tutor was there to tell me this is how to write he gave me the format for writing reports and essays. (P11, Female, Kenyan)

Four students reported language issues as a concern, claiming that their coursework was difficult and that because of their language issues, they were unable to ask for help or discuss their issues with other students. One Chinese student indicated that different Chinese students in the same class interpreted the same lesson content differently.

As an international student, I cannot learn as quick as native speakers sometimes in lectures I want to ask questions but I afraid to ask questions in so many people also I always worry about whether people can understand what I say, whether what I will say make any sense to them and after class, when (Chinese) students discussed what we learned in class we always find that we understand in different ways all of us came to the lecture, but we understand in our own way. (P7, Female, Chinese)

7.4.3 Theme 3: Sources of Stress

This theme focused on sources of stress for students. Although four of the students in this study reported that they had not yet faced any problems and expressed that their experiences were completely positive, the remainder of the participants reported many problems or stressors.

7.4.3.1 Adapting to Life in the UK. Participants who claimed to have adapted to life in the UK were asked to consider any problems they had experienced with the adaptation process. The overall response to this question was positive, as all 15 students answered that they have adapted. Two students, one from Pakistan and the other from Saudi Arabia, reported that life in the UK was much better when compared to life in their home countries, particularly due to environmental factors that affected their lifestyle (i.e., air quality) or life circumstances.

Life here is going very well because the weather is very good air is not deviated at all air is very good so start cycling here, and I lost 10kg of my weight in last six months most of it in 2 months, so I think life is healthy, things are really healthy here. (P9, Male, Pakistani)

My life now is all about me; it's not like back home, it's about you and your loved ones here it's more about me. It sounds so selfish, but in a way, I felt it's so healthy for me and for my mental health and for my well-being and for my academic life as well. (P14, Female, Saudi Arabian)

In contrast, European students reported challenges in food quality and habits.

The food quality, my main problem is food because the quality of food here is kind of different than it's in Greece because we have lots of things 100% fresh. (P12, Female, Greek)

Meanwhile, Kenyan students also mentioned that they had not adjusted to the weather.

I'm adapting and apart from the cold, the rest I think is fine cause even the first time in my accommodation I was not really comfortable because it was people I don't know, people from different nationalities, the type of food they eat, the way they behave, it's different, but now I'm kind of getting used to it. (P6, Female, Kenyan)

7.4.3.2 Language Issues. Chinese and Saudi Arabian participants reported the English language as a source of stress and linked to academic difficulties, such as difficulties in understanding lectures, assignments, or exams, and difficulties in everyday life, such as in communication or when going out.

My biggest concerns that I shared with a lot of students the language thing it is, and it will always be a major for us because at least for me I had a zero experience of studying English as a language I study at literature, and I can do well like writing and search, but I cannot do well in chatting with somebody with a native speaker, so it's a major thing language is a major thing. (P14, Female, Saudi Arabian)

We always want to talk to Chinese people or talk to other people whose English is not that good as well. There are some activities which could help us to improve our English, but we're just afraid to take part in. I always need a friend to come with me I afraid to go somewhere alone I think it's because language because when I live in China, I could go to a restaurant alone go to the cinema alone go shopping alone that's no big problem I could live alone but here I want to practice my English with people but I just afraid to talk with people because awkward sometimes. (P7, Female, Chinese)

One student who spoke English as her first language reported that she had to change the way she spoke, as people could not understand her speech.

People do not understand my speech here I have to kind of articulate word and be louder and slower while speaking so people can understand what I am saying. in class. (P6, Female, Kenyan)

7.4.3.3 Academic Stress. Stress due to academic work, deadlines or different grading systems were reported by students. In addition, students who reported problems in language reported academic stress as well.

Deadlines kind of stressful and also the system so I don't do any exams I just do assignments, and the assignments are 100% of my grade this is completely different for me I used only to do exams, and if you miss up the assignment that's it, this is a 100% of your grade so the deadline, studying and being able actually to do the assignments right is quite stressful. (P8, Female, Egyptian)

7.4.4 Theme 4: Coping Strategies

This theme focused on the coping strategies that international students used to deal with the aforementioned stressors. Most of the participants reported that their coping methods

are depending on the type of difficulties they faced. Overall, students reported a range of problem-focused coping strategies. The most common method of dealing with problems, whether related to academia or personal life, was seeking social support. This included speaking with friends who had similar experiences, such as flatmates or, if the problem was related to academia, personal tutors.

Know some other people other than your officemates and students doing the same course. From my personal experience, because I know a lot of friends here, they're really nice, and I get extra support when I feel depressed, I have friends to talk to and sometimes they will tell you something outside this psychology part they have their own life experience which is unique they have different experiences to share with you. (P4, Female, Chinese)

When I have a problem I never talked to my mom because she's not that strong and she always worries too much about me so most of the time I talk to my boyfriend or my best friends. I have two friends both studied abroad one in Japan and one in Germany, so we face similar problems, for example, assignment, language, making friends. (P4, Female, Chinese)

Participants reported the use of coping strategies; including making lists or plans, especially if the problem related to their coursework (e.g., assignments or exams). They claimed that this was the most effective way to deal with academic difficulties. Others used methods such as going to the gym, going outdoors, and cycling.

Working out, that's for whatever kind of stressor you have actually, it's good for everything and concentrates on the task of the moment like if you have an essay to submit concentrate on your work and everything will pin out eventually. (P12, Female, Greek)

I go to the gym, so I do weight I enjoy doing lifting weights so when I'm doing the activity whatever stressing me I kind of let it go into the activity so I'm lifting like weights and I just like I leave the stress when I leave the gym so it helps me and that's something that I at some point in my life I was stressed, and I had to look one activity to release the stress, so I found going to the gym. (P8, Female, Egyptian)

7.4.5 Theme 5: Maintaining Well-being Away from Home

This theme focused on the strategies that students used to maintain well-being. It also included suggestions and recommendations that participants had for future international students as well as suggestions for the university to enhance the well-being of international students.

7.5.5.1 Developing a Support Network. Various suggestions to maintain well-being were provided by the students in the sample. In particular, many students emphasised the importance of attending social gatherings with other students as soon as possible upon arrival. They also mentioned that joining clubs and societies helped them to socialise with students who had similar interests or backgrounds. Keeping in touch with friends back home was also used to maintain well-being.

I came here with a mindset that I wouldn't meet people from my own country cause I want to meet new people, but I realised that on my part they foolish because I feel that having people from your own country and being able to speak your own national language is something really helps me feel comfortable as it provides me with a support system because we often have the same culture, same background. (P6, Male, Pakistani)

Get in contact with people that are similar to them whether in religion or in a race or in nationality to help them because it's very reassuring when you find someone similar to you so I think this would be very helpful. (P8, Female, Egyptian)

Additionally, arriving two or three weeks before the beginning of their courses was deemed vital, as it allowed students to familiarise themselves with the city and the activities offered by student unions, making it easier to engage with other students.

Use the first two weeks to the know the key places in the university, link up with other international students joins events organised by the SU so those do help especially in the first few weeks when someone is a little anxious about being here so programs like that help someone find people who they can relate to. (P10, Female, Kenyan)

7.4.5.2 Self-care. Several participants suggested different ways to practice self-care and maintain well-being, emphasising the importance of achieving a study–life balance to

maintain well-being and improve academic performance. Keeping a routine, maintaining hobbies and pastimes from back home, only perceiving the experience as a change in environment, not in oneself, joining a gym and maintaining a healthy lifestyle, and keeping one's identity were some of the self-care strategies mentioned.

If you make your life in a balanced way then life is very beautiful in any case you have to study, you have to take your part in the social gathering, you have to sleep well, you have to eat well, you have to work well, you have to pray, or whatever you do for religious perspective, you have to do all these things in a very planned and very balanced manner. (P9, Male, Pakistani)

Identity crisis I think being able to maintain who you are, where you come from and always have in your mind that it is who you are and shouldn't change for anything else this is the most important thing for any international student. (P8, Female, Egyptian)

7.4.5.3 Support from the University. Although several participants felt supported by the university in their social and academic lives, three participants stated that the university could improve the students' experiences. In their suggestions, they included connecting new students with former international students who had completed their courses in the same or similar subjects and designing a pre-doctoral programme to enhance skills in academic writing and communication between students.

I would like to stress the fact that if there's any preparatory material for students especially international who moved regardless of their degree whether master or PhD they do as we called a transitional phase transitional program help international students in social and academic aspects especially writing. (P14, Female, Saudi Arabian)

It would be very helpful if the university kind of made to students like someone that has been in my course before and is from my same country make us talk or get us to know each other this would be very helpful. Because when someone from your same background, they can understand what you're going through. (P8, Female, Egyptian)

7.4.5.4 Well-being Away Strategies. The majority of the participants stated that they used some of the strategies suggested by the well-being away model. In terms of the first

stage, participants planned, discussed, and prepared to be away or study abroad with their families. Some spoke with students who had previously completed their degrees in the UK, through an agency, or their university. Many students did not make conscious or deliberate decisions about communication but rather perceived it as part of daily life. Regardless of whether or not they had discussed communication with their families before their departure, students engaged in communication with their families in some form or another. While some had a designated time for it, others communicated daily using social networking sites and apps.

I had preparation meetings at my home university, and they told us how people behave in the UK, I asked two friends who studied in the UK about university and living and asked my mom how basic cooking works. (P3, Female, German)

I was preparing back home, and I had a lot of gatherings with my friends to tell them goodbye, I also did shop with things that maybe I need here so just saying goodbye and preparing myself. (P6, Female, Kenyan)

The previous sections demonstrated that international students applied various strategies, such as joining a gym, while at university (Stage 2 in the well-being away model). Students adapted to being away by engaging in various activities to unwind in their day-to-day lives. In terms of their perceptions of home, most participants were aware that they might change and that their families and friends could also change in positive ways. That change was perceived as a normal part of life. Three students thought that nothing would change.

I think this is definitely going to happen and that's a good thing to happen if you study abroad and you still the same person as when you left, you didn't grow as a person. (P13, Male, Pakistani)

I don't think so necessarily change I like adapting to environments so I'm there's one version of me here that adapting to the British reality and another version of me adapting to the Greek reality, I can basically detect any kind of change I'm still growing up with them in a sense, and I'm going to see them like during Christmas and during the Easter break and then we have like the summer break as well so I won't completely lose touch. (P12, Female, Greek)

In terms of the well-being away strategies in the final stage, following the students' return home, students believed that it could take several weeks to adjust to being home, and some expected it would be easier to transition than when leaving home.

It's only 18 months if I live longer it might I need to adjust the life, but it's only 18 months so it won't be a big problem for me. (P7, Female, Chinese)

I know that probably the first month or so will be hard, but afterwards, I think I'll get used to it again. (P3, Female, German)

7.5 Discussion

This chapter presented the results of the final study of this thesis, which used a qualitative approach to explore the lived experiences of 15 international students in the UK. The analysis indicated that these students generally had positive experiences in the UK. However, several challenges and issues in the students' social and academic lives, while slightly varying, were mentioned. Despite the variation in their experiences, students shared similar strategies to manage their difficulties and used several strategies. This study provided information that could help to promote mental health and well-being among international students. Overall, the findings supported the outcomes of the quantitative studies described in Chapters 4 and 5.

Consistent with Saubert (2014), Counsell (2011), Maringe and Carter (2007), and Mazzarol and Soutar (2002), the current research found that students chose to study in the UK based on various factors, including the quality of education, the proximity to their home countries and the welcoming atmosphere towards international students. Most of the respondents had a friend or relative who had studied in the UK and who had helped familiarise them with the experiences, life, and education in the host country. Students reported preparing at least five months before arrival in the UK and searching on the Internet for information about the university, the city, and the course in which they enrolled.

Interestingly, the studies from the previous chapters showed that pre-departure planning and preparation were predictors of positive well-being during the transition, possibly that formed part of the reason why these students reported mostly positive experiences.

Probing into the well-being and experiences of international students in the UK revealed that although stress or difficulties could be encountered at any time, the first few weeks were the most arduous in terms of adapting to the new environment. All of the interviewees reported experiencing distress and feeling negative emotions. However, after overcoming this period, the participants in this study eventually adjusted well to life in the UK. This may be because the adaptation process was influenced by a wide range of social and individual variables, such as knowledge about a new culture (Ward & Searle, 1991); cultural distance, with increased similarities between the cultures and conditions of the host and home countries helping to reduce unfavourable effects (Ward & Kennedy, 1993); language proficiency (Furnham, 1993); and previous experiences overseas (Klineberg & Hull, 1979). As previously noted, most of the students in the current study had relatives or friends who had completed their degrees in the UK, had previous experience studying overseas, or acquired their education at British international schools based in their home countries. Furthermore, three students spoke English as their first language, and two students were from Western countries whose cultures resembled that of the UK (i.e., Germany and Greece). These aspects may have affected the participants, allowing them to better adjust to life in the UK.

