

**Research Bank**

Prof Doc Thesis

**Understanding and promoting wellbeing, student engagement,  
and resilience in early-adolescent international school students**

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**UNDERSTANDING AND PROMOTING WELLBEING, STUDENT  
ENGAGEMENT, AND RESILIENCE IN EARLY-ADOLESCENT  
INTERNATIONAL SCHOOL STUDENTS**

Submitted by  
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A thesis submitted in fulfilment of the requirements of the degree of  
Doctor of Education

Institute for Learning Sciences and Teacher Education  
Faculty of Education and Arts  
Australian Catholic University

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Co-supervisor: Doctor Baljinder Sahdra



## **Statement of Authorship and Sources**

This thesis contains no material that has been extracted in whole or in part from a thesis that I have submitted towards the award of any other degree or diploma in any other tertiary institution.

No other person's work has been used without due acknowledgement in the main text of the thesis.

All research procedures reported in the thesis received the approval of the relevant ethics committee.

This traditional thesis comprises the original work of the author. In all published work by the author cited in the thesis, the author was the principal investigator, contributed 50% or more, and planned and prepared the work for publication.

Phillipa McKeering

Date

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When embarking on my Doctorate of Education, I recall reading about the attrition rates and the high percentage of doctorate students who do not graduate. I recall thinking at the time that the information must be incorrect or a gross exaggeration of the challenges faced by doctorate students. However, I can attest to the many highs and lows I experienced during my own research journey over the past 6 years as I juggled many of life's other demands. Given this, I would like to recognise the people who provided endless support and encouragement during those times. Without them, I would not have completed my research.

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## **List of Abbreviations**

ACU HREC	Australian Catholic University Human Research Ethics Committee
ANOVA	Analysis of Variance
BRS	Brief Resilience Sale
EPOCH	Engagement, Perseverance, Optimism, Connectedness, and Happiness
ISC	International Schools Consultancy
MANOVA	Multivariate Analysis of Variance
MiSP	Mindfulness in Schools Project
MBI	mindfulness-based intervention
PERMA	Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment
PPI	positive psychology intervention
RCT	randomised controlled trial
SEM	Student Engagement Measure-MacArthur
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organization

## **Abstract**

Despite the exponential growth predicted for the international school sector, little research has been carried out with international school-aged students. Research within the field of international education has predominantly centred on the tertiary sector, which reports high levels of adjustment issues in students upon arrival in a new country. Given the high rates of mobility and transition reported within the international school sector, and the different adjustment conditions experienced between school-aged and tertiary-aged international students, necessitates the need for additional research to be conducted with international school-aged students. Early-adolescent international students have been identified as a particular cohort of students who may be more vulnerable to psychosocial health and wellbeing issues during periods of mobility. Additionally, research within the international education sector has largely examined the effects of adjustment in terms of negative psychological outcomes in students, highlighting a conceptual gap in research on ways to foster and support this student group to thrive and flourish despite the high levels of mobility they experience.

Through a positive psychology lens, this study examined how early-adolescent international students may thrive and flourish despite the high levels of adjustment difficulties they experience. The research aims of the study were twofold. The first was to develop a better understanding of wellbeing, student engagement, and resilience in early-adolescent international students. The second was to determine a suitable strategy to promote these constructs with this cohort of students. A sequential explanatory mixed-methods design was employed to address these research aims in two phases. This enabled the findings of the first phase of the research to be used to inform the second phase of the study, given the limited research conducted in the field to date.

The first phase of this study employed a survey design with 178 early-adolescent international students aged 10–14 years ( $M = 11.43$ ,  $SD = 1.12$ ) from one international school in Singapore. The findings showed positive associations between most wellbeing, student engagement, and resilience constructs. The study also identified demographic and mobility characteristics that were associated with lower levels of wellbeing, behavioural engagement, and resilience, highlighting a cohort of students who may need additional support. The second phase of the study employed a randomised waitlist control group design with 50 students who had participated in the first phase of the study ( $M = 11.84$ ,  $SD = 0.89$ ). A 16-lesson mindfulness-based intervention (MBI) program, the *.b* program, was delivered to participants, with quantitative and qualitative data collected. Student, parent, and teacher survey responses reported improvements in psychosocial health and wellbeing measures in early-adolescent international students on completion of the MBI program. Interview responses from selected students, parents, and teachers validated the reported quantitative data findings and provided additional information on how the MBI program was able to support the student group when experiencing difficulties associated with mobility and adjustment. Student interviews also validated the quantitative findings from Phase 1 of the study by elaborating on the negative implications of moving to a new country as experienced or perceived by the students.

This study's findings highlight a potential cohort of early-adolescent international students who may benefit from additional support. The findings also support an MBI program as a possible strategy to encourage this student group to thrive and flourish despite the high levels of mobility they experience. It is envisaged that the findings will provide educational professionals working within the international school sector with new information on ways to better understand and support this growing cohort of international



school-aged students. It is also envisaged that the findings will contribute to the limited empirical evidence-based MBI research conducted to date with early-adolescent students.

## **Chapter 1: Introduction**

This chapter introduces the field of research for this study. It includes a brief overview of the research topic and identifies the current research problem. This chapter also introduces the research aims and objectives that guided this study, and it highlights the potential implications of the study within the fields of international education and mental health sectors. Lastly, the chapter presents an overview of each of the thesis chapters, thus providing a scaffolding for how the research is presented in this thesis.

### **1.1 International Education**

Globalisation has contributed to significant growth in the international education sector. However, research in the field of international education has predominantly been conducted within the tertiary sector, even with exponential expansion being reported in the school sector (Farrugia, 2014). In the last decade, there has been a reported 59% expansion in international schools across the world, with the most significant increase reported in Asia (International Schools Consultancy [ISC], 2022). There are presently 12,853 international schools worldwide (ISC, 2022), and international school student enrolment numbers of 6.6 million students reported for the year 2020 are predicted to increase to 9.7 million students by the year 2028 (ISC, 2020).

International schools were initially established to ensure that education was available to school-aged students who were living temporarily in a host country as a result of mobility associated with their parents' careers (Hannaford, 2016). This included children of expatriate diplomats, missionaries, and employees of transnational organisations (Hayden, 2011). Of late, the demand for local students to receive an education with an English-medium international curriculum has resulted in increased numbers of local students also attending international schools (Hayden & Thompson, 2017). Considering the diversity between international students and the different reasons

for their enrolment, a clear definition of an international school is not simple. The ISC (2020), a key contributor to market intelligence on the world's international schools' domain, defines an international school as a place that provides an English-medium curriculum (other than the country's national curriculum) to students from a diverse range of cultures with a multilingual, transnational, and changing population of students and teachers. Although this definition may include local students as well as students temporarily living in the country, this definition is not applicable to international schools in all countries. Some countries (including Switzerland, China, and Singapore) do not permit local students to enrol in international schools in their country (Bailey, 2015). For international schools in these regions, their student group is comprised predominantly of globally mobile students, and it was this particular student group that was of interest in this study. As this research study was conducted in Singapore, it was anticipated that the students in the study would represent globally mobile international students, given the restrictions placed on local student attendance at international schools by the Singapore government (Ministry of Education Singapore, 2018).

Given the many phrases used to describe international school students, it is important to provide a clear definition of what this term means (Dillon & Ali, 2019; Hayden, 2012). Different terminology that has been used to characterise these students includes 'third culture kids' (Pollock & Van Reken, 2001), 'sojourners' (Hoersting & Jenkins, 2011), 'global nomads' (McCaig, 1992), 'cross-culturally mobile children' (Hoersting & Jenkins, 2011), 'cross-cultural kids' (Pollock et al., 2017), 'cultural chameleons' (McCaig, 1996), and 'internationally mobile children' (Gerner & Perry, 2000). While definitions of each phrase may alter slightly, in essence they all describe a student who is studying in an educational institution in a host country. For the purposes of this study, an international student was defined as a globally mobile student who is not a

permanent resident of the host country in which they are studying (United Nations Educational, Scientific and Cultural Organization [UNESCO] – Institute for Statistics, 2009).

## **1.2 Research Problem**

International school-aged students often move between schools and countries every 2 to 3 years as they follow their parents on short-term employment contracts around the world (Hayden, 2012). High mobility is a defining feature within international schools because students are often returning to their home country or relocating to another host country (Higgins & Wigford, 2018; ISC, 2020). Turnover rates in international schools vary, but a benchmark of 25–30% per year is anticipated (ICS, 2016; Whyte, 2016). This rate includes international students enrolled at the school who regularly move between countries with their parents' employment, and foreign (nonlocal) teachers employed by the school who are often on short-tenure employment contracts. Such high levels of mobility result in an international school environment continually in a state of flux. Parents of international school students report the high levels of mobility as a concern, given the ongoing changing environment they create (McLachlan, 2007; Whyte, 2016).

Research on mobility with international students indicates that these students go through a process of adjustment as they transition to a new country (Pollock & Van Reken, 2001). This process is a response to the change they encounter and is important in ensuring they are able to interact constructively and experience a feeling of connection in their new surroundings (Lessle et al., 2020). The adjustments may include cross-cultural and psychological adjustments and will be unique for each student and dependent on many factors, such as cultural identity and social support networks (Berry, 1997). This adjustment period has been identified as a difficult period for international students as they commence their education in a new country (Berry, 1997). Research studies report

that international students may be likely to experience psychosocial health and wellbeing issues while they adjust to their new surroundings (Elliot et al., 2016; Liu & Lu, 2011). Considering the high rates of mobility reported within the international school sector, this suggests a significant number of international school-aged students could be at risk of psychosocial health and wellbeing issues each year. However, the research conducted on adjustment of international students has been predominantly centred on the tertiary level (Farrugia, 2014). This research highlights the negative implications of mobility for the psychosocial health and wellbeing of international tertiary-aged students (Altinyelken, 2018); it is not known whether the same findings would be expected with international school-aged students. Although there is discussion regarding how the two groups may differ in terms of how they experience and respond to learning in a new country (Farrugia, 2014), it remains unclear whether school-aged international students may experience the same adjustment challenges on moving to a new school and country.

In addition to adjustment difficulties, the psychosocial health and wellbeing of this student group may be affected by more-recent implications of the COVID-19 global pandemic. While the pandemic presented many challenges to our way of life, especially so for young people, international students have been identified as a group who were most vulnerable to the events relating to the pandemic (Xiong et al., 2022). A recent wellbeing report by the ISC (2021) provided new information on the impact of the pandemic on the wellbeing of students and staff at international schools. The report highlighted an increase in mental health and wellbeing issues in international school students since the pandemic. It also noted that teachers reported feeling less able to support students in their wellbeing since the pandemic. The closure of schools and educational institutions during this time has resulted in long periods of online learning for international students in some countries, which may be even more isolating for students

who have only recently arrived in the country and who may have only a small support network (ISC, 2021). At the same time, immigration issues and travel restrictions due to international border closures (Centers for Disease Control and Prevention, 2021), separation from extended family members (Zhai & Du, 2020), and the reported increase in discrimination towards minority groups since the outbreak commenced (He et al., 2020) highlight the significant impact the pandemic may have had on international students (Bamford, 2020). Although this study was not focused on the effects of the pandemic on international students, this knowledge suggests that greater understanding and support of this student group is needed even more today, given the additional impact the pandemic may have had on the psychosocial health and wellbeing of this student group.

The exponential expansion described within the international school sector, alongside the gap in research conducted with this cohort, necessitates the need for further research to be conducted on this student group (McKeering et al., 2021). Additionally, given the high levels of mobility reported within the international school sector and recognition that early-adolescent students may be particularly vulnerable through stages of adjustment (van Loon et al., 2020) it is clear that a particular cohort of students could benefit from extra support. While research with international tertiary-aged students has predominantly reported negative implications of adjustment for psychosocial health and wellbeing (Altinyelken, 2018), it is not known whether similar findings may be expected with school-aged international students. Additionally, given this student group will continue to experience periods of mobility and adjustment, it is important to identify ways to promote optimal functioning for these students during such change. Research is therefore needed on ways to support international students to thrive and flourish despite the periods of mobility and transition they experience. This information may then be of

benefit to all international students, rather than only those experiencing negative psychological problems.

Therefore, given the limited research conducted with early-adolescent international students to date, this study addresses the need for research to be conducted specifically with this cohort. Additionally, the study addresses a gap in this field of research by presenting ways to enable this student group to thrive and flourish within the highly mobile international school environment, instead of focusing on negative psychological outcomes. Considering the limited research conducted to date in this field, a sequential explanatory mixed-methods design was adopted for this study. This design approach enabled each phase of the study to inform the following phase and addressed methodological limitations identified in the research field. The research aims and objectives of the study, which were developed to contribute to the theory, research, and practice on ways to better understand and promote psychosocial health and wellbeing in early-adolescent international students, are presented in the following section.

### **1.3 Research Aims and Objectives**

The research aims for this study were to address the current gap in research in the field of international education. In doing so, it was envisaged that the study would provide new information on constructs that may help early-adolescent international students thrive despite high mobility and transition. This included gaining a greater understanding of how such constructs may be interrelated and of the effect that contextual factors may have on these constructs. To this extent, the first research aim of the study was to better understand wellbeing, student engagement, and resilience in early-adolescent international students, considering the adjustment difficulties they experience. To address this research aim, the following research objective was decided:

*Research Objective 1:* To examine how early-adolescent international students respond to items assessing their wellbeing, student engagement, and resilience, and to identify any interrelations between these constructs.

This study also aimed to identify a suitable program or strategies that may be beneficial to this student group in supporting them during periods of transition. In doing so, the second research aim of the study was to examine whether an MBI program may promote psychosocial health and wellbeing with this cohort of students. The research objectives that were formulated to address this second research aim in the study were as follows:

*Research Objective 2a:* To examine the effect of an MBI program on the wellbeing, student engagement, and resilience of early-adolescent international school students through self-report and proxy measures.

*Research Objective 2b:* To explore individual students' experiences as an international student and in engaging with the intervention program.

Research questions were developed to comprehensively examine these research objectives and to address the conceptual, empirical, and methodological limitations conducted in this field of research. These research questions will be outlined further in the thesis. It is envisaged that the information gathered in addressing these research objectives will create a greater understanding and awareness of ways in which early-adolescent international students can thrive despite their highly mobile school environment.

#### **1.4 Significance of the Research**

The research aims outlined in this chapter were developed to address the research gaps identified in the field of research on early-adolescent international students. As such, this study will make a valuable contribution to the field of research within the



international education sector. Research in the field of international education is important, considering the economic, social, and cultural benefits identified in this sector (Australian Government Department of Education, Skills, and Employment, 2021). This includes benefits to the individual student, the educational institute they attend, the community, and the host country through the fostering of globally connected communities to increase cultural awareness and intercultural capacity (Robertson, 2011). To this extent, understanding adjustment and providing support for international students is important because it underpins growth within the sector (Farrugia, 2014). The adjustment that international students experience when moving to a new country and educational institution has been identified as a difficult period for tertiary-aged international students. Given this, programs and strategies have already been implemented within the tertiary international sector to better support this student group (Altinyelken, 2018; Nahidi, 2014). Gaining a greater understanding of how adjustment may impact on early-adolescent international school students may provide valuable knowledge for educational professionals working with this cohort of students on how best to support them. Additionally, the identification of a program that may help this student group to thrive during periods of mobility and adjustment may also ensure that the international school environment as a whole can also prosper. This is important, considering the exponential expansion described within the international school sector and the identification of this age group as perhaps particularly vulnerable.

Additionally, the promotion of constructs that will enhance the psychosocial health and wellbeing of early-adolescent international students is important, considering the growing concern for the mental health and wellbeing of young people (van Agteren et al., 2021). The World Health Organization (WHO; 2021) report that one in seven (14%) young people aged 10–19 years will experience mental health conditions. Considering

early adolescence has been identified as a period of heightened vulnerability (Kuyken et al., 2017), greater understanding and support for this student group during periods of mobility and transition is important. For early-adolescent international students, the high levels of global mobility and transition they experience may make them more vulnerable than local domestic students to psychosocial health and wellbeing issues. Identifying this student group as potentially being at risk and looking for a suitable program to support them, has positive implications for the wellbeing of young people. Additionally, proposing an MBI program to foster positive transition and develop positive life skills among these students has positive implications for the benefits of psychosocial interventions with this age group (Fung et al., 2019). Furthermore, the implications of the findings may be even more relevant in the post-COVID world that we are now navigating, with research reporting that “young people are bearing the brunt of the mental health crisis caused by the pandemic” (Royal College of Psychiatrists, 2021, para. 1). Additionally, research within the international education sector highlights that this group of students may face even more issues as a result of the global pandemic, which may negatively affect their wellbeing (Xiong et al., 2022). Therefore, it could be argued that the importance of supporting this cohort of students with programs or strategies to foster their psychosocial health and wellbeing has never been more necessary.

### **1.5 Thesis Overview**

In order to understand how this thesis addresses the research aims identified for the study, a clear framework of how the research will be presented here is important. This first chapter has introduced the field of research for the study. This introduction has included a broad overview of the research topic and identification of the current research problem. The research aims and objectives of the thesis have also been outlined, and the

significance of the research within the fields of international education and mental health sectors has been highlighted.

In Chapter 2, both the literature review on the field of research and the conceptual framework proposed for this study are presented. Through a positive psychology lens, the literature review examines how early-adolescent international students can thrive and flourish despite the high mobility they experience. Given the limited research conducted on adjustment and international school-aged students, research within the international tertiary sector is also included in Chapter 2. Additionally, the importance of wellbeing, student engagement, and resilience constructs in promoting optimal functioning with this student group is identified in Chapter 2. The chapter also reviews MBI programs with early-adolescent students. In doing so, it highlights this course of action as suitable in promoting the psychosocial health and wellbeing of early-adolescent international students. Lastly, a conceptual framework is proposed that addresses the conceptual, empirical, and methodological limitations identified throughout the literature review, providing justification for the study.

In Chapter 3, the methodology employed to address the research aims of this study are presented. First, the research approach, design, and context are outlined to provide a methodological framework for the study. The methodology of the first phase of the study is then presented to address the first research objective of the study. It includes an overview of the design, participants, measures, and data collection and analysis employed in the first phase of the research study. The methodology of the second phase of the study is then presented to address the second research objective of the study. It includes an overview of the design, participants, intervention program, measures, and data collection and analysis employed in this second phase of the study. Chapter 3 also includes a

timeline for both phases of the study and discusses ethics and limitations in the methodology employed.

In Chapter 4, the quantitative data findings for Phase 1 of this study are presented, including an overview of the data cleaning and assumption testing conducted to address the research questions. Correlational research findings are presented first to address the first research question of the study. Inferential research findings are then presented that address the second research question of the study. Chapter 4 concludes with a summary of the findings from Phase 1 of the study and an explanation of how the findings were used to inform the second phase of the research design.

In Chapter 5, the results are presented for Phase 2 of this study, beginning with an overview of the data cleaning and assumption testing, followed by the quantitative analysis findings to address Research Question 3. Next, the quantitative and qualitative data findings from parents and teachers are presented to address Research Question 4. Lastly, the qualitative analysis findings from the students are presented to address Research Question 5, including an overview of the thematic coding employed and verification process undertaken to address this research question. The chapter concludes with a summary of the findings that address the second research objective of the study.

Lastly, Chapter 6 summarises the findings from both phases of the research design. In doing so, it highlights how the findings from each phase of this study were integrated to inform the research conducted. It also highlights the theoretical contributions of the study and discusses research and practical implications of the findings within the fields of international education and MBI research. The limitations of the study are also discussed, and recommendations for future research in the field are outlined.

## **Chapter 2: Literature Review and Conceptual Framework**

Chapter 1 introduced the field of research and identified the broad potential implications of this study for the international education and mental health sectors. This chapter provides an in-depth review of the literature relevant to the field of interest, given the integral role the literature plays in many facets of the research procedure. First, positive psychology is introduced, providing a theoretical perspective to guide the study. Adjustment of international school students is then reviewed considering the high mobility experienced by this cohort of students that may affect their capacity to thrive and flourish. An overview of adjustment research, specifically during early adolescence, then highlights the negative psychological and social findings reported in this field of study, which are incongruent with a positive psychology focus. In doing so, the review highlights a gap in the field of adjustment research—that is, the need to promote positive emotions and build strengths in early-adolescent international students through a positive psychology lens.

The chapter then reviews positive psychology constructs that have been identified as relevant within the international education sector. These concepts include wellbeing, student engagement, and resilience. Given that limited research has been conducted on these constructs with international school students, this research draws on the findings from the international tertiary field. This literature review highlights the lowered levels reported across wellbeing, student engagement, and resilience with international tertiary students and provides a rationale for the need to better understand whether similar findings may be expected within the international school sector.

School-based positive psychology programs as a strategy to promote optimal functioning of early-adolescent students in international schools are then reviewed. General outcomes of these programs are examined as justification of their suitability to

support a student to thrive within a positive psychology framework. Mindfulness, as a practice, is introduced here, followed by a review of research around mindfulness-based school programs. A mindfulness-based school program is presented as a course of action to promote optimal functioning in early-adolescent international school students through a positive psychology lens.

The chapter then summarises the literature review and presents the study's conceptual framework, which was used to inform the research objectives and the design of this investigation. The following section, Section 2.4.2, details the key constructs being examined in the study and the relevance of these constructs to the field of interest. Lastly, the chapter highlights how the study addresses conceptual, empirical, and methodological limitations identified in the field of research to date and, in doing so, provides a justification for the study.

## **2.1 Positive Psychology**

Because this study is examined through a positive psychology lens, it is important to review the relevant literature within the field of positive psychology. The theoretical tenets of positive psychology are presented in Section 2.1.1, followed by a review of the history of positive psychology and research within the field in Section 2.1.2.

### ***2.1.1 Positive Psychology Theoretical Tenets***

The term *positive psychology* is used to encompass similar theories that are based on positive facets of human life (Noble & McGrath, 2015; White & Waters, 2015). Positive psychology encompasses the scientific study of conditions and processes that foster human functioning and flourishing (Gable & Haidt, 2005), including personal, relational, biological, cultural, institutional, and global aspects of life (Seligman & Csikszentmihalyi, 2000). The main premise of positive psychology is that it aims to define and promote what makes individuals and the wider community thrive and flourish

(Seligman, 2011). In this way, it aims to scientifically understand what makes life good and then to actively foster those concepts (Seligman, 2002). The Applied Positive Psychology Learning Institute (2021) has described positive psychology as a science that is founded on the belief “that people want to lead meaningful and fulfilling lives, to cultivate what is best within them and others, and to enhance their work, school and life experiences” (para. 2). Positive psychology is founded on three key principles: enhancing positive emotions, promoting positive individual traits, and developing positive institutions and organisations (Seligman & Csikszentmihalyi, 2000). It aims to determine the strengths and skills needed for individuals and communities to thrive (Ciarrochi et al., 2016). Positive psychologists do not view people as lacking in anything; instead, they view all individuals as possessing the capacity to thrive with the correct skills and strengths within their social environment (Kashdan & Ciarrochi, 2013). While positive traits of wellbeing and happiness have been studied for many decades (Ryan & Deci, 2001), positive psychologists have argued there remained a lack of evidence-based interventions that centred on wellbeing without a focus on mental illness (Seligman & Csikszentmihalyi, 2000). Unlike earlier wellbeing intervention programs that addressed a skill deficit in the individual, positive psychology centres on strengthening skills and personal strengths.

### ***2.1.2 Positive Psychology: History and Research***

The emergence of positive psychology has been attributed to Martin Seligman’s American Psychological Association president address in 1998, where he challenged researchers to examine which positive facets are important in making life worth living (Donaldson et al., 2015). It was argued that prior to that time, there had been a negative bias in psychological research in that it focused on the negative emotions and mental health problems of individuals (Seligman & Csikszentmihalyi, 2000). The “first wave” of

positive psychology was identified by an emphasis on positive experiences in the individual, including emotions, traits, and behaviours (Lomas et al., 2021). Positive psychology interventions (PPIs) that adopted this premise sought to increase positive mental health states for the individual and/or decrease the negative mental health states (e.g., Duckworth, 2016; Seligman, 2002). However, these PPIs, referred to as content-focused positive interventions, have been criticised for being decontextualised and coercive because they may encourage maladaptive emotion regulation strategies in the individual (Ciarrochi et al., 2016). This criticism is supported by research that has found pursuing positive mental health states and avoiding negative mental health states may have adverse implications for the individual. For example, experimental studies have shown that attempts to promote positive mental health states, such as happiness, may result in lower levels of happiness (Mauss et al., 2012; Schooler et al., 2003). Additionally, studies have reported that when individuals participated in experiential avoidance of negative mental health states, they were increasingly prone to experience symptoms such as anxiety, depression, and panic disorders (Ciarrochi et al., 2016; Hayes et al., 2006; Sahdra, Ciarrochi, Parker, & Scrucca, 2016).

As a result of these findings, the initial concept of positive psychology, characterised by the promotion of positive phenomena, has expanded and given way to the importance of the interplay between positive and negative emotions being considered (Lomas et al., 2021). This research identifies that the approach is complex and encompasses more than promoting positive affect (Ciarrochi et al., 2016). Referred to as “PP 2.0” (Wong, 2011, p. 70) or the “second wave” of positive psychology (Lomas et al., 2021, p. 662), this assumption postulates that positive psychology still focuses on the flourishing and wellbeing of the individual but recognises the impact that situational and historical events can have on behaviour (e.g., culture, family, and socioeconomic class;



Ciarrochi et al., 2016). This premise is defined by a contextual viewpoint of the notion of positive and negative, providing an awareness of how historical and cultural context may be relevant in fostering a value-consistent and fulfilling life for the individual (Ciarrochi et al., 2016). If positive psychology were to rely only on content, it could potentially place sole responsibility for optimal functioning on the individual and ignore contextual circumstances. For example, if a student were stressed, a content-focused PPI would aim to increase positive emotions and/or avoid negative emotions, suggesting a possible character flaw in the individual. However, a context-focused PPI would consider the student's stress could be the result of situational conditions, such as moving to a new school, and would subsequently build competencies in the student to support them to thrive despite such difficulties.

This study recognises the value and limitations that both positive psychology perspectives offer and harnesses concepts from both perspectives in this investigation. This research looks for ways to foster positive emotions in early-adolescent international students so that they are able to thrive and flourish despite experiencing ongoing adjustment. In this sense, the study aims to identify ways to support students with negative emotions or feelings that they may experience or perceive with respect to relocating and, in doing so, supports a content-focused approach to positive psychology. However, the study does recognise the limitations associated with applying only a content-focused approach to the study, given research reporting on the negative effects that experiential avoidance of negative mental health states may present (Ciarrochi et al., 2016). By including both perspectives in this research, the study looks at ways to promote positive emotions and foster individual strengths in students, which can act as a buffer to enable the individual to flourish through adversities, such as transitions between schools (Bharara, 2020). The concepts of flourishing and wellbeing therefore underpin this

investigation—an investigation that goes further than focusing on the individual to instead explore the groups and systems in which the individual is immersed (Lomas, et al., 2021). In doing so, the study highlights the value that both positive psychology perspectives bring to the investigation.

The inclusion of both approaches in this study also addresses issues raised by critics of positive psychology who have identified prior research findings as limiting and misleading. Ackerman (2021) outlined these criticisms as an overly narrow focus on the individual and a lack of contextual factors, invalid or overstated findings with an overemphasis on self-report and survey data, and use of predominantly white middle-class participants. The inclusion of both content-focused and context-focused perspectives in this study therefore addresses such comments in recognising the role that both the individual may have—and the broader groups within which the individual exists may have—in fostering optimal functioning for the student. Additionally, the criticism by Ackerman (2021) with respect to methodological limitations reported in positive psychology research is addressed in Chapter 3. This encompasses the inclusion of semistructured interviews in the research design to explore individual student experiences and the inclusion of proxy reports and self-report data to ensure more-rigorous findings are reported.

The contribution of a positive psychology theoretical lens in this study is also important given the plethora of papers on positive psychology that have highlighted beneficial outcomes, including increased positive emotions and development of skills and strengths in the individual and at an organisational level (e.g., Dunn et al., 2008; Fowler & Christakis, 2008; Layous et al., 2012; Scott & Barnes, 2011; Seligman et al., 2005). Findings from this research promote the use of PPIs in supporting students to lead a fulfilled life. The American Psychological Association (2021) defines optimal functioning

as “the highest possible level of functioning, especially in relationships, work, education, and subjective wellbeing”. This concept is widely incorporated in positive psychology and in educational research (Seligman & Adler, 2019; Waters & Loton, 2019). Positive psychology has been reported to teach people the power of shifting one’s perspective (Ackerman, 2021), and this premise is important to promote quality of life for an individual presented with difficulties or changes in their life. Seligman and Csikszentmihalyi (2000) asserted that fostering strengths and building competencies in an individual faced with adversity would equip them to lead a fulfilled life, despite any challenges they may experience.

### ***2.1.3 Adjustment***

Adjustment is a process of change, during which an individual may experience some difficulty in their life as they become accustomed to a new situation or environment. Some individuals are able to adjust to change easily, while—under a positive psychology lens—others may find they are not functioning at an optimal level during adjustment. Adjusting to a new school and country is an example of such a change in an individual’s life. An introduction to adjustment will now be presented in the context of the international school sector. This research will not only highlight the negative implications of adjustment for this cohort of students but also highlight the incongruent nature of these findings through a positive psychology lens.

**2.1.3.1 Adjustment in International Students.** Adjustment is a reaction to change and may comprise many different elements for international students, including psychological and cross-cultural adjustments to new surroundings (Rhein, 2018). Psychological adjustment can be defined in terms of psychological and emotional wellbeing and can be determined by factors such as social support, personality, and life changes (Ward & Kennedy, 1999) and positive mental health traits and high levels of

flexibility (Ward & Rana-Deuba, 1999). Cross-cultural adjustment can be described by behavioural skills and may be determined by factors originating from social and cultural learning (Ward & Kennedy, 1999), such as differences experienced between the home and host country and the connection and association with host nationals (Berry, 1997; Searle & Ward, 1990). These different dimensions of psychological and cross-cultural adjustment may result in an international student experiencing a significant period of difficulty as they relocate to a new country and start their education in a new setting (Berry, 1997). For some students, this may be their first time at a school outside their home country. Other students may have spent the majority of their schooling years attending schools in numerous different countries. The process of packing up and saying goodbye to loved ones is difficult and can be exacerbated if the individual has limited experience in relocating to a new country.

School transition and adjustment has been described by Zeedyk et al. (2003) as one of the most stressful events in a child's life. The adjustment experienced by international students can be considered more extreme than that experienced by domestic students as they concurrently adjust to living in a new country. High mobility within international schools suggests all students will experience transition and adjustment; however, this experience will be different for each student (Dixon & Hayden, 2008). For an international school student, school transition requires the student to successfully adjust to their new host country and host school, and then to continue to adjust to the changing school environment. The process of transition and adjustment is important to ensure that the student can successfully connect and engage in their new surroundings (Lessle et al., 2020). Whether this process is easy or difficult will depend on many different factors and will influence a student's sense of wellbeing during this period (Berry, 1997). Although the terms *adjustment*, *acculturation*, and *adaptation* have been

used interchangeably in relation to the transition process of international students, this study focuses on adjustment because it has been identified as a more appropriate term to use with these students given the high global mobility they experience (Rhein, 2018).

The high mobility reported within the international school environment and the resulting transition and adjustment experienced by the international school student have been associated with negative psychological and social outcomes. These include the student's unclear perception of their own identity, temporary friendships with peers, no sense of belonging in their new environment, and absence of attachment to a national culture (Carter & McNulty, 2014; Grimshaw & Sears, 2008). McKillop-Ostrom (2000) described this as a process of forced extroversion where students go out of their way to meet new people and encompasses a capacity to mesh with and mimic peers to quickly gain acceptance. Additionally, the high level of mobility reported in international schools means not only that students need to adjust to their new life but also that the school environment around them will be in a continual state of flux. When students become aware they will be moving soon, or that their peers are about to move, their relationships and surroundings generally enter a state of uncertainty. Student narratives characterise this period of mobility as a time when friends fight or begin to distance themselves from each other as they prepare for one of their cohort to leave (Whyte, 2016).

International students have been reported as having brief and intense relationships with their peers and developing ease in saying farewell (McKillop-Ostrom, 2000). The continual process of saying goodbye to people is a distinctive feature of the high mobility experienced by these students and has been described as unresolved grief along with a reluctance to form close emotional attachment to peers (Hayden & Thompson, 2008; Pollock et al., 2017). These students experience countless losses (both hidden and recognised), including the loss of their personal identity and displacement from their

home (Gilbert, 2008; Lijadi & van Schalkwyk, 2018). This cohort of students has been reported to experience more grief than domestic school students their age, as they constantly experience loss of lifestyle, relationships, possessions, and identity (Pollock & Van Reken, 2009). These findings on adjustment within the international school sector highlight the negative implications reported for this cohort of students. Within a positive psychology framework, although such findings identify a cohort of students that may not be functioning at an optimal level, they provide no information on positive emotions or the building of strengths and/or competencies to support the international student and the wider international school community to thrive despite ongoing adjustment.

**2.1.3.2 Adjustment in Early-Adolescent International Students.** Adjustment during early adolescence can be perceived as more difficult than at any other period of a young person's life, particularly considering this developmental period is characterised by psychosocial and physiological changes (van den Bos et al., 2014; van Loon et al., 2020). School mobility among students aged 11–14 years has been associated with lower academic attainment (Crockett et al., 1989), psychological and social difficulties (Herbers et al., 2013; South et al., 2007), and diminished student engagement (Langenkamp, 2016). Early adolescence has been identified as a period of heightened stress and emotional volatility (Powers & Casey, 2015) and is associated with increased risk of mental health problems (Merikangas et al., 2010). It is during early adolescence that the development of the individual's identity occurs and they begin to explore who they are, referenced by the relationships they have with those around them (Erikson, 1980). The significance of developing a sense of identity during this period is an integral component of healthy psychosocial development (Dunkel & Sefcek, 2009; Easthope, 2009; Gardner, 2009), and its hindrance can have significant effects on an adolescent's wellbeing (Erikson, 1963; Schwartz et al., 2010).

School mobility and adjustment in early adolescence can affect identity formation for an international student, given the uncertainty it creates with peer relationships. During this period, early-adolescent students place great importance on friendship to create a sense of connection and belonging in forming their own identity (Gillies, 1998; Ragelienė, 2016). Research reports attachment to peers, a sense of belonging within a peer group, and stable and strong peer relationships are positively related to identity formation during adolescence (Klimstra et al., 2013; Nawaz, 2011; Rassart et al., 2012). Therefore, when relationships with peers are in a continual state of flux, as reported within the international school context, it denies the early-adolescent student stability to form their own self-identity (Fail et al., 2004). It is asserted that the implications of both mobility and adjustment affect adolescent students the most significantly, because the importance placed on friendships is prominent during this developmental period (Cockburn, 2002; Eakin, 1998; Gillies, 1998; McCaig, 1996; McKillop-Ostrom, 2000). In a qualitative study with 10 adults by Lijadi & van Schalkwyk (2014), participant voices reported the reticence they had all encountered in social relationships during their early-adolescent years as international students, given high rates of mobility. Difficulties they reported experiencing during this developmental period included challenges in forming close relationships with peers, an inability to establish trust, and ongoing difficulties in maintaining relationships.

The psychosocial process that the early-adolescent international student experiences when moving to a new school and country has been described as a sense of loss across many aspects of their life, including loss of lifestyle, relationships, and identity (Pollock & Van Reken, 2001). Schaetti (1996) described it as a similar experience to changing jobs or losing a loved one. With no clear sense of belonging to their new environment, a transient friendship network, and delayed identity formation,

mobility and adjustment may be particularly difficult for this age group. These findings highlight the significant impact that school transition and adjustment can have during early adolescence specifically, and in doing so, provide a justification for this age group being selected for this study. However, this research, with its focus on the negative implications of adjustment, highlights a gap in the knowledge on ways to promote positive emotions and strengths to support the early-adolescent student and/or the wider international school community. A review of adjustment through a positive psychology lens will now be examined to provide support for the conceptual framework for this study.

**2.1.3.3 Adjustment and Positive Psychology.** Positive school transition and adjustment is pivotal to enable early-adolescent students to thrive and flourish (Bharara, 2020). However, most of the research on school transition and adjustment has focused on negative developmental outcomes in students rather than on protective factors (Gruman et al., 2008; South et al., 2007) and, as such, is not aligned with positive psychology. Adjustment research has largely considered adjustment as a series of stress-provoking life changes that necessitates coping responses (Ward et al., 2001). This perspective is conceptualised in adjustment models that identify stress and coping responses in the process of adjustment. The U-curved adjustment model is an example of this approach and identifies four distinct adjustment phases: the honeymoon period, the culture shock period, the recovery period, and the adjustment period (Lysgaard, 1955; Oberg, 1960). In Lysgaard's model (1955), the culture shock period is characterised by feelings of anxiety, stress, and frustration, which are replaced in the recovery period with coping strategies, including crisis resolution and culture learning. This U-curve model of adjustment was extended in the work of Gullahorn and Gullahorn (1963) and Ting-Toomey (1999), whose W-curved adjustment models proposed two stages of lowered wellbeing for the

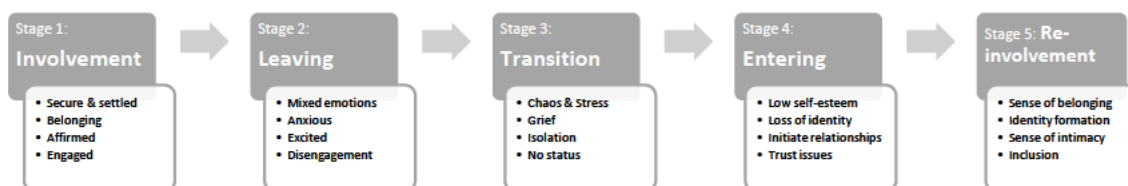


individual, with cultural shock (on entering the new country) and reverse cultural shock (when departing the country for a new location). Both the U-curved and W-curved models highlight a period of lowered wellbeing, conceptualised by stress and coping, for the individual on arrival in a new country. Dixon and Hayden (2008) referred to this stage of entry into a new country as an unsettling experience during which the unknown and unfamiliar can cause extreme stress, anxiety, and disorientation.

Adjustment was also viewed within a similar stress and coping framework in Pollock’s 5-stage adjustment model (see Figure 2.1) developed specifically within the context of international schools (Pollock & Van Reken, 2001). In this model, Stage 3 is *transition*—that is, when the student is relocating to the new country—and is a period identified as one of chaos and anxiety. Everything changes in this stage over a short period, including home, scenery, climate, friends, and school (Dixon & Hayden, 2008). This stage can be characterised by feelings of chaos, stress, isolation, grief, and emotional instability. The transition stage has been described as a time when families become temporarily dysfunctional (McCaig, 1996).

**Figure 2.1**

*Pollock’s 5-Stage Adjustment Model*



The fourth stage of this model is *entering*, where the student identifies ways to be accepted in their new environment. This stage is generally identified as a period of loss of self-esteem and identity, where behaviours of observing, initiating, and trying to engage in the new environment occur. While there are nuances in the different adjustment models

discussed here, all models highlight a period soon after arrival into a new country when the individual will report lowered wellbeing within a stress and coping framework.

These adjustment models provided a foundation for this study because they identify a period of time when students may not be thriving. However, the broad-based stress and coping framework employed in examining adjustment in these models has focused on negative mental health outcomes and has largely ignored positive outcomes. Therefore, this study aimed to address this conceptual gap in adjustment research. Given research on adjustment through a positive psychology lens is a relatively new field, a workable notion has been adopted from positive psychology practitioners on postschool transitioning, which Brown (2017) describes as a combination of strengths and virtues that allow individuals and communities to thrive during the period or process of change from one condition or situation to another. This description has guided this study in the collection of information and identification of factors that enable early-adolescent international students to thrive while moving from one school to another. In doing so, the study has focused on significant positive constructs (e.g., wellbeing, student engagement, and resilience) and investigated how those constructs are affected during the adjustment process. The study also examined how a PPI can promote positive emotions and the building of skills at an individual and organisational level to support students experiencing adjustment. To date, no empirical evidence-based research has been conducted to examine positive psychology constructs with early-adolescent international school students. This chapter will now examine specific positive psychology constructs that have been identified as relevant to international students.