Despite their adaptation, certain aspects rendered the initial stage of life overseas difficult for the respondents. The findings in the present study were similar to those in other qualitative studies, such as Bradley's (2000) study, which used data from the Higher Education Funding Council for England (HEFCE) and focus group discussions on investigating international student's needs in the UK, and Khawaja and Stallman's (2011)

study, which involved focus group discussions with international students in Australia. Loneliness, challenges in finding suitable accommodation, and concerns about flatmates and courses have commonly been found in research on international students, but the students in the present study claimed that most of these challenges disappeared with time.

This study also uncovered troubles related to daily routines as well as social and university life. The participants' responses showed how these difficulties differed markedly across students. For example, whereas the Chinese and Saudi Arabian students found their courses highly demanding, the German and Indian students felt their programmes of study to be easier and less stressful than those that they had pursued in their home countries. Chinese and Saudi Arabian students also identified the English language as a barrier factor in their social and academic lives. Similarly to students who had struggled with the consequences of language barriers in previous studies (e.g., Wong, 2004; Wu et al., 2015), the respondents in this research experienced stress about academic achievements; difficulties in academic writing, learning, and comprehension; and a lack of confidence to participate in class discussions or conversations with native speakers. A few of them also indicated unfamiliarity with the UK's gardening system, food, and weather, as was the case in other studies (e.g., Khawaja & Stallman, 2011; Liu & Winder, 2014; Mustafa, 2016).

The participants, particularly Kenyan students, had raised the issue of integration with local students, explaining that it was relatively easy to form friendships with other international students, but not with British students. This has been found not only in the UK, but also in the USA (Yue & Le, 2010), Australia (Khawaja & Stallman, 2011), and New Zealand (Brown & Daly, 2004). The resulting lack of interaction between foreign and local students has been ascribed to language issues (Rienties et al., 2012), discrimination (Russell et al., 2010), and pre-existing friendships among home students (Hendrickson et al., 2011; Rienties et al., 2012). Little research has been conducted on the encouragement of formal and

informal interaction between foreign and domestic students inside and outside of the classroom (Campbell, 2012; Leask, 2009). Previously published results have confirmed that the integration of international students into local communities enables an easy transition to life in a host country (Kashima & Loh, 2006), helps students perform well in their academic studies (Glass & Westmont, 2014), and makes students feel supported, satisfied and socially connected (Hendrickson et al., 2011). All of these variables have an impact on the well-being of international students.

Similar to the students' experiences reported in Sakuria et al.'s (2010) study, the experiences recorded in the current research indicated that students had come to the UK expecting to interact with domestic students and that the mismatch between their expectations and reality led to disappointment. The students nonetheless held the impression that locals were friendly towards them. It is worth noting that the participants who pointed to this issue as a problem had been living in the UK for approximately nine weeks. A quasi-experimental study revealed that students required over 14 weeks to bond well with locals and overcome cultural barriers in a multinational class (Rienties et al., 2013, 2014).

The question concerning strategies that students used to cope with difficulties or maintain well-being elicited many common responses, consistent with the findings of Tseng and Newton (2002). Amongst the most popular coping methods was talking about problems with family members or friends who were from the same country. The respondents stated that they felt more comfortable talking to someone with whom they shared common backgrounds and situations.

For academic problems, students sought help from their lecturers, personal tutors, and friends. The participants claimed that they felt supported by faculty members. Although only a few of the participants reported struggling with academic stress or finding their courses difficult, these participants reported using problem-focused coping methods to cope with

pressures from assignments and exams, making plans to study weekly to achieve their goals, and setting their deadlines. Typically, problem-focused coping is associated with positive affect outcomes.

The respondents developed social networks and friendships by joining social clubs overseen by the student union. The students also emphasised maintaining attendance in social gatherings with other students as an effective approach to maintaining well-being and a study–life balance. They also engaged in different types of activities to unwind after studying, such as sports and exercise (e.g., walking). None of the participants mentioned the use of well-being or counselling services provided by the campus or Night Line which is a service that provides emotional support to university students who struggle, over the phone from 8:00 p.m. to 8:00 a.m. This could be because, in some cultures, people do not seek professional help since none of the students reported having any major problems, or because the students were unaware of these services.

The students provided suggestions for other international students that were compatible with those in other studies in Australia (Khawaja & Stallman, 2011), and the UK (Saubert, 2014). A variety of recommendations were shared, such as arriving in the host country two or three weeks before the commencement of classes, making friends upon arrival in the destination country, and being open-minded and stepping out of one’s comfort zone. More importantly, the students suggested that achieving a life-study balance, focusing on academic work, and asking for help when needed were key.

7.6 Conclusions and Limitations

Overall, the findings illuminated the experiences of international students in the UK. Even though most of the respondents recounted positive experiences, their life abroad was not without challenges. The results reflected similarities with those of many previous studies on the well-being or adjustment of international students (e.g., Cowley & Ssekasi, 2018;

Lillyman & Bennett, 2014; Zhang & Goodson, 2011). While it is worth noting that individual differences, and the time at which the interviews were conducted, may have affected the students' responses, the present research has contributed to the body of literature on study abroad experiences. Combined with other studies, it can assist in the development of effective intervention programmes intended to target the initial stage of student life in a host country and life in class and on campus. By focusing on areas such as interaction with local students, these programmes could aid the students by reducing negative encounters and allowing the students to make the most of their educational experience abroad.

As with any other research, this study had several limitations. First, the sample comprised mainly of master's students. Obtaining perspectives from students in other years and pursuing students in other programmes, such as international medical students, may elicit different experiences, challenges, and coping methods. Second, the data was collected from only students at Cardiff University. Furthermore, Cardiff is considered a large city. Past research has found that international students sometimes face challenges unique to their study abroad environment, such as difficulties with public transport and lack of religious diversity in smaller towns (Gautum et al., 2016). Replicating this study in different university settings and cities could contribute to richer and more comprehensive findings as well as account for other variables that may affect an international student's experiences abroad.

7.7 Chapter Summary

This chapter builds on the findings discussed in previous chapters, confirming that the participants had a positive experience studying in the UK. Several stressors were mentioned, but some of these have disappeared with time. This study also provided a glimpse into interactions between international and local students in the UK. In terms of coping methods, the participants reported seeking social support, using a problem-focused approach, and adopting certain strategies for ensuring well-being, some of which were in line with studying

away strategies. These examples can add to the understanding of international students' needs, thereby preventing them from being overwhelmed by stressors and enhancing their mental and emotional health. In addition, the findings may be incorporated into the development of appropriate interventions to help international students adjust during their study abroad experience.

The next chapter will discuss in detail comparison of the findings of the previous chapters, along with the findings from this chapter, in the context of the broader literature. It will return to the main aims and objectives of this thesis presented in Chapter 1 and the implications from the findings.

CHAPTER 8: DISCUSSION AND IMPLICATIONS

8.1 Chapter Overview

The primary purpose of this chapter is to discuss the results of the four studies presented in Chapters 4, 5, 6, and 7 in light of previous research and the broader literature. It is organised in the order of the research objectives presented in Chapter 1. The limitations for the studies will then be identified and recommendations for future research, followed by potential implications of the current results for practice in educational and social contexts for international students and universities in the UK, will be discussed. Finally, the chapter and thesis will be completed with a conclusion that will synthesize the information given in the previous chapters.

8.2 Overview of the Research

Across the world, the number of students studying away from home has increased. The UK is the second most popular destination for international students in the world, after the USA. In 2018 alone, the UK hosted 458,490 international students, which amounted to 20% of students in higher education in the UK (Universities UK, 2019). Several benefits of the study abroad experience have been reported, including personal growth, acquisition of new languages and skills, and intercultural development (Dwyer & Peters, 2004).

Nevertheless, moving to a new country or environment can be a challenging and stressful life event. Chapter 2 presented a review of a large volume of published studies that have reported that international students faced a range of difficulties during their transitions into the host country, which negatively impacted their mental health. However, the vast majority of the studies on this topic have been based in the USA and have focused on the negative effect aspect of well-being, neglecting the positive effect aspect. They have also used mainly cross-sectional designs and have not taken into account stress and well-being theories. This thesis sought to bridge the gaps in the research by investigating the well-being

of international students in the UK and examining the effectiveness of the *Well-Being Away* model (2014), which proposed several practical strategies for maintaining well-being away from home and making the transition stages to and from home easier with less negative outcomes.

The theoretical framework of this research was based on the DRIVE stress and well-being model (Mark & Smith, 2008), and the methodology for the investigations was shaped by the research aims mentioned above. Thus, a mixed-methods approach was taken and four studies conducted using different designs. For the quantitative studies, similar measurements were used, namely, the student version of the Smith Well-being Questionnaire (Student SWELL) by Smith et al. (2018), the Quality of University Life Questionnaire by Smith et al. (2018), and the Studying Away Strategies Questionnaire by Smith et al. (2018).

The first study compared strategies used for international and home students on well-being, quality of university life, and studying away. The study results provided support for applying the DRIVE model in the university student context when comparing home and international students' well-being. Guided by the DRIVE model, the indirect relationships between the variables of interest were examined. In particular, the moderation effect of the individual differences (i.e., positive personality, student status, and gender) on the relationship between course demands and negative outcomes. Moreover, the mediation effects of cognitive appraisal, specifically, the effect of perceived academic stress was also investigated. Finally, the effect of the quality of university life on the relationship between studying away strategies and positive outcome were explored.

To improve methodology, a three-wave longitudinal study was conducted. Positive and negative effects were measured at three time points: at the beginning of the first semester (September 2017), at the beginning of the second semester (February 2018), and at the end of the second semester (May or June 2018). These time points were strategically selected to

examine the pattern of students' well-being throughout the academic year. The study also investigated the same factors in Study 1: the established factors of the DRIVE model, quality of university life and studying away strategies, and examined new factors, such as English language proficiency, previous experiences of studying abroad, satisfaction with academic achievement, and financial difficulties. The findings of this study led to the development of a pilot intervention study aimed to increase the usage of studying away strategies among international students.

The third study was a pilot randomised control trial with a pretest-posttest design. It examined the effectiveness of two months of email self-help interventions aimed to increase the usage of studying away strategies. Finally, to gain rich information and a deeper understanding of international students' experiences and well-being, 15 international student participants were also interviewed. The transcripts were analysed using Pietkiewicz and Smith's (2014) guide to interpretive phenomenological analyses. Table 8.1 provides a summary of the study designs, samples, and main findings, as well as full details of each study presented in Chapters 4 to 7.

Table 8.1

Summary of Studies

	<i>Study 1</i>	<i>Study 2</i>	<i>Study 3</i>	<i>Study 4</i>
Design	Cross-sectional comparative study	Longitudinal	A pilot randomised controlled trial	Qualitative semi-structured interview
Sample size	International students <i>n</i> = 391 Home students <i>n</i> = 117	T1 <i>n</i> = 312 T2 <i>n</i> = 135 T3 <i>n</i> = 104	Intervention group <i>n</i> = 9 Control group <i>n</i> = 5	<i>n</i> = 15
Main findings	<p>International students reported significantly lower academic demands and negative well-being and higher positive personality, quality of university life, and studying away strategies than home students.</p> <p>Predictors of quality of university life: Year (first-year students) Student status (international students) + Positive personality + Healthy lifestyle + Control and support + Studying-away strategies – Course demands</p> <p>Predictors of positive affect: First-year student + Positive personality + Healthy lifestyle + Control and support + Studying-away strategies + Quality of university life</p> <p>Predictors of negative affect: Other- years student Gender, Being Female – Positive personality – Healthy lifestyle + Perceived academic stress + Course demands – Control and support – Quality of university life</p>	<p>Levels of positive affect decreased significantly.</p> <p>Negative affect levels change during the four points; however, none of the changes was statistically significant.</p> <p>Predictors of positive affect: T1: Positive personality, English language proficiency, pre-departure strategies T2: Quality of university life T3: Satisfaction with academic achievement and low financial difficulties</p> <p>Predictors of negative affect: T1: none T2: none T3: Financial difficulties</p>	<p>There was a positive association between studying away strategies and well-being.</p> <p>The intervention group reported higher use of studying away strategies and scored higher in well-being than the control group. However, the differences did not reach a statistical significance level.</p>	<p>Students were happy with their experiences in the UK, felt supported by the university, and were satisfied with the available resources on the university campus.</p> <p>Students reported that the initial stage of transition was arduous, but that they adjusted as time went on.</p> <p>Sources of stress differed between students based on certain factors, including nationality and previous academic experience.</p> <p>Students who had language issues reported experiencing academic stress.</p> <p>Two students found their life in the UK to be better than that in their home country.</p> <p>Students used similar coping methods, including seeking support from family and friends, self-care, and taking part in university activities.</p>

8.3 Summary of Main Research Findings

This section summarises and discusses the main research findings of the four studies presented in Chapters 4, 5, 6, and 7 in light of previous research and the broader literature, and is organised in the order of the research objectives presented in Chapter 1.