#### ***2.1.4 Wellbeing and International Students***

While positive psychology focuses on many factors, including character strengths, hope, gratitude, and resilience, wellbeing was the most examined construct in a review of

1,336 positive psychology research studies conducted from 1999 to 2013 (Donaldson et al., 2015). The WHO (2019) describes wellbeing as a person's ability to manage normal stresses of life, work productively and effectively, and contribute to the community. Although there is no agreed singular definition for wellbeing, within a positive psychology framework, wellbeing is considered to encompass key psychological elements—for example, possessing a positive outlook and emotional state (Huppert & So, 2013; Liddle & Carter, 2015) and being capable of making responsible decisions to lead a fulfilled life (Ager et al., 2015; Roscoe, 2009). Wellbeing has also been defined as “the combination of feeling good and functioning effectively” (Huppert, 2009, p. 137).

Employing a positive psychology lens, an international student with high wellbeing will report high positive emotions and be able to easily draw on their strengths and skills to support them during adjustment (Bharara, 2020). In the field of positive psychology, wellbeing is important in facilitating a positive transition for students between schools (Bharara, 2020), which can enable optimal functioning for an international student despite the adjustment they experience. However, research to date on international student wellbeing has mainly examined negative psychological constructs. Additionally, although there has been substantial research on the adjustment and wellbeing of international students, such research has predominantly been conducted within the tertiary sector (Farrugia, 2014).

Research at the tertiary level highlights that these students may experience increased cross-cultural and psychological issues as they adjust to unfamiliar surroundings (Alharbi & Smith, 2018; Altinyelken, 2018; Elliot et al., 2016; Huang et al., 2020; Kim & Okazaki, 2013; Liu & Lu, 2011). Such research includes a positive association found between acculturative stress levels and wellbeing (Hilario et al., 2014; Lee et al., 2004; Popadiuk, 2009; Zhang & Goodson, 2011), which can present in either

social, physical or psychological problems (Hilario et al., 2014; Popadiuk, 2009).

However, the context and conditions experienced by tertiary-aged international students can vary significantly from those of school-aged students. For example, it is usual for international school-aged students to attend an international school that offers an internationally recognised curriculum along with, often, students representing a multitude of different cultural groups. This is in contrast to tertiary-aged students, who may realise they are in the cultural minority, with an unfamiliar national curriculum to traverse. Factors such as social support, accommodation, and financial responsibilities may also vary dramatically between the two student groups.

Higgins and Wigford (2018) led the first worldwide research investigation on wellbeing in international schools, with staff and teachers from international schools participating across 72 countries. The study design included an online survey with 31 questions about the wellbeing of teachers and that of their students. Findings reported that most of teachers thought wellbeing was high amongst their students'. There was only a small percentage (8% of the 1,056 respondent teachers) who thought wellbeing was low among their students, with about a third of those students being identified by the teachers as having serious issues that were cause for concern. The teachers did not elaborate on the issues. Findings from this report would suggest that the majority of international school-aged students were thriving and had adjusted to their new environment.

Interestingly, these findings differ from research analysed with tertiary-aged international students, which reported numerous negative effects on student wellbeing as they adjusted to their new environment (Forbes-Mewett & Sawyer, 2011; Mori, 2000). Discrepancies in these findings may be considered in light of the different adjustment conditions each of these age groups experience. On the other hand, they may suggest constraints in employing proxy reports, with international school teachers reporting on

student wellbeing (Higgins & Wigford, 2018) as opposed to self-reports completed by tertiary-aged students. It could be claimed that the sole use of proxy reports in such research may have skewed the findings, given that the reports were completed by teachers or specialist staff who may have had little communication with students aside from lessons together, making it hard for them to comment on their students' wellbeing.

In contrast, while student wellbeing was found to be high in the study, most teachers had reported that mobility was a significant hindrance to student wellbeing. The report indicated that 48% of participating teachers found that transition between schools had a negative effect on students' wellbeing during their period of adjusting to an unknown and different environment (Higgins & Wigford, 2018). Given the high mobility reported within international schools, it can therefore be assumed that this would affect general student wellbeing within their own school. Teacher participants called for this issue to be better addressed within the international school context, with only 55% of respondents indicating an effective strategy was in place at their school to support newly arrived students. Higgins and Wigford's (2018) study did not investigate any effect between wellbeing and different mobility variables (e.g., the period of time residing at the school, number of international moves). Considering adjustment models highlight arrival in a new country as the most difficult period of adjustment, greater understanding about whether early-adolescent international students may experience lowered wellbeing during that time needs to be examined. Within a positive psychology framework, these findings highlight conceptual gaps because research has predominantly centred on negative psychological constructs and on tertiary-aged international students. Examining wellbeing, a positive psychology construct, in early-adolescent international students will help to address these conceptual gaps and provide information on flourishing for the student, despite adjustments they may experience.

### ***2.1.5 Student Engagement and International Students***

Student engagement is also an expanding area of research within the international education sector (Baxter, 2019; Green, 2019; Metro-Roland, 2018; Trinh & Conner, 2019; Wekullo, 2019). Within a positive psychology framework, student engagement broadly references the degree of interest, optimism, attention, and motivation displayed by a student when they are being taught (Great Schools Partnership, 2016). High student engagement enables the student to function at an optimal level within the classroom and fosters a healthy and productive learning environment (Hodges, 2018). Student engagement has also been linked to constructs such as retention, achievement, and prosocial behaviour (Fredricks et al., 2004; Li & Lerner, 2011; Lippman & Rivers, 2008; Ng et al., 2018; Trowler, 2010). Additionally, a positive association has been found between student engagement and academic success (Kahu et al., 2017), highlighting the importance of educators actively promoting student engagement in the classroom (Hammill et al., 2022).

Student engagement fosters a sense of belonging and connectedness (Fredricks & McColskey, 2012), which is important to consider given the high mobility and adjustment reported within the international education sector through a positive psychology lens. Additionally, adjustment has been found to be a mediating factor in student engagement, with the students who reported ease in their adjustment process being more positively engaged at school (Shoshani et al., 2016). Research on student engagement within the international education sector has largely been directed at the tertiary level. These findings report lower engagement levels with tertiary-aged international students in comparison with domestic tertiary-aged students (Korobova & Starobin, 2015; Van Horne et al., 2018). Lower levels of campus connection were also found in tertiary-aged international students compared with their domestic counterparts in a national study using

online survey data from colleges across the United States (Glass et al., 2013). However, caution needs to be applied in transferring these findings to international school-aged students, given the different adjustment conditions they experience.

Higgins and Wigford's (2018) recent wellbeing report examined student engagement within the international school sector for the first time. Findings from the report indicated that 78% of the 1,056 teacher participants reported their students behaved well, 75% reported their students respected classmates, and 68% reported their students were interested to learn. This report suggests high levels of both behavioural and emotional engagement within the international school sector. Interestingly, these findings differ from tertiary-aged international student research (e.g., Korobova & Starobin, 2015; Van Horne et al., 2018), thus indicating that student-engagement levels within the international education sector may differ across age groups. Considering research that reports engagement levels are at their lowest during high school years (Marks, 2000), the limited research carried out on student engagement with school-aged international students and the possible contradiction with findings with tertiary-aged international students justifies the need for further exploration in this field.

### ***2.1.6 Resilience and International Students***

Alongside wellbeing and student engagement, resilience is also an expanding area of research within the international education sector (Kim et al., 2019; Yoo et al., 2013). There are numerous definitions of resilience, including being able to adapt when experiencing stress, trauma, or adversity (American Psychological Association, 2012), being able to adjust to stressful situations (Masten, 2013; Smith et al., 2008), and managing adverse changes (Béné et al., 2012; Southwick et al., 2014). Within a positive psychology framework, a resilient person draws upon their personal resources, strengths, and positive psychological traits to enable them to handle any challenges that may arise.

Resilient people have been described as having both control over their destiny and the capacity to make the best of any situation (Feldmen, 2011). Resilience has also been expressed as a desirable attribute for an international student to have, as it may assist these students to cope with changes associated with their adjustment in a new environment (Amat et al., 2014; Cheung & Yue, 2013).

Research on resilience within the international education sector has also predominantly centred on tertiary-aged students. Such research has focused on the effect that resilience may have on adjustment, with findings indicating that international students with higher resilience levels report fewer adjustment issues (Oyeniya et al., 2021; Wang, 2008). For example, in a study by Wang (2008), a negative correlation was found between resilience attributes and adjustment issues in 209 tertiary-aged international students. These findings align with the research conducted by Amat et al. (2014), who inferred that high levels of resilience in international students enables them to successfully address any issues they may experience in adjustment and continue to thrive.

These findings from studies with tertiary-aged international students (e.g., Pidgeon et al., 2014; Sabouripour & Roslan, 2015) call attention to the significance of resilience for international students in enabling them to adjust to their new surroundings successfully. However, minimal research has been conducted on resilience in international students at a school-aged level, which, through a positive psychology lens, highlights a gap in the knowledge on ways an early-adolescent student may function at an optimal level when experiencing adjustment. Considering the high state of mobility-induced flux reported within the international school environment (Whyte, 2016), it is important for international school-aged students to be able to adjust to their changing environment easily. School-based positive psychology intervention programs will now be



examined as a potential way to promote positive psychology constructs in early-adolescent international students, despite the adjustments they experience.

## **2.2 School-Based Positive Psychology Interventions**

Positive psychology research is attributed to the positive education movement in schools in which explicit programs or implicit strategies have evolved to promote student wellbeing (Green & Norrish, 2013; Seligman, 2011). School-based positive psychology intervention programs have developed considerably over the years to promote positive flourishing among individuals and in organisations (Bolier et al., 2013; Meyers et al., 2013). These interventions have been characterised as intentional activities that cultivate positive subjective experiences, build valuable individual traits, and foster optimism at an organisational level (Meyers et al., 2013). A growing field of research supports the effectiveness of school-based PPI programs in promoting mental health and wellbeing (Coulombe et al., 2020; Dray et al., 2014; Giannopoulos & Vella-Brodrick, 2011; Hayes & Ciarrochi, 2015; Kieling et al., 2011; Owens & Waters, 2020; Sin & Lyubomirsky, 2009; Tran et al., 2014; Waters, 2011; Weare & Nind, 2011; White, 2016; WHO, 2019) and equipping students with the tools they need to manage life stressors (Cilar et al., 2020). Additionally, these programs have reported a significant effect on student engagement among students across measures such as academic results, prosocial behaviour, and feelings of belonging to the school (Ager et al., 2015; Leland, 2015; Mind and Life Education Research Network, 2012; Noble & McGrath, 2015; Waters, 2011; Zins et al., 2004), indicating positive effects not only for the individual student but also for their school community.

These findings highlight the key pivotal role that schools can play in providing support to students through the implementation of school-based PPI programs. The programs offer wide-reaching accessibility for many students and, at the same time,

provide a cost-effective approach (Felver et al., 2013). With research indicating that only a small number of young people receive adequate treatment for mental health issues (Kieling et al., 2011), this is a progressive step forward in the provision of preventative support for students who may be at risk. A universal delivery approach also minimises the stigma that students may experience in seeking individual support from a school counsellor. This preventative approach is supported by other evidence-based programs including the Collaborative for Academic, Social and Emotional Learning (CASEL) framework (2017) that focuses on developing social and emotional skills to promote wellbeing in students as opposed to programs attempting to fix a problem (Waters & Loton, 2019). School-based intervention programs that promote wellbeing in students and can be delivered universally, minimising costs and reducing stigma, are therefore an obvious choice to examine when researching support to early-adolescent international school students. Of these school-based PPI programs, a mindfulness-based program was chosen for this study, as MBIs have reported stronger effect sizes in improving mental wellbeing in studies compared with other interventions, including cognitive behavioural therapy and acceptance and commitment therapy (van Agteren et al., 2021). MBIs have also been identified as able to promote positive emotions and build strengths at both an individual and a school level through a positive psychology lens. Mindfulness as a concept and mindfulness school-based programs will now be reviewed to justify how a mindfulness program may foster the optimal functioning of an early-adolescent international student as they adjust to their new school and environment.

### ***2.2.1 Mindfulness***

The practice of mindfulness, which originated in Buddhist spiritual practices, has been adopted by contemporary psychology, which today provides a secular approach to its application. Interest in mindfulness continues to grow (Grossman, 2019), with the

publication of systematic reviews in the field of mindfulness growing at a rate of 19% per annum (Chiesa et al., 2017). While there has been no agreement on an operational definition of mindfulness (Bishop et al., 2004; Davis, 2012; Greco & Hayes, 2008; Sahdra, Ciarrochi, & Parker, 2016), many leading researchers in the field have adopted the definition put forward by Jon Kabat-Zinn (Burke, 2010; Semple et al., 2010; Weare, 2013). Recognised as the founding father of secular-based mindfulness, Kabat-Zinn described mindfulness as “the awareness that emerges through paying attention on purpose, in the present moment, and non-judgementally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). The principle of mindfulness is present-moment awareness and nonjudgemental acceptance of what is being experienced at any given time. Mindfulness has been described as a calming, centred, and grounded practice that allows a busy or scattered mind to settle down in the moment, enabling greater clarity (Huppert & Johnson, 2010).

Mindfulness has been recognised as a multifaceted construct comprising interconnected abilities, including acting with awareness, observing, describing, not reacting, and not judging (Baer et al., 2006). It has also been defined as a “state of consciousness” (Brown & Ryan, 2003, p. 824), which essentially involves developing forms of awareness that are meta-cognitive rather than verbal. The practice of mindfulness allows a person to become conscious of inner processes that are involved when doing, feeling, and thinking and being aware of impulses, feelings, and thoughts as they occur in the body and mind (Weare, 2013). In a mindfulness-based practice, a participant may be invited to simply bring their awareness to one particular act (e.g., breathing) and to simply stay in a state of noticing it. During the practice, the mind will wander onto other thoughts, feelings, memories, or images, and upon noticing this, the practitioner then needs to bring their awareness back to noticing their breathing. This

focus then becomes an “anchor” for the practice (Meiklejohn et al., 2012). In simply observing one’s own thoughts and feelings without overidentifying with them or habitually reacting to them, one is then able to respond to a given situation, thought, or emotion with more objectivity and clarity. The practice of mindfulness enables the individual to understand that negative thoughts and feelings are simply a passing state.

From a positive psychology perspective, mindfulness introduces flexibility into how an individual cognitively appraises an event and, in doing so, promotes eudaimonic wellbeing (Garland et al., 2015). Mindfulness, as a practice, enables the individual to be in a state of noticing how they are thinking or feeling and to not avoid, reduce, or try to control any negative emotions. In this way, an MBI is aligned with the positive psychology approach adopted for this study because it allows the individual to notice firsthand how they are thinking and feeling and to let those thoughts be, without altering or avoiding them in anyway. This practice may be beneficial to international students, as mindfulness can enable the individual to notice and explore their inner states with more awareness and less reactivity and judgement, which may allow the individual to proceed with their values and goals, thus fostering optimal functioning for the individual (Sahdra, Ciarrochi, & Parker, 2016). This mindfulness practice would enable the early-adolescent international student to look at any challenges associated with adjustment with curiosity, rather than judgement or reactivity.

In this research, mindfulness is not proposed as a strategy to minimise negative emotions, such as stress, arising from adjustment. This is important to note considering the criticism levelled at MBIs by Purser and Milillo (2015), who argued that mindfulness is becoming disconnected from its deeper sociocultural context and is being used as a stress-reduction tool. Instead, the MBI employed in this study aligns itself with a positive psychology approach in aiming to foster enhanced awareness, discernment, and reflection

in the individual as a means to promote optimal functioning when experiencing adjustment. Human experience is multifaceted; mindfulness is the awareness of this complexity and the ability to navigate through it (Pagnini & Langer, 2015). In this way, the MBI may modify how an individual responds to the cognitive, affective, and physiological reactions that they experience in response to an event, which may also facilitate lasting change for the individual within their social context (Garland et al., 2015).

Within the positive psychology framework guiding this study, an MBI can facilitate greater awareness of, observation of, and nonreactivity to what the student experiences with adjustment. This may then heighten positive emotions and strengthen skills in the individual to enable them to thrive. Additionally, considering the study was looking to deliver an MBI to a cohort of students, it was envisioned that it would facilitate optimal functioning at a school community level as well as an individual level, which aligns with positive psychology principles. A review of mindfulness-based school programs, with early-adolescent students in particular, will now be examined to identify any conceptual, empirical, and methodological limitations in the research that was used to inform this study.

### ***2.2.2 Mindfulness-Based School Programs***

Although still an emerging field, exponential growth in the use of MBIs with young people has been reported, suggesting a positive association between mindfulness practices and mental health and wellbeing in school students (Felver & Jennings, 2016; Feuerborn & Gueldner, 2019). The research has reported a positive relationship between mindfulness and positive mental health traits, such as emotional wellbeing (Bluth & Blanton, 2014; Feldman et al., 2014) and coping competence (Padhy et al., 2020). In Weare's (2019) overview of recent mindfulness approaches in education, she noted that

findings have indicated a small to moderate effect for the student across a range of outcomes, most reliably on psychosocial health and wellbeing, especially mental health problems. She also noted less definitive but promising evidence of small effects on learning, cognition, physical health, and behaviour. Preliminary evidence also suggests MBI programs in schools may indirectly enhance the self-efficacy and wellbeing of teachers despite them not participating directly in the program (Kuyken et al., 2017). Similar indirect findings were also identified in an MBI program delivered to teachers, which not only reported increased teacher wellbeing levels but also an increase in students' sense of connectedness to the teachers despite not having participated in the intervention (Hwang et al., 2019). These findings indicate that MBIs may provide wide-reaching community benefits as opposed to benefits for the individual only, which is important to consider within a positive psychology framework.

Several systematic reviews and meta-analyses conducted on MBIs in school settings have reported positive effects on mental health and wellbeing with students (e.g., Carsley et al., 2018; Dunning et al., 2019; Felver et al., 2016; Maynard et al., 2017; Zenner et al., 2014). Felver et al. (2016) reported a reduction in negative psychological traits in their review ( $N = 28$ ), including behavioural problems, depression, anxiety, and suicidal ideation and an improvement in executive functioning and attention. In the studies they reviewed ( $N = 35$ ), Maynard et al. (2017) reported positive significant outcomes across cognitive, social, and emotional dimensions for the individual. However, they also noted there was no effect on either behavioural or academic dimensions. In Zenner et al.'s (2014) review, significant positive effects, such as improvements in cognitive performance and resilience, were reported in the controlled design and pre-post design studies examined ( $N = 24$ ). Carsley et al.'s (2018) review ( $N = 24$ ) also reported

small to moderate pre–post effects on mental health and wellbeing outcome measures compared with control groups.

However, a smaller overall effect size (Cohen's  $d = .19$ ) was reported in Dunning et al.'s (2019) meta-analysis ( $N = 24$ ), which exclusively examined randomised controlled trials (RCTs), compared with the meta-analyses by Klingbeil et al. (2017; Cohen's  $d = .17$  to  $.51$ ), Maynard et al. (2017; Cohen's  $d = .14$  to  $.27$ ), and Zenner et al. (2014; Cohen's  $d = .41$ ) that included nonrandomised controlled trials. Furthermore, another recent meta-analysis of RCT school-based MBIs by Odgers et al. (2020;  $N = 24$ ) reported no significant effect from MBIs in anxiety reduction among school students. The results of these two recent RCT meta-analyses indicate there is less evidence to support the use of school-based MBIs to improve the mental health and wellbeing of students. These findings also suggest that the inclusion of studies with less methodological rigour may have previously overestimated the effects of MBIs in schools. In addition, the diverse range of student ages included in the reviews (e.g., 5–19 years) poses challenges for guiding future MBI implementation within a specific age group. This is even more relevant given reports of differences in age effect.

Emerging evidence suggest older adolescents may respond better than younger age groups to MBIs (Carsley et al., 2018; Johnson & Wade, 2021). For example, Carsley et al.'s (2018) meta-analysis ( $N = 24$ ) reported higher pre–post effects on mental health and wellbeing outcomes in late adolescence (ages 15–18 years;  $n = 7$ ; Hedges'  $g = 0.28$ , 95% CI [.17,.39],  $p < .001$ ), compared with studies with middle-childhood students (ages 6–10 years;  $n = 6$ ; Hedges'  $g = 0.20$ , 95% CI [.03,.37]). They also reported no significant pre–post effects in mental health and wellbeing outcomes from the MBI in early-adolescent students (ages 11–14 years;  $n = 6$ ; Hedges'  $g = 0.11$ ,  $p = .213$ ). Differences in self-concept between preadolescent students (Grades 4–5) and early-adolescent students

(Grades 6–7), which may lead to variation in self-awareness—a key concept of mindfulness—have also been reported (Schonert-Reichl & Lawlor, 2010). Johnson et al.’s (2017) research also suggests that neurocognitive maturity may be a contributing factor to the varying influence of MBIs across age groups. Given this, it is important to better understand the findings on MBIs with early-adolescent school students specifically—the cohort of students of interest in this study.

#### **2.2.2.1 Mindfulness-Based School Programs With Early-Adolescent Students.**

The first ever systematic review of MBIs delivered specifically to early-adolescent school students, conducted by McKeering and Hwang (2019), identified 13 studies through the search strategy employed. Since that review, two further MBI studies have been conducted that meet the same inclusion criteria (e.g., Johnson & Wade, 2021; Lassander et al., 2021). Together, those 15 studies were reviewed in order to better understand the reported MBI findings specifically with early-adolescent students and used to best inform this study. The findings highlighted a conceptual gap in MBI research in this age group through a positive psychology lens, with the majority of studies focusing on negative psychological outcomes. A summary of those 15 papers (provided in Appendix A) will be briefly discussed here, highlighting the conceptual, empirical, and methodological limitations identified in current MBI research with early-adolescent students. The findings indicate the need for further MBI research to be conducted in order to promote positive emotions and build strengths in this age group.

In the 15 studies reviewed, the MBI effect was examined as either an increase in positive mental health traits for the early-adolescent student (e.g., optimism, self-compassion) or a reduction in negative mental health traits (e.g., anxiety, depression, and stress). One of the studies (Barnes et al., 2004) examined the effect of an MBI on physiological measures (e.g., blood pressure, heart rate). Positive improvements were



reported in 10 of the 13 quantitatively designed studies reviewed on physiological, cognitive, and/or emotional wellbeing outcomes. These positive improvements were reported on blood pressure and heart rate (Barnes et al., 2004), increased levels of mindfulness (Viafora et al., 2015), and improved working memory (Quach et al., 2016). Positive effects were also found in students' self-reported emotional wellbeing. This included increased positive mental health traits, such as optimism and positive affect (Schonert-Reichl & Lawlor, 2010), health-related quality of life (Lassander et al., 2021), wellbeing (Bernay et al., 2016), and prosocial functioning (Joyce et al., 2010) for the intervention group post-MBI compared with the control group. A reduction in negative mental health traits was also found in variables, including depression (Joyce et al., 2010), anxiety (Sibinga et al., 2013), suicidal ideation and affective disturbances (Britton et al., 2014), negative coping (Sibinga et al., 2013), and rumination, self-hostility, and negative affect (Sibinga et al., 2016) on completion of the MBI program. In Schonert-Reichl and Lawlor's (2010) study, teacher-rated measures reported a positive effect from the MBI on measures of student attention, student behaviour, emotional regulation, and social and emotional competence. In the nine MBI studies that reported effect sizes, medium to large effect sizes were reported in the studies that examined negative psychological constructs (e.g., negative coping, affective disturbances), compared with small effect sizes reported for increases in positive mental health traits (e.g., positive affect, prosocial functioning). These findings highlight the need for further research to be conducted on MBI effects on positive psychology constructs.

However, three of the 13 quantitative MBI studies with early-adolescent students reported no significant improvement across emotional wellbeing measures (i.e., Johnson et al., 2016, 2017; Johnson & Wade, 2021). Those three studies were all conducted by the same group of researchers and largely examined MBI effects on negative psychological

constructs in early-adolescent students (e.g., depression, anxiety, and stress). All three studies employed the same mindfulness program (.b mindfulness program), which was not used in any of the other studies reviewed. Given the .b mindfulness program is a well-regarded program (Kuyken et al., 2017), developed by the Mindfulness in Schools Project (2015) team specifically for early-adolescent school students, this study employed the same mindfulness program with an independent researcher to determine whether any differences in findings occur when the program is delivered by a different facilitator. Additionally, as the three studies largely examined MBI outcomes on negative psychological constructs, it could be argued that the .b mindfulness program may be better suited to promoting positive emotions and building strengths in the individual rather than minimising negative emotions. This is important to highlight when applying a positive psychology lens, given that optimal functioning of an individual is a balance between positive and negative affect as opposed to minimisation of negative emotional traits.

Six of these reviewed MBI studies with early-adolescent students employed qualitative findings. Analysis of these findings generated two major themes: students' experiences of practising mindfulness, and teachers' experiences of implementing mindfulness programs. Students' responses to the program were positive and active, and the majority of students were engaged with the practice (e.g., Arthurson, 2015; Costello & Lawler, 2014), with a minority of students disliking the practice (e.g., Britton et al., 2014). Students identified mindful breathing as the most frequently used practice to anchor their mind to the present and reported calming effects from the practice (e.g., Bernay et al., 2016; Viafora et al., 2015). Students spoke of both emotional and behavioural benefits when using mindfulness practices, including behaviour regulation (e.g., Bernay et al., 2016), reduction of disruptive behaviour in class (e.g., Costello &

Lawler, 2014), improved concentration (e.g., Viafora et al., 2015), and management of stress and test anxiety (e.g., Bernay et al., 2016).

Teachers' experiences in delivering MBIs in the classroom were positive (e.g., Arthurson, 2015). They identified that different activities appealed to different students (Arthurson, 2015); however, some students had difficulty in taking the activities seriously (Joyce et al., 2010). Teachers also identified environments conducive to delivering the MBI, including support from school administration and parents, collaboration with other teachers, and students' willingness to learn (Joyce et al. 2010). They also identified barriers to delivering the program, including time constraints due to the curriculum and student disengagement with the program (Joyce et al. 2010). Teachers also described improvements for students who participated in the MBI, including psychological, behavioural, and cognitive improvements (Arthurson, 2015; Costello & Lawler, 2014). In contrast to the quantitative findings, the qualitative MBI findings with early-adolescent students provide clear support for MBIs in promoting optimal functioning of students through a positive psychology lens. The acceptability of the program and the emotional, cognitive, and psychological benefits reported by students and teachers suggest benefits at both an individual and school level. These findings therefore highlight the importance of both quantitative and qualitative data to be included in research examining the effectiveness of an MBI to ensure both depth of and context to the findings reported.

Of the 15 MBI studies with early-adolescent students reviewed, the majority examined MBI effects on negative psychological constructs. These findings therefore highlight a conceptual gap in the research examining the effectiveness of MBIs through a positive psychology lens. This study addressed this conceptual limitation by examining the effectiveness of an MBI in promoting positive emotions and building strengths at both an individual and organisational level through quantitative and qualitative findings.

Additionally, caution needs to be applied when interpreting the findings reported here, given the methodological limitations identified in the studies reviewed (McKeering & Hwang, 2019). The next section summarises these limitations to ensure that the MBI design employed in this study includes design features that address prior limitations in the field of MBI research.

#### **2.2.2.2 Methodological Limitations in Mindfulness-Based Intervention**

**Research.** Recent reviews and meta-analyses of MBIs in schools have all highlighted methodological limitations in the studies reviewed (Emerson et al., 2020; Felver et al., 2016; Gould et al., 2012; McKeering & Hwang, 2019; Zenner et al., 2014). There have been calls regarding the need for more randomised trials to be conducted (Semple et al., 2017), the importance of fidelity in future MBI studies (Espil et al., 2021), and the need for consistency regarding the MBI program being implemented, considering differences reported in their structure, format, duration, and delivery (Burke, 2010; Tan, 2016; Zenner et al., 2014). Emerson et al. (2020) and Van Dam et al. (2018) suggested a stark lack of scientific rigour exists across the field, with conclusions restricted by limitations in the methodology employed. In a systematic review conducted by the author of this thesis in conjunction with another researcher (McKeering & Hwang, 2019), it is also suggested that current research does not meet the criteria for evidence-based practice in education settings due to small effect sizes and a lack of replicability between studies. A detailed explanation of each of the quality indicators used in examining the MBI studies with early-adolescent students in the review (McKeering & Hwang, 2019) highlights the methodological limitations in the field of research to date. The quality analysis critique conducted in the review establishes the need for greater methodological rigour in future MBI studies with this cohort in order to address the methodological limitations identified.

Methodological limitations in the reviewed MBI studies with early-adolescent students include single-group designs (e.g., Arthurson, 2015), nonrandomised studies (e.g., Joyce et al., 2010), small sample sizes (e.g., Sibinga et al., 2013) and no effect sizes reported (e.g., Lassander et al., 2021). Additional limitations were identified in the quantitative studies that did not report validity of outcome measures (e.g., Quach et al., 2016) and in the qualitative studies that provided no information on trustworthiness, credibility, or reflexivity of the researcher (e.g., Arthurson, 2015). Furthermore, many of the quantitative studies reviewed relied solely on self-report data (e.g., Johnson et al., 2016, 2017), which can be a concern with this age group given that cognitive, self-awareness, and identity formation are still developing (Owens & Waters, 2020; Razza et al., 2021). There are also concerns regarding the limited information provided on MBI implementation and program content in the early-adolescent studies causing fidelity issues and preventing replicability of findings for future research (McKeering & Hwang, 2019). This includes insufficient information on facilitator training (e.g., Barnes et al., 2004), the intervention program (e.g., Sibinga et al., 2016), the participants (e.g., Arthurson, 2015), and attrition (e.g., Bernay et al., 2016).

These findings highlight the need for greater rigour in future MBI research with early-adolescent students. The research design employed in this study addressed some of the identified methodological limitations in current MBI research. Specifically, this study adopted a RCT and employed a mixed-methods design to integrate quantitative and qualitative analysis. It reports validity of outcome measures and effect sizes in the quantitative analysis and provides information on veracity and the position of the researcher in the qualitative analysis. This study also provides greater transparency on the MBI program used, including setting, duration, frequency, and incorporation of informal and formal practice, as these practices have been identified as important to ensure

uniformity and better control of future MBI research (Van Dam et al., 2018). Additionally, given that several researchers (e.g., Frank et al., 2021; Johnson et al., 2016, 2017; Johnson & Wade, 2019; Volanen et al., 2020) have suggested early-aged adolescents may benefit from an increased classroom dosage of mindfulness, compared to dosage for older-aged adolescents, this study increased the lesson density (number of sessions weekly) of the .b mindfulness program. In doing so, the study aimed to provide information on how best to optimise outcomes from MBIs with this age group and contribute to empirical evidence-based research on MBIs with early-adolescent students.

### ***2.2.3 Mindfulness-Based Intervention Programs and International Students***

Although there is growing evidence that mindfulness-based programs provide psychosocial support to students, its implementation within the international education sector is a relatively new phenomenon. Considering the importance a school can play in supporting an international student's wellbeing (Langford, 1998; Schaetti, 1998), international schools have a responsibility to support students in transition (Dixon & Hayden, 2008). Cowie and Pecherek (1994) argued the need for teachers to better understand how international students will respond to the loss associated with mobility, and several researchers (e.g., Dixon & Hayden, 2008; Mc-Killop-Ostrom, 2000; Reeves, 2006) have advocated for the development of programs to better support international students adjust. However, despite repeated calls, there has been limited ongoing research or development of school-based support programs for these students (Morales, 2015).

The first research conducted on mindfulness with international students at a tertiary level reported the MBI improved the wellbeing of students by increasing their mindful awareness (de Bruin et al., 2015). Altinyelken's (2018) research then examined the effects of an MBI in a qualitatively designed study with international tertiary-aged students ( $N = 10$ ). Participants reported that their awareness of emotions had improved

and they had learnt to regulate and relate to difficult emotions (e.g., stress, anxiety, and loneliness) more constructively following participation in the program. More recently, a quantitatively designed study conducted on the effects of an MBI in tertiary-aged international students ( $N = 38$ ) in the United States reported a significant increase in wellbeing and a significant decrease in overall psychological distress and perceived discrimination in students who participated in the program (Xiong et al., 2022). However, the limited research in this field to date prevents generalisability of these findings to international students across other educational institutions.

Interestingly, mindfulness as a trait has also been examined in a recent study with international school students aged 12–19 years ( $N = 230$ ) in the United Arab Emirates (Thomas et al., 2021). The findings reported that participants with greater trait mindfulness also reported lower stress reactivity and depression. The researchers also found high rates of depression in adolescent international students and called for preventative programs to be delivered to promote wellbeing with this cohort. Given the limited research conducted on mindfulness with international students to date, the aim with this research was to address that gap by examining the effects of an MBI on positive psychology constructs with early-adolescent international students. In doing so, this study may provide information on ways to better support students, specifically those within the international education sector.

### **2.3 Summary of Literature Review**

A summary of the literature review will enable the presentation of a clear conceptual framework for this study. This chapter began by providing an overview of positive psychology and examined adjustment of early-adolescent international students through a positive psychology lens. Within a positive psychology framework, conceptual limitations were identified in current adjustment research with international students,

which has predominantly centred on negative psychological constructs. These findings highlighted the difficulties that may present from adjustment and provided justification for this study by identifying a group of students who could benefit from additional support. Early-adolescent international students were identified as the most suitable group: they experience high rates of mobility and adjustment along with the negative psychosocial implications that adjustment presents to this age group. This literature review highlighted the need for further research to better understand how to promote optimal functioning of early-adolescent international students despite the adjustment issues they experience.

Within a positive psychology framework and guided by the literature review, wellbeing, student engagement, and resilience have all been identified as important constructs that need to be better understood within the international school sector. These constructs are all relevant given their interconnectedness with each other and their association with adjustment. Findings on these positive psychology constructs in international student research, however, have largely centred on tertiary-aged students even with the reported expansion within the school sector. Given the high rates of mobility and adjustment within international schools and the different conditions and factors experienced by school-aged students compared with tertiary-aged students, there is a clear need for future research on positive psychology constructs within the international school sector.

In identifying ways to support these students, MBI programs were examined. The literature reviewed on MBIs in schools provides preliminary support for the association between mindfulness and psychosocial health and wellbeing in students. However, a review of MBIs specifically with early-adolescent students highlighted smaller effect sizes in MBIs in this age group compared with younger and older-aged students.



Additionally, the majority of MBI research studies with this age group have focused on negative psychology constructs. Given the limited number of MBI studies conducted with this age group, further research is needed to examine whether MBIs can increase positive psychology constructs. Such research needs to also address the methodological limitations highlighted in MBI research in the studies reviewed in order to ensure that a more rigorous and evidence-based approach is employed in examining the effectiveness of MBIs in education settings with this age group.

## **2.4 The Research Conceptual Framework**

The literature review facilitated the development of a conceptual framework for this study to promote the optimal functioning of early-adolescent international students. Adopting a positive psychology lens, the framework enabled the examination of information and factors that may assist or enable these students—and the wider school community—to thrive and flourish, despite the adjustment difficulties they experience.

### ***2.4.1 Positive Psychology Theoretical Lens***

Research in the field of international students to date has predominantly been conducted at a tertiary level and has largely concentrated on negative psychological constructs. Such research is limited, as it does not provide information on factors that could support international students to thrive and flourish when adjusting to a new school and/or country. This study addressed this conceptual limitation by applying a positive psychology framework in examining which factors and information may contribute to optimal functioning for early-adolescent international students within the highly mobile international school environment. Additionally, this study looked to understand how the international school, as an organisation, may best facilitate a thriving environment for its students, which is an important element of positive psychology theory.

Since positive psychology constructs are interlinked with optimal functioning and psychosocial health and wellbeing (Rusk & Waters, 2015), these constructs were examined in this study. Three positive psychology constructs were represented in the conceptual framework for this study: wellbeing, student engagement, and resilience. Each of these constructs has been identified as important to promote optimal functioning of the student (wellbeing, e.g., Donaldson et al., 2015; student engagement, e.g., Ng et al., 2018; resilience, e.g., Amat et al., 2014) through a positive psychology lens. Additionally, given the importance of these constructs in fostering positive transition and adjustment for the student, interest in these three positive psychology constructs within the international education sector continues to grow (e.g., Baxter, 2019; Green, 2019; Kim et al., 2019; Metro-Roland, 2018; Sabouripour & Roslan, 2015; Trinh & Conner, 2019). Evidence-based research also provides support for the importance of the three positive psychology constructs included in the conceptual framework for this study. Adjustment research findings highlight the negative implications of adjustment for wellbeing (Altinyelken, 2018; Elliot, et al., 2016; Huang, et al., 2020), student engagement (Korobova & Starobin, 2015; Van Horne et al., 2018), and resilience (Oyeniya et al., 2021; Wang, 2008) among tertiary-aged international students. Given this, the conceptual framework of this study looked to better understand wellbeing, student engagement, and resilience among early-adolescent international students in order to promote optimal functioning of the student through school transition and adjustment experiences within the international school environment.

The conceptual framework also incorporated a content-focused and context-focused positive psychology lens. It did this by examining the optimal functioning of students as an increase in positive psychology constructs and recognising the impact that situational and historical events can have on psychosocial health and wellbeing (Ciarrochi

et al., 2016). Given this, the conceptual framework for this study included mobility and demographic factors to determine whether these elements have any effect on the positive psychology constructs examined. In doing so, valuable contextual information on external factors that may facilitate optimal functioning in early-adolescent international students may be identified through a positive psychology lens.

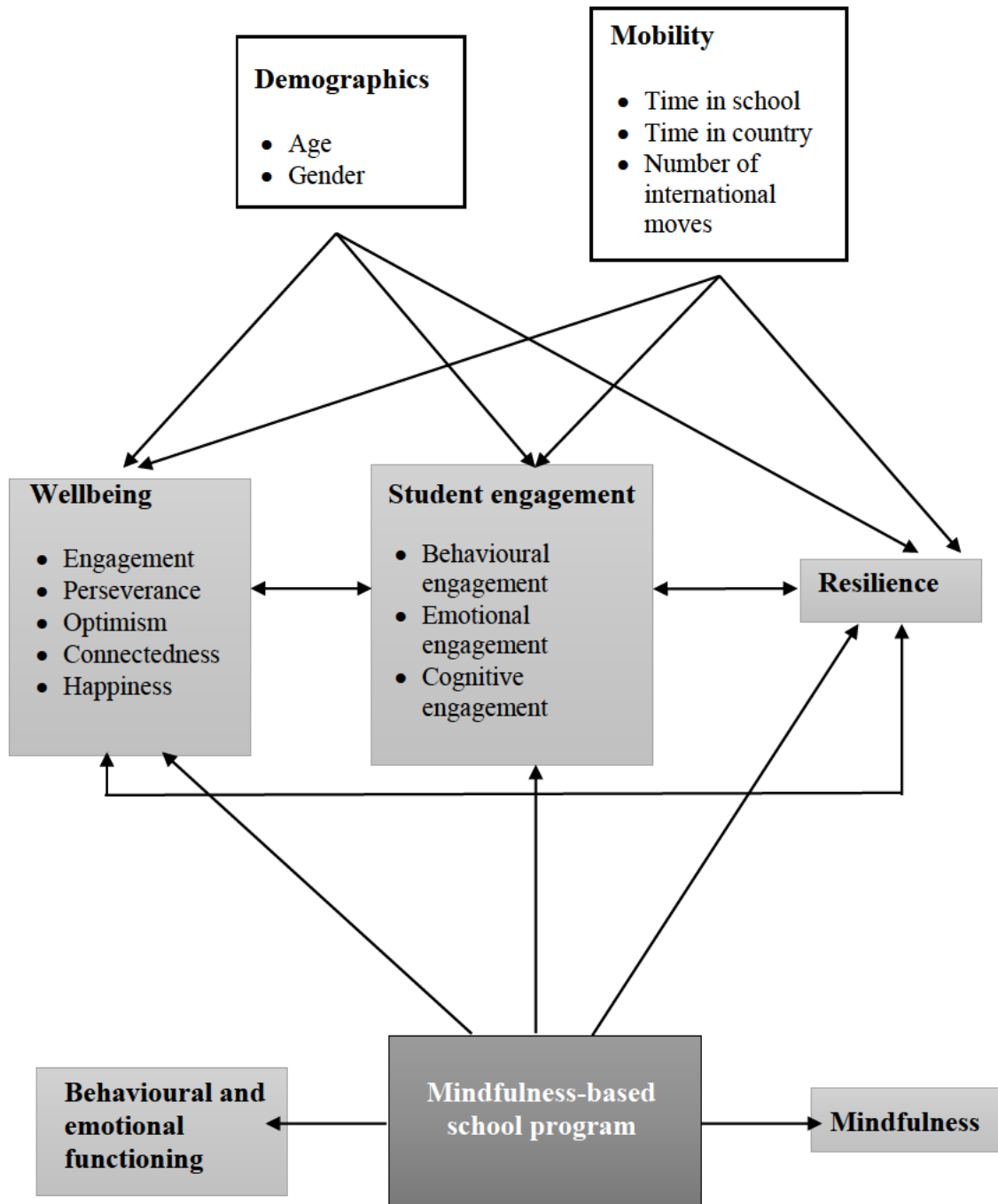
The conceptual framework also incorporated an MBI to determine whether the program facilitates positive emotions and skill building in individuals and at an organisational level in accordance with the principles of positive psychology. Specifically, this study looked to identify and understand the effect the MBI may have on wellbeing, student engagement, and resilience in early-adolescent international students. It also looked to identify and understand the effect that the MBI may have on increasing mindfulness traits in participants, which has been identified as a positive psychology tool that individuals can use to foster optimal functioning (Ackerman, 2022). This is important given the positive psychology lens employed in this study, which aimed to promote positive emotions and build tools and strengths in students to foster optimal functioning. The conceptual framework also examined any wider benefits of the MBI—within the family and school environments—another important premise under a positive psychology framework. The inclusion of parent and teacher feedback on the behavioural and emotional functioning of their child/student at the end of the program in this study may provide valuable information on the effects of the MBI at a wider organisational level.

The conceptual framework for this study therefore incorporated wellbeing, student engagement, and resilience positive psychology constructs and mobility and demographic factors to better understand which components and information may facilitate optimal functioning of early-adolescent international students (see Figure 2.2). The conceptual framework also introduced an MBI to determine whether this program may support

students across positive psychology constructs and assist in the building of mindfulness tools to promote optimal functioning in students despite the adjustment difficulties they experience. Additionally, the inclusion of parent and teacher feedback regarding any MBI effects on the behavioural and emotional functioning of their child/student provided valuable information at a wider level in accordance with the principles of positive psychology. Underpinned by positive psychology theory and supported by empirical evidence-based research, these elements will now be further detailed to highlight the anticipated associations between factors in the study.

**Figure 2.2**

*Conceptual Framework for the Study*



### ***2.4.2 Positive Psychology Constructs***

The objective was to determine whether a positive association would be reported between wellbeing and student engagement (e.g., Kahu & Nelson, 2018; Pietarinen et al., 2014; Trowler, 2010), wellbeing and resilience (e.g., Hjemdal et al., 2011; Sabouripour & Roslan, 2015), and student engagement and resilience (e.g., Pidgeon et al., 2014), given findings of prior research conducted with other student groups. This is important, because any positive association found between the constructs would suggest that wellbeing, student engagement, and resilience are interrelated constructs. It would also suggest that any reported improvement in any one of the constructs may result in an indirect improvement in another important psychological construct contributing to optimal functioning of the individual.

The conceptual framework for this study also included mobility and demographic factors and aimed to examine the effects of these factors on wellbeing, student engagement, and resilience. These factors provided additional information on ways to promote optimal functioning of the student through the positive psychology lens employed in this study. The effect that mobility variables (e.g., period of time at the school, period of time in the country, and number of international moves) have on positive psychology constructs has not previously been examined. However, the possibility of reported lower levels on wellbeing, student engagement, and resilience was expected, given prior research indicating that students who have recently arrived at a new school and/or country experience increased levels of negative mental health outcomes compared to students who have been at the school for a longer period of time (Lysgaard, 1955; Oberg, 1960; Pollock & Van Reken, 2001). This is important to consider, firstly because it highlights a period of time when a student may not be thriving, given contextual conditions arising from mobility and, secondly, because it is supported through

adjustment research. It is also an important concept to consider given the varied experiences of mobility within the international school environment, with some students having moved far more regularly than others.

The association between demographic variables (e.g., age and gender) and wellbeing, student engagement, and resilience was also examined. It was expected that there would be age differences reported across the positive psychology constructs examined, with younger-aged students reporting higher levels on these constructs. As no prior research had been conducted in this field with early-adolescent international students, this study was guided by findings on school transition and adjustment with younger-aged domestic students, who report higher levels on positive psychology constructs compared with older-aged students (Simsek et al., 2021). Additionally, it was expected that gender effects would be found with the three positive psychology constructs. With no prior research in this field, it was expected that females may report lower on the positive psychology constructs examined, given gender differences reported with tertiary-aged international students (Li et al., 2021). An understanding of the effect of demographic variables, such as age and gender, can provide valuable information on how an early-adolescent international student may be able to thrive in their environment.

Wellbeing has been identified as a multidimensional construct incorporating many different dimensions (Huppert & So, 2013; Kern et al., 2015; Marsh et al., 2020), and this is reflected in the conceptual framework for this study. This was important in order to ensure that key variables that can contribute to a rewarding and fulfilling life for the individual would be included in the conceptual design for this study. Seligman (2011) proposed the Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment (PERMA) model under a positive psychology framework that incorporates elements of hedonia and eudaimonia in examining the multifaceted construct

of wellbeing. Under the PERMA model, an individual's wellbeing encompasses five key elements. These five elements include positive emotion (e.g., feeling good), engagement (e.g., being fully engaged with life), relationships (e.g., establishing positive and supportive relationships), meaning (e.g., living meaningfully), and achievement (e.g., accomplishing goals). The PERMA model also includes elements that are valued in early adolescence (e.g., positive relationships and emotions), while at the same time being applicable to learning strategies, such as engagement (Norris et al., 2013; White & Murray, 2015). Underpinned by positive psychology theory, as a conceptual framework of wellbeing, the PERMA model supports the optimal functioning of students and was therefore included in the conceptual framework for this study.

Student engagement, like wellbeing, is multidimensional and was therefore represented as such in the conceptual framework presented for this study. Fredricks et al. (2004) describe student engagement as comprising three interrelated concepts: behavioural engagement, emotional engagement, and cognitive engagement. Behavioural engagement focuses on the student's contribution to academic, social, and extracurricular activities and the fostering of prosocial behaviour, including complying to school rules (Fredricks et al., 2005). Cognitive engagement refers to the student's interest and willingness to strive to achieve complicated tasks. Emotional engagement includes both negative and positive responses the student may experience within the context of the school environment (e.g., with friends or teachers) that may foster connection (Fredricks et al., 2005). By adopting a multidimensional student engagement model, this study also addressed conceptual limitations identified in prior student-engagement theoretical models that included only one or two engagement dimensions (e.g., Connell & Wellborn, 1991; Finn, 1989), limiting applicability in the field. Considering the complexity of student engagement within the international school sector, the inclusion of all three



engagement constructs in this model was beneficial. A more thorough notion of an international school student's engagement can be provided by examining a combination of the student's participation in unfamiliar social and school groups (e.g., behavioural engagement), sense of belonging within the school (e.g., emotional engagement), and willingness to persist in learning within a new educational curriculum (e.g., cognitive engagement) and was therefore included in the conceptual framework for this study.

#### ***2.4.3 Mindfulness-Based Intervention and Positive Psychology Constructs***

Mindfulness was proposed in this study as a practice to support early-adolescent international students to thrive through a positive psychology lens. An MBI was incorporated into the conceptual framework as a school-based program to foster optimal functioning for individual students and the wider school community. Research reports a positive relationship between mindfulness and positive psychology constructs, including wellbeing (Bernay et al., 2016; Padhy et al., 2020), student engagement (Azila-Gbettor et al., 2021; Schonert-Reichl & Lawlor, 2010), and resilience (Denkova et al., 2020; Pidgeon & Keye, 2014) in other student groups. Given this, the objective was to determine whether students would report a positive significant increase in wellbeing, student engagement, and resilience constructs on completion of the MBI program in this study. Additionally, it was anticipated that the MBI would foster greater trait mindfulness in the students on completion of the program, as reported in research with younger-aged students (e.g., Viafora et al., 2015). These findings are important as they provide evidence that mindfulness skills have been learnt through the program, which fosters optimal functioning for the student through a positive psychology lens. It was also expected that both parents and teachers would report improved behavioural and emotional functioning of their child/student on completion of the program, given similar findings reported by teachers with regard to younger-aged students (e.g., Sciutto et al., 2021; Viglas, &

Perlman, 2018). In this way, the constructs being examined with the implementation of an MBI, and the design employed to do so, aligned with the principles of positive psychology in fostering positive emotions and building skills and strengths at an individual and wider community level.

The conceptual framework presented here was guided by the literature review and the positive psychology theoretical lens employed in this study. As such, the framework incorporated factors and constructs identified as relevant within the international education sector that may foster optimal functioning of early-adolescent international students. It was envisaged that the study would provide information on how to better support this student group to thrive and flourish despite the adjustments they experience. The following section summarises how this study will contribute to the field of research on the psychosocial health and wellbeing of early-adolescent international students.

## **2.5 This Study**

As detailed in the conceptual framework, the aim of this study was twofold. The first aim was to develop a better understanding of wellbeing, student engagement, and resilience in early-adolescent international students. The second aim was to examine whether a mindfulness-based school program would promote psychosocial health and wellbeing with this cohort of students. It was envisaged that the study would then identify factors and information to facilitate optimal functioning for the early-adolescent international student and their wider school community. This study is important, as it contributes new knowledge to the field of research by addressing conceptual, empirical, and methodological limitations identified in the literature review.

The study addressed the gap in current research on psychosocial health and wellbeing of international students, which largely centres around negative psychological factors. By adopting a positive psychology framework, the study aimed to address these

conceptual limitations by focusing on ways to foster and promote optimal functioning of early-adolescent international students. The study also addressed limitations in the field of international student wellbeing research, given most of the prior research in this field has been conducted with tertiary-aged students. This is important, particularly considering the differences reported in levels of wellbeing and student engagement between school-aged and tertiary-aged international students, as reported in the literature review. With literature highlighting how adjustment during early adolescence can significantly affect psychosocial health and wellbeing, this study contributed to the field of interest by identifying ways to better support this expanding cohort of students. The study also aimed to address empirical limitations identified in the adjustment research reviewed through a positive psychology lens, by providing evidence-based research on the effect that recent arrival to a new school and/or country has on positive psychology constructs. In addition to this, the study looked to identify whether other contextual factors (e.g., number of international moves, age, gender) may contribute to the optimal functioning of this cohort of students.

Lastly, it is envisaged that the findings will contribute to the limited research on MBI programs currently implemented with early-adolescent students. Specifically, this study aimed to advance the field of MBI research by addressing the methodological limitations identified in the use of MBIs with early-adolescent students. The research design features for this study included a mixed-methods RCT design, an examination of positive psychology constructs, an increased (twice weekly) MBI dosage, and the use of self-report and proxy measures in the quantitative design measures to address methodological limitations in prior MBI research. In addition, the inclusion of detailed program content and knowledge on facilitator training can advance the field of current

MBI fidelity research specifically with this age group. The next chapter details the research design and methodology employed in this study.

## Chapter 3: Methodology

The previous chapter reviewed the literature on the psychosocial health and wellbeing of early-adolescent international school students through a positive psychology lens and examined how an MBI program may support these students. It also outlined the conceptual framework for this study from which two research aims were derived.

### 3.1 Introduction

Prior to discussing the methodology of the study in this chapter, it is important to revisit the research aims and present the research objectives, as they influence the research methodology chosen. The first aim of the study was to better understand wellbeing, student engagement, and resilience in early-adolescent international students given the adjustment difficulties they experience. To address this research aim, the following research objective was developed:

*Research Objective 1:* To examine how early-adolescent international students respond to items assessing their wellbeing, student engagement, and resilience, and to identify any interrelated associations between these constructs.

The second aim was to examine whether an MBI program may promote psychosocial health and wellbeing with this cohort of students. The research objectives formulated to address this research aim were as follows.

*Research Objective 2a:* To examine the effect of an MBI program on the wellbeing, student engagement, and resilience of early-adolescent international school students through self-report and proxy measures.

*Research Objective 2b:* To explore individual students' experiences as an international student and in engaging with the intervention program.

This chapter details the methodology employed to address the study's research objectives. The research approach, design, and context are presented first, establishing a

methodological framework for the study. The chapter then describes the two phases included in the research. The first phase of the study is presented first, including the research questions formulated to address the first research objective of the study. This includes an overview of the design, participants, measures, and data collection and analysis employed in this phase of the study. The second phase of the study then follows, commencing with the research questions developed to address research objectives (2a) and (2b) of the study. The overview includes a description of the design, participants, intervention program, measures, and data collection and analysis methods employed. The chapter concludes with a time frame for all stages of the research design and a discussion of the ethics and limitations in the research methodology employed in the investigation.

### **3.2 Research Approach**

A pragmatic research approach was adopted for the study. A research approach is a perspective that is based on a set of assumptions, values, practices, and concepts that are held by a community of researchers (Johnson & Christensen, 2014). The origins of pragmatism can be attributed to philosophers such as Charles Peirce who believed that the whole concept of science was to produce knowledge of the world through concepts that capture what Pierce referred to as “reals” (Hammersley, 2012). In this way, a pragmatic approach is less concerned with the pursuit of a mirror of reality and more interested in solving the practical problems of the real world (Feilzer, 2010). This problem-orientated philosophy can be represented through a model of inquiry, which is shown as a continuous cycle between beliefs and actions that requires constant interpretation and reflective decision-making (Dewey, 1938). This philosophical pragmatic view can lend itself to best practice educational research through the design of plural, flexible research methods.

For this study, a pragmatic research approach was considered a better choice than other paradigms, such as a positivist or social constructivist view. With a positivist view, a singular view of reality is provided. This approach purports to provide an objective and value-free inquiry and employs predominantly quantitative research methods to do so. The limitation in using such an approach for this investigation was that it would not consider the subjective nature of adjustment experienced by international school students, which can be influenced by variables such as life changes, personality, and social support (Ward & Kennedy, 1999). Additionally, a positivist approach would not explore the individual interpretations of or experiences with an intervention program, aspects that can be beneficial in examining the fidelity and suitability of a program. In contrast, a social constructivist approach views reality as multiple and subjective, and inductively develops a theory or pattern of meanings (Creswell, 2019). This approach does not value the numeric measures that can be used to define positive psychology constructs, such as wellbeing and student engagement (Embretson, 2010), which are of interest in this research.

Pragmatism, as a research paradigm, refuses to become involved in the metaphysical concepts, such as truth and reality, which are present in other paradigms, and instead accepts that there can be single or multiple realities (Creswell & Plano Clark, 2011). Pragmatists view reality as a continually changing state that is observable and has practical consequences. This research approach recognises that meaning cannot be separated from human experience and is dependent upon context (Dillon et al., 2000). Three core methodological principles that underpin a pragmatic research approach include an emphasis on actionable knowledge; recognition of interconnectedness between experience, knowing, and action; and the importance of inquiry as an experiential process (Kelly & Cordeiro, 2020). Considering these principles, pragmatism was a better fit for

this study, as the research encompassed joining beliefs on how early-adolescent international students can thrive and flourish, dependent on contextual factors, with action to promote this notion (e.g., through the intervention program). Additionally, adopting a pragmatic research approach for the study enabled the interpretation and reflection on findings in each phase of the research to inform the action in the following component of the study. This continual process of inquiry afforded by a pragmatic research approach was valuable in this investigation, given the study examined constructs not previously researched with this cohort of students. This research approach is not offered by other research paradigms, thus affirming the suitability of a pragmatic research approach to ensure best practice in the research undertaken in the study.

Pragmatist philosophers ascribe to the belief that the research question should drive the methodology being employed and that research methodology is merely a tool designed to aid our understanding of the world (Onwuegbuzie & Leech, 2005; Tebes, 2012). Based on this premise, pragmatist researchers recognise the importance of using a methodological approach that works best for the research problem being examined (Teddlie & Tashakkori, 2009) and is often associated with mixed-methods research (Biesta, 2010; Creswell & Plano Clark, 2017; Kaushik & Walsh, 2019; Morgan, 2014; Teddlie & Tashakkori, 2009). The philosophical root of pragmatism was used as a guiding principle in the research approach of this study through the collection, interpretation, and integration of data in a mixed-methods research design, which will now be discussed.

### **3.3 Research Design**

Research designs are the plans and procedures that take the decision from broad assumptions to more-detailed methods of data collection and analysis in a study (Creswell, 2019). A sequential mixed-methods research design was employed in this



study, which is a procedure for collecting, analysing, and integrating both quantitative and qualitative methods to address a study's research objectives (Creswell & Plano Clark, 2017). The premise underlying this two-phase design is that the qualitative data will explain or build on the quantitative data, which combined with the reader's human experience, will provide a comprehensive understanding of a research problem (Johnson et al., 2007). This two-phase design aligns itself with the pragmatic research approach adopted for this investigation through a process of inquiry.

The research objectives of the study called for more complexity than a deductive or confirmatory scientific approach, given that the process of inquiry required to inform the investigation included both construct analysis and individual experiences. Quantitative approaches have been criticised for isolating participants from their social and cultural roots and for being too simplistic given their inability to provide depth in their results (Onwuegbuzie & Leech, 2005). Additionally, quantitative approaches do not offer the researcher the ability to explore individuals' personal experiences with an intervention program. In this investigation, employing only a quantitative approach would have led to the omission of valuable findings on individual student experiences of relocating to a new country, and their experiences with the intervention program, which were necessary to inform the research. Similarly, there would be limitations with the exclusive use of an inductive scientific approach of a qualitative design, as it would not adequately address the research objectives either. Qualitative design has been criticised as being overly susceptible to researcher bias and as having limited generalisability due to the smaller sample sizes of the designs (Onwuegbuzie & Leech, 2005). To employ only a qualitative design for this investigation would have prevented examination of the associations between the constructs of wellbeing, student engagement, and resilience that are of interest to this study. The inclusion of quantitative data followed by qualitative data

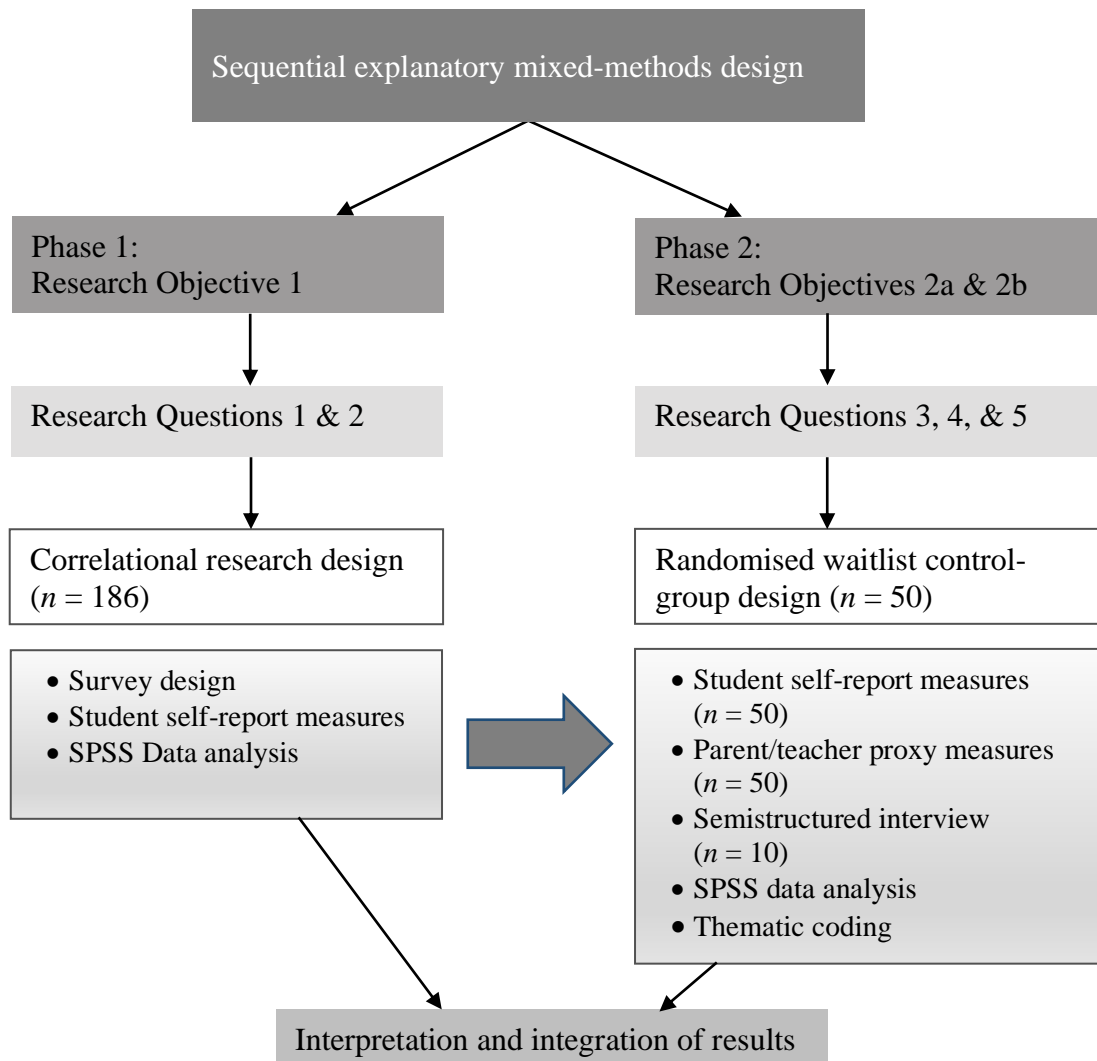
in the study also addresses criticism regarding the methodologies employed in MBI research (Harnett & Dawe, 2012; Johnson et al., 2016; Rempel, 2012; Shankland & Rosset, 2016; Tan, 2016).

### ***3.3.1 Sequential Explanatory Mixed-Methods Design***

A sequential explanatory mixed-methods design was employed in the study because it provided an appropriate design format to address the research objectives under a pragmatic research approach. The two-phase design included quantitative data collection first, followed by qualitative data collection to inform or explain the quantitative data findings (Creswell & Plano Clark, 2017). A sequential explanatory mixed-methods design was chosen over a sequential exploratory mixed-methods design, as the literature review had already provided a guiding framework of constructs to be examined, which necessitated a quantitative focus first rather than a qualitative focus. The two phases conducted in the sequential explanatory mixed-methods design for the study are depicted in Figure 3.1.

**Figure 3.1**

*Sequential Explanatory Mixed-Methods Design*



*Note.* SPSS = Statistical Package for Social Sciences

The first phase of the sequential explanatory mixed-methods design collected quantitative data on the constructs of interest with a large sample of early-adolescent international school students and examined the association between each of these constructs. The survey results were then used to inform the design of the following phase with a smaller subset of participants. Specifically, because Phase 1 findings identified lower levels of wellbeing and resilience measures in students who had recently arrived at the school or in the country, Phase 2 looked to examine whether an MBI program could

support those students. Additionally, given the lowered wellbeing and resilience levels in students who had recently arrived at the school and/or in the country as reported in the survey data findings, the semistructured interviews conducted in Phase 2 of the study looked to explore individual student experiences with mobility and adjustment to provide context to the survey data findings reported.

In the second phase of the sequential explanatory mixed-methods design, quantitative data were collected and analysed first to examine the effectiveness of the intervention program. This was followed by qualitative data collection and analysis to enable the researcher to explore the ways in which the intervention program may have influenced the constructs of interest through students' personal experiences. The rationale for this approach was explained by Creswell (2015), who stated, "quantitative data and results provide a general picture of the research problem; more analysis, specifically through qualitative data collection is needed to refine, extend, or explain the general quantitative picture" (p. 545). In the study design, the collection and analysis of qualitative data to explain and enrich the quantitative data findings reported in each phase of the study would ensure a robust methodological design had been employed to address the research objectives. As the sequential explanatory mixed-methods design employed both quantitative and qualitative data collection and analysis, it would be beneficial to know which data sources were used in each phase of the design. Although a detailed explanation of each of these data measures will follow, an overview of how they were applied to address the research questions in the study is worth highlighting (see Table 3.1).

**Table 3.1***Connecting Research Design and Questions to Measures*

Phase	Research design	Research strategy	Research question	Measures
One	Quantitative	Survey	One and Two	Wellbeing (5 subscales; EPOCH) Student Engagement (3 subscales; SEM) Resilience (BRS) Demographic survey
Two	Quantitative and qualitative	Randomised waitlist control	Three	Quantitative (self-report) measures: <ul style="list-style-type: none"> <li>• Wellbeing (EPOCH)</li> <li>• Student Engagement (SEM)</li> <li>• Resilience (BRS)</li> <li>• Mindfulness (CAMM)</li> </ul>
			Four	Quantitative (proxy) measures: <ul style="list-style-type: none"> <li>• Behavioural and emotional Functioning (SDQ)</li> </ul>
			Five	Qualitative measures: <ul style="list-style-type: none"> <li>• Semistructured interview</li> <li>• Postprogram survey</li> </ul>

*Note.* EPOCH = Engagement, Perseverance, Optimism, Connectedness, and Happiness; SEM = Student Engagement Measure – MacArthur; BRS = Brief Resilience Scale; CAMM = Child and Adolescence Mindfulness Measure; SDQ = Strengths and Difficulties Questionnaire.

### 3.4 Context

Prior to examining the methodology of the two phases of the study, the context in which the research was undertaken needs to be detailed to ensure that it aligns with the research objectives. Students from Years 6 to 8 at an international school in Singapore were invited to participate in the research. Singapore was identified as an appropriate location for the study to be conducted as it has a large international student presence, with over 80 international schools and kindergartens providing education to more than 55,000

international students aged 2 to 18 years (ICS, 2019). A compound annual growth rate of 11% was reported in international school student enrolments in Singapore between 2012 and 2018 (Keeling, 2018), with continued exponential growth forecast for the region (ISC, 2019). Additionally, as international schools in Singapore cater for globally mobile students, given the restrictions placed on local student attendance (Ministry of Education Singapore, 2018), the participants in the study all met the definition of an international student. This was also confirmed through the demographic data collected in Phase 1. The strong expatriate presence reported in Singapore (Keeling, 2018) and the resulting high mobility rates of expatriate children attending international schools (Whyte, 2016) also enabled the study to examine the effect of mobility rates with this cohort of students. The researcher was residing in Singapore at the time the study was conducted and had existing relationships with international schools in the region, both personally as a parent of children attending the schools and professionally through wellbeing programs delivered to schools in the region.

The school of interest met the inclusion criteria for the research, as it caters exclusively for international students and has a large number of adolescent students in attendance. The international school identified is an independent privately owned school that offers the International Baccalaureate Diploma and the national curriculum of England and is part of a larger organisation with several international schools in Asia. At the time of the research, enrolment numbers were approximately 2,200 across all year levels from Nursery to Year 12 (ages 2 to 17 years), with students representing more than 50 different nationalities. Students at the school represented the middle to high socioeconomic class, and all students met minimal English language requirements. Mobility rates for the school of interest were not available; however, the region reports a

turnover rate of students and teachers within international schools of 25%–30% annually (ISC, 2019; Whyte, 2016).

### **3.5 Phase 1: Correlational Research Design**

This section presents the research methods employed for the correlational research design, which was the first phase in the sequential explanatory mixed-methods design of the study. The correlational design was employed to address the first research objective of the investigation as follows:

*Research Objective 1:* To examine how early-adolescent international school students respond to items assessing their wellbeing, student engagement, and resilience, and to identify any interrelated associations between these constructs.

To address this research objective, the following research questions were developed:

*Research Question 1:* How are wellbeing, student engagement, and resilience measures associated with each other among early-adolescent international students?

*Research Question 2:* What effect do age, gender, and mobility factors have on wellbeing, student engagement, and resilience among early-adolescent international students?

The following subsections first explain the research design, including the pilot study that was conducted. A description is then provided of the sample selection and recruitment, data measures used, data-collection timeframe and guidelines, and data analysis for Phase 1.

#### **3.5.1 Study Design**

A correlational research design was employed for Phase 1 of the study to determine the extent to which the constructs of interest were related. A correlational design enables the researcher to describe and measure the degree of association between

two or more variables (Privitera, 2019) and was employed to address the first research objective of this study. Survey data were collected to measure the constructs of interest. A survey was the chosen method due to the speed of collecting data in this format (Creswell, 2019). The questionnaire was completed in a printed format; both the school and the researcher believed this would be the best format to use to ensure a high response rate with students in this age group.

**3.5.1.1 Pilot Study.** A pilot study was conducted in November 2017 prior to administering the questionnaire in this investigation. The pilot study enabled the researcher to ensure that the wording used in the scales was not complicated or confusing and to check for face validity in all questions or statements used (Creswell, 2019; Teijlingen & Hundley, 2004). All measures were trialled with 10 students attending a different international school in Singapore aged 10 and 13 years. Feedback from the pilot study was then used in modifying some of the items in the Brief Resilience Scale (BRS), which is detailed in Section 3.5.3.4. All other scales were appropriately understood by the participants and did not require any changes.

### ***3.5.2 Sample Selection and Recruitment***

After approval was granted by the Australian Catholic University Human Research Ethics Committee (ACU HREC; see Appendix B), a formal request was made to the headmaster of the school of interest to participate in the research. The request was made in writing and followed up by a meeting to discuss the research in detail. All timeframes, logistics, and ethics around the research were discussed with the headmaster and relevant senior staff of the school and followed up with a letter to the headmaster detailing the investigation (see Appendix C). The headmaster then provided formal consent for the school's participation in the research (see Appendix D), including consent for form teachers to assist in data distribution and collection. All students enrolled in



Years 6 to 8 at the school were invited to participate in the research. The researcher conducted presentations with parents and students separately, where information was provided on all components of the study, including timeframe, data-collection measures, the intervention program outlined in Section 3.6.3, and confidentiality and privacy for participating students. The presentation also provided the opportunity for those interested in participating to ask any questions of the researcher. The parent information session was held at the beginning of the school day when it was believed more parents would be available to attend. Information on the study was also uploaded to the school's intranet site for parents who could not attend the information session. The student session was conducted during a morning year-level assembly. Any interested parents and/or students were then given a letter with information on the study (see Appendices E and F), which required both parent/guardian and student consent (see Appendix G). To enable the student to participate in the study, both forms had to be returned. No student with signed student and parent/guardian consent forms was excluded from the study.

One hundred and eighty-six students participated in the first phase of the study, with eight students excluded from analysis due to missing data. Analysis was conducted on data from 178 students (60.7% females), with a mean age of 11.43 years (range 10–14 years;  $SD = 1.12$ ). The students represented 24 different nationalities, with 26 students (14.6%) identifying as dual nationality. The highest percentage of students held passports from the United Kingdom (40.4%), followed by Australia (18%), China (6.2%), India (5.6%), and Japan and the United States (3.9% each). Student demographic data supported the high mobility and turnover rates reported with international school students (e.g., 25% to 30% per annum; ISC, 2019), with a large percentage of the students having resided in the country for less than 2 years (31.5%), having attended the school for less

than 1 year (36%), or having moved to three or more different countries to live (39.3%; see Table 3.2).

**Table 3.2**

*Participant Frequency Distribution by Demographic Variables (n = 178)*

Variable	Female		Male		Total	
<b>Age</b>						
10 years	26	24.1%	18	25.7%	44	24.7%
11 years	36	33.3%	18	25.7%	54	30.3%
12 years	24	22.2%	19	27.1%	43	24.2%
13–14 years	22	20.4%	15	21.4%	37	20.8%
<b>Time in country</b>						
0–2 years	30	27.8%	26	37.1%	56	31.5%
3–4 years	56	51.9%	25	35.7%	81	45.5%
5+ years	22	20.4%	19	27.1%	41	23.0%
<b>Time at school</b>						
6–12 months	38	35.2%	26	37.1%	64	36.0%
2 years	21	19.4%	18	25.7%	39	21.9%
3 years	22	20.4%	11	15.7%	33	18.5%
4+ years	27	25.0%	15	21.4%	42	23.6%
<b>Number of international moves</b>						
1–2 countries	68	63.0%	40	57.1%	108	60.7%
3+ countries	40	37.0%	30	42.9%	70	39.3%

*Note.* From “A study into wellbeing, student engagement and resilience in early-adolescent international school students,” by P. McKeering, Y-S. Hwang, and C. Ng, 2021, *Journal of Research in International Education*, 20(1), p. 76. (<https://doi.org/10.1177/14752409211006650>). Copyright 2021 by SAGE.

### 3.5.3 Measures

Quantitative data sources were used to provide the numeric data that were analysed in addressing the relevant research questions for this phase of the study. The questionnaire contained a six-item demographic measure and three self-report measures examining wellbeing, student engagement, and resilience. The predictor variables in the

study were gender, age, and three mobility constructs. The dependent variables were five wellbeing constructs, three student engagement constructs, and one resilience construct (see Table 3.3).

**Table 3.3**  
*Dependent and Predictor Variables for Phase 1*

Dependent variables		Predictor variables
Wellbeing (EPOCH)	Engagement	Age
	Perseverance	
	Optimism	Gender
	Connectedness	
	Happiness	
Student engagement (SEM)	Behavioural engagement	Period of time residing in Singapore
	Emotional engagement	
	Cognitive engagement	Period of time attending the school
Resilience (BRS)	Number of international moves	

*Note.* EPOCH = Engagement, Perseverance, Optimism, Connectedness, and Happiness; SEM = Student Engagement Measure – MacArthur; BRS = Brief Resilience Scale.

Permission was required to use two of the measures in the survey study (i.e., The Engagement, Perseverance, Optimism, Connectedness, and Happiness Measure of Adolescent Wellbeing [EPOCH] and the Student Engagement Measure – MacArthur [SEM]), which was given by the developers. The measures that were chosen for the study met several criteria, including having been widely cited and having good reviews and acceptable reliability and validity scores, as reported in prior studies (Creswell, 2019). Descriptions of the data measures are provided in the following subsections.

**3.5.3.1 Demographic Survey.** A demographic survey was developed by the researcher to collect personal data on each participant and their mobility experience. The instrument had six items on the student, including gender, age, nationality, period of time

residing in Singapore, period of time attending the school, and number of different countries in which the student had resided (see Appendix H). The instrument provided demographic data, which was used in constructing independent variables for the study. It was also used to identify participants for purposeful selection in Phase 2, as outlined in Section 3.6.2.2.

**3.5.3.2 Wellbeing Scale.** The EPOCH Measure of Adolescent Wellbeing scale (Kern et al., 2016) was created to provide a developmentally appropriate scale to measure wellbeing in adolescents under Seligman's (2011) PERMA model. The scale incorporates relevant positive adolescent characteristics that can support an adolescent's ability to thrive, including engagement, perseverance, optimism, connectedness, and happiness. The scale was chosen for use in this research because it applies the fundamental framework of Seligman's PERMA model in a measure developed specifically for use with adolescents (Rose et al., 2017). The scale also provides a reliable and valid multidimensional construct that has been used in measuring wellbeing in adolescents across different cultures (Adler, 2016; Kern et al., 2016; Kern et al., 2019; Sobri et al., 2019). Strong reliability was reported across each of the subscales in the study: engagement ( $\alpha = .87$ ), perseverance ( $\alpha = .81$ ), optimism ( $\alpha = .80$ ), connectedness ( $\alpha = .83$ ), and happiness ( $\alpha = .89$ ). Construct validity for the scale has also been examined in prior studies and shown to be positively correlated to relevant measures, including engagement and life satisfaction ( $r = .36$ ) and happiness and meaning/purpose ( $r = .55$ ; Kern et al., 2016). The 20-item instrument required participants to indicate how they were feeling and functioning, and all statements were worded positively (e.g., "I finish whatever I begin" and "When I have a problem, I have someone who will be there for me"). It used a 5-point Likert scale as follows: 1 (*almost never/not at all like me*) to 5 (*very much like me/almost always*; see Appendix I). Each of the five subscales had four items, and total

scores were computed for each subscale and an overall wellbeing score. A higher score indicated a higher level of wellbeing for that subscale for the participant.

**3.5.3.3 Student Engagement Scale.** The SEM was designed to measure behavioural, emotional, and cognitive engagement in school-aged students (Fredricks et al., 2005). The scale was chosen for use in this investigation as it offers a reliable and valid multidimensional construct for student engagement (Fredricks & McColskey, 2012), and has been used in research measuring student engagement in adolescent students across different cultures (Ang et al., 2015; Yusof et al., 2017). The 15-item measure has three subscales: behavioural engagement (four items, e.g. “I follow the rules at school”), emotional engagement (six items, e.g. “I feel happy in school”), and cognitive engagement (five items, e.g. “I check my school work for mistakes”). Each of the three subscales differ from the engagement subscale examined under the Wellbeing scale that aims to examine the student’s engagement in life (e.g., “When I do an activity, I enjoy it so much that I lose track of time”), compared with engagement within the context of school. Participants were asked to provide responses to items using a 5-point Likert scale from 1 (*never*) to 5 (*all of the time*; see Appendix J). Total student-engagement scores were computed by reverse scoring three of the items (items 2, 4, and 6), and then totalling all scores. Scores were computed for each of the three subscales and a total engagement score, with higher scores indicating a higher level of student engagement for the participant.

Due to time restraints imposed by the school, the shorter Wave 1 version of this measure was chosen for use in Phase 1 because it contained fewer items than the modified later version. The longer version (Wave 2) had been developed to address low reliability reported in the earlier measure, specifically with younger students (e.g., Year 3 students; Fredricks et al., 2005). As this investigation was conducted with an older-aged

cohort of participants, it was assumed that reliability would be strong as had been reported in studies with students of a similar age (Fredricks et al., 2005). Reliability of the subscales on the 15-item instrument in Phase 1 was as follows: behavioural engagement ( $\alpha = .47$ ), emotional engagement ( $\alpha = .85$ ), and cognitive engagement ( $\alpha = .79$ ). An examination of the item-total statistics for the four-item behavioural engagement subscale reported Cronbach's alpha reliability would increase from  $\alpha = .47$  to  $\alpha = .63$  if item 2 were removed in this phase of the study. Item 2 stated, "When I am in class I just act as if I am working." This item was consequently removed from the instrument, and all of the following analyses are based on the participants' responses to the remaining three items. A similar low Cronbach's alpha reliability was reported due to this specific item in a study by Culver (2015), who also removed this item in her analysis, increasing reliability from  $\alpha = .61$  to  $\alpha = .73$ . Given the low reliability reported for behavioural engagement in Phase 1, and the subsequent removal of an item in analyses, the researcher used the longer Wave 2 version of the SEM in Phase 2 (see Section 3.6.4.1.1). Construct validity for the scale was analysed and reported to be positively related to engagement indicators, including peer support ( $r = .23$  to  $.41$ ), perceived teacher support ( $r = .35$  to  $.49$ ), and work orientation ( $r = .37$  to  $.42$ ; Fredricks et al., 2005).