8.3.1 Research Objective 1: A review of stress and well-being of international students

(Chapter 2)

The literature review conducted in Chapter 2 aimed to provide a general overview of the experiences of international students about stress and well-being in Australia, Canada, New Zealand, the UK, and the USA. Two databases, PsycINFO and PubMed, were used in this search, and 42 studies were included in the review. From the reviewed studies, six main sources of stress for international students were identified: (a) acculturative stress, (b) academic stress, (c) language issues and their impact on academic and social life, (d) perceived discrimination, (e) financial stress, and (f) loneliness. While most studies reported that international students faced greater difficulties and experienced moderate-to-severe levels of stress or depression, some of the sources of stress, including academic stress, financial pressure, and perceived discrimination, were common in both domestic and international students. Three studies conducted in the USA and New Zealand (i.e., Gardner et al., 2014; Hamamura & Laird, 2014; Hechanova-Alampay et al. 2002) reported no significant differences between the two groups in the levels of strain, depression, or perceived stress, but these were the only exceptions. Other studies found that international students reported higher depressive symptoms (Acharya et al., 2018), poorer physical health (Krägeloh et al., 2009) and lower life satisfaction, and lower level of social support (i.e., Khawaja & Dempsey, 2008; Skromanis et al., 2018) compared to domestic students.

Stress outcomes were also found to be influenced by a range of individual differences, including coping strategies (i.e., Gardner et al., 2014; Hsu et al., 2009; Szabo et al., 2016;

Tseng & Newton, 2001), social support (i.e., Burant, 2003; Liu & Winder, 2014; Poyrazli et al., 2004; Yeh & Inose, 2003), personality traits (e.g., perfectionism, neuroticism, and openness), English language fluency (i.e., Barron et al., 2007; Kim, 2011; Liu & Winder, 2014), length of stay in the host country (i.e., Rosenthal et al., 2008; Nilsson et al., 2008) and certain demographic factors (e.g., gender and ethnicity). For example, Asian students reported higher levels of acculturative stress (Kim, 2011; Poyrazli et al., 2004; Yeh & Inose, 2003) than European students. Associations were found between positive individual differences and positive outcomes in well-being, adjustment, and academic aspects such as performance and adjustment to the education system. For example, higher levels of social support coincided with lower stress levels. However, demographic factors, such as age and ethnicity, yielded inconsistent results. These inconsistencies were likely a result of the variety in measurement tools, sample characteristics, study locations, and university settings across different studies.

The literature review highlighted the research gaps that needed to be addressed, including the lack of use of longitudinal studies and the failure to consider both positive and negative well-being, with the majority of studies focusing on negative effects (e.g. depression, anxiety, and stress). Furthermore, the studies lacked variety in terms of location, with most studies having been conducted in the USA, making the results less generalisable. In addition, among the extensive number of studies that focused on the challenges that international students faced, only a limited number of interventions were examined to facilitate international students in overcoming these challenges. The majority of these limited interventions focused on adjustments that international students needed to make in the host country.

8.3.2 Research Objective 2: The Similarities and Differences in Well-being Between Home and International Students (Chapter 4).

The comparative study conducted in Chapter 4 considered the differences between international and home students. In this study, British students reported having a significantly lower positive personality, more negative affect, lower quality of university life, and higher course demands than international students. These findings were consistent with studies on the mental health of university students in the UK. Jones et al. (2019) compared the mental health of international and British students and found that home students had significantly lower levels of self-esteem and life satisfaction, as well as generally poorer mental health. However, with a small sample size of British students, caution must be applied, as the findings might not be transferable to other universities in the UK. The current study and Jones and colleagues' study both had a small sample size of British students and students were from one university, while Alsaad (2017) compared over 200 British students to over 500 international students from nine universities in England, found that British students reported better general mental health and perceived higher levels of social support compared to international students.

The Insight Network (2019), a mental health survey on university students showed that 21.5% of university students reported mental health problems, the most common being depression and anxiety, and 33.9% experienced severe psychological issues for which they felt they needed professional help. The survey also found that 87.7% of the sample reported struggling with feelings of anxiety. Hubble and Bolton (2019) found that academic demands, living away from home, and financial worries due to high tuition fees might contribute to increased mental health issues among university students in the UK. These factors may have applied to the current sample of British students.

It is worth noting that mental health issues were more common in female students and students in their second year and later years of university in both groups. This finding is consistent with the findings of the other studies conducted in this thesis in which female students and non-first-year students in both international and home student groups reported higher negative well-being. These findings have been published in a peer-reviewed article in the *Journal of International Education Studies* (see Alharbi & Smith, 2019).

Another important finding was that the well-being process in the two groups was similar, for example, positive personality, healthy lifestyle, and control and support over academic work associated with positive wellbeing, whereas perceived academic stress and low scores in positive personality associated with negative wellbeing. A difference between the two groups was noted in terms of course demands, which was correlated with negative and positive wellbeing in domestic students, but only with negative wellbeing in international students. This might be due to how each group perceived academic stress which will be discussed later in Section 8.3.5.

8.3.3 Research Objective 3: Well-being of International Students

8.3.3.1 Changes in Well-being Throughout the Academic Year (Chapter 5). The data from the longitudinal study, detailed in Chapter 5, confirmed that levels of positive affect changed significantly during the academic year compared with in the last six months before their courses began. The highest level of well-being was noted before students began their respective courses, with the level of positive well-being then steadily decreasing as the year progressed. This might be explained by the increase in the academic demands toward the end of the academic year, which may have negatively affected the students' positive well-being. The responses to the open-ended questions revealed that students held several specific concerns at Time 1 and Time 2. At Time 1, students were concerned with interactions with other students, weather, food, loneliness, and academics (e.g., the ability to pass their

courses), and at Time 2, academic concerns were the most common challenge. That may mean that issues reported at Time 1 had not effected well-being to the extent that academic demands had. Similar to the findings by Acharya et al. (2018), the many concerns held by U.S. university students, such as a change in social activities, and change in sleeping and eating habits, academics were the only predictor of depressive symptoms. The present study results indicated a strong influence of academic concerns on students' well-being.

In terms of negative well-being, the pattern of negative well-being was found to have changed throughout the academic year, although the changes were not statically significant ($p = .054$). While not statistically strong, this finding could offer insight into the changes in anxiety and depression levels throughout the year. Students reported the lowest scores at the beginning of the second semester and the highest scores during exams at Time 3. This finding was supported by the responses to the open-ended questions and the qualitative study, in which participants had mentioned that exams and academic demands were the main causes of stress and that other stressors had disappeared with time. They were also in line with claims by other researchers (e.g., Golden, 1973; Hechanova-Alampay et al., 2002) that the stress levels of university students were likely to rise and fall in line with the academic season or semester cycle. Furthermore, the level of negative well-being before students started their courses was slightly higher than at the beginning of the academic year, which could be explained students' reports at Time 3 that pre-arrival was the most difficult stage of their journey abroad because this stage included saying goodbye and uncertain feelings about living away from home and a familiar environment.

The longitudinal study thus demonstrated the importance of the timing of data collection. The literature on international students was mainly comprised of studies that reported international students being at risk of developing mental health issues because of high stress levels and symptoms of depression. However, these findings might be due to the

timing of the data collection, especially when only negative effect (e.g., stress, anxiety, and depression) measures were employed.

8.3.3.2 Individual Factors that Affect the Well-being of International Students.

Several variables were identified in the literature review in Chapter 2, which affected the well-being of international students. In this thesis, the longitudinal and comparative studies conducted in Chapters 4 and 5, respectively, examined a range of individual variables that affected international student well-being. These variables are presented below.

Gender. It was found in both studies that gender correlated and predicted well-being. Female students in both the home and international samples reported more experiences of negative well-being than male students. This finding is consistent not only with studies of international students or university students but also with the vast majority of research that has focused on the well-being and gender differences concerning well-being (e.g., Acharya et al., 2018; Liu & Peng, 2019; Rosenthal et al., 2006; Stallman, 2010).

Positive Personality. Data from the comparative study and the longitudinal study confirmed the association between positive well-being and optimism; positive personality was the strongest predictor of positive well-being among university students. This finding supported those of previous studies (e.g., Denovan & Macaskill, 2017; Howells & Smith, 2019; Smith & Izadyar, 2020; Williams et al., 2017).

English Proficiency. Data from the longitudinal study confirmed the association between a high level of English proficiency and positive well-being. Indeed, English proficiency affects every aspect of international students' lives and is a fundamental determiner of their social and academic adjustment. A high level of English language proficiency also increases students' sense of belonging and self-esteem. Numerous scholars (e.g., Smith & Khawaja, 2011; Taušová et al., 2019; Ward & Kennedy, 1993; Yeh & Inose, 2003; Zhang & Goodson, 2011) have found that international students with better English

language skills adjusted better to their new surroundings than those with poorer English language skills. In addition, as in Sümer et al.'s (2008) study, English language proficiency correlated negatively with negative well-being.

Satisfaction with Academic Achievement. Data from the longitudinal study showed that a high level of satisfaction regarding one's academic achievement at Time 3 was a significant predictor of positive affect. However, low satisfaction with academic achievement was not a significant predictor of negative affect. The present findings were consistent with a recent meta-analysis of 45 studies, which used objective grade point average (GPA) measures across studies, finding that low academic achievement did not necessarily correlate with low subjective well-being and that high academic achievement did not automatically predict high subjective well-being (Bucker et al., 2018). It is worth noting that academic achievement in this thesis was a subjective measure, unlike GPA, which is an objective measure. The use of an objective measure might have led to a different outcome among international students.

Financial Difficulties. Data from the longitudinal study showed that financial difficulties predicted negative affect, which had also been reported in the literature (e.g. Rosenthal et al., 2006). It should be noted that in the open-ended questions posed as part of the longitudinal and qualitative studies, only a few participants reported having financial difficulties. There are two possible explanations for this. First, the Tier 4 student visa for the UK requires students to provide documents as evidence that they have sufficient finances to cover their university fees and the cost of living in the UK. Thus, international students cannot obtain this visa if they do not have enough funds to cover university costs. Second, the majority of the participants may have been granted scholarships to study abroad or may have been from Gulf countries (i.e., Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates), which are known to be relatively wealthy. Kono et al. (2015) found that international students, who were granted scholarships were less likely to suffer from financial

issues and depression, suggested that financial conditions could impact international students' mental health, which is confirmed in this thesis.

Previous Experiences Studying Abroad. In line with other studies (e.g., Adler, 1975; Church, 1982; Zhanga & Goodson, 2011), previous experiences abroad positively correlated with the higher well-being of international students. The longitudinal study showed that previous experience of studying abroad was associated with less negative outcomes at the beginning of the academic year. This might be because the students who were studying abroad for the first time faced more challenges and concerns at the post-arrival stage than their experienced counterparts.

Additionally, Ward and Rana-Dueba (1999) found that the length of stay affected international students' sociocultural adjustment, but not their emotions in terms of positive and negative affect. This was also somewhat supported by the finding of the comparative study; second-year students and above reported higher negative well-being compared to first-year students. This might be because students in later years have higher course demands, thus leading to higher negative well-being or lower positive well-being. In conclusion, the findings presented here highlighted the influence that individual differences could have on the well-being of international students.

8.3.4. Research Objective 4: The Experience and Challenges Faced by International Students and Their Coping Strategies (Chapter 7)

The qualitative study conducted in Chapter 7, through a series of semi-structured interviews, offered rich data on the experiences of international students, including the challenges they faced. The following subsections discuss the experience of international students in the UK, challenges and issues students faced in social and academic life, and their coping methods.

7.3.4.1 Experiences of International Students. In general, the students reported an overall positive experience of international study in the UK and also reported feeling supported by their universities and satisfied with the resources available to them. All 15 students reported that their academic experiences in the UK were better than those in their home countries. Furthermore, two students claimed that their lives in the UK were better than in their home country for a variety of reasons, such as better life circumstances and environment that helped them to prompt healthy lifestyle. These findings may explain the findings of the comparative study in Chapter 4, in which international students reported a higher quality of university life and lower negative affect than home students. These results were consistent with the findings from a report by the UKCISA (2016), which found that 76.8% of the sample had a positive experience and enjoyed their courses.

8.3.4.2 The Challenges Faced by International Students. The students reported challenges in their responses to the open-ended questions posed in the longitudinal study and interview study, outlined in Chapters 5 and 7, respectively. Some challenges were similar to those identified in the literature review, including academic stress, language issues, homesickness, loneliness, the struggle to find suitable accommodation, difficulties in adjusting to the weather and food, a lack of interaction with local students, a lack of support and high costs of living. It is important to note that the challenges reported by the students differed depending on their ethnicity or nationality, previous educational experiences, and academic skills. For example, Saudi and Chinese students reported the English language difficulties as a source of stress that affected their academic and social life, whereas, Indian and Kenyan students reported that courses were easier compared to their previous experience in their home countries. Furthermore, all 15 students in the interview study reported that with time, they were able to overcome some of the challenges, such as finding accommodation, and reported that the first two weeks of their international experience had been the most

difficult. This finding is in line with the findings of Khanal and Gaulee (2019), who categorised the challenges faced by international students according to three different stages: the pre-departure, post departure, and post-study stages.