**3.5.3.4 Resilience Scale.** The BRS was developed to enable examination of a person's ability to cope with adversity and bounce back from stress (Smith et al., 2008). The scale was chosen for use in this investigation because it provides a reliable unitary construct for resilience (Smith et al., 2008) and has been used in measuring resilience in international students (Amat et al., 2014). The original instrument was slightly altered after the pilot study to ensure that the statements were age appropriate for the participants, in line with an earlier study with students of a similar age (Windle et al., 2011). Reworded statements were then tested for face validity with participants in the pilot study

(items 1, 2, 4, and 6). For example, the statement “I have a hard time making it through stressful events” was reworded to “I have a hard time coping through stressful events”. Participants were asked to provide responses on the 6-item instrument using a 5-point Likert scale as follows: 1 (*Strongly disagree*) to 5 (*Strongly agree*; see Appendix K). Three of the items were reverse scored (items 2, 4, and 6), and a total resilience score was computed by adding the items together, with a higher score indicating greater resilience. Reliability of the scale in the study was good ( $\alpha = .77$ ), and evidence of the scores’ predictive, concurrent, and convergent validity has been reported (Rodríguez-Rey et al., 2016). Reliability and validity of the scale have also been reported across different cultures (Coelho et al., 2016; Lai, & Yue, 2014).

#### ***3.5.4 Data-Collection Timeframe and Delivery***

After ethics approval and the information sessions with students and parents, an invitation was extended to 314 students in Years 6 to 8 at the school to participate in the study. A total of 186 students returned the signed consent and assent forms within the 1-week timeframe given. This indicates a response rate of 59%, which falls within the guidelines provided by the American Association for Public Opinion Research (2020). Survey data collection with this student age group has been identified as difficult because it requires both parent and student consent (Richards et al., 2009); therefore, the researcher decided that the response rate was acceptable and represented the population of interest in the study with a low nonresponse bias (American Association for Public Opinion Research, 2020).

The printed questionnaires that included all the measures were administered to students in morning form time during the first week of December 2017. Form teachers assisted with questionnaire distribution and collection, and they were provided with instructions from the researcher regarding how to do this. All completed questionnaires

were then handed directly to the head of student services at the school to ensure that the questionnaires were stored securely until they were collected by the researcher later in the day. Each questionnaire was allocated a special code to protect the privacy of the participants. The questionnaire took approximately 20–25 minutes for students to finish, and no additional time was needed. Participants were also advised that their responses were confidential and that they could withdraw from the study at any time.

### ***3.5.5 Data Analysis***

Data were screened to inspect for outliers and to make certain that assumptions for normality, multicollinearity, and homogeneity of variance and covariance had been met. Descriptive analysis was also carried out to establish central tendency and measures of dispersion for the variables of interest across predictor and dependent variable constructs. Correlational analyses were conducted to address Research Question 1 (as outlined in Chapter 4). Following this, a one-way multivariate analysis of variance (MANOVA) and a separate one-way analysis of variance (ANOVA) were also conducted to address Research Question 2 (see Section 4.5). All scale items that were negatively stated were reverse scored in data input, and the researcher rechecked all data to ensure that it had been input correctly.

## **3.6 Phase 2: Randomised Waitlist Control Group Design**

The second phase in the sequential explanatory mixed-methods design of this research was a randomised waitlist control group design. In this phase, an intervention program was delivered to a sample of students who had participated in Phase 1. The research objectives of Phase 2 were to expand on the findings from Phase 1 as follows:

*Research Objective 2a:* To examine the effect of an MBI program on wellbeing, student engagement, and resilience of early-adolescent international school students through self-report and proxy measures.



To address this research objective, the following research questions were formulated:

*Research Question 3:* Does the intervention program improve wellbeing, student engagement, resilience, and mindfulness in early-adolescent international students?

*Research Question 4:* How do teachers and parents of early-adolescent international students perceive the benefits of the intervention program?

The second research objective in this phase of the study was as follows:

*Research Objective 2b:* To explore individual students' experiences as an international student and in engaging with the intervention program.

To address this research objective, the following research question was formulated:

*Research Question 5:* What are the students' experiences with moving and with the program?

An overview of the second phase of the study begins by explaining the research design methodology employed in this phase of the study. It is then followed by a description of the sample selection and recruitment, intervention program, data measures used, data-collection timeframe and guidelines, and data analysis employed.

### **3.6.1 Study Design**

A randomised waitlist control group mixed-methods design was employed to address the research questions in Phase 2. When using this research design, the researcher randomly assigns individuals to two different experiment groups, with one group receiving the intervention before the other group (Creswell, 2019). This design was employed to provide an untreated comparison for the intervention group in order to identify effect size of the intervention (Creswell, 2015). It also addressed the ethical implications of withholding a program from students that could be of benefit to them and

that is often employed in research on MBI programs in schools (Flook et al., 2015; Johnstone et al., 2016; Langer et al., 2017; Parker et al., 2014; Quach et al., 2016; Ricarte et al., 2015). Waitlist control group design studies can overestimate intervention effects (Cunningham et al., 2013; Hart & Bagiella, 2012), but the researcher employed self-report and proxy measures to provide additional ways to examine the intervention effect in the study. Research has reported that proxy reports can provide at least a partial view of mental health and wellbeing in young people (Erhart et al., 2009) and that the inclusion of both adolescent self-reports and parent/teacher proxy reports can provide additional perspectives to consider in research with this cohort of students (Kaartina et al., 2015.)

In addition, qualitative interviews were employed on completion of the intervention program to add value and provide depth to the quantitative data collected. Participant interviews are widely used in qualitative research and involve the researcher (or someone working for the researcher) asking the participant several questions in order to search for meanings in the conversation (Johnson & Christensen, 2014). Qualitative interviewing is a technique that provides textually rich data through the interaction between the interviewer and the respondent (Kelly, 2010). In qualitative interviewing, the researcher is explicitly seeking to gain access to participants' experiences and perspectives (Galletta, 2013; Kelly, 2010), and it is therefore an appropriate method to use in exploring the participants' experiences as international students and their experiences with the mindfulness-based school program.

### ***3.6.2 Sample Selection and Recruitment***

Students who had participated in the survey questionnaire in Phase 1 were invited to participate in the MBI program. Parents/guardians and students interested in the intervention program were given an information letter, which provided details on the program and data collection (see Appendices L & M respectively). This followed the

earlier presentation given by the researcher on all sections of the research, including the MBI program. Parents/guardians and students interested in participating were requested to complete and return a consent letter within a 1-week timeframe (see Appendix N). Of the 186 students who participated in Phase 1, 65 students returned the signed consent and assent forms within the required timeframe to participate in Phase 2.

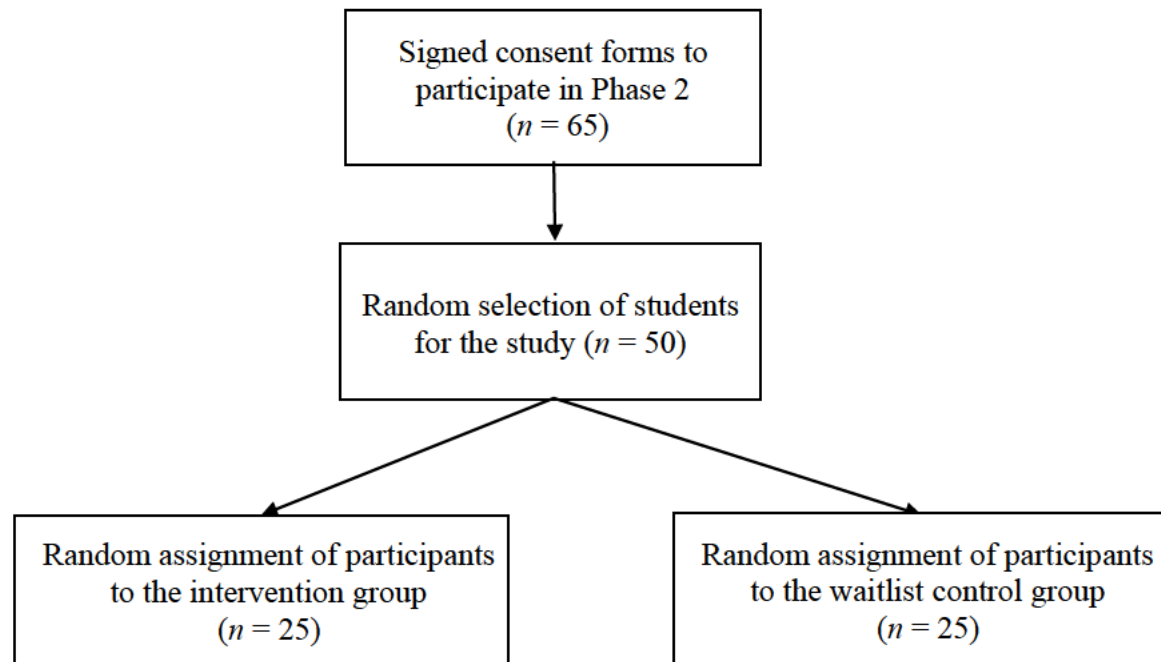
**3.6.2.1 Intervention Group Sample Selection and Recruitment.** When using a quantitative design approach, a minimum number of participants is needed in each group for group comparisons to be made. A rigorous and systematic approach for doing this is to conduct a power analysis, which is a means of identifying an appropriate sample size for a study (Creswell, 2019). An a priori analysis was conducted using G\*Power 3.1 (Faul et al., 2007), which indicated that when using a sample size of 48 with an alpha level of 0.05, there would be sufficient power ( $<.80$ ) to detect a moderate effect size (0.5). Given attrition rates in educational research are reported to be around 15%–20% (Enders, 2003), a sample size of 55–60 students was initially targeted for the study. However, given time restraints imposed by the participating school and concerns expressed that numbers in each group should be capped to ensure effectiveness, a sample size of 50 participants was agreed on, with 25 students to be assigned to each group.

A lunchtime meeting to discuss specifics on program logistics and to address any questions was held with the 65 students who had returned consent forms. Students were reminded at this meeting that numbers for the program were capped, with 25 students selected to participate in the Term 2 program and a further 25 students in Term 3. Students who were not selected to participate in the program were advised they could attend the program with the researcher at a different location after school hours. After this meeting, each student was allocated a unique code for randomisation, and a random number generator program (Urbaniak & Plous, 2013) was used to select 50 students to

participate in the intervention program. These students were then randomly assigned to either the intervention or waitlist control group (see Figure 3.2).

**Figure 3.2**

*Assignment of Participants in Intervention Program in Phase 2*



Once this process was completed, all students were notified by email on whether they had been selected and, if so, which term they would participate in the program. Students not selected were offered information on an out-of-school program they could attend. The students were all reminded (via an email from the researcher to their form teacher and parent/guardian) 1 week before they were to commence the program. The students' parents/guardians were also emailed and notified regarding whether their child had been selected to participate in the program. In the parent information letter and returned consent form, parents indicated their agreement to complete a questionnaire on their child both before and after their child had completed the program. The email reminded those parents whose children were participating in the program of this

involvement and advised them of the dates they could expect to receive the questionnaires, depending on whether their child was participating in the program in Term 2 or Term 3. Two families had two of their children participate in the program, and for both of these families, their children were allocated to the program in the same term. This was done to reduce treatment contamination that could occur with communication of the program in the family (Magill et al., 2019).

At that time, the teachers of the students who were participating were also emailed an information letter about the program, which provided an overview of how the teachers could participate in the program (see Appendix O). Given the students were in middle and high school, they had classes with many different teachers throughout the day. It was therefore determined, in consultation with the headmaster, that their form teacher would be the most appropriate person to participate in the study. The form teacher saw the students first thing every morning during morning form time and attended activities such as retreats and school camps with the students. They were also the first point of call should the child or parent have any issues or concerns they wished to discuss with the school. These teachers were asked to complete the signed consent form by email and return it to the researcher if they agreed to complete a questionnaire on their students both before and after their students had completed the program. All teachers of the participating students agreed to complete the questionnaire and returned a consent form (see Appendix P).

Fifty students participated in the intervention program (females = 58%), ranging in age from 11 to 14 years ( $M = 11.84$  years,  $SD = 0.89$ ). These participants represented 16 different nationalities, with the highest percentage of students from the United Kingdom (32%), followed by Australia (18%), United States (10%), and China (6%). The intervention group ( $n = 25$ ; females = 52%) ranged in age from 11 to 14 years ( $M = 11.88$

years,  $SD = 0.91$ ), and the waitlist control group ( $n = 25$ ; females = 64%) ranged in age from 11 to 13 years ( $M = 11.80$  years,  $SD = 0.85$ ). Both groups were similar in relation to the demographic characteristics examined (see Table 3.4). Student demographic data supported high mobility and turnover rates (e.g., 25%–30% annually; ISC, 2019), with approximately one third of the participants (30%) having attended the school for less than 12 months and almost half of the students (42%) having resided in three or more countries.

**Table 3.4**

*Group Participant Frequency Distribution by Demographic Variables (n = 50)*

Variable	Intervention group		Waitlist control group		Total	
<b>Age</b>						
11 years	11	44%	12	48%	23	46%
12 years	7	28%	6	24%	13	26%
13–14 years	7	28%	7	28%	14	28%
<b>Time in country</b>						
0–2 years	7	28%	6	24%	13	26%
3–4 years	6	24%	9	36%	15	30%
5+ years	12	48%	10	40%	22	44%
<b>Time at school</b>						
6–12 months	7	28%	8	32%	15	30%
2 years	6	24%	5	20%	11	22%
3 years	8	32%	5	20%	13	26%
4+ years	4	16%	7	28%	11	22%
<b>Number of international moves</b>						
1–2 countries	15	60%	14	56%	29	58%
3+ countries	10	40%	11	44%	21	42%

**3.6.2.2 Interview Sample Selection and Recruitment.** Purposeful sampling was employed to identify participants to be interviewed on completion of the intervention program. This sampling approach is used to accumulate rich data to develop a detailed understanding of the topic being examined (Patton, 2002; Seidman, 2006). Suitable participants were identified and recruited based on the information they provided in the demographic survey in Phase 1 (including mobility variables; see Appendix H), and in postprogram satisfaction survey in Phase 2 (see Appendix Q), which explored the participant's experience with the MBI program. The researcher used maximal variation sampling to identify and select participants who differed either demographically or in their experience with the mindfulness program. The aim of maximal variation sampling is to enable the researcher to examine or explore different perspectives and experiences derived from the intervention (Creswell, 2015).

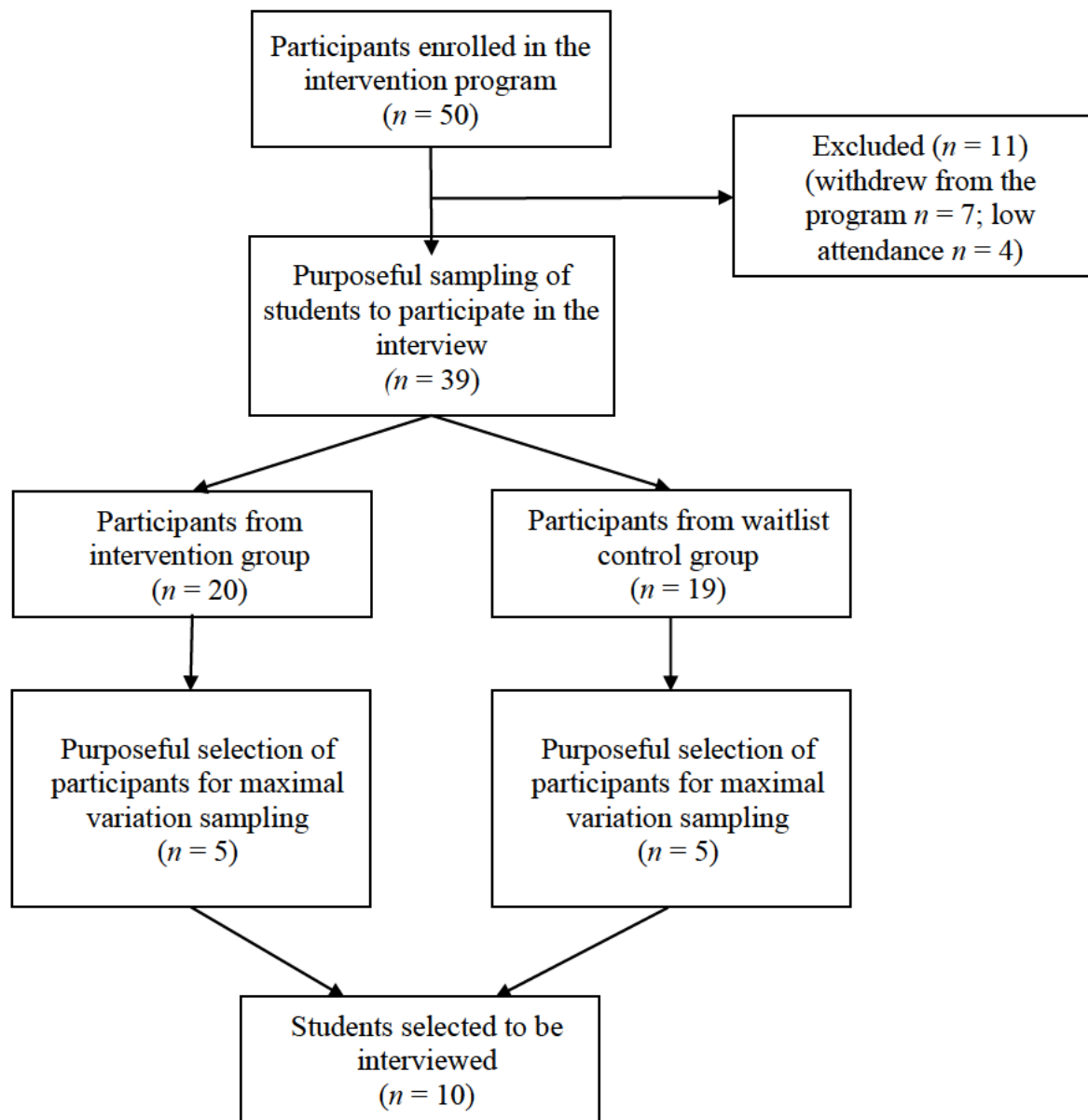
In identifying participants for this part of the study, the researcher investigated the number of participants that would be needed to reach data saturation (Creswell, 2019). Kuzel (1992) suggested that data saturation is reached within six to eight interviews, and Guest et al. (2006) claimed that data saturation occurs within the first 12 interviews. In consideration of both of these suggestions, the researcher proposed 10 interviews as a sufficient number to reach data saturation for this second phase of the study. Although it can be difficult to determine the point of saturation, the last few interviews conducted in the study provided no additional new information and no further coding, indicating data saturation had been met (Guest et al., 2006). Additionally, based on the researcher's judgement and experience in the study, it was determined that data saturation had been met, which is an important consideration in inductive thematic coding (Guest et al., 2020).

Although 50 students had participated in the intervention program, only 39 students (intervention group  $n = 20$ ; waitlist control group  $n = 19$ ) were considered in the purposeful selection of participants to be interviewed because they had attended the minimum number of intervention lessons to be included in the data analysis (see Section 3.6.5.1). However, this selection number falls below the priori sample size identified for the second phase of the study, which suggests limitations in the design and necessitates the need for caution to be applied in interpreting the results. The researcher recruited five students each from both the intervention and waitlist control groups for these interviews (see Figure 3.3). An information letter had been provided to parents/guardians and students on participation in the interview (see Appendices L and M), and consent was given prior to participation in the MBI program (see Appendix N). Additional consent was requested of students at the end of the intervention program (see Appendix Q) in case they had changed their mind.



**Figure 3.3**

*Participant Selection in Qualitative Interviews in Phase 2*



### **3.6.3 Intervention Program**

A modified version of a program developed by the organisation MiSP (2015), known as the *.b* program, was used for this phase of the study. The MiSP organisation is a registered charity in the United Kingdom, whose aim is to improve resilience and wellbeing in young people through the delivery of mindfulness programs. The program

was developed over a period of 5 years by three school teachers, who were also mindfulness practitioners. The *.b* program offers mindfulness lessons, which are taught in a classroom environment and specifically tailored for school students aged 11–18 years (Kuyken et al., 2017). Research findings from the program have reported significant positive effects in students across many measures (Huppert & Johnson, 2010; Kuyken et al., 2013). Program delivery is conducted by experienced mindfulness practitioners with a long-standing personal mindfulness practice, who have also completed a 4-day accreditation program with MiSP. The program is well regarded and is currently part of a large-scale longitudinal study being conducted by the Oxford Mindfulness Centre examining mindfulness and resilience in adolescence (Oxford Mindfulness Centre, 2017). The credibility of the mindfulness program in this research is important given the research surrounding the limitations or inconsistency of other mindfulness programs for students (Burke, 2010; McKeering & Hwang, 2019; Tan, 2016).

The format of the *.b* program consists of a class of 40–50 minutes duration delivered weekly over a 10-week period. Given time restraints imposed by the school timetable, the program was modified in Phase 2 of the study to classes of 30–40 minutes in duration, delivered twice weekly over an 8-week period. As the *.b* program was developed to offer flexible delivery dependent on the individual school's time constraints (MiSP, 2015), the change to the duration of the lessons of the program in this investigation was not significant. Although the duration of each lesson was reduced by 10 minutes, the addition of an extra lesson each week enabled additional time to deliver the content of the program. Given this, most lessons were extended in order to be delivered over two lessons each week rather than one (see Appendix R). This enabled the facilitator to spend more time in group discussion on topics being explored and increased the frequency with which the students engaged in mindfulness exercises during lesson time.

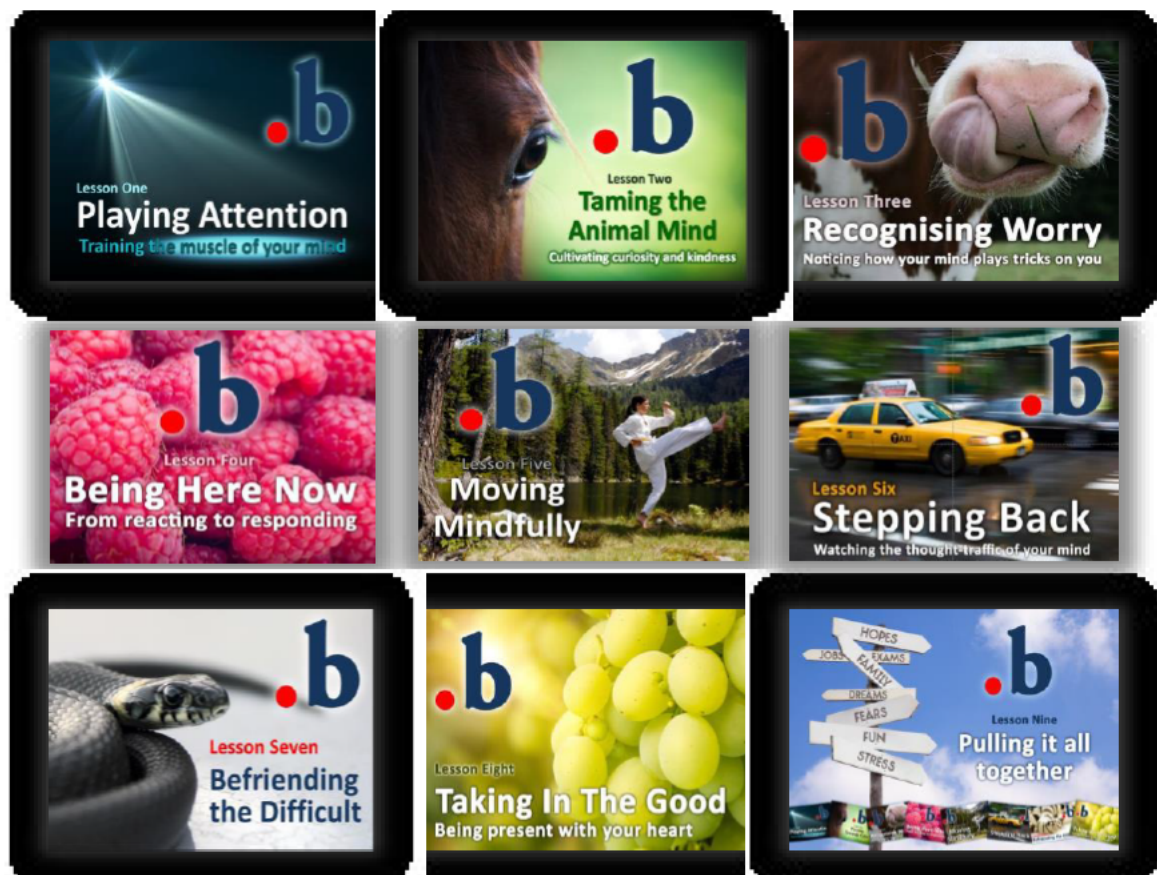
By modifying the program duration and frequency, the dosage of the program increased from approximately 400–500 minutes in the standard *.b* format to approximately 480–640 minutes in the modified format of the program in the study. The program was taught to students by way of structured lessons including both didactic and experiential learning, which are important in mindfulness practice (Felver et al., 2016). The program includes components of psychoeducation and practical skills in training the mind, learnt through experiential experiences that focus on the breath, body, and present-moment awareness (Kuyken et al., 2017).

Each lesson began with a short mindfulness practice, followed by an introduction to the lesson's core message, a PowerPoint presentation on key themes (see Figure 3.4), a group discussion, and further mindfulness activities. Whilst a detailed lesson plan for the MiSP *.b* program cannot be detailed here due to copyright regulations, a brief overview of the lesson objectives is provided (see Table 3.5). The lessons included, but were not limited to lessons on mindful breathing, mindful movement, the body scan, mindful eating, and gratitude. A more detailed description of the curriculum including mindfulness practices, student worksheets and home practice can be found in Appendix R. The lessons always started and finished with the ringing of a bell as a sign that the program was either beginning or coming to an end. The program was delivered during lunch recess twice weekly, and students were able to bring their lunch if they had not yet eaten. Each session concluded with a summary of what had been discussed, and a homework handout was distributed and explained to the students. As homework has been shown to be an important element of mindfulness training (Semple et al., 2006), the researcher wanted to encourage the students to engage in the homework. Although homework was optional, the researcher always discussed homework in the last few minutes of each session, and again in the first few minutes of the following session, as a

prompt to encourage the students to engage in home mindfulness exercises and reflect on the practice whenever possible. Two of the weeks' homework included audio recordings of the mindfulness exercises, and these were emailed through to the students and their parents/guardians as an additional prompt.

**Figure 3.4**

*Examples of the .b PowerPoint Presentation Slides*



(Mindfulness in Schools Project, 2015)

**Table 3.5***Brief Overview of the .b Mindfulness Lesson Objectives*

Lesson	Theme	Objectives
1 & 2	An introduction to mindfulness	<ul style="list-style-type: none"> <li>• To introduce mindfulness in a way that is engaging, entertaining and persuasive</li> <li>• For pupils to have their first taste of mindfulness practice (e.g., ‘play attention’ via mindfulness of hands and .b)</li> <li>• To establish ground rules for the lessons themselves so that the basic ethos of the classroom is established</li> <li>• This lesson is carefully tailored to the target audience. The relationship mindfulness has with different aspects of their lives such as learning, sporting achievements, cultural pursuits and social relationships is explored to encourage participation in the program</li> </ul>
3 & 4	Playing attention	<ul style="list-style-type: none"> <li>• To introduce pupils to their faculty of attention</li> <li>• For pupils to experience that they can direct their attention</li> <li>• For pupils to understand the untrained mind’s fickle nature – it is like a puppy</li> <li>• To begin to provide some simple tools for training their attention</li> <li>• To introduce key attitudes to attention-training: kindness, patience, repetition</li> </ul>
5	Taming the animal mind	<ul style="list-style-type: none"> <li>• To explore that the mind has a life of its own – we often can’t control it</li> <li>• To nurture an attitude of curiosity, kindness, acceptance and openness that helps us to deal more skilfully with these fluctuating mind-states</li> <li>• To teach that by ‘anchoring’ our attention in the lower half of the body we can begin to turn towards calm even when our minds are stormy.</li> </ul>
6 & 7	Recognising worry	<p>For pupils to understand that:</p> <ul style="list-style-type: none"> <li>• The mind habitually interprets and ‘tells stories’ about what is happening</li> <li>• We can get stuck in our heads and ‘ruminate’ or ‘catastrophise’</li> <li>• Such rumination is not only ‘stressful’ – it affects our bodies and behaviour, from sleep</li> </ul>

		and sport to spots and studies
		<ul style="list-style-type: none"> <li>• Practices like the 7-11 and Beditation help us deal with this by switching us from ‘thinking’ mode to ‘sensing’ mode</li> </ul>
8	Being here now	<ul style="list-style-type: none"> <li>• To explain how ‘autopilot’ prevents us from being alive and awake to our experience in the here and now</li> <li>• To learn to appreciate and savour the pleasant</li> <li>• To learn how to respond rather than react to the unpleasant</li> <li>• To learn how a .b can quickly bring our attention into the here and now, and help us to respond rather than react to what it difficult</li> </ul>
9	Moving mindfully	<p>For pupils to understand that:</p> <ul style="list-style-type: none"> <li>• Mindfulness is not just about being still, as in the FOFBOC or Beditation. It is also about movement. We spend a great deal of time doing actions ‘mindlessly’... on autopilot</li> <li>• One such activity is walking. We are rarely ‘present’ when we walk</li> <li>• Learning to move mindfully can also be used as a resource for peak performance in sport, music and the performing arts</li> </ul>
10 & 11	Stepping back	<p>For pupils to:</p> <ul style="list-style-type: none"> <li>• Understand that they have the capacity to ‘step back’ from their thoughts</li> <li>• Learn that it can be helpful to see thoughts as ‘traffic’ flowing through the mind</li> <li>• Identify some of the particular ‘thought-buses’ that pass through their mind</li> <li>• Recognise that they don’t have to ‘get on the bus’ of these difficult thoughts</li> </ul>
12	Befriending the difficult	<p>For pupils to:</p> <ul style="list-style-type: none"> <li>• Understand stress: where it comes from, why it is necessary, how it works and the potentially harmful effects.</li> <li>• Identify and draw their “stress signature” - where in the body do they feel stress?</li> <li>• Learn to respond rather than react, by ‘turning towards’ and ‘being with’ difficult</li> </ul>

- 13 & 14 Taking in the good
- To encourage an appreciation of what is good in life
  - To explain how even the ordinary can be experienced as ‘good’ if we are more fully aware of it
  - To teach the advice of those who have done this even in awful circumstances
  - To teach a practice of “taking in the good” so that what is good turns from an idea into an experience

- 15 & 16 Pulling it all together
- For pupils:
- To identify what they have found most useful in the .b course
  - To consider in what areas of their life they might apply their new mindfulness skills
  - To fill in questionnaires expressing their views about the course

(Mindfulness in Schools Project, 2015)

Fidelity of the intervention was also valuable to the study to determine whether the intervention was delivered as intended and to enable future replication of the study. Future replication of the program is important to ensure consistency in program delivery between different groups in a study, and in this research particularly so given the variation that currently exists between MBI programs in content, format, and duration (McKeering & Hwang, 2019). The .b program provides detailed lesson manuals, which were adhered to closely during delivery of the program to ensure fidelity of the intervention. The researcher also audio recorded, with appropriate consent, each of the lessons for both groups and compared the recorded lessons to the .b lesson manuals after delivery to ensure adherence to the program format was maintained. By documenting lesson plans with learning objectives, activities, and pedagogy and by audio recording and transcribing each lesson, the researcher was able to check for intervention fidelity (Hwang & Kearney, 2015).

An independent mindfulness practitioner with a long-standing practice in delivering mindfulness programs in Singapore also provided an independent assessment on fidelity of the intervention by listening to audio recordings and examining the MiSP manuals for each lesson. Four lessons for each group were randomly selected for critiquing, as has been done in other fidelity research with MBI school programs (Fung et al., 2019). A rating was then given for each of the four lessons using a standardised measure that was developed and employed by Johnson et al. (2017) in their fidelity of the .b mindfulness program. The marking rubric had been reported as appropriate by MiSP and had been modified from the adult MBI teaching assessment criteria (Crane et al., 2012). The checklist examined three domains: (a) coverage, pacing, and organisation; (b) embodiment of mindfulness; and (c) guiding of mindfulness practices. Each of these domains was measured against six competency levels, from 1 (*incompetent*) to 6 (*advanced*; see Appendix S). Ratings for the eight independently reviewed lessons ranged from 4 (*competent*) to 6 (*advanced*), with an average competency rating of 5.04. This score suggests high fidelity of the intervention in the study, which is similar to the few MBI studies that have reported on fidelity (e.g., Fung et al., 2019; Johnson et al., 2017).

### **3.6.4 Measures**

Quantitative and qualitative data measures were used to address the research objectives in Phase 2 of the sequential explanatory mixed-methods design of this study.

**3.6.4.1 Quantitative Data Measures.** Quantitative data measures were used to provide numeric data that were analysed to address the relevant research questions of Phase 2. Self-report measures were used to address Research Question 3 and included four instruments assessing wellbeing, student engagement, resilience, and mindfulness. Two of these instruments were used in Phase 1 (e.g., Wellbeing scale and Resilience scale) and have already been outlined in Section 3.5.3. Good reliability was reported for



Wellbeing ( $\alpha = .92$ ) and Resilience ( $\alpha = .74$ ) scales in Phase 2. This phase also employed two other measures: a revised Student Engagement scale, and a Mindfulness scale, which will be outlined below. Proxy-report measures were also used to address Research Question 4 (see Section 3.6.4.1.3). This research question examined the effects of the intervention program on student psychosocial health and wellbeing (specifically examining behavioural and emotional functioning) as reported by the student's parent/guardian and form teacher.

In Phase 2 of the study, the independent variables were the experimental group (intervention or waitlist control group), and time (preintervention measure, postintervention measure and follow-up measure), and the dependent variables included wellbeing, student engagement, resilience, and mindfulness (see Table 3.6). The aggregate scale scores for each dependent variable measure was used in Phase 2, as opposed to the subscale scores of these measures used in Phase 1, given findings reported in Phase 1 and power concerns with a smaller sample size. The measures met the appropriate criteria to be included in the study including reliability, validity, being widely cited, and containing acceptable scales of measurement (Creswell, 2019). A description of the additional scales used in Phase 2 of the study will now be outlined.

**Table 3.6***Dependent and Independent Variables for Phase 2*

Dependent variables	Independent variables				
	Between groups		Within groups		
Wellbeing	Intervention group	Waitlist control group	Preintervention measure	Postintervention measure	Follow-up measure
Student engagement					
Resilience					
Mindfulness					

**3.6.4.1.1 Student Engagement Scale.** The Wave 2 version of the SEM (Fredericks et al., 2005) was employed in Phase 2, as there were fewer time restraints than in Phase 1. Strong reliability was reported with the modified version of the total engagement score in Phase 2 ( $\alpha = .91$ ), which also addressed reliability concerns reported on the behavioural engagement subscale in Phase 1. The 19-item instrument has three subscales: behavioural engagement (five items, e.g. “I complete my work on time”), emotional engagement (six items, e.g. “My classroom is a fun place to be”), and cognitive engagement (eight items, e.g. “I study at home even when I don’t have a test”). Participants were asked to provide responses to items using a 5-point Likert scale as follows: 1 (*Never*) to 5 (*All of the time*; see Appendix T). Aggregate student-engagement scores were computed by reverse scoring three of the items (items 2, 3, and 11) and then adding all scores, with higher scores indicating a higher level of engagement for the participant.

**3.6.4.1.2 Mindfulness Scale.** The Child and Adolescence Mindfulness Measure was developed by Greco et al. (2011) to measure the level of mindfulness in children and

adolescents. The measure has a one-dimensional factor structure, based on the Kentucky Inventory of Mindfulness Skills (Baer et al., 2004), and examines participants' capacity to act with awareness, including observing internal experiences and being able to accept without any judgement. It was chosen for this study because of its use in prior research measuring mindfulness in early-adolescent students (Johnson et al., 2016; Quach et al., 2016; Sibinga et al., 2013) and its validation across different cultures with this age group (Goodman et al., 2017). The 10-item instrument asked participants to indicate how true each statement was, reflecting on their own experiences (e.g., "I keep myself busy, so I don't notice my thoughts or feelings" and "It's hard for me to pay attention to only one thing at a time"). It uses a 5-point Likert scale as follows: 0 (*never true*) to 4 (*always true*; see Appendix U). All items were reverse scored and summed together to provide an aggregate score, with higher scores indicating a higher level of mindfulness and acceptance.

High reliability was reported with the Mindfulness scale in Phase 2 ( $\alpha = .81$ ), as has previously been reported in other studies (Greco et al., 2011). Evidence has also been found for the scale's construct validity, with scores correlating with positive significance to favourable psychological functioning outcomes and negatively with adverse outcomes (Greco et al., 2011; Kuby et al., 2015). The psychometric properties of the Child and Adolescence Mindfulness Measure have been validated across different cultures (Chiesi et al., 2017; Cunha et al., 2013). Construct validity of the scale has also been examined in adolescents across different cultures and reports a positive significant association with mindful awareness ( $r = .56$ ) and self-compassion ( $r = .35$ ), and a significant negative association with emotional regulation difficulties ( $r = -.52$ ; Sünbül, 2018).

**3.6.4.1.3 Behavioural and Emotional Functioning Scale.** The Strengths and Difficulties Questionnaire was developed as a brief behavioural and emotional screening

questionnaire (Goodman, 1997). It was selected for use in the study because it had been used in prior research measuring wellbeing in adolescence (Ussher et al., 2007) and research examining student engagement (Ogilvie et al., 2019). It has also been employed in research on mindfulness intervention effects in this age group of students (Joyce et al., 2010; Lam, 2016; Volanen et al., 2020). High reliability of the scale was reported on both the parent and teacher questionnaires respectively on the total difficulties score in Phase 2 ( $\alpha = .81-.82$ ;  $\alpha = .84-.86$ ), as has been reported in previous research with the measure (Goodman, 2001). Strong reliability and validity were also reported on the scale with participants across different cultures (Giannakopoulos et al., 2013). The 20-item total difficulties score measure asks parents and teachers to comment on how true each statement is for their child/student (e.g., “Thinks things out before acting” and “Nervous in new situations, easily loses confidence”). Participants were asked to provide a response to items using a 3-point Likert scale as follows: 0 (*Not true*) to 2 (*Certainly true*; see Appendix V). Five items were reverse scored (items 5, 8, 11, 16, and 20), and a total difficulties score was generated by summing all scores ranging from 0 to 40. A higher score reflects a higher level of behavioural and emotional difficulty, with a score of more than 15 considered slightly raised and a score of more than 20 considered high and reflective of substantial clinical problems.

#### **3.6.4.2 Qualitative Data Measures.**

Qualitative data measures were also employed in Phase 2 of this study. These measures were used to provide textual data to address Research Question 5 and are outlined in the following subsections.

**3.6.4.2.1 Program Acceptability.** A postprogram satisfaction survey was developed by the researcher to gain a better understanding of students’ acceptability of the program. This survey had 15 items, which were grouped in two parts. The first section

listed 10 mindfulness exercises that were practised during the program and asked participants to describe their own experience with this practice by circling a number from 1 (*not useful*) through to 10 (*very useful*; see Appendix Q). The second section had five questions and asked the participant to provide information on their own mindfulness practice and to identify which components of the program they liked or disliked. The information was used to inform the researcher on the acceptability of the program, purposeful selection of students for interview, and themes to explore with participants in the interviews.

**3.6.4.2 Semistructured Interview.** A semistructured interview was employed to enable the researcher to gather informative data on individual student experiences, both with moving and with the intervention program. The first section of the interview had five questions that explored the participant's experiences with mobility, given the high rates of turnover reported with international school students. In this section, participants were encouraged to discuss any challenges they may have experienced in moving to a new school or country, and which tools or resources they had used, or were continuing to use, to help them through this process. Following on from the quantitative data findings reported in Phase 1 of the study, this section of the interview aimed to explore how moving may have affected the student's psychosocial health and wellbeing.. The second section of the interview aimed to explore the participant's thoughts on, and experiences with, the mindfulness program. It consisted of eight open-ended questions (see Appendix W). The participant was encouraged to elaborate on which parts of the program they enjoyed, or did not enjoy, and which exercises or themes they found most relevant to them in their own personal life. The format of the interview was guided by—not determined by—the interview questions, which allowed the researcher to explore other themes of interest that arose during the interview. The interview questions were all age

appropriate, and participants were given the opportunity at the end of the interview to provide additional comments that had not been discussed. The interviews took approximately 20–30 minutes to complete. The timeframe varied depending on how much information the interviewee was willing to share and the point at which data saturation had been achieved. The duration of the interview was also restricted by the logistics around the participant's school day.

### ***3.6.5 Data-Collection Timeframe and Delivery***

The data-collection timeframe and delivery for the quantitative and qualitative data measures for Phase 2 of this study are outlined in the following subsections.

**3.6.5.1 Quantitative Data Measures Collection.** Responses to items were collected with students in the second phase of the study at designated time intervals in a printed format. The four self-report instruments were administered to students at baseline, pretest period, posttest period, and follow-up period. The experimental group received the *.b* mindfulness program between the Time-1 and Time-2 data-collection periods. The waitlist control group received the *.b* mindfulness program between the Time-2 and Time-3 data-collection periods. Time-1 data collection occurred 1 week prior to the intervention group commencing the program. This was pretest data collection for the intervention group and baseline data collection for the waitlist control group. Time-2 data collection occurred 10 weeks after Time-1 data collection. This was posttest data collection for the intervention group and pretest data collection for the waitlist control group. Time-3 data collection occurred 11 weeks after Time-2 data collection. This was follow-up data collection for the intervention group and posttest data collection for the waitlist control group. The final data collection at Time-4 occurred 11 weeks after the Time-3 data collection and was conducted only with the waitlist control group as a follow-up data measure. The data-collection measures and timeframes for each group are

represented in Table 3.7, with a more detailed schedule presented in Appendix X. It was not possible to collect Time-4 data on the intervention group due to both time restraints in the students' curriculum at that time and high attrition rates due to mobility. The time required to complete these measures in total was approximately 25–35 minutes.

The researcher offered two possible time periods for the students to complete these measures during the week: either at an agreed lunch recess or before morning form time. All measures were administered by the researcher in the school library or in a designated classroom. Each participating student had been assigned a unique code in the selection stage of the study, and that code was used for them in all data-collection periods. All participants were emailed the week before data collection as a reminder and to confirm logistics regarding where the data collection would take place. Form teachers were also asked to pass on messages to participants during the study if participants had not responded to the researcher's email.

**Table 3.7***Student Data Measures and Collection Timeframes for Each Group*

Condition	Data collection			
	Time-1	Time-2	Time-3	Time-4
Experimental group	Preintervention	Postintervention	Follow-up	
	• EPOCH	• EPOCH	• EPOCH	
	• SEM	• SEM	• SEM	
	• BRS	• BRS	• BRS	
	• CAMM	• CAMM	• CAMM	
Waitlist control group	Baseline	Preintervention	Postintervention	Follow-up
	• EPOCH	• EPOCH	• EPOCH	• EPOCH
	• SEM	• SEM	• SEM	• SEM
	• BRS	• BRS	• BRS	• BRS
	• CAMM	• CAMM	• CAMM	• CAMM

*Note.* EPOCH = Engagement, Perseverance, Optimism, Connectedness, and Happiness; SEM = Student Engagement Measure – MacArthur; BRS = Brief Resilience Scale; CAMM = Child and Adolescence Mindfulness Measure.

Parent/guardian and teacher participation was completed using Qualtrics software, Version [February, 2018]. This was identified as the best format to use to promote participation with both groups, due to the low cost, ease of accessibility for participants, and prompt response timeframe (Nayak & Narayan, 2019). The measure was emailed as a link to each student’s parent/guardian and teacher during the week the participant commenced in the program (e.g., Time-1) and again immediately after the student had completed the program (e.g., Time-2; see Table 3.8).



**Table 3.8***Teacher and Parent Data-Collection Timeframes*

Data collection	Condition			
	Intervention group		Waitlist control group	
	Time-1	Time-2	Time-1	Time-2
Parents	Preintervention	Postintervention	Preintervention	Postintervention
Teachers	Preintervention	Postintervention	Preintervention	Postintervention

Parents and teachers were given two weeks to complete the online questionnaire, and postintervention questionnaires were emailed to only those parents/guardians and teachers whose child/student had completed the intervention program. The researcher provided a face-to-face information session, printed information letters, and reminder emails to both groups to encourage participation response—strategies that have been identified as successful in achieving higher response rates with these participant groups (Wolfenden et al., 2009). No parent/guardian participated in data collection across both the intervention and waitlist control groups; however, some teachers completed data collection in both groups depending on when their students were participating in the study.

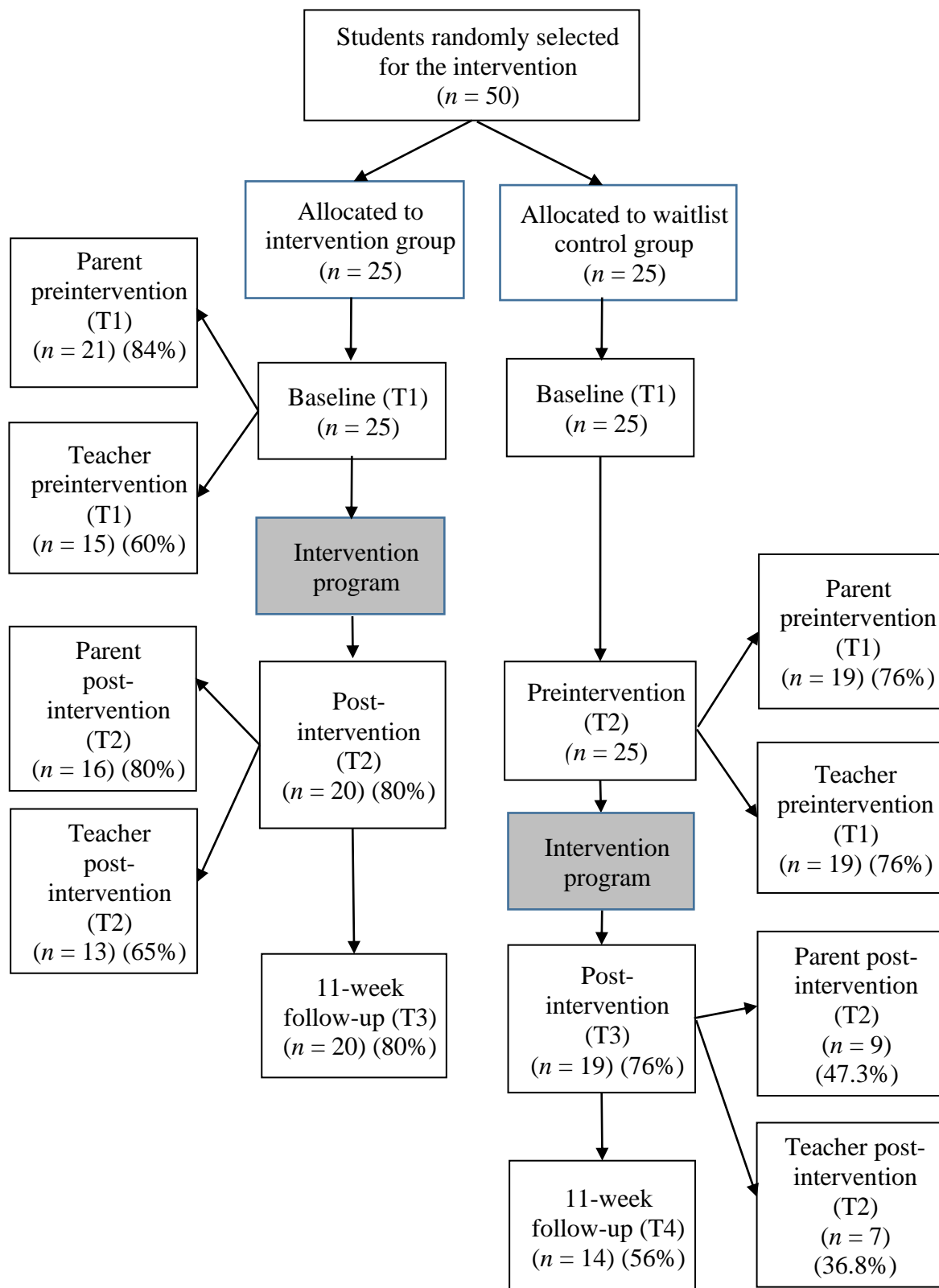
Students were required to attend a minimum of 12 of the 16 mindfulness sessions (75% attendance rate) and to have completed all quantitative measures within a designated 1-week timeframe in order to qualify as a valid case for data analysis. This is consistent with research that reports that an attendance rate of 70% or higher is needed in order for an intervention to be effective (Amico, 2009). This minimum attendance rate has also been used in other MBI school research (Quach et al., 2016). The student retention rate at postintervention measure was 78% (experimental group 80%, waitlist control group 76%). This retention rate is not dissimilar to retention rates in other

intervention programs delivered at schools with this age group (Dray et al., 2017; Johnson & Wade, 2019). Student retention rate at the follow-up data time point was 68% (experimental group 80%, waitlist control group 56%); this lower rate was largely a result of student mobility in the waitlist control group ( $n = 5$ ; see Figure 3.5). This rate of mobility is expected in international schools and usually occurs at the beginning/end of a school year (Whyte, 2016), as was evident in this study.

Response rates for parent/guardian at pretest measure was 80% (experimental group 84%, waitlist control group 76%), and posttest measure was 64% (experimental group 80%, waitlist control group 47%). Teacher response rate at pretest measure was 68% (experimental group 60%, waitlist control group 76%), and posttest measure was 51% (experimental group 65%, waitlist control group 37%; see Figure 3.5). These rates are consistent with parent and teacher response rates in research, with parent response rates reported as higher (Schilpzand et al., 2015). Low teacher-response rates in research have often been attributed to time constraints and teacher disengagement during the research process (Kubitskey et al., 2012).

**Figure 3.5**

*Participant Retention Rates in the Intervention Program in Phase 2*



**3.6.5.2 Qualitative Data Measures Collection.** The postprogram survey was administered to both groups during their last lesson of the intervention program. The interviews for both groups were conducted after the intervention program had been delivered to the waitlist control group and 1 week after Time-3 data was collected for both groups (see Appendix X). This was two weeks before the end of the school year, after the completion of academic assessments. The interviews for participants were conducted during the morning lessons and lunch recess in the school library. The researcher liaised with participants and their teachers to identify a suitable time to conduct the interview during the week, with many teachers giving permission for classes to be missed, given school work for the year had been completed. Given the high mobility that occurs at the end of every school year in an international school (Whyte, 2016), this period was identified as a pertinent time to explore mobility experiences with the participants. The interviews were audio recorded after participants had verbally agreed to the recording at the beginning of the interview. The participants were also advised that they could stop the interview at any time. At the commencement of each interview, the researcher began by stating the date, time, and location of the interview and introducing the participant under a pseudonym chosen before the recording commenced. The participant was encouraged to answer the questions as honestly as they could and to provide as much detail in their responses as possible. When the participant had completed answering all the questions and it was determined that they had nothing else to communicate in the interview, the interview ended. The participant was thanked for their time and offered a copy of the transcribed interview to be provided at a later stage. The audio recording enabled the researcher to listen during the interview and to transcribe notes later to avoid distracting the interviewee. The original digital recording was deleted once transcription had taken place.

### **3.6.6 Data Analysis**

The quantitative and qualitative data analysis used in Phase 2 of this study is broadly outlined below with a more detailed description provided in Chapter 5.

**3.6.6.1 Quantitative Data Analysis.** Data were screened to inspect for outliers and to check assumptions for normality, multicollinearity, and homogeneity of variance and covariance had been met. Descriptive analysis was carried out to establish central tendency and measures of dispersion for the variables of interest across all constructs. A mixed factorial MANOVA (see Section 5.2.2) and a series of one-way repeated-measures ANOVA (see Section 5.2.3) were conducted to address Research Question 3. Separate paired-samples t-tests (see Section 5.3.3) were also conducted to address Research Question 4. All scale items that were negatively stated were reverse scored in data input, and the researcher rechecked all data to ensure that they had been input correctly.

**3.6.6.2 Qualitative Data Analysis.** The interviews were transcribed and coded by the researcher and stored in a password-protected document on the researcher's personal computer. The researcher read the transcript, dividing the text into segments of information. Codes were then allocated to segments of the transcript. A code is a label that is used to describe a segment of text (Creswell, 2019). This type of analysis, known as thematic analysis, and its use in this study is outlined in Section 5.4.1. The veracity of the qualitative analysis is outlined in Section 5.4.2. The findings were used to address Research Question 5, and they are reported in this thesis via narrative discussion with visual representation of interconnecting themes (see Section 5.4.3).

## **3.7 Delivery and Timeframe of Research**

The research at the school was conducted over a 10-month period from November 2017 to September 2018. The researcher gained approval from the headmaster in November 2017 and held meetings with all senior teachers at that time to confirm

logistics of the research. A pilot study was conducted in November 2017 with students at another school to check face validity for all measures being employed in the investigation. Phase 1 was conducted in December 2017, at the end of the first school term. It was conducted during the morning form class with the assistance of the form teachers. Phase 2 was conducted in Terms 2 and 3 from January to June 2018, with final data collection (Time-4) completed at the beginning of the new school year in September 2018 (see Appendix X). The intervention program in Phase 2 was delivered by the researcher in a designated classroom at the school over lunch recess. It was delivered twice a week to the intervention and waitlist groups for 8 weeks, with the exception of a 1-week midterm break during the program for the intervention group. Quantitative data collection with students for Phase 2 was completed either in the allocated classroom at lunchtime or, on occasion, before morning form time in the library. Qualitative data collection, which was conducted in the school library, was carried out in the last 2 weeks of the school year in June 2018. All data collection for each phase of the study was completed within the allocated time frame, as outlined (see Sections 3.5.4 and 3.6.5).

### **3.8 Ethics**

The National Health and Medical Research Council's code of ethics was used as a governing document for all ethical decisions in this research. The four core principles of respect, research merit, justice, and beneficence were upheld in all research undertaken in this investigation. Before approaching the school of interest regarding participation in the research, the researcher waited until approval had been granted by the ACU HREC (see Appendix B). The researcher ensured all approvals had been granted by the school's headmaster and senior staff before participant recruitment began (see Appendix D). Participant information and informed consent forms were provided to students, parents/guardians, and teachers detailing the purpose of the research, participant tasks,

and contact details of the researcher for the two phases of research. This information also detailed the rights of the participant, the terms of confidentiality, and the method with which the data would be handled and stored in accordance with ACU HREC's requirements (see Appendices E–G and L–P). All consent forms had to be returned before a student could participate in the research. Student participation in the program was voluntary. No students were offered any incentive to participate in the program, and students were given the opportunity to discontinue from the program at any time.

Confidentiality and protection of participants in the research were upheld under the code of ethics prescribed. Participants' names were not used in the data collection, and all participants were assigned a code to protect their identity. All data were stored in a locked filing cabinet, and any work on the researcher's personal computer was password protected. All data will be kept for 5 years under ACU HREC guidelines. The school's identity was also protected by ensuring that the school's description was as general as possible in the detail provided in the context of the investigation.

During the data collection and intervention stages of the research, the researcher was onsite 2 days each week. Although disruption to classes was kept to a minimum with the program delivery occurring over lunch recess, a small level of disruption to staff and students occurred with some students completing instruments and interviews during class time. The researcher presented the research findings to the senior staff of the school to assist with future planning of resources and programs for the pastoral growth of students.

### **3.9 Limitations of the Research**

There were methodological limitations in each phase of the sequential mixed-methods design of this investigation. In Phase 1, employing only self-report data in the design may have resulted in social desirability or recall bias (Althubaiti, 2016). While the researcher was aware of this limitation in the design, self-report measures were employed

as an inexpensive way of obtaining data quickly with minimal disruption. As no prior research had been conducted on the constructs of interest with this cohort of students, the survey provided preliminary findings to address a gap in knowledge in this field.

However, the survey participants were confined to one specific school. Future research needs to capture a wider participant group of students in other international schools.

In Phase 2, the most apparent methodological limitation was with the small sample size employed. A larger sample size is preferred in quantitative data because it reduces sampling error and increases reliability (Creswell, 2015). Additionally, despite strategies put in place to minimise attrition (e.g., reminders sent for data collection, convenient location for the intervention program delivery), attrition did occur in Phase 2 of the study. While small sample size and attrition are not uncommon in educational research (Bartlett et al., 2017; Berry et al., 2012; Coyne, 2010; Jago et al., 2011; White, 2012), the study addressed these limitations through the inclusion of different data measures. Employing self-report and proxy-report data measures, and validating these findings through qualitative data, can provide greater support for the intervention effects despite a small sample size and attrition in the study. Furthermore, as it was not possible for the proxy-report data to be collected at intervals necessary for an untreated comparison group in the design, a pre–post test design was employed to address Research Question 4. Given this, the findings from the proxy-report data need to be considered with caution alongside the other data findings.

Another limitation exists with the waitlist control group design that was employed in Phase 2 of the study. The design was used in the study to provide an untreated comparison group and because of the ethical considerations in withholding the MBI program from a cohort of students. However, methodological limitations exist with the study design, given overestimation effects can be found in self-report data measures in



waitlist control design studies (Cunningham et al., 2013; Hart & Bagiella, 2012).

Considering this limitation, the study also employed proxy-report data measures, and qualitative data, to address any overestimation effects.

Finally, time restraints imposed by the school's curriculum meant the intervention program was offered as an elective lunchtime program. This may have resulted in possible sampling bias in the study because it can be argued that students volunteering to engage in a lunchtime extracurricular program may not represent the true year-level cohort, with some students preferring to socialise with friends or play sport at that time. With this in mind, caution needs to be taken when generalising the results to other international school students.

Additionally, interviewer bias may have arisen during the conduct of interviews. As the interviewer was also the person who delivered the intervention program to the participants, this may have influenced the way in which the participants responded to the questions on the intervention program, and how the information was interpreted by the interviewer. The researcher was aware of this limitation in the design and aimed to address this during the interview through open-ended questions, and providing a supportive and open dialogue with the participants. The researcher used validation steps, such as member checking and review by an independent researcher, to ensure that the interpretation of findings were dependable.

### **3.10 Conclusion**

This chapter has provided a detailed explanation of the methodology employed in Phase 1 and Phase 2 of the study. The aim of this research was to examine the constructs of wellbeing, student engagement, and resilience among early-adolescent international school students, and to investigate the effects of an MBI program on these constructs. The research objectives that underpin this investigation were addressed using a sequential

explanatory mixed-methods design that included quantitative analysis followed by qualitative data analysis. The chapter began with an overview of the research approach, design, and context employed in the study, which provided a framework for the methodology of each phase of the research.

The chapter has detailed the correlational research design (Phase 1) and randomised waitlist control group design (Phase 2) employed in the study. The recruitment and selection of participants for each of these phases has also been detailed, along with a description of the data measures used and the data analysis. A clear timeframe for each phase of the study has been detailed and information on the program delivery provided. The chapter has also described the ethics that governed the research and the limitations of the current investigation.

The methodology employed in this investigation was chosen in recognition of the methodological limitations of prior research in the mindfulness field. In making this choice, the aim was to address a gap in the research (McKeering & Hwang, 2019) by embedding the most appropriate methodological paradigm in Phase 2 of the study to provide more scientifically robust findings. The sequential explanatory mixed-methods design employed in the study enabled the qualitative data findings to be used to validate the quantitative data findings. It also enabled the Phase 1 findings to be used to inform Phase 2 in the study. The integration of both quantitative and qualitative data in this design also provided a more complete picture on the field of research by “noting trends and generalisations as well as in-depth knowledge of participants’ perspectives” (Creswell & Plano Clark, 2011, p. 35). Therefore, the methodology employed in the study appropriately addressed the research objectives of the investigation and provided a detailed plan for conducting the study. The next chapter reports on the Phase 1 data findings of the study.

## Chapter 4: Results of Phase 1

This chapter reports on the findings from Phase 1 of this study. The findings address the first research aim of this study, which was to better understand wellbeing, student engagement, and resilience in early-adolescent international students given the adjustment difficulties they experience.

### 4.1 Introduction

The quantitative data findings addressed the first two research questions of this investigation as follows:

*Research Question 1:* How are wellbeing, student engagement, and resilience measures associated with each other among early-adolescent international students?

*Research Question 2:* What effect do age, gender, and mobility factors have on wellbeing, student engagement, and resilience among early-adolescent international students?

A significant positive association was anticipated between wellbeing, student engagement, and resilience following prior findings across these constructs in research conducted with international tertiary-aged students (e.g., Alharbi & Smith, 2019; Sabouripour & Roslan, 2015). Significant effects of mobility on the dependent variables were also expected, given prior research findings reported with tertiary-aged international students. As there had been limited research conducted on age and gender effects across the dependent variables, this phase of the study investigated the effects of these predictor variables with early-adolescent international school students.

The chapter begins with an overview on the data cleaning and assumption testing conducted, to ensure that the findings from the analyses employed were valid (Field, 2018). Correlational findings addressing Research Question 1 are then reported. This is

followed by findings from the one-way MANOVA and one-way ANOVA that were conducted to address Research Question 2. The chapter concludes with a summary of findings from Phase 1 and an explanation of how the findings were used to inform Phase 2 in the sequential explanatory mixed-methods design of this study.

## **4.2 Data Cleaning**

All analyses were run using the Statistical Package for the Social Sciences, Version 25 (IBM Corporation, 2017). Preliminary investigation of the gathered data identified some incomplete data. A detailed inspection of the missing data in the investigation (correlations and independent t-tests) showed the data could be labelled as missing at random (Little & Rubin, 2020). Questionnaires with one item missing in any subscale ( $n = 11$ ) were retained in the analysis, and the missing values were changed to the subscale mean (Roth, 1994). Of the 186 participants who finished the survey, eight participants (4%) had more than one item missing for each of the subscales being examined and were subsequently removed from additional analyses. Analysis was conducted on 178 students (female students = 108, male students = 70) aged 10–14 years.

## **4.3 Assumption Testing of Total Scores**

Prior to analysis, subscale scores were assessed for normality and outliers. Results indicated that all skewness and kurtosis ratio values were between  $\pm 3$  and while not all Shapiro–Wilk significance values were above .05, these represented only mild to moderate violations of normality. As such, the subsequent parametric testing was considered appropriate to these mild and moderate violations due to sample size being well in excess of 100.

An inspection of z-scores for each variable indicated that only emotional engagement had a z-score above  $\pm 3.29$  ( $z = -3.54$ ); however, this occurred with only one participant, representing less than 1% of the sample. Due to this and the fact that

there was no impact on normality, this outlier was retained. The assumption of multicollinearity showed no issues, as no correlations were above 0.85 between dependent variables, with correlation ranging from 0.14 to 0.73, and collinearity statistics showed a variance inflation factor of less than 5 and tolerance values above 0.20, which were at acceptable levels.

In respect to the MANOVA conducted in Research Question 2, assumption testing indicated equality of covariance was met for age, gender, and all three mobility variables, with Box's M significance levels above .05. Levene's equality of variance was met for all univariate analyses for gender; however, there was a slight violation for age in connectedness,  $p = .013$ . Within the mobility variables it was violated for time in country with connectedness,  $p = .034$ , and for time at school with perseverance,  $p = .027$  and connectedness,  $p = .021$ . There was no violation with the third mobility variable of number of international moves. Due to ANOVA being robust to mild violations of homogeneity of variance and normality, and considering the robust nature of the data—including a sample size well above 100 and a sample size variation of less than 1.5—a power transformation was not considered appropriate for any of the variables to address these mild homogeneity violations (Field, 2018; Stevens, 2009).

#### **4.4 Research Question 1**

*How are wellbeing, student engagement, and resilience measures associated with each other among early-adolescent international students?*

A series of Pearson correlation analyses were performed to identify any positive associations between wellbeing, student engagement, and resilience subscales. Correlational results are presented in Table 4.1, alongside descriptive statistics and Cronbach's alpha. Findings reported a weak to strong statistically significant association, with the majority of the constructs examined. All correlations between the subscales were

positive in direction, which was expected based on previous research findings with domestic students of a similar age (Hjemdal et al., 2011; Pietarinen et al., 2014) and international tertiary-aged students (Pidgeon et al., 2014; Sabouripour & Roslan, 2015; Trowler, 2010).

The strongest associations were found between wellbeing subscales that included happiness and optimism ( $r(178) = .66, p < .001$ ), happiness and connectedness ( $r(178) = .73, p < .001$ ), optimism and connectedness ( $r(178) = .61, p < .001$ ), and optimism and perseverance ( $r(178) = .66, p < .001$ ). These findings are consistent with Seligman's PERMA model (2011), which states that the five core elements are interdependent constructs. The wellbeing subscales also reported weak to moderate statistically significant correlations across the three student-engagement subscales, which is consistent with prior findings with domestic students of a similar age (Pietarinen et al., 2014). The strongest association between the wellbeing and student-engagement subscales was reported between happiness and emotional engagement ( $r(178) = .59, p < .001$ ) and the weakest associations were reported between engagement and behavioural engagement ( $r(178) = .21, p < .01$ ), and connectedness and cognitive engagement ( $r(178) = .20, p < .01$ ). Wellbeing subscales also reported weak to moderate statistically significant correlations with the brief resilience scale, with the strongest association reported between happiness and resilience ( $r(178) = .43, p < .001$ ), and the weakest association between engagement and resilience ( $r(178) = .19, p < .01$ ). These findings are similar to the findings of earlier research conducted on wellbeing and resilience with domestic students of a similar age (Hjemdal et al., 2011) and tertiary-aged international students (Sabouripour & Roslan, 2015).

The student-engagement subscales detailed a weak to moderate statistically significant correlation with each other, with the strongest association found between

behavioural engagement and emotional engagement ( $r(178) = .50, p < .001$ ), and the weakest association reported between behavioural engagement and cognitive engagement ( $r(178) = .21, p < .01$ ). These findings provide support for the interrelated association between these constructs (Fredricks et al., 2005). Finally, while the brief resilience scale reported a statistically significant correlation with emotional engagement ( $r(178) = .32, p < .001$ ), there was no statistically significant correlation reported with either behavioural engagement or cognitive engagement. Although the association between resilience and emotional engagement supports earlier research (Pidgeon et al., 2014), the findings are in contrast to those of prior studies that found a statistically significant association between resilience and behavioural engagement or cognitive engagement (Pitzer & Skinner, 2017; Rodríguez-Fernández et al., 2018). The inconsistency reported in the findings in these studies suggests more research is needed on the association between resilience and different student-engagement constructs, given the limited research conducted in this field to date (Rodríguez-Fernández et al., 2018).

Overall, the findings supported earlier research conducted (Hjemdal et al., 2011; Pidgeon et al., 2014; Pietarinen et al., 2014; Sabouripour & Roslan, 2015; Trowler, 2010), with significant positive associations found across wellbeing, student engagement, and resilience constructs in early-adolescent international students, with the exceptions being any association between resilience and either behavioural engagement or cognitive engagement.

**Table 4.1***Instruments' Reliability, Mean, Standard Deviation, and Correlations (N = 178)*

Variables	$\alpha$	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. BRS	.77	18.45	3.91	–	.14	.32***	.14	.19*	.29***	.35***	.32***	.43***
2. SEM BEH	.63	13.08	1.43		–	.50***	.32***	.21**	.41***	.33***	.26***	.31***
3. SEM EMO	.85	22.53	3.78			–	.48***	.39***	.44***	.48***	.39***	.59***
4. SEM COG	.79	13.30	4.10				–	.27***	.46***	.38***	.20**	.27***
5. EPO ENG	.87	11.66	3.73					–	.47***	.54***	.55***	.58***
6. EPO PER	.81	14.36	3.03						–	.66***	.49***	.48***
7. EPO OPT	.80	13.23	3.36							–	.61***	.66***
8. EPO CON	.83	15.72	3.38								–	.73***
9. EPO HAP	.89	15.49	3.61									–

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . BRS = Brief Resilience Scale; SEM BEH = Behavioural Engagement, SEM EMO = Emotional Engagement; SEM COG = Cognitive Engagement, EPO ENG = Engagement, EPO PER = Perseverance; EPO OPT = Optimism, EPO CON = Connectedness; EPO HAP = Happiness.  
 From “A study into wellbeing, student engagement and resilience in early-adolescent international school students,” by P. McKeering, Y-S. Hwang, and C. Ng, 2021, *Journal of Research in International Education*, 20(1), p. 79. (<https://doi.org/10.1177/14752409211006650>). Copyright 2021 by SAGE Publications.





## **4.5 Research Question 2**

*What effect do age, gender, and mobility factors have on wellbeing, student engagement, and resilience among early-adolescent international students?*

To address Research Question 2, a series of one-way MANOVAs were performed to examine whether age, gender, and mobility would have an effect on wellbeing and student-engagement subscales. The predictor variables included age (10 years, 11 years, 12 years, 13–14 years), gender (male, female), and three mobility variables: time in country (0–2 years, 3–4 years, 5+ years), time at school (6–12 months, 2 years, 3 years, 4+ years) and number of international moves (1–2 countries, 3+ countries). Students aged 14 years ( $n = 4$ ) were combined with the 13-year-old age group ( $n = 33$ ) to increase statistical power in the analysis. The wellbeing outcome variables included engagement, perseverance, optimism, connectedness, and happiness. In the second series of one-way MANOVAs, the same predictor variables were used with three student-engagement outcome variables: behavioural engagement, emotional engagement, and cognitive engagement.

A separate series of one-way ANOVAs were conducted to examine the effect of age, gender, and mobility on resilience. The same predictor variables were used, including age (10 years, 11 years, 12 years, 13–14 years), gender (male, female), time in country (0–2 years, 3–4 years, 5+ years), time at school (6–12 months, 2 years, 3 years, 4+ years) and number of international moves (1–2 countries, 3+ countries), and the outcome variable was resilience. Results are presented for wellbeing subscales first, followed by student engagement and resilience scales.

### **4.5.1 Wellbeing**

Descriptive statistics are detailed for each predictor variable with the wellbeing subscales in Table 4.2. The findings of the one-way MANOVAs for the wellbeing subscales are detailed for each predictor variable in Table 4.3. Findings from the one-way MANOVAs

highlighted age groupings as having a significant multivariate effect on wellbeing,  $F(15, 516) = 1.77, p = .036, V = .147, d = 0.46$ . Examination of univariate effects showed that age had a significant effect with a Cronbach's alpha level of .05 for optimism ( $F(3, 174) = 3.18, p = .026, d = 0.46$ ) and happiness ( $F(3, 174) = 3.81, p = .011, d = 0.51$ ). Inspection of the effect sizes indicated a medium effect size (e.g.,  $d = 0.50$ ; Cohen, 1988), suggesting practical significance of the findings that is potentially powerful in both the short and long term (Funder & Ozer, 2019).

**Table 4.2***Descriptive Results for Wellbeing Across Each of the Independent Variables*

Variables	Engagement	Perseverance	Optimism	Connectedness	Happiness
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Age	11.66 (3.73)	14.36 (3.03)	13.23 (3.36)	15.72 (3.38)	15.49 (3.61)
10 years	12.77 (3.26)	15.15 (2.78)	14.54 (2.95)	16.75 (2.92)	16.67 (3.13)
11 years	11.74 (3.74)	14.07 (3.01)	12.81 (3.35)	15.57 (3.20)	15.91 (3.32)
12 years	10.72 (3.51)	14.21 (2.81)	12.98 (3.19)	15.70 (3.15)	14.47 (3.54)
13–14 years	11.32 (4.26)	14.03 (3.50)	12.57 (3.70)	14.73 (4.11)	14.67 (4.17)
Gender	11.66 (3.73)	14.36 (3.03)	13.23 (3.36)	15.72 (3.38)	15.49 (3.61)
Male	11.49 (3.86)	14.23 (2.92)	12.94 (3.50)	15.10 (3.58)	14.82 (3.94)
Female	11.77 (3.66)	14.45 (3.10)	13.42 (3.26)	16.12 (3.19)	15.93 (3.31)
Time in country	11.66 (3.73)	14.36 (3.03)	13.23 (3.36)	15.72 (3.38)	15.49 (3.61)
0–2 years	11.09 (3.89)	13.83 (3.47)	12.63 (3.57)	14.45 (3.77)	14.76 (3.99)
3–4 years	11.88 (3.61)	14.56 (2.83)	13.56 (3.31)	16.53 (2.98)	16.09 (3.44)
5+ years	12.02 (3.75)	14.71 (2.70)	13.41 (3.12)	15.85 (3.10)	15.32 (3.23)
Time at school	11.66 (3.73)	14.36 (3.03)	13.23 (3.36)	15.72 (3.38)	15.49 (3.61)
6–12 months	10.77 (3.70)	14.13 (3.48)	13.05 (3.52)	14.89 (3.66)	14.90 (3.65)
2 years	12.87 (4.16)	14.46 (2.92)	13.69 (3.52)	16.08 (3.45)	15.54 (3.60)
3 years	12.15 (3.34)	14.00 (2.65)	12.71 (2.91)	15.61 (3.40)	15.30 (3.83)
4+ years	11.52 (3.39)	14.90 (2.65)	13.49 (3.31)	16.73 (2.52)	16.50 (3.26)
Number of inter-					
national moves	11.66 (3.73)	14.36 (3.03)	13.23 (3.36)	15.72 (3.38)	15.49 (3.61)
1–2 countries	11.94 (3.68)	14.75 (2.94)	13.50 (3.42)	16.10 (3.22)	15.59 (3.52)
3+ countries	11.22 (3.79)	13.77 (3.08)	12.82 (3.24)	15.12 (3.55)	15.34 (3.75)

*Note.* From “A study into wellbeing, student engagement and resilience in early-adolescent international school students,” by P. McKeering, Y-S. Hwang, and C. Ng, 2021, *Journal of Research in International Education*, 20(1), p. 79. (<https://doi.org/10.1177/14752409211006650>). Copyright 2021 by SAGE Publications.

**Table 4.3***Significant MANOVA Results for Wellbeing Scales Across Each Independent Variable*

Variables	Pillai's trace	<i>F</i> ( <i>df</i> )	<i>p</i>	$\eta^2$
Age	.15	1.77 (15, 516)	.04	.05
Engagement		2.38 (3, 174)	.07	.04
Perseverance		1.37 (3, 174)	.26	.02
Optimism		3.18 (3, 174)	.03	.05
Connectedness		2.53 (3, 174)	.06	.04
Happiness		3.81 (3, 174)	.01	.06
Gender	.03	1.19 (5, 172)	.32	.03
Engagement		0.25 (1, 176)	.62	.001
Perseverance		0.22 (1, 176)	.64	.001
Optimism		0.88 (1, 176)	.35	.01
Connectedness		3.98 (1, 176)	.05	.02
Happiness		4.04 (1, 176)	.05	.02
Time in country	.09	1.62 (10, 344)	.10	.05
Engagement		0.98 (2, 175)	.38	.01
Perseverance		1.31 (2, 175)	.27	.02
Optimism		1.34 (2, 175)	.27	.02
Connectedness		6.74 (2, 175)	.002	.07
Happiness		2.33 (2, 175)	.10	.03
Time at school	.15	1.77 (15, 516)	.04	.05
Engagement		2.90 (3, 174)	.04	.05
Perseverance		0.74 (3, 174)	.53	.01
Optimism		0.66 (3, 174)	.58	.01
Connectedness		2.78 (3,174)	.04	.05
Happiness		1.72 (3,174)	.16	.03

Variables	Pillai's trace	<i>F</i> ( <i>df</i> )	<i>p</i>	$\eta^2$
Number of international moves	.05	1.69 (5, 172)	.14	.05
Engagement		1.59 (1, 176)	.21	.01
Perseverance		4.55 (1, 176)	.03	.03
Optimism		1.74 (1, 176)	.19	.01
Connectedness		3.62 (1, 176)	.06	.02
Happiness		0.20 (1, 176)	.66	.001

*Note.* From “A study into wellbeing, student engagement and resilience in early-adolescent international school students,” by P. McKeering, Y-S. Hwang, and C. Ng, 2021, *Journal of Research in International Education*, 20(1), p. 80. (<https://doi.org/10.1177/14752409211006650>). Copyright 2021 by SAGE Publications.

Post hoc analyses using Tukey’s honestly significant difference test (HSD) reported 10-year-olds had significantly ( $p = .04$ ) higher optimism ( $M = 14.54$ ,  $SD = 2.95$ ) compared with 13/14-year-old students ( $M = 12.57$ ,  $SD = 3.70$ ), with the 95% confidence intervals not spanning zero [0.06, 3.88]. No other statistical differences were reported across the other age groups. In examining the happiness construct, findings reported 10-year-olds ( $M = 16.67$ ,  $SD = 3.13$ ) had significantly ( $p = .02$ ) higher scores compared with 12-year-olds ( $M = 14.47$ ,  $SD = 3.54$ ), with a 95% CI [0.25, 4.17]. There were no other differences reported across the other age groups. These findings suggest that younger-aged international school students may have higher levels of wellbeing with optimism and happiness constructs than older students and supports earlier research in this field with domestic students of a similar age (WHO, 2016).

The time at school predictor variable was also found to have had a significant multivariate effect on wellbeing,  $F(15, 516) = 1.77$ ,  $p = .036$ ,  $V = .147$ ,  $d = 0.46$ . Examination of univariate effects showed a significant effect for time at school with a Cronbach’s alpha level of .05 for engagement ( $F(3, 174) = 2.90$ ,  $p = .037$ ,  $d = 0.46$ ), and connectedness ( $F(3, 174) = 2.78$ ,  $p = .043$ ,  $d = 0.46$ ). Inspection of effect sizes indicated a medium effect size (e.g.,  $d = 0.50$ ; Cohen, 1988), suggesting some explanatory and practical use of the findings (Funder

& Ozer, 2019). Follow-up post hoc tests using Tukey's HSD found that students who had attended the school for 6–12 months ( $M = 10.77$ ,  $SD = 3.70$ ) had significantly ( $p = .03$ ) lower levels of engagement compared with students who had attended the school for 2 years ( $M = 12.87$ ,  $SD = 4.16$ ), with the 95% confidence intervals  $[-4.04, -0.17]$  not spanning zero. However, no difference was reported in other period-of-time groups. Likewise, students who had attended the school for 6–12 months ( $M = 14.89$ ,  $SD = 3.66$ ) had significantly ( $p = .03$ ) lower levels of connectedness compared with students who had attended the school for 4+ years ( $M = 16.73$ ,  $SD = 2.52$ ), with a 95% CI  $[-3.55, -0.13]$ . These findings align with earlier research shown with tertiary-aged international students, which suggested that wellbeing levels for all international students (regardless of age) may improve over time. It also highlights the potential need for additional support to be provided to recently arrived school-aged international students, as is often provided at a tertiary level.