8.3.4.3 The Coping Methods of International Students. In terms of coping methods, it was found that students used various coping methods, with the most common being talking about their problems with someone else (i.e., seeking social support). Students shared their problems and emotions with their friends, especially those who had similar experiences or were from the same country. It is worth noting that the students emphasised the importance of making friends with students from the same country and with those who spoke their first language. They also valued having friends with the same ethical views. These friendships were essential sources of support for the students. In addition, students reported using problem-focused practices, such as seeking information from academic staff, improving their time-management skills, and ensuring that they were well-organised as coping methods for academic problems, these findings are consistent with the findings of Islam and Borland (2006).

The students in the present study reported using a range of self-help methods to cope with the challenges of studying abroad. These included practising self-care and positive thinking, joining and engaging with student union societies, and exercising. Interestingly, none of the participants in the longitudinal or qualitative studies reported using the on-campus well-being services. However, other studies (e.g., Hyun et al., 2007) have noted that international students tended not to seek professional help or use the well-being services available on university campuses. Plymouth University investigated the factors barring international students from visiting the university counsellors and found that 71% of the 102 respondents thought they should sort their problems by themselves, of which 35% felt their problem not important enough, and 32% did not know about the service (UKCISA, 2016).

8.3.5 Research Objective 5: Studying Away Strategies, Quality of University Life and Well-being

Studying away strategies and quality of university life were the focus of the current research. Across the quantitative studies, discussed in Chapters 4 to 6, a positive association was found between studying away strategies and quality of university life. Higher quality of university life was also associated with positive affect. These findings supported Sirgy et al.'s (2007) model that university life was only one of many domains of a student's life that affected the student's overall subjective well-being. Additionally, the current study suggested strategies that would enhance the perceived quality of university life and thereby improve students' well-being.

The effectiveness of studying away strategies was evaluated using different methods. The results of the comparative study in Chapter 4 showed a significant association between positive affect and studying away strategies. Importantly, studying away strategies was the strongest predictor of the quality of university life. Further investigations on the relationship between these three factors showed that quality of university life mediated the association between studying away strategies and positive affect, meaning that quality of university life was a causal link between studying away strategies and positive affect. Similarly, in the longitudinal study in Chapter 5, the strategies were examined during each respective relevant time point throughout the academic year, and the results found that pre-departing strategies were associated with positive affect at the beginning of the academic year. None of the other strategies observed at the second and third points significantly predicted positive well-being, possibly because the regression model included the quality of university life at Time 2 (which mediated the association between the studying away strategies and positive outcome as shown in Chapter 4) and timing of data collection at Time 3, which was at the examination period. The effectiveness of the strategies used when returning home and after should have

been examined after the students had completed their courses and re-entered their home countries.

Moreover, student status (Home/International) was found to moderate the association between studying away strategies and positive affect. This relationship was stronger in international students, meaning that the strategies might not benefit home students' well-being as much as they would international students. A possible explanation for this might be that the short geographical distance from home increased UK students' personal control over visits home and decreased the differences between the home environment and university environment (Fisher et al., 1985).

The findings presented in Chapter 4 and Chapter 6 showed a possible reverse causality between studying away strategies and negative well-being, where those students having a high level of negative well-being were likely to start using the studying away strategies, which means that having problems might prompt the use of studying away strategies. However, this finding needs more empirical support because the quantitative studies found there was no significant correlation between the strategies and negative well-being. The significant association between negative well-being and the strategies in Chapter 4 most probably due to suppression effects as the strategies were only significant when the quality of university life entered in the regression model.

Overall, the findings were in support of the use of the well-being away strategies, which provide concrete guidance on how international students can improve their quality of university life and well-being. The findings also made significant contributions to the current pool of knowledge about international students' general well-being and their well-being away.

8.3.6. Research Objective 6: The Relationships Between Perceived Academic Stress, Course Demands, Control and Support, Quality of University Life, Individual Differences and Well-being Outcomes

The data from Chapters 4 and 5 confirmed the key associations and direct relationships between DRIVE model components (i.e., university characteristics and individual differences) and well-being outcomes. Positive personality, course demands, control, and support over academic work and quality of university life were directly associated with well-being outcomes, where positive factors predicted positive outcomes and negative factors predicted negative outcomes. Having a healthy lifestyle was found to be a significant predictor of positive well-being in Chapter 4 study, but not in Chapter 5 study. This may have been due to a lack of variation in the sample in the latter study. These relationships were similar amongst both the international and home students, which means that the well-being process was similar in the two groups. The only exception to this was the role of course demands, which had a dual effect among British students and related to their positive and negative outcomes. This finding confirmed Smith's (2019) suggestion that the workload was initially perceived as stressful, but could also increase students' motivation. Unlike for domestic students, course demands were linked with negative affect amongst the international students, meaning that international perceived academics as stressful. In other words, British students perceived course demands as a challenge that enhanced their learning, while international students perceived them as a threat.

Another important element adapted in the DRIVE model was the cognitive appraisal. Specifically, perceived academic stress mediated the relationship between course demands and outcome. The findings presented in Chapter 4 supported the indirect effects, of course, demands through perceived academic stress on negative outcomes, showing that course demands indirectly influenced negative affect. This finding suggested that course demands

did not directly affect well-being. Instead, the course demands affected well-being through perceptions of stress. Thus, to decrease the level of negative affect, students should adopt positive coping strategies and skills needed to overcome academic challenges.

Meanwhile, individual differences, such as student status, gender, and positive personality, were not statically significant moderators of the relationship between course demands and negative effect. As mentioned in the previous section, an interaction was found only between studying away strategies and student status on a positive outcome. It is worth noting that in the original DRIVE model, interactions between work demands, coping methods, and attributional styles were assumed, but these components were not measured in the current thesis.

Overall, the findings confirmed the major components of the proposed research model and supported the application of the DRIVE model to explore and understand the stress and well-being of university students and international students.

8.4 Theoretical and Methodological Implications

The research was undertaken in this thesis further extended research on students' well-being and well-being away. First, the research addressed the need for more comparative studies between domestic and international students and the need for longitudinal studies. Moreover, the research built on the multi-dimensional approach of the DRIVE model, which offered a flexible approach and allowed for the inclusion of several variables to investigate stress and well-being of international students, both particularly limited in the literature of international students (Zhang & Goodson, 2011).

Second, the findings from the studies introduced in Chapters 4 and 5 showed that several factors explained students' well-being, such as studying away strategies and quality of university life. Furthermore, the interview study contributed valuable insights into understanding students' experiences and confirmed the findings of the comparative study in

Chapter 4. For example, students reported in the interview study that they generally had positive experiences and found their quality of university life better than that in their home countries.

As illustrated above, the timing of data collection was also important to consider when examining stress and well-being among university students because stressors differ at different time points throughout the semester; some issues were more prevalent across time points, such as academic concerns, while others were more time-specific. Additionally, the current findings demonstrated that the well-being processes of international and home students were more similar than different. Also, this research confirmed the mediatory role of perceived stress on the relationship between course demands and negative affect, as well as the benefits of applying studying away strategies for improving the quality of university life and well-being.

8.5 Summary of Research Limitations

Although the thesis was most successful in fulfilling the objectives presented in Chapter 1, several limitations should be highlighted. In particular, five limitations were identified, which should be addressed in future studies.

The first limitation was with regards to the sample of participants used in the research of this thesis. The small sample size of British students is unlikely to represent the entire university student population of the UK. Furthermore, the ability to access potential participants was limited, as the International Support Office at Cardiff University was unable to distribute the survey link to international students at the university due to the university's policies. It was thus difficult to gain a larger sample, as not all international students were contacted. Furthermore, although a variety of recruitment strategies were used, including conducting face-to-face communications with potential participants, communicating through online platforms (i.e., Facebook and Twitter), sending emails to international student

communities and student unions, and conducting on-campus advertising, half of the sample in the longitudinal and intervention studies were Arab ethnicity, meaning that the sample may not reflect the entire population of international students in the UK.

The second limitation was the self-selection method used in the online survey. Third, all questionnaires were presented in English, which may have confounded the results due to the varying proficiencies of the participants. Although all of the participants passed the International English Language Testing System exam, were enrolled in English-speaking universities, and have been asked about their English language proficiency, the level of comprehension of the survey questions could have varied from student to student.

Fourth, the methodology used in the longitudinal study in Chapter 5 did not allow for cause-and-effect relationships to be drawn because not all of the measurements (i.e., course demands, strategies related to third time point, and satisfaction with academic achievement) had been completed at all three of the time points, because it was unrealistic to ask about most of the predictors at the first time point, September 2017, during the enrolment week. Additionally, the high attrition rates in the longitudinal study (66%) and the pilot randomised control trial (68%) led to a lack of power in the analyses.

Fifth, the use of structural equation modelling (SEM) may have been more effective for testing the theoretical model and increasing the understanding of complex relationships. Instead the hierarchical regression analyses and PROCESS macro were used in the comparative study to investigate the direct and indirect relationships between the variables of interest. Moreover, as this research was conducted as part of a doctoral thesis, analyses of the interview data in Chapter 7 and the open-ended questions in Chapter 5 were conducted by only one researcher. This may have affected the quality of the results, as it is recommended that qualitative data be analysed by at least two researchers to ensure reliability and increase the trustworthiness of the analyses (Anderson, 2010). Despite these limitations, the findings

of each of the studies proved useful, as they stimulated further discussions on the topic of well-being away and student well-being among international students.

8.6 Recommendations for Further Research

As the studies were completed, more issues emerged that could not be addressed in the present thesis due to the limited scope of the research. In particular, six areas that could be explored in further research have been identified.

First, future prospective studies on well-being should use a longitudinal design to explore the baseline levels of international students' well-being for valid comparisons of well-being before and after completing their studies and returning to their home country. Furthermore, international and home students should be compared, and these comparisons should include factors such as study hours, weekly work hours, academic achievement, financial issues, and coping strategies. In addition, it would be worthwhile to investigate the well-being of British students and their needs, focusing on students in their second year and later to understand why their levels of well-being decrease. Ideally, a longitudinal study would be able to provide answers to these questions.

Future studies should also examine the multidimensional nature of perceived social support and its effect on well-being, quality of university life, and academic achievement. Social support has been linked with positive outcomes for international students (Brisset et al., 2010; Rienties et al., 2012; Zhou et al., 2008), and seeking social support was noted as a common coping strategy for international students in the qualitative study in this thesis. Investigating perceived social support would provide further insights into how support programmes could benefit international students.

The third recommendation for future studies is to conduct interviews with well-being counsellors and psychologists on university campuses to gain additional insights into the differences between international and domestic students in terms of the causes of stress and

factors that affect their well-being, this may also help to overcome the limitation of self-selection. Furthermore, this research found that the quality of university life had a strong influence on well-being. Thus, more research should examine the quality of university life in terms of which domains (i.e., academic aspects or social aspects) are strongly linked to student's well-being and academic performance and the factors that influence it.

Fourth, further intervention trials for home and international students are needed. This study found that sharing self-help information could lead to a positive outcome. Thus, combining self-help interventions with sessions available on the university campus would be more effective in enhancing well-being. Furthermore, extended follow-ups could determine whether the interventions have long-term effects. Moreover, as positive personality (i.e., optimism) was linked to positive outcomes throughout the studies, further intervention trials to increase optimism among university students would likely enhance students' well-being.

A mass of different nationalities or ethnicities are all clumped into one category can be helpful to some extent to reveal what the experience of studying abroad itself does to human beings in general, however, is also challenging because of the diversity in ethnicities, cultures, and educational backgrounds involved, making the findings difficult to generalise and lead to lack of uniformity of the samples, which makes controlling variables difficult and statistical analyses weaker. Therefore, the fifth recommendation for future studies is to consider a larger sample involving a variety of ethnicities would allow for further comparative analyses of well-being, quality of university life, and coping strategies.

Finally, as studying away strategies were the strongest predictor of quality of life and quality of life predicted positive outcomes, further studies may consider developing a training programme to encourage individuals who are studying or working away from home to use well-being away strategies.

8.7 Implications for Practice

Viewed together, the findings and insights gained from the four studies, presented in Section 8.3, had several implications for educational and social contexts. The results of this thesis showed that international students experienced issues when studying abroad, especially at the beginning of their studies. Thus, it would be prudent for universities and other actors involved in international student affairs to consider pre-arrival plans for international students. Currently, most UK universities use *buddy schemes*, which involve one British student helping three to seven new arrivals during induction week and providing general information about the city, the university, and university life. The results from this study have suggested that it would be better to use peer support from students from the same country or those who had previously completed the same course. This would help reduce the stress and anxiety of international students. As most universities send pre-arrival information and advice to students entering the UK from other countries, they should provide pre-departure strategies and stress the importance of being mentally prepared for moving away from home, as international students may have different expectations of their studies abroad.