No significant multivariate effect of gender on wellbeing ( $F(5, 172) = 1.19$ ,  $p = .318$ ,  $V = .033$ ) was reported, indicating no differences in wellbeing subscales between males and females. In addition, no significant multivariate effect was found for time in country on wellbeing ( $F(10, 344) = 1.62$ ,  $p = .100$ ,  $V = .09$ ), and number of international moves on wellbeing ( $F(5, 172) = 1.69$ ,  $p = .139$ ,  $V = .047$ ), indicating that these mobility variables had no bearing on wellbeing levels with early-adolescent international school students.

#### ***4.5.2 Student Engagement***

The descriptive statistics are detailed for each predictor variable with the student-engagement subscales in Table 4.4.

**Table 4.4***Descriptive Results for Student Engagement Across Each of the Independent Variables*

Variable	Behavioural engagement	Emotional engagement	Cognitive engagement
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Age	13.08 (1.43)	22.53 (3.78)	13.30 (4.10)
10 years	13.20 (1.21)	23.11 (3.44)	14.91 (3.98)
11 years	13.04 (1.45)	22.99 (4.32)	13.39 (3.85)
12 years	12.81 (1.37)	21.62 (3.89)	12.20 (3.97)
13–14 years	13.32 (1.67)	22.21 (3.05)	12.56 (4.28)
Gender	13.08 (1.43)	22.53 (3.78)	13.30 (4.10)
Male	12.70 (1.28)	22.37 (4.03)	13.15 (4.14)
Female	13.33 (1.47)	22.63 (3.63)	13.40 (4.09)
Time in country	13.08 (1.43)	22.53 (3.78)	13.30 (4.10)
0–2 years	13.07 (1.44)	22.69 (3.72)	13.45 (4.30)
3–4 years	13.12 (1.40)	22.67 (3.64)	13.47 (4.15)
5+ years	13.02 (1.49)	22.02 (4.18)	12.78 (3.76)
Time at school	13.08 (1.43)	22.53 (3.78)	13.30 (4.10)
6–12 months	13.08 (1.43)	22.79 (3.60)	13.16 (4.16)
2 years	13.44 (1.07)	23.10 (3.39)	14.21 (3.49)
3 years	12.76 (1.44)	21.90 (3.63)	13.39 (4.37)
4+ years	13.02 (1.66)	22.09 (4.47)	12.62 (4.31)
Number of international moves	13.08 (1.43)	22.53 (3.78)	13.30 (4.10)
1–2 countries	13.11 (1.47)	22.61 (3.81)	13.45 (4.09)
3+ countries	13.04 (1.37)	22.39 (3.77)	13.08 (4.13)

*Note.* From “A study into wellbeing, student engagement and resilience in early-adolescent international school students,” by P. McKeering, Y-S. Hwang, and C. Ng, 2021, *Journal of Research in International Education*, 20(1), p. 81. (<https://doi.org/10.1177/14752409211006650>). Copyright 2021 by SAGE Publications.



Findings of the one-way MANOVAs for the student engagement subscales highlighted gender as having a significant multivariate effect on student engagement,  $F(3, 174) = 3.37, p = .02, V = .055, d = 0.51$ . Examination of univariate effects showed gender had a significant effect with a Cronbach's alpha level of .05 for behavioural engagement ( $F(1, 176) = 8.75, p = .004, d = 0.46$ ), with females ( $M = 13.33, SD = 1.47$ ) significantly higher than males ( $M = 12.70, SD = 1.28$ ), with a 95% CI [0.21, 1.06] not spanning zero. However, no gender differences were reported on either the cognitive engagement or emotional engagement subscales. Inspection of the findings reported a medium effect size (e.g.,  $d = 0.50$ ; Cohen, 1988), suggesting some explanatory and practical significance for gender effects on behavioural-engagement levels with early-adolescent international school students (Funder & Ozer, 2019). Similar findings have also been reported in prior research with domestic school students (Lietaert et al., 2015).

No significant multivariate effect of age groupings on student engagement was reported ( $F(9, 522) = 1.81, p = .064, V = .091$ ), showing there were no differences in student-engagement levels across the different age groups. Additionally, no significant multivariate effect was found for time in country ( $F(6, 348) = 0.23, p = .968, V = .008$ ), time at school ( $F(9, 522) = 0.86, p = .560, V = .04$ ), and number of international moves ( $F(3, 174) = 0.12, p = .947, V = .002$ ) on student engagement. These findings are presented in Table 4.5. These mobility findings indicate that the period of time the student attends the school, the period of time the student resides in the country, and the number of different countries the student has resided in will make no difference to their student-engagement levels. These findings are in contrast to research with international tertiary-aged students that reported lower student-engagement levels in students recently arrived in the country or college (Van Horne et al., 2018). These findings suggest that student-engagement experiences may vary between international early-adolescent students and tertiary-aged students, and indicates further research is needed in this field.

**Table 4.5**

*Significant MANOVA Results for Student-Engagement Scales Across Each Independent Variable*

Variable	Pillai's trace	<i>F</i> ( <i>df</i> )	<i>P</i>	$\eta^2$
Age	.09	1.81 (9, 522)	.06	.03
Behavioural engagement		0.99 (3, 174)	.40	.02
Emotional engagement		1.54 (3, 174)	.21	.03
Cognitive engagement		3.88 (3, 174)	.01	.06
Gender	.06	3.37 (3, 174)	.02	.06
Behavioural engagement		8.75 (1, 176)	.004	.05
Emotional engagement		0.19 (1, 176)	.66	.001
Cognitive engagement		0.16 (1, 176)	.69	.001
Time in country	.01	0.23 (6, 348)	.97	.004
Behavioural engagement		0.07 (2, 175)	.93	.001
Emotional engagement		0.48 (2, 175)	.62	.01
Cognitive engagement		0.43 (2, 175)	.65	.01
Time at school	.04	0.86 (9, 522)	.56	.02
Behavioural engagement		1.40 (3, 174)	.24	.02
Emotional engagement		0.89 (3, 174)	.45	.02
Cognitive engagement		1.05 (3, 174)	.37	.02
Number of international moves	.002	0.12 (3, 174)	.95	.002
Behavioural engagement		0.10 (1, 176)	.76	.001
Emotional engagement		0.14 (1, 176)	.71	.001
Cognitive engagement		0.35 (1, 176)	.56	.002

*Note.* From "A study into wellbeing, student engagement and resilience in early-adolescent international school students," by P. McKeering, Y-S. Hwang, and C. Ng, 2021, *Journal of Research in International Education*, 20(1), p. 81. (<https://doi.org/10.1177/14752409211006650>). Copyright 2021 by SAGE Publications.

### 4.5.3 Resilience

Findings of the one-way ANOVAs for resilience with the predictor variable are reported in Table 4.6, including significant and relevant descriptive statistics.

**Table 4.6**

*ANOVA and Descriptive Results for Resilience Across Each of the Independent Variables*

Variable	<i>F</i> ( <i>df</i> )	<i>P</i>	$\eta^2$	<i>M</i> ( <i>SD</i> )
Age	0.61 (3, 174)	.61	.01	18.45 (3.91)
10 years				17.94 (3.45)
11 years				18.91 (4.12)
12 years				18.65 (4.04)
13–14 years				18.16 (4.00)
Gender	0.68 (1, 176)	.41	.004	18.45 (3.91)
Male				18.75 (3.81)
Female				18.26 (3.97)
Time in country	4.02 (2, 175)	.02	.04	18.45 (3.91)
0–2 years				17.34 (3.76)
3–4 years				19.23 (3.85)
5+ years				18.44 (3.94)
Time at school	3.01 (3, 174)	.03	.05	18.45 (3.91)
6–12 months				17.95 (3.84)
2 years				17.98 (3.24)
3 years				18.00 (3.99)
4+ years				20.01 (4.22)
Number of international moves	0.59 (1, 176)	.44	.003	18.45 (3.91)
1–2 countries				18.27 (3.83)
3 + countries				18.73 (4.04)

*Note.* From “A study into wellbeing, student engagement and resilience in early-adolescent international school students,” by P. McKeering, Y-S. Hwang, and C. Ng, 2021, *Journal of Research in International Education*, 20(1), p. 82. (<https://doi.org/10.1177/14752409211006650>). Copyright 2021 by SAGE Publications.

Findings showed that time in country had a significant effect on resilience:  $F(2, 175) = 4.02, p = .02, d = 0.41$ . Follow-up post hoc analyses using Tukey's HSD indicated that resilience was significantly lower ( $p = .014$ ) in students who had resided in the country for less than 2 years ( $M = 17.34, SD = 3.76$ ) compared with students who had resided in the country for 3–4 years ( $M = 19.23, SD = 3.85$ ), with the 95% confidence intervals not spanning zero  $[-3.47, -0.31]$ . No other group differences were statistically significant. Inspection of the findings showed a medium effect size (e.g.,  $d = 0.50$ ; Cohen, 1988), suggesting resilience levels may be lower in other studies with early-adolescent international students who have recently arrived in the country (Funder & Ozer, 2019).

Results also found that time at school had a significant effect on resilience:  $F(3, 174) = 3.01, p = .032, d = 0.46$ . Inspection of the findings showed a medium effect size (e.g.,  $d = 0.50$ ; Cohen, 1988), providing some explanatory and practical use of the findings in the short term (Funder & Ozer, 2019). Follow-up post hoc analyses using Tukey's HSD indicated resilience was significantly lower ( $p = .038$ ) in students who had attended the school for 6–12 months ( $M = 17.95, SD = 3.84$ ) compared with those who had attended the school for 4+ years ( $M = 20.01, SD = 4.22$ ), with a 95% CI  $[-4.04, -0.08]$  not spanning zero. However, there were no other differences reported across the other school time periods. The effect that mobility variables have on resilience levels in international students (irrespective of age) is new to the field and highlights a group of students who may benefit from additional support on arriving to a new country or school.

No significant effect was reported for age groupings ( $F(3, 174) = 0.61, p = .613$ ), indicating resilience levels do not differ by age in early-adolescent international school students. No significant multivariate effect was found for gender on resilience ( $F(1, 176) = 0.68, p = .41$ ), which indicates no difference in resilience levels between males and females, and supports prior research with international tertiary-aged students. Additionally, no multivariate effect was found for number of international moves on resilience ( $F(1,$

176) = 0.59,  $p = .442$ ), which suggests that unlike the other two mobility variables examined, the number of different countries that the international school student has resided in has no bearing on resilience levels.

#### **4.6 Conclusion and Significance**

Overall, the research questions for Phase 1 were addressed with positive significant associations found across most of the wellbeing, student engagement, and resilience constructs examined. Additionally, findings highlighted the effect that age, gender, and mobility has on these constructs. Although prior research had identified a positive association between some of these constructs with tertiary-aged international students, it was not known whether the same association would exist in this younger cohort of international students, considering the different adjustment conditions they can experience when moving to a new host country. The findings reported reduced levels of wellbeing in older-aged adolescent international students and reduced student-engagement levels in the behavioural-engagement construct with males. The mobility variables had a significant effect on both wellbeing and resilience levels, with students who had recently arrived in the country or at the school reporting lowered levels on these constructs. These findings advance the currently sparse research previously conducted within the international school sector and, in doing so, highlight a potential cohort of early-adolescent international school students who may benefit from additional support when they arrive at a new school.

These findings were used to inform the next phase in the sequential mixed-methods design of this investigation. Specifically, because mobility factors were found to have a significant effect on wellbeing and resilience levels in early-adolescent international school students, an intervention program was introduced to determine whether such a program may support these students. Given that international school students experience high mobility, they may report lower levels of wellbeing or resilience when arriving at a new school or in a new

country. In addition to this, the findings from the study highlight wellbeing levels are lower in older-aged early-adolescent young people (compared with 10-year-olds), which identifies an age group of international students who could benefit most from support. These findings provided a rationale for the implementation of a school-based mindfulness program with these students in Phase 2. The mobility findings were also explored in the qualitative interviews employed in Phase 2 to better understand individual student experiences when moving to a new school and/or country, and how this may have affected their psychosocial health and wellbeing.

Additionally, given the reported positive significant associations found across most of the wellbeing, student engagement, and resilience constructs examined in Phase 1, this knowledge was used to inform the inclusion of wellbeing, student engagement, and resilience dependent variables in Phase 2 to examine the effect of the intervention program on each of these constructs.

In conclusion, findings from Phase 1 were specifically used to inform the design of Phase 2. This included the constructs being examined, the intervention program implemented, and the use of a mixed-methods design approach. It is envisaged that the findings from the intervention program in Phase 2, along with the findings from Phase 1, will contribute to the field of research on wellbeing, student engagement, and resilience specifically with early-adolescent international students. The next chapter reports on the Phase 2 data findings of the study.

## Chapter 5: Results of Phase 2

The psychometric results presented in Chapter 4 provide a greater understanding of wellbeing, student engagement, and resilience in early-adolescent international students. These findings reported a positive significant association between these constructs, and they identified demographic and mobility factors that were associated with lower levels of wellbeing, behavioural engagement, and resilience. Specifically, the results highlighted lowered levels of wellbeing and resilience measures in early-adolescent international students who had recently arrived at the school and/or in the country. Given these findings, the next phase of the study was to examine whether a school-based mindfulness intervention program may support this cohort of students in their wellbeing, student engagement, and resilience levels.

### 5.1 Introduction

This chapter reports on both quantitative and qualitative data analysis employed in the design of Phase 2 that addressed Research Questions 3, 4, and 5 in the study as follows:

*Research Question 3:* Does the intervention program improve wellbeing, student engagement, resilience, and mindfulness in early-adolescent international students?

*Research Question 4:* How do teachers and parents of early-adolescent international students perceive the benefits of the intervention program?

*Research Question 5:* What are the students' experiences with moving and with the program?

The chapter begins with an overview of the quantitative analysis employed to address Research Question 3. This includes data cleaning and assumption testing implemented to ensure that the findings from the analysis employed were valid (Field, 2018). This is followed by findings from the MANOVA and ANOVA conducted to address Hypothesis 3a and Hypothesis 3b, respectively. Next, quantitative analysis used to address Research Question 4 is presented, including data cleaning and assumption testing. This is followed by paired-samples

t-test findings employed to address Hypothesis 4a. This section also presents some unsolicited qualitative data received by the researcher that was relevant to Research Question 4. Finally, qualitative data analysis is detailed to explore Research Question 5. This includes an overview of the thematic coding employed and verification processes undertaken to ensure a high standard of quality analysis (Creswell, 1998). The chapter concludes with a summary of findings from Phase 2, which, alongside the findings reported in Phase 1, provides a better understanding of ways to support wellbeing, student engagement, and resilience in early-adolescent international students.

## **5.2 Research Question 3**

*Does the intervention program improve wellbeing, student engagement, resilience, and mindfulness in early-adolescent international students?*

This section presents the findings from the quantitative data analysis employed to examine the effect of the intervention program with early-adolescent international students across both the intervention and waitlist control groups. Data cleaning and appropriate assumption testing is presented first, followed by MANOVA findings to address Hypothesis 3a and ANOVA findings to address Hypothesis 3b.

### **5.2.1 Data Cleaning**

All analyses were conducted using the Statistical Package for the Social Sciences Version 26 (IBM Corporation, 2019). Inspection of the data showed that not all participants could be included because some students did not attend the minimum number of program lessons required in order to be included in data analysis (as outlined in Section 3.6.5.1). Eleven students did not attend the minimum number of lessons required (intervention group  $n = 5$ ; waitlist control group  $n = 6$ ) and were removed from the data analysis (see Figure 3.5). Furthermore, five students from the waitlist control group did not complete follow-up data collection (e.g., Time-4; as they had already moved to another country) and were therefore



excluded from the analysis of the effects of the intervention from postintervention to the follow-up stage (e.g., Hypothesis 3b). No missing data were identified for participants who were included in the data analysis across any of the data-collection periods. Data were analysed using the sample sizes outlined in Table 5.1 for Hypothesis 3a and in Table 5.2 for Hypothesis 3b.

**Table 5.1**

*Total Participants for Data Analysis for Hypothesis 3a*

Group	Baseline	Preintervention	Postintervention	Total
Intervention group	–	25	20	20
Waitlist control group	25	25	–	25

**Table 5.2**

*Total Participants for Data Analysis for Hypothesis 3b*

Group	Preintervention	Postintervention	Follow-up	Total
Total participants	50	39	34	34

### **5.2.2 Results for Hypothesis 3a**

A significant positive increase across all measures (e.g., wellbeing, student engagement, resilience, and mindfulness) was expected in the intervention group on completion of the intervention program (from preintervention to postintervention stage) compared with the waitlist control group, who was predicted to show no change over the same period of time (from baseline to preintervention stage). Furthermore, it was predicted that no significant difference would be reported across the same measures with the waitlist control group, because this group had not yet participated in the intervention program. These results were expected, given prior reviews reporting the benefits of mindfulness programs with school-aged children

in terms of increased cognitive performance and resilience (Zenner et al., 2014), and positive mental health traits (Carsley et al., 2017).

A mixed factorial 2 x 2 MANOVA was conducted to address Hypothesis 3a because it allowed the researcher to consider all the variables in the same analysis and minimise Type II error. A mixed factorial MANOVA, sometimes referred to as a “doubly multivariate”, is often used to analyse the effectiveness of intervention studies (Tabachnick & Fidell, 2013). A mixed factorial MANOVA design contains two or more independent variables, including a mixture of between-groups and repeated-measures variables, with two or more dependent variables (Field, 2018). The within-subjects independent variable in the study was time (preintervention measure, postintervention measure) and the between-subjects independent variable was group (intervention group, waitlist control group). The dependent variables included wellbeing, student engagement, resilience, and mindfulness.

Prior to analysis total scores for Hypothesis 3a (wellbeing, student engagement, resilience, and mindfulness) were assessed for normality and outliers. The subscale scores for the dependent variables that were examined in Phase 1 were not used in Phase 2 given the smaller sample sizes in this phase of the study. Results indicated that all skewness and kurtosis ratio values were between  $\pm 3$  and all Shapiro–Wilk significance values were above .05, indicating normality was met. As such, the subsequent parametric testing was considered appropriate. Next, an inspection of z-scores for each variable indicated no outliers at baseline, preintervention, postintervention, or follow-up time periods across either of the groups, based on z-score values above  $\pm 3.29$ . Descriptive statistics are detailed for the independent variables (time x group) across the dependent variables in Table 5.3.

**Table 5.3***Descriptive Results for Each of the Independent Variables Across the Dependent Variables*

Variables	Wellbeing	Student engagement	Resilience	Mindfulness
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Intervention group ( <i>n</i> = 20)				
Preintervention time period	3.57 (0.58)	21.07 (2.70)	18.30 (4.27)	23.45 (4.52)
Postintervention time period	4.16 (0.42)	24.70 (2.23)	23.00 (2.94)	29.05 (3.46)
Waitlist control group ( <i>n</i> = 25)				
Baseline time period	3.49 (0.67)	21.04 (3.89)	17.68 (3.17)	20.32 (5.98)
Preintervention time period	3.10 (0.61)	19.93 (3.41)	15.00 (2.77)	18.20 (5.36)

The assumption of equality of covariance was violated with Box's M significance below .001; however, as the sample sizes were approximately equal, a conservative alpha of .05 was adopted. Pillai's trace criterion, which is more robust to violations of assumptions, was also used in the analysis (Field, 2018). The assumption of sphericity did not need to be tested, as there were only two levels in the within-subjects variable being analysed. The assumption of homogeneity of variances was met using Levene's test of equality of error variances with all significance values greater than .05.

Using Pillai's trace criterion, a statistically significant multivariate interaction effect was reported in the mixed factorial MANOVA between time and group on the combined dependent variables,  $F(4, 40) = 57.01, p < .001, V = .85, d = 4.76$ . These findings suggest initial support for Hypothesis 3a, with a significant difference found in the dependent variables in the intervention group from preintervention to postintervention stage, compared with the waitlist control group over the same period. A very large effect size was shown (e.g.,  $d > 0.80$ ; Cohen, 1988), which highlights the significant effect of the intervention program on the dependent variables examined and provides preliminary support for the benefits of the intervention

program in promoting psychosocial health and wellbeing with this cohort of students. However, caution needs to be applied when interpreting this effect size, given research that reports very large effect sizes would rarely be found in a larger sample or replication of the study (Funder & Ozer, 2019). Follow-up univariate interaction and main effects of time and group across the four dependent variables were then calculated (see Table 5.4). These will now be detailed for each of the dependent variables to best address Hypothesis 3a.

**Table 5.4***Univariate Interaction and Main Effects of Time and Group for Each Dependent Variable*

Variable	<i>F</i>	<i>p</i>	$\eta_p^2$
<b>Wellbeing</b>			
Time*group	66.45	<.001	.61
Intervention	30.28	<.001	.61
Control	36.06	<.001	.60
<b>Student engagement</b>			
Time*group	123.35	<.001	.74
Intervention	74.77	<.001	.80
Control	36.86	<.001	.61
<b>Resilience</b>			
Time*group	144.86	<.001	.77
Intervention	57.42	<.001	.75
Control	128.87	<.001	.84
<b>Mindfulness</b>			
Time*group	120.94	<.001	.74
Intervention	59.94	<.001	.76
Control	73.60	<.001	.75

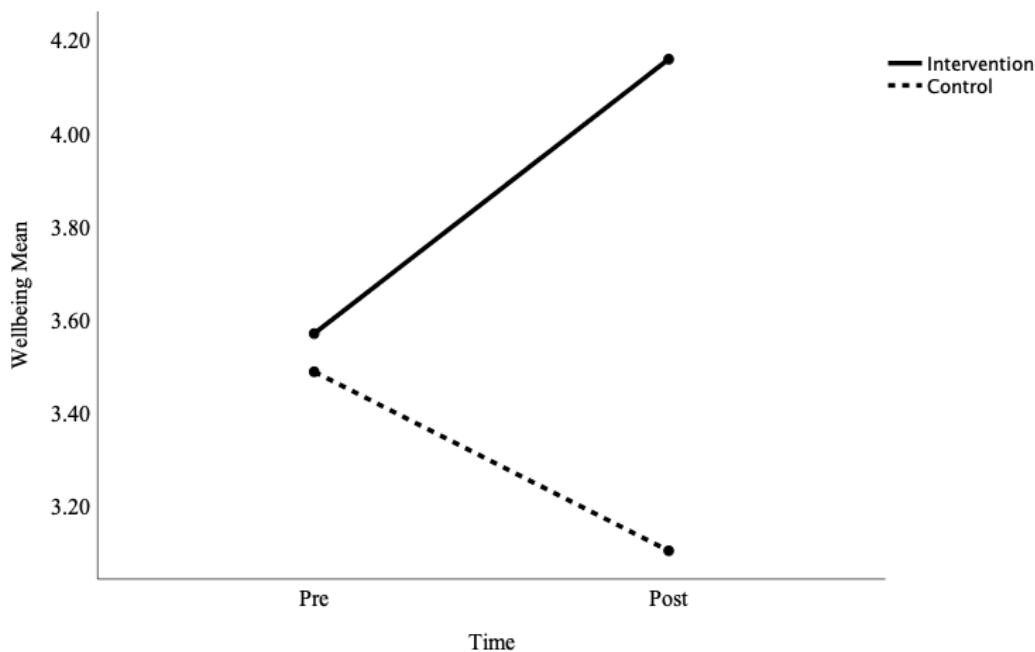
*Note:* *df* (1,43) for Interaction effect, *df* for Intervention (1,19), *df* for Control (1,24). \* = interaction between time and group.

**5.2.2.1 Wellbeing.** There was a statistically significant interaction effect between time and group on wellbeing,  $F(1, 43) = 66.45, p < .001, d = 2.49$ . The very large effect size shown (e.g.,  $d > 0.80$ ; Cohen, 1988) indicated the intervention group had higher wellbeing levels on completion of the program compared with the waitlist control group, who were yet to receive the intervention. However, given research that reports large effect sizes may be a gross

overestimate, especially in small sample sizes (Funder & Ozer, 2019), caution needs to be applied in interpreting this effect size. Figure 5.1 shows the interaction between time and group on wellbeing, with an increase in wellbeing levels for the intervention group and a decrease in wellbeing levels for the waitlist control group over the same period.

**Figure 5.1**

*Profile Plot Interaction Effect Between Group and Time on Wellbeing*



Examination of univariate within-subjects effects showed a statistically significant effect ( $\alpha = .05$ ) of time on wellbeing from preintervention to postintervention for the intervention group,  $F(1, 19) = 30.28, p < .001, d = 2.52$ . As such, simple comparisons were run for the differences in mean wellbeing scores between the two time periods for the intervention group. The marginal means for wellbeing scores for the intervention group were 4.16 ( $SD = 0.10$ ) for the postintervention time period and 3.57 ( $SD = 0.13$ ) for the preintervention time period, with a statistically significant mean difference of 0.59, 95% CI [0.37, 0.81],  $p$

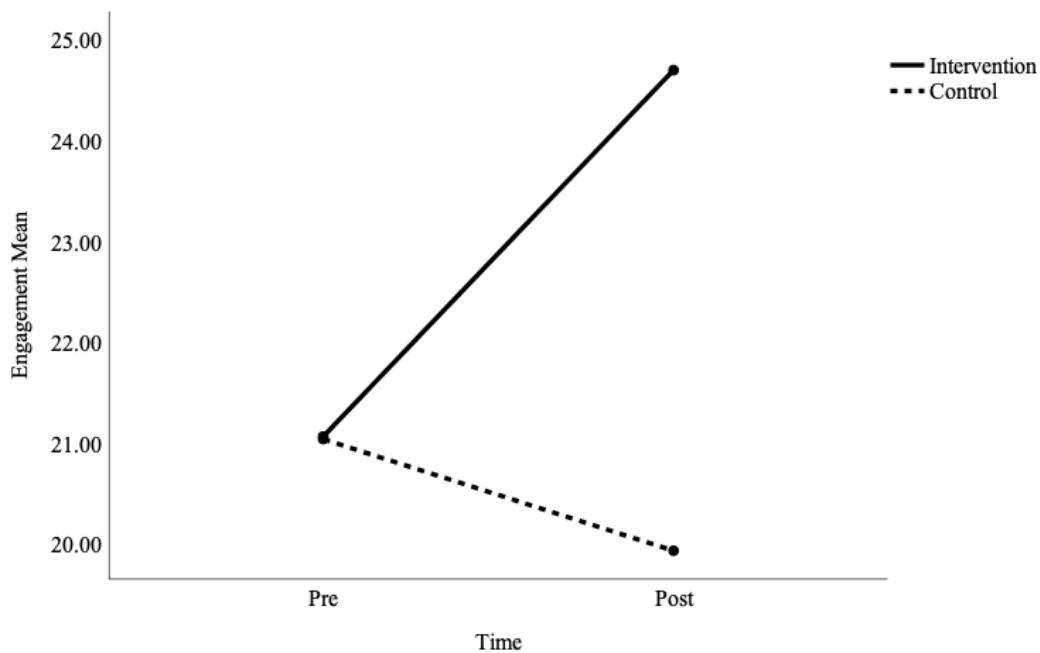
<.001. These findings support Hypothesis 3a, as wellbeing levels in the intervention group improved on completion of the intervention program.

Examination of univariate within-subjects effects also showed a statistically significant effect ( $\alpha = .05$ ) of time on wellbeing from baseline to preintervention for the waitlist control group,  $F(1, 24) = 36.06, p < .001, d = 2.45$ . The marginal means for wellbeing scores for the waitlist control group were 3.10 ( $SD = 0.61$ ) for the preintervention time period and 3.49 ( $SD = 0.67$ ) for the baseline time period, with a statistically significant mean difference of  $-0.38, 95\% CI [-0.52, -0.25], p < .001$ . This was not predicted in Hypothesis 3a because this group was not expected to report any change in wellbeing levels between the two periods of time given that they had not yet participated in the intervention program. The significant decrease in reported wellbeing in the waitlist control group at the preintervention stage may have been the result of other external events at the time, including participant mobility issues (see Section 5.2.2.5). As adjustment research highlights that lowered wellbeing is reported when a student becomes aware of an upcoming move, it is possible that for many of these students they may have recently become aware that their family was soon to relocate to another country or that a close friend was moving.

**5.2.2.2 Student Engagement.** There was a statistically significant interaction effect between time and group on student engagement,  $F(1, 43) = 123.35, p < .001, d = 3.39$ . The very large effect size shown (e.g.,  $d > 0.80$ ; Cohen, 1988) indicated that student-engagement levels increased on completion of an MBI program for the intervention group. However, it is important to note that this effect size may be misleading, given research suggesting very large effect sizes are rarely found in a large sample or replication of the study (Funder & Ozer, 2019). Figure 5.2 shows the interaction effect between time and group on student-engagement levels, with an increase in student-engagement levels for the intervention group between the two time periods and a decrease in student-engagement levels in the waitlist control group over the same period.

**Figure 5.2**

*Profile Plot Interaction Effect Between Group and Time on Student Engagement*



Examination of univariate within-subjects effects showed a statistically significant effect ( $\alpha = .05$ ) of time on student engagement from preintervention to postintervention for the intervention group,  $F(1, 19) = 74.77, p < .001, d = 3.96$ . As such, simple comparisons were run for the differences in mean student-engagement scores between the two time periods for the intervention group. The marginal means for student-engagement scores for the intervention group were 24.70 ( $SD = 2.23$ ) for the postintervention time period and 21.07 ( $SD = 2.70$ ) for the preintervention time period, with a statistically significant mean difference of 3.63, 95% CI [2.75, 4.51],  $p < .001$ . These findings support Hypothesis 3a, as student-engagement levels in the intervention group improved on completion of the intervention program.

Examination of univariate within-subjects effects also showed a statistically significant effect ( $\alpha = .05$ ) of time on student engagement from baseline to preintervention for the waitlist control group,  $F(1, 24) = 36.86, p < .001, d = 2.48$ . The marginal means for student-engagement scores for the waitlist control group were 19.93 ( $SD = 3.41$ ) for the preintervention



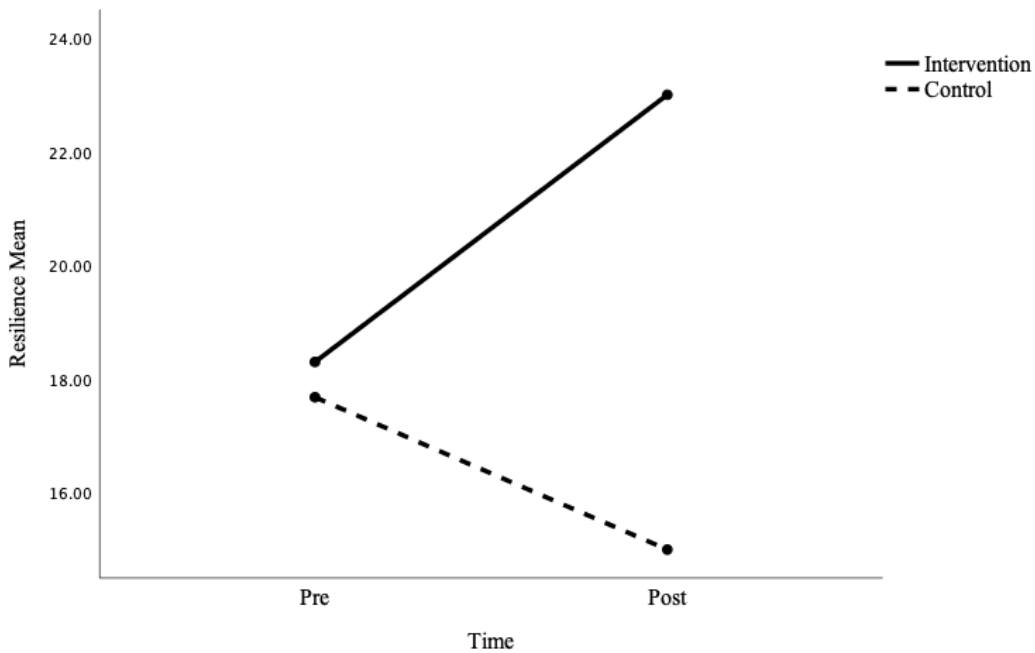
time period and 21.04 ( $SD = 3.89$ ) for the baseline time period, with a statistically significant mean difference of  $-1.11$ , 95% CI  $[-1.48, -0.73]$ ,  $p < .001$ . This was not predicted in Hypothesis 3a because this group was not expected to report any change in student-engagement levels between the two periods of time. Similar significant decreases were reported over time for the waitlist control group across all the dependent variables, and this outcome is discussed in more detail in Section 5.2.2.5 to identify possible reasons for this unexpected result.

**5.2.2.3 Resilience.** There was a statistically significant interaction effect between group and time on resilience,  $F(1, 43) = 144.86$ ,  $p < .001$ ,  $d = 3.67$ . The very large effect size shown (e.g.,  $d > 0.80$ ; Cohen, 1988) highlights that resilience levels increased on completion of an MBI program for the intervention group. As noted previously, however, there are concerns in the interpretation of such a large effect size, and replication of the study with a larger sample size is therefore necessary (Funder & Ozer, 2019). Figure 5.3 shows the interaction effect between time and group on resilience levels, with an increase in resilience levels in the intervention group between the two time periods and a decrease in resilience levels in the waitlist control group over the same period.

Examination of univariate within-subjects effects showed a statistically significant effect ( $\alpha = .05$ ) of time on resilience from preintervention to postintervention for the intervention group,  $F(1, 19) = 57.42$ ,  $p < .001$ ,  $d = 3.47$ . As such, simple comparisons were run for the differences in mean resilience scores between the two time periods for the intervention group. The marginal means for resilience scores for the intervention group were 23.00 ( $SD = 2.94$ ) for the postintervention time period and 18.30 ( $SD = 4.27$ ) for the preintervention time period, with a statistically significant mean difference of 4.70, 95% CI  $[3.40, 6.00]$ ,  $p < .001$ . These findings support Hypothesis 3a, with resilience levels in the intervention group improving on completion of the intervention program.

**Figure 5.3**

*Profile Plot Interaction Effect Between Group and Time on Resilience*



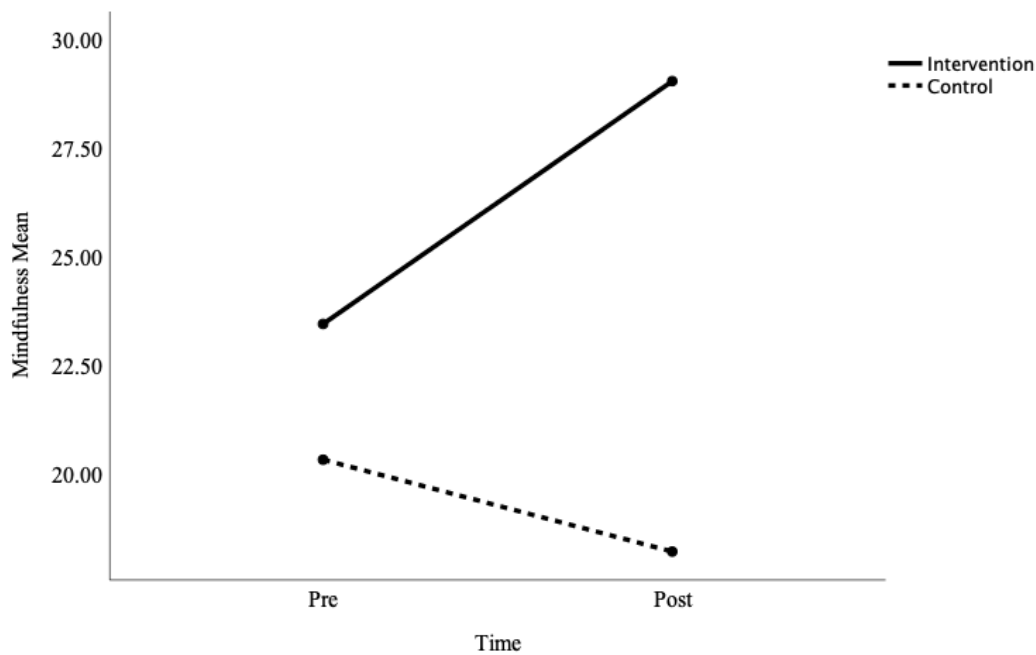
Examination of univariate within-subjects effects also showed a statistically significant effect ( $\alpha = .05$ ) of time on resilience from baseline to preintervention for the waitlist control group,  $F(1, 24) = 128.87, p < .001, d = 4.63$ . The marginal means for resilience scores for the waitlist control group were 15.00 ( $SD = 2.77$ ) for the preintervention time period and 17.68 ( $SD = 3.17$ ) for the baseline time period, with a statistically significant mean difference of  $-2.68, 95\% \text{ CI } [-3.17, -2.19], p < .001$ . As stated previously, this significant decrease in resilience was not predicted in Hypothesis 3a, and an explanation of possible causes (e.g., Hawthorne effect) for this unexpected finding is included in Section 5.2.2.5.

**5.2.2.4 Mindfulness.** There was a statistically significant interaction effect between group and time on mindfulness,  $F(1, 43) = 120.94, p < .001, d = 3.36$ . The very large effect size reported (e.g.,  $d > 0.80$ ; Cohen, 1988) suggests similar findings on mindfulness levels could be expected across other groups on completion of an MBI program and provides support for the program in meeting its objective in fostering mindfulness with participants. However, again

there are concerns that such a large effect size is misleading (Funder & Ozer, 2019). Figure 5.4 shows the interaction effect between time and group on mindfulness levels, with an increase in mindfulness levels for the intervention group between the two time periods and a decrease in mindfulness levels in the waitlist control group over the same period.

**Figure 5.4**

*Profile Plot Interaction Effect Between Group and Time on Mindfulness*



Examination of univariate within-subjects effects showed a statistically significant effect ( $\alpha = .05$ ) of time on mindfulness from preintervention to postintervention for the intervention group,  $F(1, 19) = 59.94, p < .001, d = 3.55$ . As such, simple comparisons were run to ascertain the differences in mean mindfulness scores between the two time periods for the intervention group. The marginal means for mindfulness scores for the intervention group were 29.05 ( $SD = 3.46$ ) for the postintervention time period and 23.45 ( $SD = 4.52$ ) for the preintervention time period, with a statistically significant mean difference of 5.60, 95% CI

[4.09, 7.11],  $p < .001$ . These findings support Hypothesis 3a, as mindfulness levels in the intervention group improved on completion of the intervention program.

Examination of univariate within-subjects effects also showed a statistically significant effect ( $\alpha = .05$ ) of time on mindfulness from baseline to preintervention for the waitlist control group,  $F(1, 24) = 73.60$ ,  $p < .001$ ,  $d = 3.50$ . The marginal means for mindfulness scores for the waitlist control group were 18.20 ( $SD = 5.36$ ) for the preintervention time period and 20.32 ( $SD = 5.98$ ) for the baseline time period, with a statistically significant mean difference of  $-2.12$ , 95% CI  $[-2.63, -1.61]$ ,  $p < .001$ . This was not predicted in Hypothesis 3a because this group was not expected to report any change in mindfulness levels given that they had not yet participated in the program. The significant decrease reported in mindfulness, alongside the significant decreases reported in wellbeing, student engagement, and resilience levels for the waitlist control group at the preintervention stage, suggest that mindfulness levels may be affected by factors such as participant bias and is discussed in Section 5.2.2.5.

**5.2.2.5 Summary of Findings for Hypothesis 3a.** Wellbeing, student engagement, resilience, and mindfulness measures significantly increased in the intervention group on completion of the intervention program compared with the waitlist control group over the same period of time (see Figures 5.1–5.4 respectively). These findings support Hypothesis 3a and provide preliminary support for an MBI program in promoting psychosocial health and wellbeing in early-adolescent international students. Unexpectedly, however, the same measures significantly decreased in the waitlist control group over the same period of time (see Figures 5.1–5.4 respectively). These findings do not support Hypothesis 3a, as it was predicted that no change would occur to these measures in this group over this period of time given that they had not yet participated in the intervention program. These findings can be examined by considering the research design of the study. Biases such as social desirability or Hawthorne effect within the waitlist control group may have resulted in participants modifying their answers to data collected in the second data-collection time period, as they became aware of

being observed (Creswell, 2015). Although this behaviour has previously been reported in waitlist control design studies (Cunningham et al., 2013), the researcher identified other factors that were more likely to explain these findings.

By examining external events that might explain these findings, it was noted that the second data collection (Time-2) was conducted immediately after a 2-week holiday and 4 weeks prior to end-of-year external assessments. However, if either of these events were to affect measures in the waitlist control group, it could be assumed a similar effect would be found within the intervention group. Given this, it can be reasoned that if such events negatively affected score levels, then the intervention program may have provided additional support to the intervention group to assist them during this time. A more likely explanation for these unexpected findings was mobility. The researcher established that many of the waitlist control group participants ( $n = 7$ ) were informed during the holiday break that they would be moving country at the end of the school term. This premise aligns with the findings from Phase 1 of this study that reported the effects of mobility on wellbeing and resilience. The high number of waitlist control group participants (28% of the participants) who completed the preintervention data shortly after learning about their imminent mobility is therefore most likely to have affected their measures on positive psychology constructs at that time. This could also partly explain the large effect sizes found in the interaction effects reported across wellbeing, student engagement, resilience, and mindfulness measures between the two groups. This suggestion is also supported in the adjustment research reviewed for this study, which highlights lowered psychosocial health and wellbeing in students when experiencing school transition and adjustment associated with mobility (Whyte, 2016). Considering the external events (e.g., mobility, assessments) identified at the time of the second data collection for participants in the study, additional measures were employed in the study to ensure that robust analysis was conducted. This included the incorporation of proxy-report measures in Research Question 4 along with student narratives in Research Question 5.

### 5.2.3 Results for Hypothesis 3b

To gain a better understanding of the effectiveness of the intervention program in the study, the researcher assessed the effects of the intervention program for all participants from both the intervention and waitlist control groups at both the postintervention stage ( $N = 39$ ) and the follow-up stage ( $N = 34$ ). It was predicted there would be a significant positive increase on wellbeing, student engagement, resilience, and mindfulness measures in participants from both groups on completion of the intervention program (from preintervention to postintervention stage), with the effects maintained at the follow-up stage (11 weeks later). These results were expected given prior reviews reporting MBI benefits across all groups (e.g., Joyce et al., 2010), with reported benefits maintained at follow-up stage (e.g., Sibinga et al., 2013).

A series of one-way repeated-measures ANOVA was conducted to address Hypothesis 3b. This statistical test, also known as a within-subjects ANOVA, is “an analysis of variance conducted on any design in which the independent variable or variables have all been measured using the same participants in all conditions (Field, 2018, p. 883). This is often used in determining differences when the same participants are tested on three or more occasions with the same dependent variable. In this analysis, the within-subjects factor was time (preintervention stage, postintervention stage, and follow-up stage) and the dependent variables included wellbeing, student engagement, resilience, and mindfulness.

Prior to analysis, total scores for Hypothesis 3b (wellbeing, student engagement, resilience, and mindfulness) were assessed for normality and outliers. There were no outliers, and the data were normally distributed for wellbeing and student engagement, as assessed via a box plot and Shapiro–Wilk test ( $p > .05$ ) respectively. Resilience measures were normally distributed at the preintervention stage ( $p = .726$ ) but not at the postintervention stage ( $p = .026$ ) or the follow-up stage ( $p = .011$ ). Mindfulness measures were also normally distributed at the preintervention stage ( $p = .533$ ) and at the postintervention stage ( $p = .542$ ), but not at the follow-up stage ( $p = .006$ ). Given ANOVA is fairly robust to deviations from normality and that

the levels of the within-subjects factor were similarly skewed for all four dependent variables (Field, 2018), the parametric testing was still considered appropriate to these mild violations. Mauchly's test of sphericity indicated that the assumption of sphericity had not been violated for resilience,  $\chi^2(2) = 1.24, p = .537$ , but it had been violated for wellbeing,  $\chi^2(2) = 12.14, p = .002$ , student engagement,  $\chi^2(2) = 7.84, p = .020$ , and mindfulness,  $\chi^2(2) = 7.23, p = .027$ . Accordingly, Greenhouse–Geisser significance values were reported for wellbeing, student engagement, and mindfulness. Descriptive statistics are detailed for the within-subjects factor of time across the dependent variables in Table 5.6, and findings for each dependent variable are now presented.

**Table 5.6**

*Descriptive Results for the Independent Variable Across the Dependent Variables*

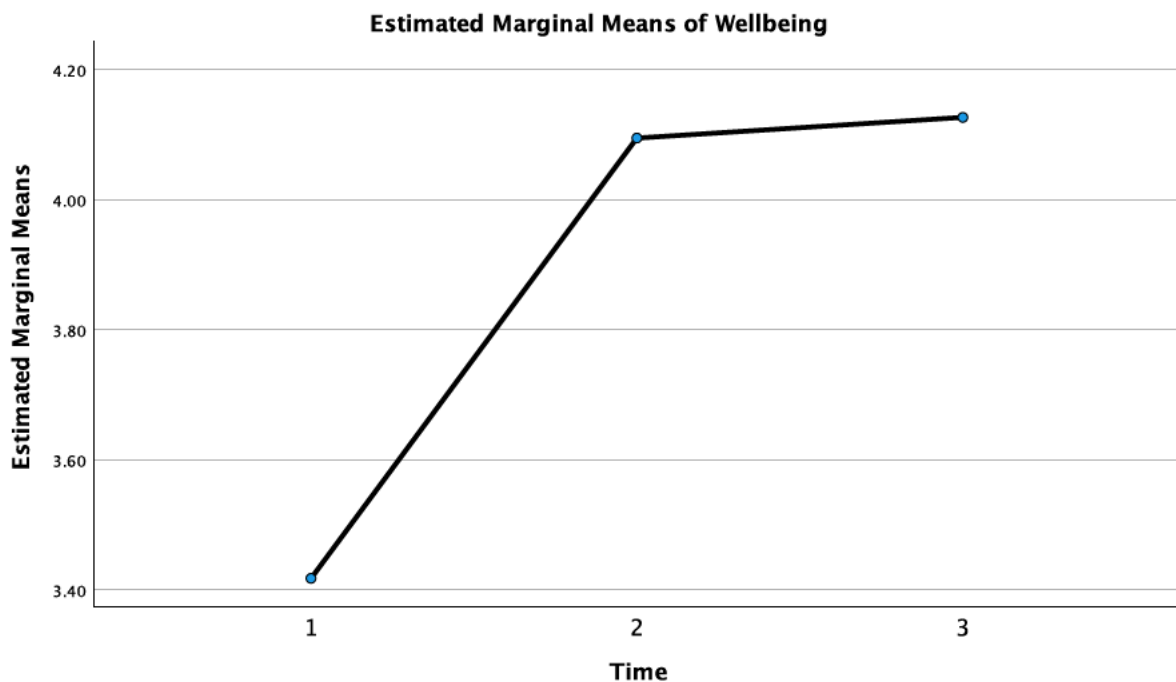
Variables	Wellbeing	Student engagement	Resilience	Mindfulness
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Total participants ( <i>n</i> = 34)				
Preintervention time	3.42 (0.61)	20.73 (3.11)	17.29 (3.88)	21.32 (5.40)
Postintervention time	4.09 (0.42)	24.69 (2.40)	22.26 (3.38)	28.06 (4.01)
Follow-up time	4.13 (0.40)	24.62 (2.06)	22.97 (2.89)	29.94 (4.16)

**5.2.3.1 Wellbeing.** A one-way repeated-measures ANOVA was conducted to determine whether there were statistically significant increases in wellbeing measures on completion of the intervention program. Figure 5.5 shows the interaction between time and wellbeing for participants. The MBI elicited statistically significant ( $\alpha = .05$ ) changes in wellbeing levels over time for all participants,  $F(2, 66) = 58.18, p < .001, d = 2.66$ . The very large effect size reported (e.g.,  $d > 0.80$ ; Cohen, 1988) highlights that wellbeing increased on completion of an MBI program for participants, but it is important to note that such a large effect size could be a gross

overestimate (Funder & Ozer, 2019). The marginal means for wellbeing scores for participants were 4.09 ( $SD = .42$ ) at postintervention stage, and 4.13 ( $SD = .40$ ) at follow-up stage, compared with 3.42 ( $SD = .61$ ) at preintervention stage. Post hoc analysis with a Bonferroni adjustment revealed that wellbeing levels statistically significantly increased from preintervention stage to postintervention stage ( $M = 0.68$ , 95% CI [0.48, 0.87],  $p = <.001$ ) but not from postintervention stage to follow-up stage ( $M = 0.03$ , 95% CI [-0.10, 0.16],  $p = 1.00$ ). These findings support Hypothesis 3b, as wellbeing scores improved on completion of the intervention program and were maintained at follow-up stage for participants.

**Figure 5.5**

*Estimated Marginal Means of Wellbeing for Preintervention (Time-1), Postintervention (Time-2), and Follow-Up (Time-3)*



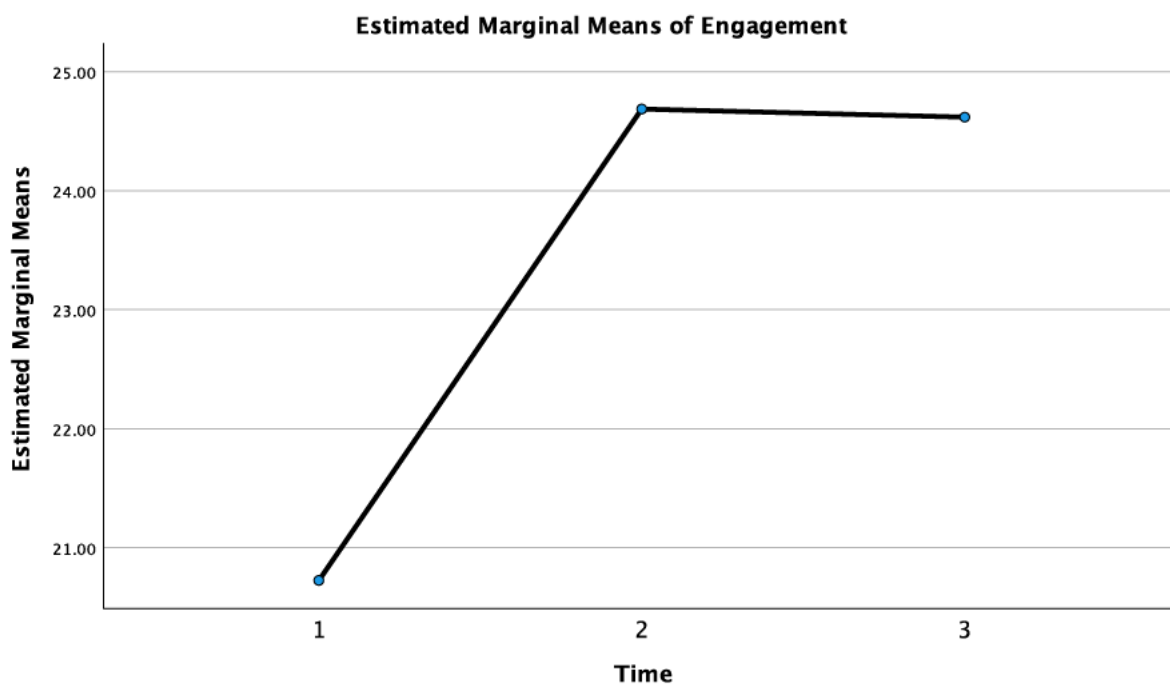
**5.2.3.2 Student Engagement.** A one-way repeated-measures ANOVA was conducted to determine whether there were statistically significant increases in student-engagement measures on completion of the intervention program. Figure 5.6 shows the interaction between time and student engagement for all participants. The MBI elicited statistically significant ( $\alpha$



=.05) changes in student engagement over time for all participants,  $F(2, 66) = 73.10, p < .001, d = 2.98$ . The very large effect size reported (e.g.,  $d > 0.80$ ; Cohen, 1988) highlights that student engagement increased on completion of an MBI program for participants, but again caution needs to be applied to these findings given large effect sizes in small sample sizes can be misleading (Funder & Ozer, 2019). The marginal means for student-engagement scores for participants were 24.69 ( $SD = 2.40$ ) at postintervention stage and 24.62 ( $SD = 2.06$ ) at follow-up stage, compared with 20.73 ( $SD = 3.11$ ) at preintervention stage. Post hoc analysis with a Bonferroni adjustment revealed that student-engagement levels statistically significantly increased from preintervention stage to postintervention stage ( $M = 3.96, 95\% \text{ CI } [3.02, 4.90], p = < .001$ ) but not from postintervention stage to follow-up stage ( $M = -0.07, 95\% \text{ CI } [-0.80, 0.67], p = 1.00$ ). These findings support Hypothesis 3b, as student-engagement scores improved on completion of the intervention program and were maintained at follow-up stage for participants.

**Figure 5.6**

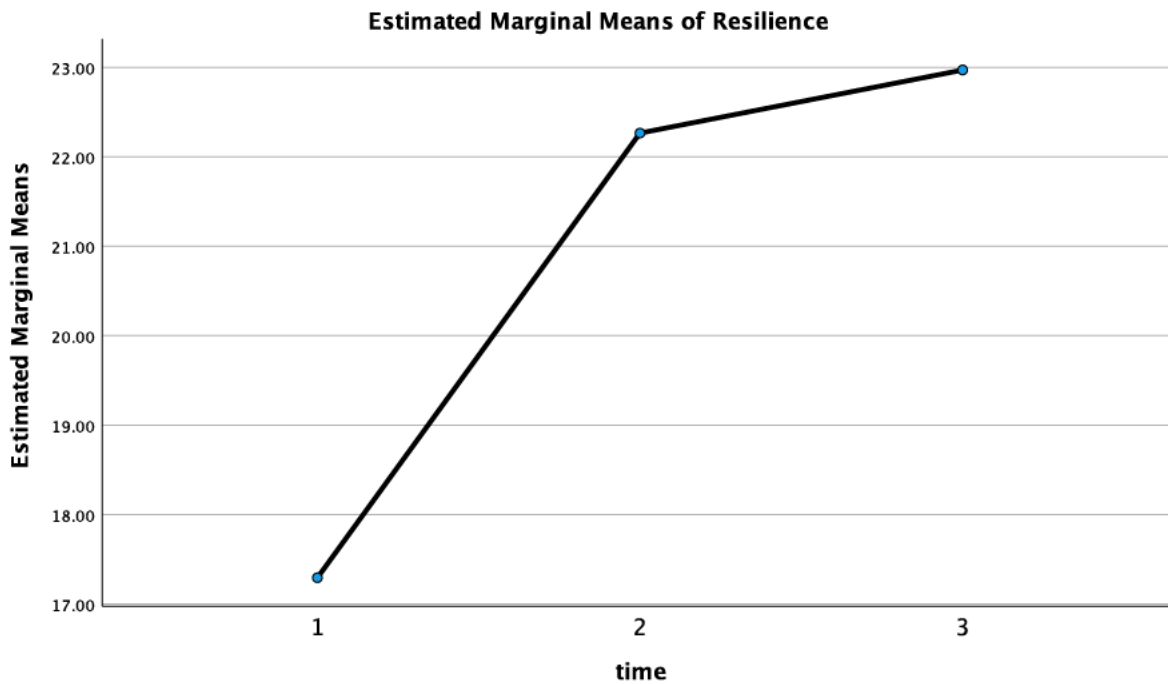
*Estimated Marginal Means of Student Engagement for Preintervention (Time-1), Postintervention (Time-2), and Follow-Up (Time-3)*



**5.2.3.3 Resilience.** A one-way repeated-measures ANOVA was conducted to determine whether there were statistically significant increases in resilience measures on completion of the intervention program. Figure 5.7 shows the interaction between time and resilience for all participants. The MBI elicited statistically significant ( $\alpha = .05$ ) changes in resilience over time for all participants,  $F(2, 66) = 68.01, p < .001, d = 2.87$ . The very large effect size reported (e.g.,  $d > 0.80$ ; Cohen, 1988) highlights that resilience significantly improved in participants on completion of an MBI program; however, such a significant effect size may be a gross overestimate as previously discussed (Funder & Ozer, 2019). The marginal means for resilience scores for participants were 22.26 ( $SD = 3.38$ ) at postintervention stage and 22.97 ( $SD = 2.89$ ) at follow-up stage, compared with 17.29 ( $SD = 3.88$ ) at preintervention stage. Post hoc analysis with a Bonferroni adjustment revealed that resilience levels statistically significantly increased from preintervention stage to postintervention stage ( $M = 4.97, 95\% \text{ CI } [3.70, 6.24], p < .001$ ), but not from postintervention stage to follow-up stage ( $M = 0.71, 95\% \text{ CI } [-0.57, 1.98], p = .512$ ). These findings support Hypothesis 3b, as resilience scores improved on completion of the intervention program and were maintained at follow-up stage for participants.

**Figure 5.7**

*Estimated Marginal Means of Resilience for Preintervention (Time-1), Postintervention (Time-2), and Follow-Up (Time-3)*

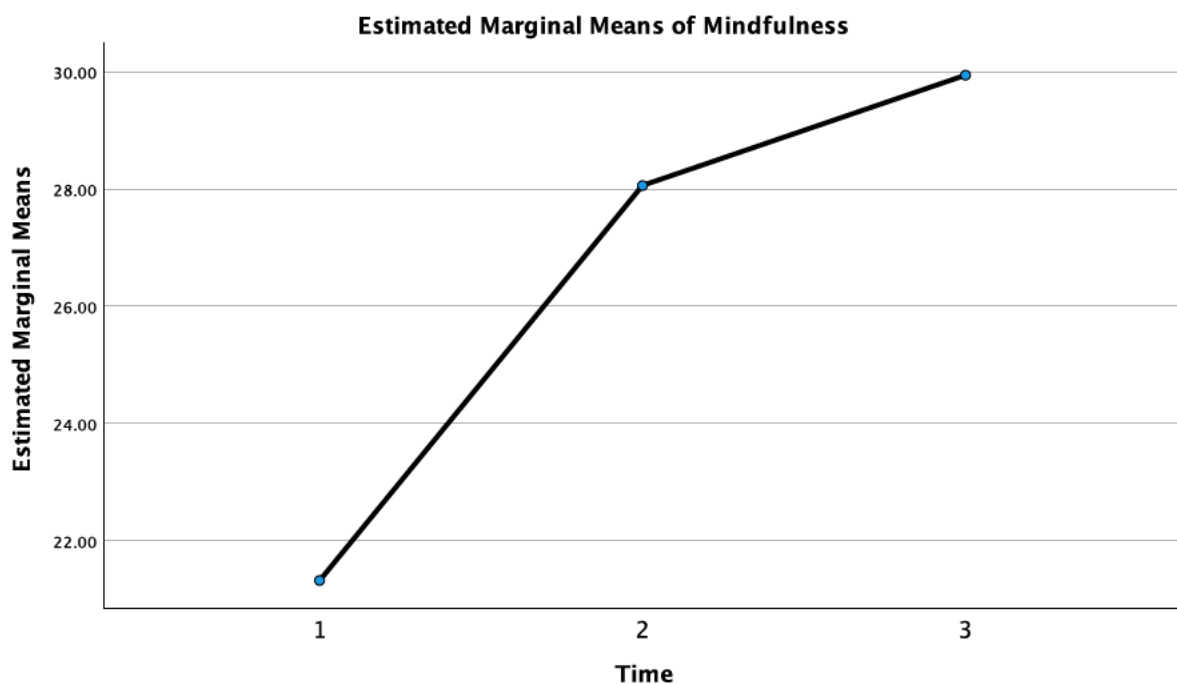


**5.2.3.4 Mindfulness.** A one-way repeated-measures ANOVA was conducted to determine whether there were statistically significant increases in mindfulness measures on completion of the intervention program. Figure 5.8 shows the interaction between time and mindfulness for all participants. The MBI elicited statistically significant ( $\alpha = .05$ ) changes in mindfulness over time for all participants,  $F(2, 66) = 58.06, p < .001, d = 2.66$ . The very large effect size reported (e.g.,  $d > 0.80$ ; Cohen, 1988) highlights that mindfulness significantly improved in participants on completion of an MBI program, but again caution needs to be applied in interpreting this effect size given research suggesting such a high effect size could be misleading (Funder & Ozer, 2019). The marginal means for mindfulness scores for participants were 28.06 ( $SD = 4.01$ ) at postintervention stage and 29.94 ( $SD = 4.16$ ) at follow-up stage, compared with 21.32 ( $SD = 5.40$ ) at preintervention stage. Post hoc analysis with a Bonferroni adjustment revealed that mindfulness levels statistically significantly increased from

preintervention stage to postintervention stage ( $M = 6.74$ , 95% CI [4.86, 8.61],  $p = <.001$ ), and again from postintervention stage to follow-up stage ( $M = 1.88$ , 95% CI [0.03, 3.74],  $p = .046$ ). These findings support Hypothesis 3b, suggesting that mindfulness improved after the intervention program and then continued to improve for all participants for a period of 11 weeks after the intervention finished.

**Figure 5.8**

*Estimated Marginal Means of Mindfulness for Preintervention (Time-1), Postintervention (Time-2), and Follow-Up (Time-3)*



**5.2.3.5 Summary of Findings for Hypothesis 3b.** Wellbeing, student engagement, resilience, and mindfulness measures had significantly increased in participants (regardless of group) on completion of the intervention program and were maintained at the follow-up stage (see Figures 5.5–5.8 respectively). While measures for wellbeing, student engagement, and resilience were maintained between postintervention and follow-up stage, findings showed that mindfulness continued to significantly improve from postintervention to follow-up stage (see Figure 5.8), providing evidence of the effectiveness of the program in promoting the trait of

mindfulness in participants. These findings support Hypothesis 3b and provide additional support, alongside the findings from Hypothesis 3a, of the benefits of an MBI program in promoting optimal functioning in early-adolescent international students.

### **5.3 Research Question 4**

*How do teachers and parents of early-adolescent international students perceive the benefits of the intervention program?*

This section presents the findings from the quantitative data analysis that was used to best address Research Question 4. This question looked to understand how parents and teachers of early-adolescent international students perceived the benefits of the intervention program. Quantitative data results are presented first for parents, followed by teachers. This analysis provides additional information on the effectiveness of the intervention program (through proxy reports) in addressing Hypothesis 4a. This section also presents unsolicited qualitative data the researcher received from parents and teachers on completion of the intervention program by their child/student.

#### **5.3.1 Data Cleaning**

Initial inspection of the data indicated there were incomplete data due to parent and teacher retention rate along with their child's/student's retention in the program. Data were collected from parents ( $n = 25$ ) and teachers ( $n = 20$ ) who had completed both the preintervention measure and the postintervention measure. However, data were analysed only on parents ( $n = 24$ ) and teachers ( $n = 18$ ) whose child/student had meet the minimal attendance requirements of the intervention program (75% attendance rate; see Section 3.6.5.1).

#### **5.3.2 Assumption Testing**

A paired-samples t-test was identified as an appropriate method to analyse the data in addressing Hypothesis 4a. The paired-samples t-test is used when there are two experimental conditions, and the same participants take part in both conditions of the experiment (Field,

2018). In the study design pertaining to this phase of the study, parents and teachers were to be invited to complete a behavioural and emotional screening questionnaire on their child/student at the beginning and end of the intervention program. However, time restraints restricted the researcher from collecting additional follow-up data in this section of the study. In the paired-samples t-test, the participants from both groups (intervention and waitlist control group) were combined, and the experimental conditions were preintervention stage and postintervention stage. The dependent variable examined the behavioural and emotional difficulties of the child/student using the Strengths and Difficulties Questionnaire (Goodman, 1997).

Prior to analysis being conducted for Hypothesis 4a, total scores were assessed for normality and outliers, and separate analysis was conducted for parents and teachers. In Table 5.7, descriptive statistics are detailed for both of the groups across the dependent variable. The behavioural and emotional difficulties scores were considered normally distributed for parents, with skewness and kurtosis ratios within the limits of  $\pm 3$  and Shapiro–Wilk significance values above .05 (preintervention  $p = .161$ , postintervention  $p = .402$ ). Accordingly, a parametric paired-samples t-test was conducted to compare preintervention and postintervention scores for parents.

**Table 5.7**

*Descriptive Results for Each of the Groups Across the Dependent Variables*

Variables	Behavioural and emotional difficulties score
	<i>M (SD)</i>
Parent group ( $n = 24$ )	
Preintervention time period	10.63 (5.98)
Postintervention time period	5.83 (4.21)
Teacher group ( $n = 18$ )	
Baseline time period	3.67 (4.21)
Preintervention time period	2.61 (3.47)

However, scores for teachers were positively skewed, with statistics outside these recommended limits. The Shapiro–Wilk test of normality showed a violation at preintervention test score ( $p = .002$ ) and postintervention test score ( $p < .001$ ) with teachers. Given this, the Wilcoxon signed-rank test was conducted for teachers, as the data were not normally distributed. This test can be considered as the nonparametric test equivalent of the paired-samples t-test and can be used to determine whether there is a median difference between paired observations of data for the same participants that is not normally distributed (Field, 2018). A critical assumption of the Wilcoxon signed-rank test is that the data needs to be symmetrically distributed (Field, 2018). Visual inspection of the histogram confirmed the symmetrical distribution of data collected for teachers.

### **5.3.3 Results for Hypothesis 4a**

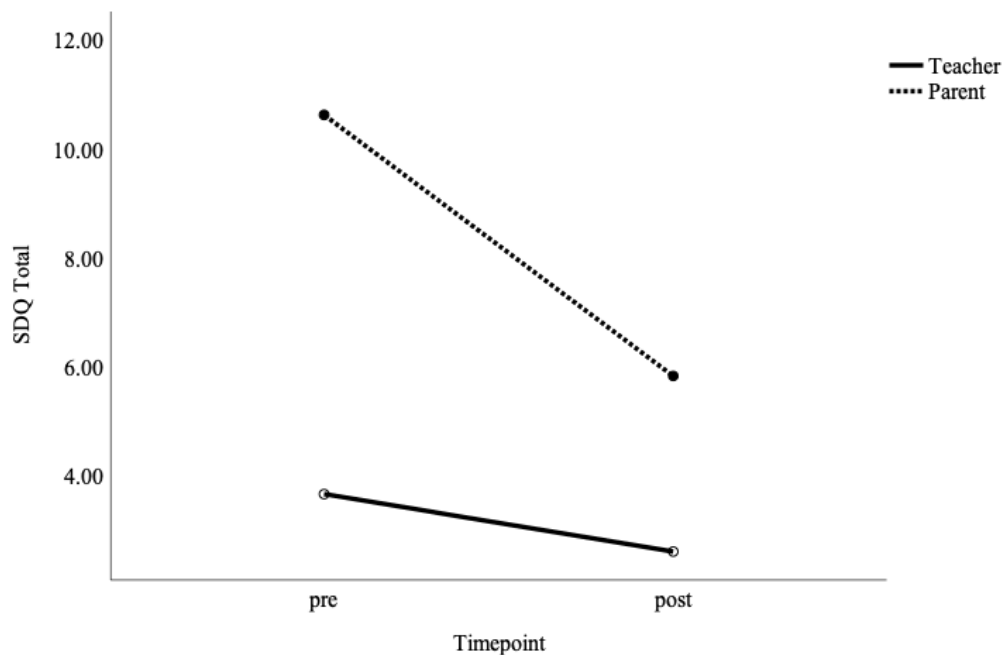
A statistically significant decrease in students' behavioural and emotional difficulties scores, as rated by parents and teachers separately, was predicted from preintervention to postintervention stage. This prediction was guided by prior research findings on the reduction in emotional and/or behavioural problems in students who had participated in a mindfulness program as reported by their parents (e.g., Flook et al., 2010; van der Oord et al., 2012) and teachers (e.g., Joyce et al., 2010; Schonert-Reichl & Lawlor, 2010).

**5.3.3.1 Parent Data Analysis.** A paired-samples t-test showed a significant mean decrease of behavioural and emotional difficulties scores for participants of 4.79, 95% CI [2.51, 7.07],  $t(23) = 4.34$ ,  $p < .001$ ,  $d = 0.89$ , as reported by their parents. The large effect size reported (e.g.,  $d > 0.80$ ; Cohen, 1988) suggests similar findings could be expected in a replication of the study; however, caution needs to be applied in interpreting such a high effect size given the small sample size (Funder & Ozer, 2019). Figure 5.9 shows the parent means on their child's behavioural and emotional functioning from the preintervention to postintervention stage.

Participant scores decreased from preintervention ( $M = 10.63$ ,  $SD = 5.98$ ) to postintervention ( $M = 5.83$ ,  $SD = 4.21$ ). These findings indicate perceived benefits in the behavioural and emotional functioning of early-adolescent international school students who participated in the mindfulness program as reported by their parents.

**Figure 5.9**

*Teacher and Parent Behavioural and Emotional Difficulties Scores Across Time*



**5.3.3.2 Teacher Data Analysis.** A Wilcoxon signed-rank test showed a mean decrease in behavioural and emotional difficulties scores from preintervention ( $M = 3.67$ ,  $SD = 4.21$ ) to postintervention ( $M = 2.61$ ,  $SD = 3.47$ ), but this difference was not statistically significant,  $z = -1.93$ ,  $p = .053$ ,  $r = -0.32$ . Figure 5.9 shows the teacher means, alongside the parent means, on students' behavioural and emotional functioning from preintervention to postintervention stage. Of the 18 teachers who participated in this analysis, eight participant teachers reported a decrease in behavioural and emotional difficulties scores in students on completion of the intervention program, and seven reported no change in score from preintervention to



postintervention stage. These findings indicate an observed reduction by some teachers in students' behavioural and emotional functioning on completion of the program, but not for all students. Participating teachers in the study were the students' form teachers, and although they saw the students each morning in form class, they may not have had any further contact with them outside of the morning session. Given this, it can be argued that any benefit from the intervention program may have been difficult for them to witness, given the possible short contact they had with the student each day.

**5.3.3.3 Summary of Findings for Hypothesis 4a.** Parents reported a statistically significant reduction in the behavioural and emotional difficulties score in their children on completion of the intervention program. These findings provide support for Hypothesis 4a on the benefits of the intervention program in supporting their child's behavioural and emotional development. There was also a nonsignificant decrease reported by the students' teachers in the behavioural and emotional difficulties score on completion of the program. Although this difference was nonsignificant, the trend reported by teachers was in the right direction, suggesting support for Hypothesis 4a. These findings from the students' teachers suggest the teachers may have been less sensitive than the parents to the changes in their students. This is not unexpected when considering teachers need to manage a large number of students, whereas parents focus solely on their own children.

#### ***5.3.4 Qualitative Data Analysis***

The researcher also received unsolicited qualitative data through feedback provided by parents ( $n = 11$ ) and teachers ( $n = 2$ ) on completion of the intervention program. All of this data was received via emails sent to the researcher after the parents and teachers had completed the postintervention questionnaire on their child/student. As the methodology design for Phase 2 did not include a qualitative data component with either parents or teachers, there is no qualitative measure or data-collection design to discuss here. Despite this, the qualitative data

received from parents and teachers provided additional depth to themes being explored on the benefits of the intervention program, and therefore will be included here in addressing Research Question 4.

**5.3.4.1 Parent Feedback.** All parent feedback received ( $n = 11$ ) reported benefits from the program for their child's wellbeing. Parents spoke of their child's positive affective responses to the program (e.g., "he found it really useful" – R2; "she enjoyed the course" – R5; "he must have enjoyed it if he was doing the optional exercises at home" – R8). Parents also commented on improvements they perceived in their child psychologically (e.g., "he is sleeping much better at night and doesn't appear so anxious" – R11), emotionally (e.g., "she seems to be a lot happier and relaxed" – R7), and socially (e.g., "she has two close friends leaving this summer, and I think your program has helped her to work through her feelings about them leaving" – R2). One parent also spoke of the cognitive benefits she perceived the program had on her child (e.g., "her concentration, focus, attitude, and overall behaviour in doing her homework has improved so much" – R1). These qualitative findings provide supplementary support for the quantitative findings reported by participant parents in Section 5.3.3.1.

**5.3.4.2 Teacher Feedback.** Both teachers ( $n = 2$ ) reported a benefit of the program with their student in terms of engagement in their classrooms. Both students were reported to have improved cognitive engagement (e.g., "he is more attentive in class and is more focused on completing his assigned tasks" – T1), and one of the teachers commented that the behavioural engagement of her student had also improved (e.g., "she will now sit quietly in class and not walk around disrupting the other students" – T2). Both of these students to whom the teachers were referring had been interviewed by the researcher and had reported similar cognitive benefits from the program for them in class (e.g., "it mainly helped me with focusing in the classroom" – P6; "I used finger breathing exercises when I felt worried in class, mainly before assessments. Before the exercises, I would sit in class feeling anxious when the teacher was explaining something and I didn't understand it. I did the exercises, and I was able to calm

down and focus on the subject and not feel my mind was jumping about all over the place” – P1). While there were no significant findings reported in the quantitative data received from teachers (see Section 5.3.3.2), this qualitative teacher data suggests this area needs to be explored further. An exploration of individual student experiences with the intervention program will now be analysed to best address Research Question 5.

#### **5.4 Research Question 5**

*What are the students’ experiences with moving and with the program?*

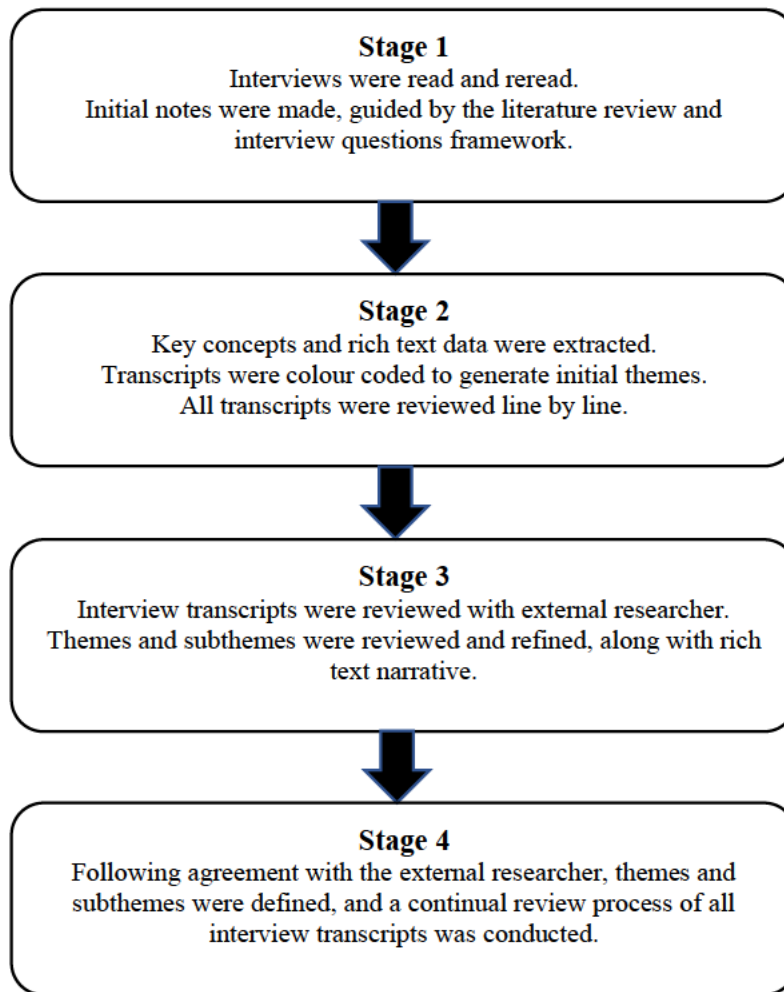
This section presents the findings from the qualitative data analysis that was employed to explore the participants’ experiences in moving as an international student and their experiences with the intervention program. By employing semistructured interviews with participants ( $n = 10$ ), the researcher was able to better understand the participants’ subjective experiences and attitudes (Peräkylä & Ruusuvuori, 2018). As outlined in Section 3.6.4.2.2, the interview commenced by exploring the student’s experiences with moving as an international student (see Appendix W) to better understand how their experiences may have influenced their psychosocial health and wellbeing. In doing so, the aim was to enrich the quantitative data reported in Phase 1 of the study that identified lowered wellbeing and resilience levels in early-adolescent international students who had recently arrived at the school/and or in the country. The interview also explored the student’s thoughts on, and experience with, the MBI program. This was done to enable the researcher to identify whether individual student experiences with the program supported the quantitative data analysis findings on the benefits of the program in Phase 2. The thematic coding employed and the veracity process undertaken will be presented first, followed by a summary of the themes that emerged from the thematic analysis conducted to best address Research Question 5.

### ***5.4.1 Thematic Coding***

Qualitative data analysis is a continuous open-ended process (Creswell, 1998), and for this study, it involved reading and rereading transcripts from the semistructured interviews with participants and making notes. This approach to thematic coding has been well supported in prior research by Braun and Clarke (2006), who outlined a series of steps necessary for thematic coding analysis. This process has been mirrored in this research study (see Figure 5.10), which adopted an inductive thematic approach. With this approach, it is the researcher who determines what constitutes a theme, and it involves reading through the data to let it speak for itself (Braun & Clarke, 2006). During the reading process, the researcher reflects on and identifies what is being assumed and then examines whether those assumptions and positions are supported in the data analysed (Braun & Clarke, 2019). This process includes continual revision because codes are developed using the words of the interviewees themselves. The codes therefore express the perspectives of the individuals. Additionally, as this analysis was part of a mixed-methods research design, further inductive codes were developed based on the underlying concepts and guided by the interview questions.

**Figure 5.10**

*Flow Chart of Thematic Coding Analysis*



Text data were collected from the interview transcripts and examined to identify similarities and differences between participants. Given the small sample size, this was done manually; it involved going through each line of the transcript and identifying key concepts and rich text within each interview. This text was then broken into segments of information by the researcher, and themes were allocated to each segment of text. This process involved colour coding different themes and making notes in the margins of the texts while concurrently writing down any preliminary themes identified. Once all interviews had been coded in this format, the similar and differing themes were written down along with supporting transcript from the participant. This was a continual process, which involved revisiting and rereading each

transcript several times to ensure that all themes had been identified and no rich text had been overlooked. This open-ended review process enabled familiarity with the data and the related themes across the interview transcripts. An independent researcher was employed to review interview transcripts to ensure key concepts and rich text data had been identified appropriately. The findings from the thematic analysis are reported in Section 5.4.3 via narrative discussion along with visual representation of themes to explore Research Question 5.

#### ***5.4.2 Veracity of Qualitative Findings***

Establishing appropriate strategies to demonstrate rigour in qualitative analysis in research is necessary in order to establish a true process of inquiry (Morse, 2018). Verification of the accuracy of qualitative findings can be conducted by examining whether the meanings that emerge are both plausible and defensible (Huberman & Miles, 1994). The data collected in the interviews in this study were therefore checked to ensure that the conclusions made were reasonable and justifiable. Triangulation of the data is a process that involves multiple methods in research to develop an understanding of the phenomena being explored (Creswell, 1998). Comparing the interview data findings with the survey data findings in Phase 1 enabled international students' experiences with moving to a new school and/or country to be validated through triangulation. Additionally, by comparing the interview data with the student, parent, and teacher quantitative data reinforced support for the effectiveness of the MBI program and therefore increased the construct validity of the interviews. In this way, the triangulation of data provided depth to the interview content, which improved the rigour of data collected (Kelly, 2010). The researcher also triangulated the data by inviting four of the interviewed participants to review the themes constructed by the researcher and to check them for authenticity. The importance of different types of data being obtained from each of the data sources employed in the study therefore enabled the data findings to supplement and reinforce the information

gained from the quantitative data findings on the intervention program, as reported in Hypotheses 3a and 3b.