In terms of developing the right interventions that target international students' needs, the first step may be to encourage students to complete surveys before and after arriving at the university, throughout the academic year, and after completing their courses. Moreover, professors, lecturers, and personal tutors should increase the levels of interaction between home and international students during in-class group work. This would be extremely beneficial and would enrich the experiences of both groups.

As it is very rare for international students to seek formal or professional help, well-being services on university campuses could develop group psychoeducational workshops to allow students to share ideas or train in the use of studying away strategies and other useful coping strategies.

For international students, pre-departure planning is essential for a smooth transition into the new environment and for maintaining well-being. This includes adjusting expectations about the experiences of studying and living away from home, parting with family and friends, setting up a social support network, and increasing knowledge about the country and education system as well as related information about courses. Arriving at the host country two weeks in advance of the start of the course is also helpful for a smooth transition and gives students ample time to settle into their new environment and find accommodations, as finding suitable accommodations has been reported to be a concern for some international students. Additionally, joining student clubs and societies available on university campuses can help students to make friends and overcome feelings of loneliness and isolation. Finally, and possibly most importantly, improving English language skills may help students academically and socially. It may also help students adopt and improve their study-life balance by improving efficiency and time-management skills, which impact their experiences abroad and enhance their well-being.

8.8 Conclusions

This thesis empirically investigated the well-being of international students in the UK and evaluated the effectiveness of studying away strategies on well-being and quality of university life. The main findings of the thesis have been summarised in six main points.

- The well-being of international students changed over the academic year, with students experiencing the highest level of positive affect before they began their courses and the highest level of negative affect at the end of the year during the exam period.
- British domestic students reported higher negative affect, higher course demands, and lower quality of university life compared with their international peers. This can be explained by the likelihood that international students enjoy a higher quality of university

life in the UK than in their home countries; international students have fewer financial worries, and some find a better life in the UK compared to in their home country.

- International students generally reported having a positive experience in the UK, but that did not necessarily mean that they did not face challenges, as students indicated that they struggled with both academic and social issues.
- The use of studying away strategies was associated with a higher quality of university life.
- Five factors predicted negative well-being in university students: being female, being a second-year student or above, perceived academic stress, high course demands, and low quality of university life. Positive well-being was predicted by having a positive personality, ensuring a healthy lifestyle, having control and support, and having a high quality of university life.
- The current research findings have supported most of the relationships and mechanisms proposed in the DRIVE model.

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Appendix A: Study 2

Informed Consent

I understand that my participation in this project will involve completing a questionnaire on studying abroad and well-being at three different periods during this academic year (beginning of the first semester, beginning of the second semester and at the end of the second semester), which will take no more than 10 minutes in each phase.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to avoid responding to any questions that I feel uncomfortable answering and that I can discuss my concerns with Eman Alharbi or Professor Andrew Smith at the e-mail addresses below.

I understand that the information provided by me will be **held confidentially**, such that only Eman Alharbi and Professor, Andrew Smith can trace this information back to me individually.

The information will be retained for up to 5 years, and I understand that I can ask for the information I provide to be deleted at any time and I can have access to the information at any time. I also understand that at the end of the study, I will be provided with additional information and feedback about the purpose of the study. By checking the box below and continuing, I consent to participate in the study conducted by Eman Alharbi and under the supervision of Professor Andrew Smith Cardiff University.

I have read and understood the above statement and agree to participate.

Contact Details:

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General Instructions

Thank you for agreeing to participate in this study, you will be asked to complete questionnaires about well-being and studying abroad experience. This study is three phases long, Time 1 (pre-arrival or at the beginning of the first semester), Time 2 (at the beginning of the second semester, and Time 3 (at the end of the second semester). The questionnaires for each phase should take you no more than 5 to 10 minutes to complete.

We would like to request that you be as open and honest as possible in answering these questions, there are no right or wrong answers.

If you have decided to participate in this study, please understand your participation is voluntary, and you have the right to withdraw your consent or discontinue participation.

Thank you.

Time 1 (September – October 2017)

Section 1:

Demographic Questionnaire

- Please indicate your gender (0 male/ 1 female)
- Please indicate your age years
- Type of program: (0Undergraduate/ 1Master/2PhD)
- Marital status: Single Married
- If you are married, is your family with you:
- Please indicate your ethnicity: (0White – 1Asian– 2Black – 3Arab – 4Mixed– 5Other)
- Please indicate your nationality:
- Have you studied outside your home country before? (Yes / No)
- What is your present level of English fluency?

1 = very poor, 2 = poor, 3 = average, 4 = good and 5 = very good (fluent).

Section 2:

Positive and negative affects

How stressed are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How anxious or depressed are you?

Not at all

Very much so

How happy are you?
1 2 3 4 5 6 7 8 9 10
Not at all Very much so

How satisfied are you?
1 2 3 4 5 6 7 8 9 10
Not at all Very much so

Section 3:

SWELL Well-Being Questions

A healthy lifestyle involves taking exercise, eating a balanced diet, not smoking, not drinking excessive amounts of alcohol, and not being overweight. To what extent do you have a healthy lifestyle?

Not at all Very much so
1 2 3 4 5 6 7 8 9 10

People often describe themselves as being positive (“seeing the glass as half full”) or negative (“seeing the glass as half empty”). How would you describe yourself?

Very negative Very positive
1 2 3 4 5 6 7 8 9 10

How satisfied are you with life in general?

Not at all Very much so

1 2 3 4 5 6 7 8 9 10

How much stress have you had in your life in general?

Very little A great deal

1 2 3 4 5 6 7 8 9 10

Would you say you are generally happy?

Not at all Very much so
1 2 3 4 5 6 7 8 9 10

Would you say that you generally feel anxious or depressed?

Not at all Very much so

1 2 3 4 5 6 7 8 9 10

Overall, to what extent do you feel the things you do in your life are worthwhile?

Not at all Very much so
1 2 3 4 5 6 7 8 9 10

Section 4:

Studying away Strategies Questions

To what extent did you carry out pre-departure planning with family or friends?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent did you discuss expectations of how being apart will feel?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent did you say “goodbye” properly and in a way that acknowledges the reality of the coming separation?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent did you agree on likely communications while away?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Section 5:

Open-ended Questions

What concerns do you have about studying and living in the UK?

Section 1:

Positive and negative affects

How stressed are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How anxious or depressed are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How happy are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How satisfied are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Section 2:

SWELL Well-Being Questions

How demanding do you find your course (e.g. do you have constant pressure, have to work fast, have to put in great effort)?

Not at all demanding

Very demanding

1 2 3 4 5 6 7 8 9 10

Do you feel you have control over your academic work and support from staff and fellow students?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How much stress do you have because of your university work?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Are you satisfied with your course?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How physically or mentally tired do you get because of your academic work?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Have you had an illness (either physical or mental) caused or made worse by your academic work?

Yes No

Do you ever come to university when you are feeling ill and knowing you can't work as well as you would like to?

Yes No

How efficiently do you carry out your academic work?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Do you find your academic work interferes with your life outside of university, or your life outside of university interferes with your course?

Never

Very often

1 2 3 4 5 6 7 8 9 10

Are you happy at university?

Never

Very often

1 2 3 4 5 6 7 8 9 10

Are you anxious or depressed because of academic work?

Never

Very often

1 2 3 4 5 6 7 8 9 10

Section 3:

Quality of Life Questions

To what extent do you feel that your university life is easy and efficient?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you feel that being a student at university promotes a healthy lifestyle through a well-balanced diet and exercise.

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you feel you are valued at the university?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent does the university provide a good physical environment?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent does the university strengthen bonds among individuals and facilitate access to culture and entertainment?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent does the university promote learning and progress?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Section 4:

Studying away Strategies Questions

To what extent have you acknowledged and adapted to being away?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you live the reality of being away without over-reliance on technology (your phone, e-mail, Skype or social media)?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you make an effort to unwind after academic work?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Section 5:

Open-ended Questions

What is the most difficult challenge you faced in the last four months, and what were your coping strategies?

Time 3 (May/June 2018)

Section 1:

Positive and negative affects

How stressed are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How anxious or depressed are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How happy are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

How satisfied are you?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Section 2:

Studying away Strategies Questions

To what extent do you expect to prepare for your return home?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent will you change activities before returning home to help the transition?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you consider that you and matters at home, or your perceptions of these, may have changed while you've been away?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent will you "stage" your return (e.g. break up the journey home)?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you expect to relax and unwind on the journey home?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you expect to take time to adjust to being in the home rather than the university environment?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

To what extent do you expect to act on the realisation that time may be needed to psychologically adjust to being at home?

Not at all

Very much so

1 2 3 4 5 6 7 8 9 10

Section 3:

Open-ended Questions

What has been the most challenging part of your journey in studying abroad (e.g. pre-arrival, saying goodbye or being away), and what challenges you have faced during the year?

Debriefing Statement

Thank you for taking the time to complete the questionnaire on well-being and studying away from home. The results of this study will identify how international students' well-being changes over time and what are the factors that could have impacts on the level of well-being while being away from home.

Your responses to the questionnaire **will be held confidentially**. Only the research team can trace this information back to you.

If you have any queries or concerns about the research at any phase, please contact Eman Alharbi or Prof. Andy Smith on contacts details below.

Thank you again for your participation.

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Appendix B: Pairwise Comparisons (Bonferroni adjustment) for Negative Affect Scores

Table 1: Pairwise Comparisons (Bonferroni adjustment) for Negative Affect Scores

(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig.	95% CI	
					Lower	Upper
1	2	.340	.325	1.000	-.534	1.214
	3	1.505	.570	.057	-.028	3.038
	4	.117	.609	1.000	-1.522	1.755
2	1	-.340	.325	1.000	-1.214	.534
	3	1.165	.637	.422	-.549	2.879
	4	-.223	.660	1.000	-1.999	1.552
3	1	-1.505	.570	.057	-3.038	.028
	2	-1.165	.637	.422	-2.879	.549
	4	-1.388	.642	.197	-3.115	.338
4	1	-.117	.609	1.000	-1.755	1.522
	2	.223	.660	1.000	-1.552	1.999
	3	1.388	.642	.197	-.338	3.115

Appendix C: Responses on Open-ended Questions

TIME 1

What concerns do you have about studying and living in the UK?

1. What concerns do you have about studying and living in the UK?

2. Mostly is a future job opportunity. I am worried about what kind of job am I going to have after I finish my degree in the UK and even what can I probably do when I go back to my country. My friends in my hometown all got their jobs, and they are able to live on themselves; some of them even got married, these are the factors that generate pressure on me.

3. I cannot follow teachers and manage my money

4. Financial independence, establishing connections with the community, enjoying the new environment

5. In general, I am happy within this journey because I am looking to discover a new culture and engage with foreign people. There are no concern points in my study only those who related to my academic progress.

6. Safety issues Difficult to find a place as an international student.

7. The course is a little bit difficult. the access to music opera and concert is limited

8. Different language. Different living habits and food. heavy schoolwork

9. NONE SO FAR

10. NOT BE ABLE TO FIND ACCOMMODATION.

11. GRADUATION

12. Working. Language.

13. THE COURSES ARE TOO DIFFICULT. MISS ALL THE CHINESE FOOD.

14. Cost of living. difficulties of communication stress of study miss home

15. How to pass the exams and graduate?

16. LANGUAGE. FRIENDS.

17. Stress because of the lecture. Not interested in the content of lectures.

18. 1- language barriers. 2-health (work out regularly) 3- time management (sports-entertainment- study balance) 4- academic knowledge acquisition.

19. Essay!

20. Security

21. Academic writing. Language, weather and food.

22. Poor oral English skills. And I am also concerned that it can I handle well with my concerns.

23. When I come to the UK in July, I found it very difficult to talk with English native

speakers because of my language. Language barriers really cause some problems. I have to prepare very well before a lecture.

24. 1- where and how can I get books that I want to read. 2- how can I improve my English skills (listening, writing and speaking). 3- can I be a friend with local students or other students from other countries. 4-are there any good places that I could go with my friends and how can I be their member?

25. SO FAR SO GOOD

26. Have some problems with understanding lectures

27. Study (Marks)

28. Adapting to the culture while trying not to miss my own too much. Finding the "right" group of friends. Being alone when I want company. Not being the best I could be academically (disappointing myself and my family)

29. money

30. No concerns

31. Scared of losing someone I love in my home country, family members especially. I am scared if suddenly receiving a phone call with bad news.

32. My spoken and written English is not good enough, which brings me difficulty with communicating with teachers and classmates, especially when I'm trying to express my opinion with them. They cannot understand me sometimes. Also, there're some students in my class who have divergence with Chinese student in the class. They are curious about our country's condition and somehow say offensive words (or maybe not offensive for them). Some of them try to raise discussion or debate and even challenge us on whatever democracy, human right...etc. I'm tired of that kind of debate and dislike it at all. Even the language barrier makes me more upset about the cultural difference. I can't feel the "real" thing between students from different countries. Sometimes I think they are fake. And they debate just in order to debate intentionally, challenge us, instead of friendly communicating. After all, they will hold their original opinion anyway.

33. Not knowing if I pass the courses and, having to pay back my sponsorship. Losing connections.

34. LANGUAGE

35. sometimes I feel lonely, and hard to be part of the students in my university

36. I felt excited. I was only afraid not to find any friends and having too less money to survive. Sometimes I was afraid of a different language in the lecture

37. Studying: I am not a native speaker, so language will be still my first concern. Though this is my second year in the UK, last year I was in an international college. My English has improved a lot compared to last year. But spent 3-month summer holiday at home and moved to a new environment. I found that I need to get used to using English again. For example, I found it a bit difficult to read the materials for lectures and seminars. Living: Taking care of myself is okay for me. But making some new friends is a challenge. I found that it's a bit frustrated and worried. University is a large community, and you will meet lots of new people, and probably just see them once. For me is too big that I cannot actually find 'friends. I won't expect to have that much close friendship, but I do think I need some friends for a

new stage. (No offence, sometimes I found that some people cannot realise the different cultural background and they tend to find friends with the same background, which I would say even if I would like to join them, they are not that much welcome. But I know some of them are nice and willing to hear as well:)

38. Security issue

39. Financial issues and communication issues.

40. I actually feel worried about the possibility of Brexit being fully executed while I am in the UK and one of its measures being to force any person foreign to this country to return to their homelands, resulting in me and many other people not being able to complete my Erasmus course.

41. What is the recommended target

42. It's a great chance of being here to gain a lot of things like friends, cultures and life lessons. But all I would like to say is nothing is easy or either hard, everything we need is to have patience and tryna manage everything.

43. Losing friends from my home country Breaking up

44. The mindset of British people is too different from people from my country, so we don't get on well.

45. Not much, it's just hard making friends and adapting to a new culture and being in a new environment.

46. further jobs

47. publish paper

48. Culture shock

49. Not much

50. My first and foremost concern was not feeling capable enough to fit in, make friends and live on my own. Today I am happier, but sometimes I feel very lonely and disappointed with the fact that Erasmus experience has not lived up to my expectations, for people may idealise what living and studying abroad is like. Nevertheless, I have the feeling that this is generally a good experience to grow; living by myself and away from my beloved ones, I got to know myself more, and I acknowledged which my insecurities are, so that in the future I may be able to work on them and feel more confident.

51. Problem with enrolment in the right and most useful modules for my studies. I was not prepared enough for the assessments, very different system, and kind of exams. Nobody really helped us Erasmus students doing anything or explained to us practical things as writing essays.

52. Living in colocation with younger people. Not being able to express myself.

53. It's a new system and way of living that I don't really know, so there are still few lacks information about some subject like the assessments and the UK marking system for example that are not the same. It is a source of stress that is not very easy to deal with when you are already far from your home and your own country.

54. The way they teach and the way they do their assignments (essays)—a lot of work on your own through readings. Lectures are not very complete.

-
55. not fulfil the expectations people put over Erasmus students
-
56. The language barrier, being far from my family and my friends, feeling lonely
-
57. To learn as much as possible (regarding education and life).
-
58. I do not really have any concerns about studying and living in the UK, although cooking is, as it is the first time, I have to make my own meals.
-
59. Different university organisation Different food Living alone
-
60. I can't start my therapy to change my body (transgender person) and can't afford the faster method. The meat. The buses system.
-
61. I'm concerned about the financial situation
-
62. Discrimination
-
63. Ability to adapt to the study and culture in a short period of time
-
64. Wasting time and money
-
65. I am losing my motivation and spirit. Feel defeated from the inside. I am giving up living and focus only on school. I am not seeing the point of what I am doing. I don't want to put my life on hold. I am failing to balance my life.
-
66. It is helpful, informative, learn a lot and gain knowledge and experience
-
67. - How to study very hard in order to pass this third year with high grades, and not to feel depressed because all of my time is only in the library and between books, which is something I don't really like. - Moreover, I'm very, very, very very afraid of failure, and then not to stand to try again. - No living concerns.
-
68. Expensive cost of living, sometimes misunderstand the country roles, poor knowledge about research skills, poor knowledge for communication skills with the supervisor.
-
69. Very difficult to deal with native people and they consider Muslim as bad peoples Live very expensive and studying here is a totally different style from my country
-
70. Old country. Need to be modern.
-
71. There are no worries about studying in general. However, everyone might fear of being failed after long years of studying
-
72. The stupid behaviour of some young and drunk ppl.
-
73. Good chance to contact with other people
-
74. I am just concerned about how my family will accommodate life in UK
-
75. English language and the challenges of study in this language as well as the change of culture compared to my country
-
76. Thank God, I am very happy to experience the situation of being international student and study abroad, I think this experience contributes to improving my personality though I always miss my country, family, friends, and, in general, my life in Saudi, as I always feel of foreignness.
-
77. How to balance my time between my family (children) and concentration on my study
-
78. Different culture. New language. A new way of living.

79. Nothing Living a decent and enjoyable life out here
-
80. need free student without any other responsibilities
-
81. Failing exams. Visa issues. Money issues
-
82. Living expenses, raising a child, and a combination of both
-
83. Nothing
-
84. language
-
85. English barriers
-
86. I am still trying to adapt to it
-
87. Living expenses
-
88. 1- Language barrier (Scottish pronouns inside the classroom from both teacher and student) and most of the time, it's difficult to catch-up all words. 2- Using numerous diversity of academic vocabulary (evaluate the student inboard as a national one). 3- Time management in self-learning because the international student takes longer times in self-learning than the national student.
-
89. Living alone without friends The safety of the place. The racism regarding the religion, e.g. Islam
-
90. Just study
-
91. Social life- weather
-
92. Living expenses
-
93. Nothing
-
94. Not too many, mostly about the high costs, in terms of living, i.e. accommodation and food. However, I was not concerned about it, simply aware that it would be more expensive than in my home country.
-
95. No concerns. I really like it here. My only problem the fact that I am struggling to make friends
-
96. Culture shock Financial stability Abandonment during holidays
-
97. Since English is not my first language, I am a little worried I will be able to fully participate in seminars discussions and write my essays and exams properly. I also have concerns about high living costs in the UK.
-
98. I am having a decreased academic success and some security issues about my neighbourhood.
-
99. Winter, being away of support (family & friends) and ras
-
100. I have concerned about safety while studying overseas. Being away from my parents, never know what could happen here—always worried about getting a new good place to live etc.
-
101. Studying in the UK is a good chance, but it is difficult for some student especially those who have children however living in the UK is nice
-
102. I think I prefer American Beer. And eating American roast steak

103. There is nothing to worry about. My biggest worry is that I speak American English, but in Britain, it is British English. I feel a little bit different in pronunciation and grammar. I do not want people to think I'm foreign and look down on me.
-
104. The costs of living, the workload and high demand for work and getting a job
-
105. 1) Different education system 2) Registration with the police and the necessity of updating my record
-
106. I was away from my husband. My teenage girls blame me for bringing them without their consent, although I have discussed this with them and showed its pros and cons to them. Feeling guilty about taking some quality time for myself on the expense of either my daughters, third baby or study
-
107. - Safety of being a Muslim and an international student - Language barrier sometimes
-
108. Being away from home
-
109. The content of the subject is hard. The assessment criteria are strict.
-
110. I would say that British people do not make any effort to interact with me or trying to develop a deep and strong friendship. This candid, empathetic relationship with people is the one that I am missing, and then it makes me feel vulnerable and alone. The fact that I miss my family and my culture makes me feel that I can't be acknowledged that I will have to live here for the next three years. Although I try to get involved with people from different cultures and that I am also part of the Latin American Society, I still feel a lack of belonging to this place. Likewise, PhD is not encouraging myself to make me feel optimistic about my future.
-
111. It is a different environment, culture, and day-to-day life. It is hard to adapt if you do not have any friends, family, or relatives before you come if this is the case, it is vital for a normal student to make friends. In my view, it is much easier for internationals to make a friendship with other internationals than with UK students. I believe the diversity specifically in Cardiff helps to overcome this, and the student atmosphere helps students from abroad to settle more easily. Living on your own or with other people can be another challenge for people who have not been away from home; being patient and open-minded helps to overcome this.
-
112. Expenses, stability's
-
113. 1-I live in the UK without my wife 2-I miss my country and my family
-
114. It is a very nice place to live, and most universities have got a high rate around the world.
-
115. Being separated from family, extended family and close friends. Although I have a social circle here in the UK, the commonality that brings us together is our shared experience of living abroad and studying for a specific degree. We may not share common interests or hobbies or may not even feel comfortable with each other. Furthermore, there is not a support system such as the one I had in KSA, no close family to help with children and at times of sickness. All support and help available to myself are through paid services such as childminders, afterschool clubs and house cleaners. Although they might provide excellent services, there is also the cost to think of, in addition to the differences in religion and culture. They may look after my children, but they cannot nurture them in ways that relatives can. Consequently, this all results in more responsibilities and stress for myself as a PhD


candidate.

-
116. The difficulty and pressure of the PhD program. The arrangement time between study and family. The stress of scholarship extension by SACB (my sponsor) Sometimes the monthly rewards by government
-
117. - Whether your work worth a PhD or not in case you have poor supervision. - Finishing on time.
-
118. The cost and funding children upbringing
-
119. The visa-sponsorship of the university is very concerning. Once, I have used all my annual leave, and before the next annual leave was available, my mum had surgery, I was in a very difficult situation that affected my studies during a month.
-
120. Not getting used to the shitty food and weather in the UK
-
121. Probably, it would prefer national students and graduates in the labour market.
-
122. A challenge because of the difference in culture.
-
123. No concerns.
-
124. I am not able to settle in and a culture/taste shock.
-
125. Fear of being dismissed
-
126. Very expensive Weather and long winter
-
127. expenses in general (expensive) My kids future as Arabic is neglected The vague future after graduating The benefits at all of the studies we are doing
-
128. Failing High-cost Wasting time
-
129. Brexit affecting futures jobs
-
130. Feeling lonely; having no friends or support system; falling sick and having no one to take care of me or help me; getting depressed from the pressure of writing my thesis; being attacked/alienated for my skin colour; facing prejudice; not having anyone to hold me accountable in my studies, and therefore not doing well; not having anyone to help with household chores, and therefore having less time to study.
-
131. money mostly
-
132. Having English as a second language obviously made me a bit concerned about my ability to understand the lecturer and peer students (especially those with strong Welsh or Scottish accent). Additionally, the educational system in the UK is completely different than the one in Ukraine; it took some time to understand how it works and how I should work within the system.
-
133. Terrorist attacks. Different food. Different currency
-
134. Missing the people (and pets) back home, being able to manage my financial matters properly
-
135. Cultural collision, almost everything is different in my country. Also, the food is very different from where I came from.
-
136. The UK is a horrible place in comparison to my home. My home is safe, whereas, in the UK, there is the threat of terrorism. At home I have the freedom of a

car, this I do not have in the UK.

137.	the food's different from China
138.	Terrorism mainly
139.	Living expenses are high that I cannot enjoy travelling or entertainment to release the stress. Health care is bad, and there is no health insurance. People are racist and unfriendly.
140.	Hard work, very busy with children
141.	Feeling to fail
142.	The high cost of living, unpredictable weather, people are more segregated into their own circles
143.	The responsibility of children at the same time as the study.
144.	To be responsible for my studies and my family at the same time without the presence of relatives to help
145.	Studying in the UK is highly competitive and being responsible for everything of yourself during your time in the UK increases the stress and difficulties. My program needs about 20 hours of working per week if not more. Part of that time may be wasted in transportation between the Uni and home.
146.	If I have some circumstances that it may have a side effect on my studying
147.	The cost of living in the UK
148.	Being with a family is sometimes stressful in addition to financial issues that make things harder here.
149.	The way British people treat me, the cost of living, racist
150.	Childcare and time management! Will I able to do it (PhD)? And how?
151.	A very good place to study and live on even with the expensive lifestyle.
152.	Language. Study difficulties Cultural diversity
153.	People are disrespecting and not accepting my Muslim Identity as I wear my Hijab and cover my face.
154.	Generally, it is good and comfortable especially when I am living with my family
155.	It is better than stay at home
156.	I had some concerns at some point in my staying in the UK. But not anymore. My concerns were that I am not going to get the degree and would never fit into the scientific field around me. On a personal point of view, I thought that I am not a good mother and that I don't do enough for my children.
157.	I concern about my study. I hope to do something useful for education in Saudi.
158.	Passing my final year.
159.	Difficult life
160.	I am still in the first stage, and I have still many concerns regarding studying

regarding schooling of my kids Regarding finding a house Regarding the budget

161.	How can I live with them, and how can I adapt with them.
162.	living far away from my husband and family 
163.	Get a new experience of study and life Good level of education Reflecting this experience on my life as a positive perspective
164.	Actually, nothing deserves. I'm satisfied with my situation here and looking for coming back home after achieving my dream.
165.	Exposure to racism
166.	Language, culture still challenge my ability to adapt
167.	being away from my children who are living with me in the UK because of long classes and studying times
168.	It's a great chance to gain the best experiences and benefits for me and for my children which will reflect positively on our family and community or society as well.
169.	I am afraid from m my progress in my study especially the issues of language, I have a concern related to my son in the UK and how I can be a good mother
170.	Nothing, I am enjoying it.
171.	Integrating into the environment and if I'd be stereotyped for being black/Nigerian/African
172.	New culture, customs that I have to adapt to. Furthermore, a new environment to get used to as well. All this coupled with a whole new way of learning (university style) is a lot of change
173.	Affording tuition fees.
174.	Missing home
175.	difficulties adopting the new culture or living on my own, meeting "strange/bad people."
176.	Missing wife and kids difficult accessibility to health care services like seeing GP a lot of financial expenditures let you feel financially tight accommodation services take large amounts of money in the initial phases need to adopt self-learning approach rather the usual spoon-feeding style as in home country feeling lonely
177.	Adapting to society is quite hard for people with an introvert background. It's quite suffocating when you are surrounded by strangers. Homesick is a bad thing considering you live thousands of kilometres away from home. And to be ably managing your own economy is a huge task for oneself knowing that you have to be wise all the time.
178.	Actually, I like to study and live in the UK. I learned a lot of things during my study. Difference culture added to my experiences many features.
179.	Everything
180.	How will I manage my study? Will I get my goals? How I take care of the self without my family? How are the people there? Will I eat probably food?
181.	Missing home and family

182.	To be a mum and a student is too difficult; there is no life of well-being (nanny, driver or a housemaid)—everything I have to do it by myself, the opposite situation in my country.
183.	Their strict rules
184.	living costs, adaptation, focus on studying
185.	The main concern was the food and accommodation since it was the first time to live alone without my family.
186.	The different way of answering questions in the exam between local and international student. Management treated international student so badly.
187.	Being apart from family/friends Study pressure
188.	No concerns clear picture about things.
189.	language barriers
190.	expensive life
191.	When I started my PhD in 2014, I was feeling very happy to study in the UK. Right now, I feel anxious, mainly because I am approaching the end of my studies, and I am trying to find a job. My partner has been offered a position as a PostDoc here in Cardiff, so I would like to get a job in the same area. However, Brexit is making me feel insecure about my future.
192.	1. I may not get used to the pub culture. 2. As a PhD student, I may not have enough time making friends. 3. It's not easy to see GP. 4. Feel a little bit "disconnect" with mainstream society.
193.	Get in touch with the community and try to join up some societies, it always the first time and have to take the first step, be brave
194.	It's ok, but it contains a lot of crying 😭.
195.	Time- doing PhD in three or four years for women with children is difficult. Field of studying- studying science such as computer science is difficult Knowledge Background.
196.	I am under pressure of my study now and job applications in the future. Sometimes I find it a bit difficult to make friends with people who are not from my own country, and they are not warmed as I imagined before. Anyway, the sky is super blue when it does not rain, and the food also very delicious and there are still many people who are very kind. As Diana said 'who knows what fate will produce', so what I need to do is to adjust myself to keep pace with the new environment and get the distinction after 1year study hopefully instead of just complaining.
197.	I do not have enough chance to communicate with native speakers.
198.	no friends
199.	Communication with others and always afraid of loses the course.
200.	Living alone without any family or friends to be met in person
201.	Meeting local people and interact with them
202.	I am living away, with new surroundings. The language barrier, as well as cultural differences. I will miss out on important family events like birthdays, or

being physically there for my family members in hard times

-
203. This is the first year I study abroad. The most thing I worried about is my English; I came to the UK, and I worried I could not speak English frequently. And I always have homesick, miss parents and friend and Chinese foods sometimes. Totally, I wish, and I trust myself that I can deal with it and everything gonna be alright.
-
204. Good
-
205. Being alone and not getting support from family.
-
206. Finance Raising the children properly Maintaining their mother language
-
207. The strict role in the UK makes life complicated (sometimes)
-
208. Just the visa and hospital.
-
209. Apart from being away from family, there is nothing much to say. So far, so good unless in Winter. Might be winter blues.
-
210. People in the UK Did not speak with student because they are afraid and busy
-
211. -Dealing with different educational programs -Understanding everything in lectures -Having great results when I finished -Back home without any shock of change
-
212. This is an amazing experience for me. I learned a lot from the university and life between British people.
-
213. Life costing: otherwise, I was totally lucky to be a student in the UK
-
214. The difference in culture and language
-
215. Nothing really
-
216. being single p:
-
217. I am married with a baby. Quite stressful while doing my PhD because my other family (siblings and parents) are far away. I often miss Malaysian food and extended family. nursery for baby is so expensive in the UK. I cannot afford to pay. Not many supports and activities for PhD moms (mostly for single undergraduate students).

TIME 2

What is the most difficult challenge you faced in the last four months, and what were your coping strategies?

1. Writing up the final chapter of my PhD thesis and looking for a job at the same time.
2. Unclear guidelines of assignments amount of self-study are not perceived absence of family lack of old friends difficult to get new friends

3. Trying to balance my life between my role as a single mother, two teenagers and a baby (My husband is back home because of work) and my role as a PhD student. The university does not support single moms and their special needs, and I feel that all the services by which they market their study program are just created with limited capacity. Just for the sake of bragging about having such facilities and services. But I cannot see any real support neither on the academic nor on the social level.
4. To write an essay in a different language, I read some advice about how to structure an essay and how to read an academic text properly
5. Time management
6. The grading system is really not fair they do not want to give grades they need to change that grading system because we are here to learn not to be punished
7. Research project
8. reading in philosophy, especially epistemology and ontology.
9. Overwhelming by assignments and attending lectures and reading materials and ending up with the examination in a short period of time.
10. Organizing my ideas to write my thesis
11. Keeping up between academic and outside life. having balance and sacrifice for what is more important
12. I don't know even now I feel stress and I can not answer
13. Homesick, miss family, different teaching style
14. Exams
15. Dissertation writing. Disclosing with friends, sharing the struggle.
16. Depression and anxiety, now it is getting better
17. Coping with academic requirements and assignments. Crying like hell. Reading some motivational quotes watching some youtube motivational, educational, teaching videos. Reading self-help books. Positive, encouraging self-talk. Thinking and reflecting on challenges.
18. Coping with exams/gym/living managed time and money efficiently
19. Biggest challenges: work overloads and meet the deadline. Strategies: I always stay positive and optimist and not overthinking. Contact close friend, family as well as having support from colleagues.
20. I was so lazy and lack of persistent in doing the work that should be done. Keep telling myself that I need to keep on going, and a small step will lead to better outcomes, and reward yourself.
21. I was writing up a thesis in a very limited short time. I had to work extra hours each day.
22. I am writing up my thesis, giving me more stress and take most of my time. I start smoking more and sleep more.
23. Writing my thesis
24. I was writing a 5000-word essay in five days only. I decided to write 1000 words every day and was successful in submitting on time.

25. Working from 9 am to 6 pm every day then going home to 3 kids and a husband whom all expect full attention. I just took it one hour at a time and planned the weekend properly.

26. I was trying to sort out conflicts with my scholarship funder.

27. I am trying to stay focused on academic work when there is trouble for my family, particularly my younger sibling. I worry about them but cannot do much from so far away. I try to contact them as often as we can. I speak to my partner about what worries me.

28. I was trying to revise for a mid module exam in such a short period of time. My coping strategies were to dedicate more time to revision which leads to a cascade of compromises that needed to be met—for instance, spending less time in extracurricular activities, sports and general social time.

29. I am trying to finish dissertation work and having difficulty of contact the supervisor because she is super busy. I cope by making deadlines for each step of the dissertation and email the supervisor with regular update.

30. Too much stress and pressure. Praying.

31. To study and my husband studies full-time Masters degree and two kids are challenging. I put them in After school club and summer clubs, which cost a lot.

32. To face the locals who come for an eye exam and solve their problems. Be well prepared and practice more. Everything will go smoothly eventually.

33. To begin with my master thesis

34. Time management Stress management

35. The stress of writing reports. I am trying different methods.

36. The new academic system (because of the change of university and country) and coping with anxiety. I tried to take little steps instead of big ones.

37. The most difficult challenge was dealing with the home community outside the University, i.e. their judgmental behaviour. I dealt with this by removing the negative people in my life and keeping close to my family and focus on my aims and objective, which is to achieve this PhD.

38. The most difficult and stressful thing at the beginning was choosing the modules because of my home university structure and the differences with Cardiff uni structure. It was very stressful because I couldn't find the right modules and I had time pressure with short terms. I think universities should really improve the organisation at this level in order to help students during Erasmus.

39. The essay and their deadlines but also the exams in January.

40. The cultural barriers I have with my supervisors and the office's colleagues.

41. The analysis of my data. I just start to take the issue easily and read books about my analysis I take rest in the weekend and go with my friends to another city I started to make shopping I was meeting with my friends I called my mother every day in order to reduce my anxious

42. The amount of work demanded in a master, which is much more important than in a bachelor. It was very hard when the first deadlines arrived. The only strategy to have is to try to be more efficient at work.

43. Teaching different levels of students

44. Staying on campus over the long weekends while everyone else goes home has been one of the biggest challenges for me emotionally. It's hard spending so much time alone sometimes, knowing that you can't just go home to see your family when you'd like. However, I've overcome this, and I enjoy being in my own company. I find activities to do, like shopping and exploring local areas when I'm bored.

45. Spending a decent amount of time with my family here in the UK

46. Reading

47. Publishing takes a long time, including writing and reviewing.

48. Professors in university don't consider the English language is not my first language.

49. Probably the most challenging aspect of my life is a good performance on the course. However, I believe that my life at university is easy enough. I do not have any other problems to think about. My parents provide all support I need. Nonetheless, I cannot stop thinking about my university work what, sometimes, causes insomnia—lack of sleep influences bad on everyone. Since the beginning of the second semester, I cannot find a way to relax. I believe that the reasons are, e.g. being withdrawn from university (student finance lost my application), portfolio submission or illness and visiting hospital abroad. Therefore I hope it is not a permanent situation.

50. I was preparing for exams. I tried to revise to make sure I knew the stuff. It was also a way to comfort me.

51. Passing viva

52. Overcome stress I Simply focused more on the practical solutions rather than crying about my problems. And It worked

53. Overcoming my depression and anxiety, I tried to understand and gain more knowledge about it and be kind to myself.

54. Organise my academic work and my social life

55. Organise workload. Priorities tasks

56. My work

57. My program upgrade. To involve as much as I can to be part of my study.

58. My laptop was stolen two weeks ago, and I faced financial challenges to purchase a new laptop.

59. Loneliness and isolation. I called home a lot and focused on academic work to distract me.

60. Living without my family; away from family

61. Leaving home for uni + financial issues

62. my laptop was stolen on 17 January and had to find a replacement

63. Language

64. Lack of diversity in people and food Lack of school support Lack of school helping exchange students

65. It was in January, Specially the exams because I had to do my assignments along with the exams. Time management
-
66. It was my assignments whose deadlines were very soon. My only coping strategy for responsibilities is working.
-
67. Insomnia and depression. I tried to force myself to sleep and took some essential oils to calm down my anxiety. I listed all my positive things and talked about my demons and fears to some people.
-
68. I was spent much time to write and read, because of these I have got a pain in my back and my shoulder.
-
69. I was not getting along very well with the environment in university halls, but I learnt its better to let it go rather stress more of what is not in your control to change.
-
70. I think the most difficult thing I've come across is probably seasonal affective disorder (SAD). I knew about this kind of disease after I come to Britain. I feel obvious physical and emotional disorder in Britain when winter comes, in winter it rains a lot, it is very cloudy. I am experiencing a period of intense emotional turmoil. The weather in Wales made her feel depressed. Physically, I become lazy, lost my regular routine, and have little energy to do anything. I have increased the intake of sweets; overeating gains my weight. Psychologically, I lost the willingness to go out; all I want is to stay alone in the room, refuse to talk to anyone. When sunshine rarely occurs, these symptoms get a little bit better.
-
71. I split up with my boyfriend and started a relationship with someone new who had become pretty much my life now. I talked to friends a lot, the few friends left at home and friends I found here, and family. Basically, what had been my old life is now gone. But this stay abroad helped me to become more aware of what I particularly liked about my situation at home and whatnot. I found myself anew and am still developing.
-
72. I recently started a full-time lectureship while writing up my PhD. This had caused immense stress and physical exhaustion. My coping strategy has been to exercise a few times a week and ensure that I set aside time to relax with friends.
-
73. I have trouble keeping a schedule and being disciplined about my work. I have trouble eating and sleeping on time. My only coping strategy has been to try and push myself to fix these issues.
-
74. I have to accept my summer placement place where it doesn't really have much food that suitable for my dietary restrictions, and it is so far away from Cardiff. I am afraid to go alone since I have a problem with my sleeping pattern and I'm just too anxious about every what-if.
-
75. I have been looking for a job after the PhD (I am about to submit my doctoral thesis), but I do not find anything, neither here nor in my home country. I feel like I am now overqualified and I can't find a job outside the academia.
-
76. I felt lonely too often. To overcome this, I started talking to myself aloud whole alone; it helps.
-
77. I believe studying MA in the English language was the most difficult challenging for me.
-
78. I am struggling to do the work expected of me to keep up with my course. I feel the course is very demanding, and I am having difficulties, especially the language barrier between me and fully benefiting from the lectures I always attend.
-
79. How to control my through during the exams period. My coping strategy did not

work.

80. Homesick, I have been here for about one year. That's unusual but because I have to do more experiment.

81. I had to work part-time and study for my final-year assessments. I improved my time management, and I tried to get enough sleep so as to be more efficient.

82. Finding

83. The motivation to study as much as I should. Coped by easing into it during Christmas and making my schedule more hectic to force me to be more productive.

84. Family responsibility. My coping strategy is just trying to be more relaxed.

85. Exams, studying a lot

86. Exam

87. Once I get my homework, I started to do it. Do some assignment, so I can have time to re-read it and submit with confidence.

88. Essays. Researching, immersion into work.

89. Essay and exams

90. Essay

91. Doing the final stages of the dissertation.

92. Dealing with local people in the university

93. Deadlines 😞

94. The deadline I'm usually a very lazy and just work few days before submission day that's stressing me, not because I'm lazy, but even all the fabulous ideas came before submission, I guess that I like to work under high Adrenalin level :) But now I tried to read and organise my work my references and formatting work and keep the days before submission for writing only, and that's work with me I get an excellent mark and the stress becomes less.

95. Critical thinking

96. Coursework deadlines were too close to each other.

97. Complete my thesis write-up

98. Comping back from a vacation made it difficult to pick up the phase of writing up my thesis. Oversleep, overwork and sm

99. Challenge: Forgetting what I learned. Strategy: Review the knowledge regularly.

100. Can't understand the contents of the courses.

101. The balance between my family specially my kids and my study

102. Being alone without my kids

103. Being away from your family Working hard but not appreciate by your supervisor. Dealing with all the above difficulties alone

104. Balancing my time as a first-time mother and doing my PhD. Coping strategies: 1. Parents came from abroad to help to look after the baby, so I have

more time to work. 2. Lower my expectations. I have to be realistic; I can't do much work like before I have a baby. Set short goals n small tasks to complete each day. Work in the office 5 hours non-stop. And go home take of the baby.

105. Balancing my academic work and society work as well as my social life - basically trying to keep up with everything going on in my life

106. Balancing living by myself along with my education and coping strategy was to have a daily routine set time of when to cook and have food (lunch/dinner) and do work in between

107. Balancing between academic work and society work as well as my social life. - By having to-do lists - Taking breaks whenever I feel like I really need it - self-care

108. Adjusting to the language on a daily basis, especially in more specific conversations, and also getting used to the academic rythme of the university here. I guess only work, motivation and organisation helped me to cope.

109. Academic Writing

110. A difficult living situation that I got through by not spending too much time at my accommodation, i.e. going to the library or spending time with friends

TIME 3

What has been the most challenging part of your journey in studying abroad (e.g. pre-arrival, saying goodbye or being away), and what challenges you have faced during the year?

1. Pre-arrival and finding a commendation

2. First arriving

3. Pre-arrival. It is hard to get to know the place, adjust food habits, adjust with timetables and commuting, also in booking the right place for your stay. The right place has been the most difficult one.

4. Meet new people (more specifically natives)

5. Learning English is most difficult

6. Being away

7. The age of my classmates and the quality of teaching with my health matters.

8. Integrating and saying goodbye

9. The most challenging part of studying abroad is not able to see friends and family members as often as I would have liked to. Even though I had some friends with me, I felt lonely many times.

10. issues with scholarship funder

11. The hardest would be pre-arrival where I must leave home and my family and friends. You know how comfy house is so yeah. The hardest would be as usual studying for exams. Honestly, the UK's way of marking papers was so strict. I am not ready, or I still cannot adapt to the process, so my study is quite affected.

12. Possibly, I was not fully aware of the financial need connected with everyday needs. I wasn't able to socialise with other students (my group of friends) having a maintenance loan at this same level. There was no pressure from anyone's side, however, considering my budget, sometimes, I'd rather stay at home. Also, it is believed that the first year does not count what lowers the motivation to study.
13. Although I am working hard with the time allowed for me to work as a single mother and a PhD student, however, I am not satisfied with the progress of my work due to some reasons, among which are the lack of a supporting community, the lack of training and professional development within the university itself since my conditions does not allow me to frequently look for external professional development, and the lack of clarity when it comes to the responsibilities and rights in the supervision process. I am now in the analysis stage of my research, and I cannot determine at this stage what is the role of the supervisors and how are they supposed to guide me through. When I talk to my colleagues in the department, I see that they have different types of support, guidance and work than I am receiving. I cannot say that my supervisors are not working with me, but the process itself is not straightforward, and I cannot figure out what are my rights in this process.
14. Pre-arrival, planning everything will not be on-site yet. And adjusting to the environment.
15. pre-arrival and during my initial arrival to the UK
16. Pre-arrival
17. The financial challenge with a laptop stolen, flight tickets back home.
18. I think the most challenging thing that I thought about is being away from my sister. However, I realised that I need to stay longer than I have to.
19. Saying goodbye to my family, being totally independent through this year and get used to the system that is different from my home
20. Finding a place to stay and saying goodbye. I've faced the 'problem' that people are different and that they live their life's in different ways and have a different point of views on how clean a house/room should be.
21. Pre-arrival and when arrived firstly Challenge: adapting to live in the UK
22. Financial problem. I do not have my designated disk.
23. Pre-arrival
24. Taking care of kids with their financial difficulties in addition to a busy supervisor.
25. The most difficult part upon arrival was to find a house. After being stable during the study, my major source of depressions was definitely away, and I missed my home country. I missed my family and friends.
26. Laptop was stolen
27. The most difficult times for me were caused by the things that still influenced me from 'at home' even though I have been over in Cardiff. My life basically turned around 180 degrees. I broke up with my long-term relationship during one of the first weeks I had been in Cardiff and had to take my personal belongings out of the flat we lived in together at the same time. I am now completely facing a new phase in my life which makes me tremble sometimes. Regarding university, I had mostly

had positive experiences. I liked most of my courses and found them interesting. I especially liked that the staff was very friendly and helpful at all times and was always responding to emails very quickly. I think, being away was sometimes difficult (when I did not have anyone being around I knew and to whom I could talk to when I needed them), but at other times and most of the time being away was exactly what I needed to find my personal balance and to figure what I want from my life.

28. Being away

29. Financial difficulties Food so expensive to eat well Strange medications given by NHS Had to go to Neath for an appointment to get my NIN

30. Saying goodbye is the worst. And my father in law passed away while I am here. Since then, I do not stop thinking about going back before I lose someone else.

31. Being away from my family and friends. I faced some challenges with time to achieve some academic requirements.

32. language and expression social

33. getting accommodation, exam loads

34. being away from home when stress comes. The way and type of questions asked on the exam which required lots of reading, not just on lectures notes totally different from my country and of course with my limited vocabulary, it is totally hard sometimes to memorise things that I don't understand.

35. being away Time management issues Research writing

36. Saying goodbye to my family

37. Everything was difficult, but we can do it. By the way, it is a great experience.

38. Language, nightlife, weather. family

39. Been away

40. Boredom, loneliness and isolation

41. managing time, responsibilities for families during the study, the harsh requirement of the study and the stress of extension from SACB

42. Challenges: - Just missing that opportunity of watching my nephews grow up - The fear of experiencing hate crime from Islamophobics

43. Being away could be the most difficult part of my journey if I have to specify one. Most of the challenges that I face here are academic challenges related to my PhD study. Yes, I remember, there is one challenge that I faced which is taking care of my family while my wife was pregnant.

44. Saying goodbye

45. Being away

46. Being away. Missing family and academic challenges

47. - Adjusting to the new environment - Not having the linguistic tools at disposal to articulate thoughts like when at home speaking Arabic - Having to come to terms with being 'the foreigner' for the first time - Facing the fact that The University of Southampton is one of the best and most students are the best of the best from

their school and that I am no longer the special student - Being away from friends 'I had family here' - Not driving So in general, the adjusting period which -I think-ended when I became comfortable with English as a language

48. Integrating socially with the locals.
49. Saying goodbye to my partner and being away from my family when they are going through tough times.
50. Looking for a flat and getting used to new examination methods
51. Being away
52. being away from my kids and family
53. Missing all the people in the home country.
54. Saying goodbye. The challenges that I have faced are understanding what lecturer is talking about and deal with the depression myself.
55. The most difficult part was when I arrived there, had to choose the modules and understand the different university organization
56. Most of my friends already left university at the beginning of the year, so sometimes I feel kind of alone
57. being away from family. Language.
58. The age difference between other students and me, the ability to remember everything you are studying, the enlivenment and how to keep your manners and do not lose because of many things.
59. The time that it takes to get used to the new place that I rent and secondly working in groups.
60. missing family so much assignment unclarity lack of friends the appropriate method of postgraduate studying
61. Meeting people with different and difficult personalities
62. I'm away from my family (independency relies on me). Language barrier somehow affected during the year.
63. pre-arrival
64. Saying goodbye has always been the hardest part.
65. Being away from my family and friends for mental support
66. Being away and studying in a different way as my background study
67. Laptop was stolen
68. Immediately post-arrival. Having to settle in, do house shopping, grocery shopping on your own for the first time in a foreign country.
69. Saying goodbye and being away from home for a long time. Working really hard and disappointed with the marks. Health care is very poor in the UK. No one takes care of you.
70. Saying goodbye is too difficult, but then everything was going very well, at the time being I feel happy, but sometimes I have to pay attention to my family more than before. But in the UK alhamdulillah, I am satisfied.

71. Language

72. I was looking after my son while me and my husband doing our PhD. Less family support here. Childcare expensive. Very hard balancing study and being a parent.

73. Being away from family. And the most challenge I encounter has been the process of writing the thesis.

74. My Studies

75. Money, time change, whether shared office

76. Being away. I have several challenges. One of them is how to make a balance between my study and my family. I have challenges to make my son speak the Arabic language (mother language). My son born in the UK and He does not want to speak Arabic and his English language also not very well. So, I spend a lot of time with him and to take some courses that help me to improve his language. Another difficulty is related to the fess of my son nursery. Actually, it considers too expensive for me. Another difficulty is the analysis part. I used methods is not usually used.

77. Saying goodbye is always the most difficult thing to do. I've missed my family so much during this year abroad. That was the most challenging thing for me. House share comes next. Living with nine people was challenging. It took me a great deal of self-control and patience. I like to live in a clean and quiet environment - especially at night. It wasn't always the case in my house.

Appendix D: Study 4

Participant Information Sheet

An interpretative phenomenological analysis of well-being in first-year international students

What is the purpose of the study?

This study aims to understand the experience of studying abroad and well-being.

Why have I been invited?

We are inviting a number of the first-year international students from Cardiff University for this study.

What does this study involve?

You will be asked to participate in an in-depth interview with the researcher. The interview will last approximately 30-50 minutes. This interview will be audio-recorded and transcribed for analysis. All data used from these interviews will be made anonymous.

What are your rights as a participant?

Taking part in the study is voluntary. You may choose not to take part or subsequently cease participation at any time.

Will I receive any payment?

You will receive £5 for your participation.

Who do I contact about the study?

You can contact us via e-mail

- Eman Alharbi alharbie@cardiff.ac.uk
- Professor, Andy Smith Smithap@cardiff.ac.uk

Consent Form

An interpretative phenomenological analysis of well-being in the first-year international students

I have read the information regarding the participation in this study conducted at Cardiff University, School of Psychology.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that the information provided by me will be handled in confidence.

I understand these interviews will be transcribed, coded, and the results anonymised. Quotes from interviews may be used, but these will also be anonymous, any names or identifying features will be removed.

I understand that this information may be retained for seven years. I also understand that at the end of the study, I will be provided with additional information about the purpose of the study.

I voluntarily agree to participate

Date..... Signature of participant.....

Center of Occupation and Health Psychology
 School of Psychology
 Cardiff University



Confidential Questionnaire

Number.....

Age	
Gender	Male Female
Marital Status	Single Married Other
Nationality	
Ethnicity	
Type of program	Undergraduate Master PhD
Major	
First language(s)	
Have you studied away from home? If yes where	
How long have you been in the UK?	
Are you comfortable conversing in English?	Yes No

Notes:

Participant Debrief Form

Thank you very much for your participation☺

The results of this study will explore the experiences of first-year international students in the UK and how they cope with difficulties, identify how international students' well-being changes and the factors that could have impacts on the level of well-being while being away from home.

If you have any queries or concerns about the study at any phase, please contact Eman Alharbi or Prof. Andy smith on contacts details below.

Contact Details:

Eman Alharbi - alharbie@cardiff.ac.uk

Prof. Andrew Smith - smithap@cardiff.ac.uk