To ensure reliability in the data analysis, an independent researcher was also employed to code two of the interviews. This process is referred to as “interrater reliability” (Creswell, 1998). Comparisons were then made between the coding performed by the independent researcher and the researcher’s coding to ensure consistency. Inconsistent coding was discussed, and appropriate revision undertaken to ensure that the coders maintained a 90% agreement rate. For example, the coders differed on the coding around the theme of “benefits experienced from the mindfulness-based program”. The researcher had identified a subtheme of “emotional benefits”, whereas the independent researcher had identified two subthemes: “negative mental health trait benefits” and “positive mental health trait benefits”. However, when the researcher explained why they had been themed together—through a context-focused positive psychology lens—the independent researcher accepted the reclassified subtheme. A sample of an interview transcript and corresponding themes and subthemes is provided in Appendix Y as an example of another process used in this study to demonstrate rigour of qualitative analysis employed (Roberts et al., 2019).

The interviewer was also the researcher/facilitator in the study, which enabled her to draw on prior interactions and shared experiences with the interviewees throughout the course of the program and thus facilitate improved engagement and trust during the interview. During the course of the program, the researcher had developed a good rapport and rich relationships with each of the interviewees. This was important because research shows that resistance in the interview process can often be due to a lack of rapport between the interviewer and interviewee (Frey, 2018). The researcher was also mindful of the teacher–pupil relationship that she had with the interviewees. The researcher was no longer conducting the program at the school at the time of the interviews, and it was envisaged that this may reduce the impact of a power relationship (Baumfield et al., 2008). During the interviews, the researcher also spoke about her

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own experiences in moving to a new country and about her own mindfulness practices. By sharing aspects of her own identity in the interview, the researcher aimed to minimise the power imbalance with the interviewee (Frey, 2018). However, she was conscious to keep this brief to minimise priming the interviewee. Additionally, the researcher shared the intent of her research with the interviewees and provided detailed information on how data was stored and how confidentiality was protected to minimise the power imbalance (Frey, 2018). The researcher also acknowledged she may have had potential preconceptions prior to the interviews. Given this, she undertook to ensure that she maintained neutrality in her verbal and nonverbal behaviour throughout the interview. An example of this was that she maintained a consistent voice intonation when asking questions to ensure she would not be perceived as implying anything to the interviewee (Frey, 2018).

The semistructured interview format also allowed for flexibility during the interview, enabling the researcher to follow up on themes identified by the interviewee as important. This process gave the researcher a greater chance to become visible as a knowledge-producing participant in the process itself, which can provide more valuable information than hiding behind a preset interview guide (Brinkmann, 2018).

Additionally, the researcher has a long-standing mindfulness practice and has completed the mindfulness-based stress-reduction course and MiSP. Given a personal mindfulness practice has been identified as important for the successful delivery of a mindfulness program (Segal et al., 2002), this places the researcher as an expert in the field and provides greater depth to the qualitative data analysed.

#### ***5.4.3 Results for Research Question 5***

This research question looked to explore the students' experiences with moving as an international student and with the intervention program. In doing so, it was envisaged the findings would provide depth and context to the quantitative data findings reported in this



study. This section synthesises and illustrates the themes and subthemes that emerged from the thematic analysis. The analysis focused on two main areas from the interviews—(a) student experiences with moving as an international student and (b) student experiences with the intervention program—the purpose being to better understand how the intervention program may support international school students.

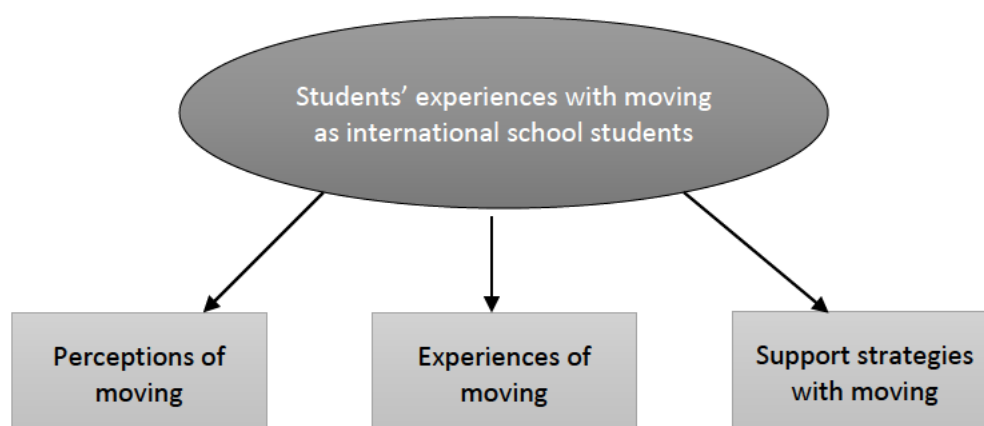
#### **5.4.3.1 Students' Experiences With Moving as an International School Student.**

The purpose of the first part of the interview was to seek a better understanding of international school students' experiences with moving, given the lowered levels of psychosocial health and wellbeing reported in Phase 1 of this study. When asked about their experiences with moving as an international student, all participants spoke of their age when they arrived in Singapore, where they had moved from, and for some participants, the different countries they had resided in (e.g., “I was born in Ohio where I lived for 4 years. Then I moved to Singapore for 1 year before my mum got a job in South Korea. We lived there for 3 years and then moved back to Singapore when I was about 9 or 10 years” – P9).

The minimum number of international moves made by the interviewed participants was to two different countries ( $n = 2$ ), and the most moves between countries was five ( $n = 3$ ). Participants reported having attended three to five different schools in their schooling life. Three of the participants had been at the current school for less than 6 months, with the longest period of time attending the school by any participant being a three-year period ( $n = 5$ ). All interviewed participants knew approximately how much longer they would reside in Singapore, and referred to “home” as the place where they were born or where family were residing. When exploring participant experiences with moving, three themes were identified, which are visually represented (see Figure 5.11) with narrative discussion in the following three subsections.

**Figure 5.11**

*Visual Representation of Students' Experiences in Moving as International Students*



**5.4.3.1.1 Theme 1: Perceptions of Moving.** Participants' responses on how they perceived moving to a new school and/or country highlighted mixed thoughts and feelings. All participants expressed negative emotional feelings when considering what moving may mean for them. These feelings, which included being worried or scared about an upcoming move, were generally based around the uncertainty that lay ahead for them in social relationships (e.g., "I remember thinking I will feel scared when I start to think about what school will I go to, who will be my friends" – P1; "I think I will be worried about missing my good friends" – P5), and more general thoughts about not knowing what the move would entail (e.g., "I had a lot of friends there, and I didn't know anyone in Singapore or what to do when I got there. I remember thinking the move would be difficult for me" – P10; "I have been to Cambodia, and I remember thinking Singapore would be the same with high poverty and awful places to live" – P7). Students also commented on feelings of sadness they believed they would face when moving (e.g., "I think I will feel terrible; I will feel really sad. I wish I was staying a few days after school finishes to do proper farewells" – P6; "I think I will be unhappy leaving friends here when I move" – P3).

However, six participants also considered the move to a new country with positive emotional thoughts and feelings, including excitement (e.g., “I think I will be excited seeing my new house” – P3) and curiosity about their new life and what it might be like (e.g., “I remembered wondering what it would be like living in a country where I could swim all year round” – P7; “I didn’t know Singapore was a place. I was wondering what it was going to be like” – P8). For these six participants with mixed emotional feelings, their positive thoughts at the outset when thinking about moving were replaced with negative thoughts over time (e.g., “at the beginning I didn’t think it was going to be too bad and I was really excited, but now [that] I know everything I know it won’t be easy” – P6).

**5.4.3.1.2 Theme 2: Experiences of Moving.** All participants spoke of the negative emotions and feelings they had experienced when moving to a new school and/or country. The psychosocial developmental changes that occur during early adolescence may be a possible causation for some of these identified challenges by participants. These included feelings of sadness they experienced when either they moved or a close friend moved. These feelings were centred around loss of friendship (e.g., “I feel sad as I have been their friend since starting” – P2; “I was really upset leaving my friends” – P4; “It makes me really sad that my friend has just left” – P5; “I cried a lot – I didn’t want to leave my school and friends” – P8). Feelings of homesickness and loneliness were also experienced (e.g., “talking with my friends from my old school makes me feel homesick and lonely at times” – P1; “I feel homesick for the life back home” – P7; “Mum was so busy with setting up house she couldn’t spend as much time with me” – P8).

Five participants also reported feeling overwhelmed in adjusting to the move (e.g., “I was overwhelmed, as the school was a lot bigger than my old school” – P9; “I couldn’t believe I had to learn a different curriculum and that I had to sit exams two weeks after starting” – P8; “a lot of our belongings were lost in the move; it was devastating. ... lots of our memories were lost, we didn’t know what to do” – P10). Three participants also spoke of the disconnection to

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their family unit experienced as a result of moving (e.g., “my sister will stay behind and board at school, which is not great” – P9; “Dad has to stay here with work for another 6 months or so, which is sad” – P3; “my father had to stay behind for a few months, which made us feel a bit lonely” – P10). Only two participants spoke positively of their experience of moving (e.g., “now that I am here I don’t want to go back” – P8; “when I came here I thought it was marvellous, like being on a tropical holiday” – P7).

**5.4.3.1.3 Theme 3: Support Strategies With Moving.** Considering the negative thoughts associated with the perception of moving, along with the negative emotional feelings experienced by participants with moving, the interviewer explored whether participants had any strategies to support them. Nine participants identified individual strategies they had used, or were intending to use, when they had negative thoughts or feelings regarding moving. When probed by the interviewer, all participants said they had not been offered any school-based strategies to support them with moving. Three participants spoke of strategies that they, in conjunction with their parents, had identified may provide support to them with moving. The other six participants spoke of strategies they themselves had identified could help with negative thoughts or feelings associated with moving.

Six participants said staying connected with people socially could help them when experiencing lowered emotional feelings when missing friends (e.g., “I use social media to reconnect with old friends, which has helped when I feel sad” – P1; “we still keep in contact with each other, so I don’t feel so alone” – P5; “I’m not so worried now that we have shared emails and phone numbers, as I know that will help us keep in contact ” – P2; “I am planning to get everyone’s numbers to keep in contact, which makes me feel less anxious” – P3). One participant also identified the importance of finding connection within a school group to help her feel a sense of belonging in her new environment (e.g., “I am trying lots of different activities and I am still trying to find my thing with sport, as I know finding like-minded students will help me” – P1).

The interviewer also explored with participants whether they had identified any aspects of the mindfulness-based program that could be useful when experiencing negative thoughts or feelings about moving. Three participants spoke about having already employed some of the mindfulness exercises they had been taught during the program to support them with negative feelings they had recently experienced with moving (e.g., “I used to try to block thoughts or images of my past life in Shanghai out; now I do some finger breathing to help me settle my emotions down” – P1; “I did a meditation [e.g., a particular mindfulness practice taught to the students during the program] on the plane last week and it helped me ... it slowed my breathing down and helped me feel a bit more settled saying goodbye to X” – P6). Six other participants identified aspects of the program that they could use in the future to support them with moving (e.g., “I might try the 7/11 or mindful eating exercise when saying goodbye to everyone ... it could help me feel a bit better” – P2; “I could do a .b to help me feel that this is happening, but it’s not always going to be bad ... it will help me cope with that feeling” – P5; “I think I will do some deep breathing and meditations before I start at my new school ... I think it will help me feel less worried” – P7). Four of the participants also spoke about using mindfulness exercises to help them stay present rather than engaging in thoughts related to their upcoming move (e.g., “I will probably use some of the exercises to remind myself that I have x amount of time left, and I want to spend it having fun with friends and not spend it worrying about when I leave and being really scared” – P4). These participants recognised that by staying in the present moment it “will allow me to be more relaxed and clear my mind, rather than being overwhelmed as I over think everything about the move” (P9). These participant voices suggest a mindfulness program may offer support to international students with negative thoughts or feelings they may perceive, or experience, associated with moving.

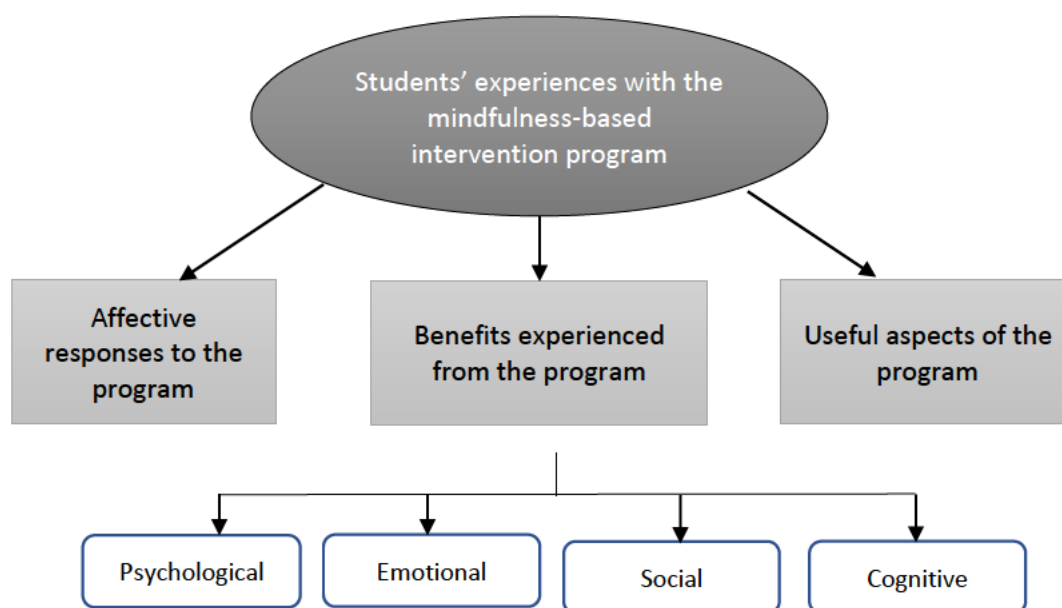
**5.4.3.2 Students’ Experiences With the Intervention Program.** The second stage of the interview explored individual students’ experiences with the intervention program. The researcher sought to better understand how students responded to the program and whether they

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identified any benefits from the program for their psychosocial health and wellbeing. The interviewer also explored which aspects of the program the participants enjoyed the most as a means to inform future program development and implementation. Qualitative analysis generated three themes and subsequent subthemes, which are visually represented in Figure 5.12, with narrative discussion on each in the following subsections.

**Figure 5.12**

*Visual Representation of Students' Experiences With the Intervention Program*



*Note:* Main themes are shaded in grey, and subthemes are shaded in white.

**5.4.3.2.1 Theme 1: Affective Responses to the Program.** Participant responses to the intervention program were explored to gain an understanding of whether the program had been viewed favourably by participants. This was important, because participants would need to view the program positively if it were to be presented to them as a suitable support strategy for the future. All 10 participants voiced positive responses to participating in the program, with some participants describing the program as “enjoyable” (P1), “relaxing” (P3), “helpful” (P4), and “fun” (P8). Six participants provided further insight into why they enjoyed participating in

the program (e.g., “it gave me something new to try” – P1; “there were lots of different aspects I took out of it” – P7; “I learnt a lot of things from it, which I can use, like, later on” – P9), and two participants explained how they found the program interesting (e.g., “we learnt about lots of different techniques” – P10; “it was interesting trying something new” – P4).

**5.4.3.2.2 Theme 2: *Benefits Experienced From the Program.*** All participants identified benefits they had experienced from participating in the program that could improve their psychosocial health and wellbeing. In exploring how the program was beneficial to them, the participants spoke about aspects of their lives that they felt had improved as a result of engaging in the mindfulness exercises they had been taught in the program. Participants outlined psychological, emotional, social, and cognitive benefits they experienced when doing the mindfulness exercises, and these four subthemes will be explored below. These findings also validated parent and teacher voices reported in Sections 5.3.4.1 and 5.3.4.2 respectively, which outlined psychological, emotional, social, and cognitive benefits they had identified in their child/student as a result of participation in the program.

***Psychological Benefits.*** Eight of the participants spoke about the psychological benefits to their mental health, which they experienced as a result of participating in the program. These included increased positive mental health traits in their mood (e.g., “I think I have become a bit more optimistic” – P10; “I now take the good things in ... feel grateful” – P5; “I felt more certain that the GCSE exams would go okay” – P7) and/or a reduction in negative mental health traits, such as worry (e.g., “I am not putting so many negative thoughts stuck in my head” – P4). Four participants spoke of experiencing improved sleep since participating in the program (e.g., “doing the meditation has stopped me worrying when I’m lying in bed at night; I just fall asleep” – P6; “it has also helped with sleep, as I couldn’t get to sleep. I had lots of thoughts going on in my head and didn’t feel tired. Doing the breathing exercises helped the thoughts just go away” – P6). Two participants also spoke of increased energy levels after

participating in the program (e.g., “I just feel like I can get more things done now” – P4), and one participant described improved physical health (e.g., “I took up yoga after the program. It’s really good; I feel a lot stronger from it” – P10).

***Emotional Benefits.*** All participants spoke of the emotional benefits they experienced from participation in the program. These included increased positive emotions, as described by eight of the participants, with feelings including gratitude (e.g., “it makes me feel more grateful when doing the exercises” – P5), calmness (e.g., “I feel more relaxed ... and calm” – P3; “doing the exercises made me feel calmer” – P6), happiness (“I have not always been very happy, and I feel a lot happier since I finished the program” – P8), and optimism (e.g., “I am more confident that I can do it” – P5). All 10 participants identified a reduction in negative emotions as a result of the program. They described feeling less stressed (e.g., “I’m feeling less stressed before big events” – P6), less worried (e.g., “it helped me to forget about worrying thoughts and not focus on the past” – P1; “I was feeling that it was a bit too much as the exams were getting closer and revision practice was increasing. I did some of the exercises to help me feel less worried” – P6), and less frustrated when they were doing a mindfulness-based exercise (e.g., “at home when my sisters are annoying me, I do one of the exercises, and it helps me feel less bothered by them” – P9).

***Social Benefits.*** Six participants spoke of the social benefits they experienced from participating in the program. These benefits included an increased sense of belonging, more self-confidence in social interactions, and improvements in conflict resolution in interactions with peers. The six participants all spoke about the sense of connectedness they experienced socially with peers as a result of participating in the program (e.g., “I felt closer with the other students by doing the program” – P1; “it was good knowing I wasn’t the only person interested in mindfulness” – P4; “hearing my friend’s thoughts about certain things ... made us closer as friends” – P10), including across different year levels (e.g., “it was interesting to see what the Year 6’s thought. I thought what they thought was quite similar to us, which was quite cool to



see there were more similarities between us than I thought” – P9). Two participants identified that participation in the program had encouraged friendship opportunities for them (e.g., “I wasn’t close to anyone in my form class ... I think it has helped having girls from my form do the program as I am able to now talk to them more” – P8; “there was a new boy in my class ... during the program I began talking to him and then found we had similar interests” – P2). Three participants also identified that the program had helped them socially when experiencing conflict issues with friends (e.g., “it has helped me with friendships when we get into fights ... with the breathing exercises I am able to allow my thoughts and emotions to settle down” – P4; “if I have an argument with my friend, it is a bit easier for me to forgive them now” – P3), and two participants described increased self-confidence in their social interactions with peers (e.g., “I now feel more confident especially in my relationships with the students in my class” – P7; “I feel more confident talking to people I wouldn’t have talked to previously” – P2).

***Cognitive Benefits.*** Seven participants outlined benefits that could be associated with enhanced student engagement and academic learning as a result of engaging in the program. Improvements in concentration and focus were described by the participants since participating in the program (e.g., “I concentrate on my thinking a lot more” – P10; “it helped me to find a focus, especially in lessons” – P4). These participants explained how their concentration had improved (e.g., “I did mindfulness exercises on days when I was tired and [when] my head felt all over the place when I was studying. I couldn’t concentrate on the question, so I decided to clear my head before I went on. ... Doing the breathing exercises made me feel more relaxed, and I found it easier to do my work and just get on with it” – P3; “some days I kept drifting off in class and not listening to my teacher. Doing the finger breathing exercise helped me to keep focus more easily in the lessons” – P4). Five of the participants also outlined how engaging in the mindfulness exercises they were taught in the program had helped them in revising and sitting school assessments (e.g., “I felt stressed waiting to go into the classroom for the exam, so I did a finger breathing exercise” – P5; “when I was studying Chinese my brain felt all

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cramped, so I did a FOFBOC [e.g., a particular mindfulness practice taught during the program] to help me get more focused” – P8).

**5.4.3.2.3 Theme 3: Useful Aspects of the Program.** To inform future program development and implementation, the interviewer also explored with participants which aspects of the program appealed to them the most. This was important to consider, given the varied mindfulness programs on offer and the different format and structure of each program. Identifying which components of the program the students identified as useful can help to ensure any new mindfulness programs developed are effectively tailored for this age group. All 10 participants identified the mindfulness-based exercises the facilitator taught them were the most helpful part of the program. Of the different mindfulness-based exercises, the breathing exercises and body-scan exercises were described by participants as having the most benefit (e.g., “I always felt doing the FOFBOC or 7/11 exercise were the best in making me feel less worried” – P7). Other mindfulness-based exercises that the participants described finding useful were the *.b* practice, finger breathing, beditation, and mindful eating exercises. Seven participants also identified the group discussion component of the program, in which students spoke about their own experiences with the topic being explored, as useful to them, as “it was helpful hearing about other people’s worries” (P2). Four participants also identified the animation clips shown in the program as helpful, because “the animations got through the points in very interesting ways” (P10). The worksheet component of the program was identified as the least enjoyable aspect of the lesson, with five participants describing the worksheets as confusing and of no value (e.g., “I couldn’t figure out how to write them” – P2; “I found it more effective talking than writing it down” – P3). Additionally, the optional homework exercises were completed by just a few participants and only sporadically, indicating this aspect of the program was not identified as useful by participants.

**5.4.3.3 Summary of Findings for Research Question 5.** A triangulation approach to this research design enabled different information to be elicited from the interview data to

supplement and reinforce the information gained through the quantitative data findings reported in Phase 1 and Phase 2 of the study. These findings provide context with regard to why lowered wellbeing was reported in early-adolescent international students who had recently arrived at a new school and/or country, considering the negative thoughts or feelings the participants perceived or experienced associated with moving. These findings are also important in that they constitute the first narrative conducted with early-adolescent international school students to better understand how the students' experiences with moving have influenced their psychosocial health and wellbeing. Given the negative implications of moving as perceived or experienced by the participants, the need to provide better support to these students is necessary. In exploring support strategies with the participants, the lack of current support programs available to these students was clear, highlighting the need to offer better wellbeing support to students within the international school sector.

Given that participants identified the mindfulness-based program as providing support to them when dealing with negative thoughts or feelings associated with moving, the program is an obvious choice to consider as a school-based supportive program. Additionally, all participants spoke of psychosocial health and wellbeing benefits associated with having participated in the program, and similar findings were reported in addressing Research Questions 3 and 4, thus providing evidence-based research on the suitability of the program to support this cohort of students. Further support for the program was provided through participants' affective positive responses to the mindfulness-based program, indicating that future mindfulness programs would be well received and well regarded. Information provided by the participants regarding which aspects of the program they felt were the most useful to them can also be drawn upon for future program development to ensure that the aspects of the program identified as the most useful are incorporated.

## 5.5 Conclusion and Significance

This chapter has reported on the findings from Phase 2 that addressed Research Questions 3, 4, and 5 in this sequential explanatory mixed-methods design study. These questions were developed following the findings reported in Phase 1 of the study that highlighted lower levels of wellbeing, behavioural engagement, and resilience measures in early-adolescent international students newly arrived at the school and/or in the country. Considering these findings, Research Questions 3, 4, and 5 aimed to examine whether a school-based mindfulness intervention program may provide support to this cohort of students.

Support for the mindfulness-based program in improving the psychosocial health and wellbeing of early-adolescent international students was reported through the quantitative findings of Research Question 3. Findings from Hypotheses 3a and 3b reported increased levels across wellbeing, student engagement, resilience, and mindfulness in students on completion of the MBI program. Additional support for the program was found in the proxy data analysed from students' parents and teachers for Research Question 4. Parents reported improved behavioural and emotional functioning in their child after participation in the program (see Hypothesis 4a) and provided information on how they felt the program had helped their child (see Section 5.3.4.1). Teacher feedback reported a nonsignificant reduction in behavioural and emotional difficulties scores in their students on completion of the program, alongside cognitive-engagement and behavioural-engagement benefits reported in qualitative data findings. Furthermore, through the qualitative findings addressing Research Question 5, support for the program was found that provided rich contextual information on how the MBI was beneficial to the students in improving their psychosocial health and wellbeing.

These findings are relevant considering not only the lowered wellbeing, student engagement, and resilience levels reported in students who were newly arrived to the country and/or school in Phase 1 but also the contextual information provided by students on their experiences of moving to a new country, as explored in Research Question 5. This information

highlights that school transition and adjustment—a common and recurring experience within this student group—may affect an early-adolescent international student’s ability to function at an optimal level. Therefore, it is important to identify a school-based program that can provide support to this student group, and to the wider international school community, to enable them to continue to thrive during periods of school transition and adjustment. The findings reported in this chapter highlight a mindfulness-based program could be a suitable program to implement within international schools to better support this cohort of students and the wider school community. The implications of the findings reported in Phase 1 (Chapter 4) and Phase 2 (Chapter 5) will be discussed in the next chapter to provide context to the findings through a positive psychology theoretical lens.

## **Chapter 6: Discussion**

The research aims of this study were twofold. The first aim was to expand the knowledge of wellbeing, student engagement, and resilience in early-adolescent international school students. The second aim was to examine whether an MBI program could promote psychosocial health and wellbeing with this cohort of students. The impetus for the study stemmed from the high rates of mobility and transition reported within the international school sector and the minimal research conducted in the field to date. Applying a positive psychology lens, the study aimed to examine how early-adolescent international students can thrive and flourish at an international school in Singapore despite the adjustment difficulties they experience. In doing so, the study addressed conceptual limitations in the field of research to date by examining these constructs at the same time in a single study and identifying the importance that contextual factors may also play. The study also provided empirical evidence-based research on MBIs with early-adolescent students, which is relevant considering the limited research conducted on MBIs with this age group. It is envisaged that this thesis may provide a starting point whereby greater awareness, support, and advocacy emerges to enable early-adolescent students to thrive within the highly mobile international school sector.

### **6.1 Introduction**

This chapter is structured into sections that summarise the research undertaken in this study. Firstly, in order to provide context to the study results, it begins by outlining the research aims and the methodology employed in all phases of the research design. The key findings of both phases of the study are then presented. Phase 1 findings are outlined first, followed by Phase 2 findings. Next, the chapter highlights the theoretical contributions of the study, followed by implications for the fields of international education and MBI research. Lastly, the chapter identifies the limitations of the present study and provides recommendations for future

research in the field. The chapter concludes with the significance of the findings for theory, research, and practice.

## **6.2 Methodology Summary**

Guided by the literature review, a sequential explanatory mixed-methods design was employed for this study, as outlined in Chapter 3. This particular research approach was adopted given the limited research conducted in this field to date. It included a two-phase process, with the findings of the first phase of the study used to inform the second phase of the design. Data from both phases were then triangulated to confirm and validate the study findings.

A survey design was employed in the first phase of the study to better understand wellbeing, student engagement, and resilience in early-adolescent international students. This design also examined the effect that contextual factors may have on these constructs. These quantitative findings highlighted a cohort of students who may be at risk given the effect that contextual factors had on their capacity to thrive and flourish. Student narratives were then collected after these findings were analysed (in Phase 2) to better understand individual students' experiences with mobility and transition. As limited research has been conducted in this field to date, the inclusion of quantitative and qualitative findings enriched the information gathered on the optimal functioning of this cohort of students. This design also addressed methodological limitations in the field of wellbeing research with international school students from a reliance solely on self-report data (McKeering et al., 2021), proxy measures (Higgins & Wigford, 2018), or qualitative data (Whyte, 2016).

Considering the at-risk cohort of students identified in the first phase of the study, an MBI program was proposed in the second phase of the study as a possible strategy to support this student cohort. The program was implemented with a smaller cohort of students who had participated in the first phase of the research. The second phase of the study employed a

randomised waitlist control mixed-methods design in order to understand the effects of an MBI on students' psychosocial health and wellbeing. Quantitative data from students who participated in the program were collected at preintervention, at postintervention, and at a follow-up period 11 weeks later. Quantitative data were also collected through proxy measures with the students' parents and teachers at preintervention and postintervention periods. This design approach enabled the effect of the MBI over time to be examined across the positive psychology constructs of interest. Semistructured interviews were also conducted with students on completion of the MBI, with the qualitative findings confirming and enriching the quantitative data findings reported in the study. This design method also addressed methodological limitations identified in MBI research with this age group (McKeering & Hwang, 2019).

### **6.3 Key Findings: Phase 1**

This section summarises the findings from Phase 1 of this study, which reported an interrelated association between the positive psychology constructs examined and the contextual effects of these constructs.

#### ***6.3.1 Interrelated Association Between Wellbeing, Student Engagement, and Resilience***

Positive significant associations were reported across most of the wellbeing, student engagement, and resilience constructs examined in early-adolescent international students in this study. These findings are consistent with prior research reported with tertiary-aged international students that showed a positive association between the constructs of wellbeing and student engagement (Pietarinen et al., 2014), wellbeing and resilience (Sabouripour & Rosland, 2015), and student engagement and resilience (Pidgeon et al., 2014). The strongest associations were found between the wellbeing subscales in the study, which is consistent with Seligman's PERMA model (Seligman, 2011), which identifies the interdependent nature between wellbeing subscales. Weak to moderate positive associations were found across most



of the other constructs examined, suggesting any improved level of measure in any one of the constructs may be linked to an improved level in one of the other constructs investigated in early-adolescent international students. These findings provide new information on the interrelated construct association found between the positive psychology constructs examined in this study and suggest increased levels in any one of these constructs may have broader benefits for the early-adolescent international student across other constructs that can help them thrive and flourish. Although the study was limited to examining three positive psychology constructs, the findings suggest that an interrelated association may also be found across other positive psychology constructs with this cohort of students.

### ***6.3.2 Contextual Effects on Wellbeing, Student Engagement, and Resilience***

Contextual factor effects were found across wellbeing, student engagement, and resilience constructs in the study. These findings highlight that wellbeing, student engagement, and resilience are dynamic and fluid constructs in early-adolescent international students, dependent on different contextual factors. These findings provide new information on the effect of contextual factors across these constructs with early-adolescent international students. Findings from the contextual factors examined in this study are reported in the following subsections.

**6.3.2.1 Mobility Factors and Wellbeing and Resilience.** Findings showed lowered wellbeing (e.g., connectedness and engagement) and resilience levels in early-adolescent international students who had been at the school for less than a 12-month period. Findings also showed lower resilience levels in students who had lived in the country for less than a 2-year period. Medium effect sizes were reported for each of these results, suggesting practical use of the findings (Funder & Ozer, 2019). The findings are consistent with prior research on the effects of mobility on wellbeing reported with international tertiary-aged students (e.g., Cemalcilar & Falbo, 2008) and in the international school sector (e.g., Hurem et al., 2021).

While the findings from this study align with the limited research conducted on the effects of mobility on wellbeing within the international school sector, they were found to contradict the findings from one study, conducted by Higgins and Wigford (2018), which described high levels of student wellbeing in international school-aged students. However, the disparity between these findings in the two studies may be attributed to the different research methods employed, with Higgins and Wigford (2018) relying on teacher proxy data to measure student wellbeing as opposed to self-report data as used in this study. The differences reported may therefore be attributed to possible distinct perspectives held by students and teachers regarding student wellbeing. However, the cross-sectional design employed in this study prevented the effects of mobility on the constructs of interest being examined over time. Such research may be valuable considering recent longitudinal findings suggesting that the effects of mobility may have even longer-term effects on wellbeing in international school students than is suggested in this study (Hurem et al., 2021).

The quantitative findings on the negative association between recent arrival at school and feelings of being valued, loved, supported, and engaged for early-adolescent international students were also confirmed in the qualitative findings from Phase 2 of the study. Student narratives highlighted the negative thoughts or feelings the students had perceived or experienced associated with moving. These narratives included negative emotional feelings of being worried, sad, and lonely from the loss of friendships and the disconnection from social and community groups as a result of moving. These findings are consistent with, and further elaborate on, prior qualitative findings (e.g., uncertainty, related conflict with peers) conducted with international students (McLachlan, 2007; Whyte, 2016). These findings also provide context regarding why a student recently arrived at a new school and/or country could be reporting lower levels of wellbeing.

These findings are important, considering turnover rates in international schools are described to be from 25% to 30% annually (ISC, 2019; Whyte, 2016). Given this, the findings

suggest that a large number of early-adolescent international students arriving at a new school and/or country each year may be experiencing lowered wellbeing and resilience levels. This highlights a potential cohort of students who may benefit from support, given their heightened risk for psychosocial health and wellbeing issues as they transition and adjust to a new school and country. These findings therefore contribute to the limited empirical evidence-based research conducted on the effects of mobility on wellbeing with international school-aged students by highlighting a cohort of at-risk students. They also elaborate on prior research findings by highlighting key information regarding a period of time in which this student group may benefit most from support. The findings also provide new information on the effects of mobility on resilience in early-adolescent school students. This knowledge will necessitate international schools becoming responsive in providing support programs or strategies for new students, ideally within the first 12 months of their commencement at the school. This information is also pertinent considering research with international school educators has highlighted that many did not identify their school as having in place an effective strategy to support newly arrived students (Higgins & Wigford, 2018).

These findings can also be understood considering the interrelated associations found among the constructs examined in this study. This is evident in the reported effect of mobility across both wellbeing and resilience constructs but not with student engagement. These findings contradict research in the international tertiary sector that reported lower levels of student engagement in students recently arrived in the country (e.g., Van Horne et al., 2018). This new information suggests that other contextual factors may moderate the effect that mobility may have on student-engagement levels between the two student groups. In considering the different educational environments attended by these two student groups (e.g., larger student sizes, reduced contact hours, and changes to assessment style in the tertiary sector), it is suggested that a myriad of different contextual factors may moderate the effects reported between the groups. These findings highlight that other contextual factors may

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moderate the potential effect of mobility on the interrelated positive association found between the positive psychology constructs examined in this study. This information suggests that the nature of the interrelated association between positive psychology constructs is dynamic and fluid, and may be moderated by various relevant contextual factors.

**6.3.2.2 Demographic Factors and Wellbeing and Student Engagement.** The findings showed that age had an effect on wellbeing with this cohort of students. Lower levels of feeling happy and optimistic were reported in the older-aged students in the study (e.g., students aged 12–14 years compared with students aged 10 years), which aligns with prior research on the effect of age on wellbeing during early adolescence (WHO, 2016). No age effects were reported across student engagement and resilience constructs, thus providing new information to the limited research conducted in this field of research. Gender was also found to effect student engagement, with being male related to lower levels of behavioural engagement. These findings align with other gender research on behavioural engagement in school-aged students (Bru et al., 2021). However, no gender effects were reported across wellbeing and resilience constructs; these findings contradict earlier research that reported lowered wellbeing was more prevalent in females during adolescence (Hartas, 2019; White et al., 2022; WHO, 2020). It also differs from research carried out with tertiary-aged international students that reported lowered wellbeing levels in females (Alharbi & Smith, 2018; Rhein, 2018). These contradictory findings indicate that additional research may be necessary to identify any gender effects across positive psychology constructs with international school-aged students and suggest a limitation in this study given that only one school participated.

This knowledge is important in the field of research, considering that the medium to large effect sizes reported provide practical significance to the findings (Funder & Ozer, 2019). As such, it provides international educators with new empirical information on specific student groups who may benefit most from additional support. Specifically, strategies could be employed to promote higher levels of wellbeing in older-aged early-adolescent students in the

classroom (e.g., 12–14 years) and in improving behavioural engagement in males. These demographic findings not only provide important information on how age and gender may affect the constructs of interest but also highlight how the interrelated association between positive psychology constructs may change depending on different demographic variables. This information again suggests that the interrelated association between wellbeing, student engagement, and resilience constructs are dynamic and dependent on different contextual factors in early-adolescent international students.

### ***6.3.3 Significance of Phase 1 Findings***

To recap, the significance of the findings derived from Phase 1 is summarised in the following points:

- Findings highlight an interrelated positive association between wellbeing, student engagement, and resilience constructs in early-adolescent international students. This is the first time these constructs have been examined simultaneously in a single study with this cohort of students and suggests any improved measure on any one of these constructs may offer broader benefits across other constructs.
- Findings highlight the effect that contextual factors have on these constructs, providing new knowledge on the complexity and dynamic nature of these constructs and the value of including a comprehensive conceptual framework to examine these constructs.
- Mobility factors reported lowered wellbeing and resilience levels in early-adolescent international students newly arrived at the school and/or in the country. These findings provide new knowledge on a group of students who may benefit from additional support and considered timing on when such support should be provided.
- Demographic factors reported lowered wellbeing levels in older-aged early-adolescent students and lowered behavioural student-engagement levels in males.

These findings provide new knowledge, which may assist educational professionals working with these students.

## **6.4 Key Findings: Phase 2**

This section summarises the findings from Phase 2 of this study, which reported the effects from an MBI program on the psychosocial health and wellbeing of early-adolescent international students.

### ***6.4.1 MBI Program and Wellbeing, Student Engagement, Resilience, and Mindfulness***

Quantitative findings reported increased levels of wellbeing, student engagement, resilience, and mindfulness in the intervention group on completion of the MBI program compared with the waitlist control group over the same period of time. The findings also showed increased levels of all constructs of interest for all participants on completion of the program. Furthermore, at a follow-up period 11 weeks later, the findings showed that the increased levels reported on completion of the MBI program had been maintained or improved. These findings are consistent with prior research (e.g., Feldman et al., 2014; Padhy et al., 2020) that reported increased levels of psychosocial health and wellbeing in students on completion of an MBI program. They also align with research on the long-term benefits of MBIs (Lassander et al., 2021). However, caution needs to be applied when interpreting these quantitative findings, given that Funder & Ozer (2019) have suggested the very large effect sizes are a gross overestimate and are rarely found in a large sample or replication of the study.

The inclusion of qualitative findings in the study partly addressed this concern and provides additional support for an MBI program in promoting psychosocial health and wellbeing in this student group. Qualitative analysis identified that the benefits students perceived from participation in the program included psychological, emotional, social, and cognitive benefits. These findings align with prior qualitative research on the benefits of MBIs in school-aged students (e.g., Bannirchelvam et al., 2017; Langer et al., 2020). Students also

voiced positive responses to participation in the program and provided insights into which aspects of the program they found most useful. This suggests high levels of student engagement in the program and provides valuable information on ways to improve future MBI programs.

Additionally, the inclusion of parent and teacher quantitative findings revealed reduced levels of behavioural and emotional difficulties in their child/student on completion of the program. These findings complement earlier research on the effects of MBIs in enhancing psychosocial health and wellbeing in school students as reported by parents (Flook et al., 2010) and teachers (Schonert-Reichl & Lawlor, 2010). Although the difference reported in the teacher data findings was nonsignificant, the trend was in the right direction, providing support for the program. However, these teacher findings suggest limitations in the inclusion of teacher data on student wellbeing when the teacher may have limited contact with the student during the course of the school day, as was the case in this study. This possibility could also be used to explain the variations in teachers' perspectives on student wellbeing reported in Higgins and Wigford's (2018) study. Given that Zenner et al.'s (2014) research, which used teacher ratings, also reported low effect sizes in MBIs on student wellbeing, future research examining student and teacher perspectives on student wellbeing in the same study in greater detail could be of benefit. Nonetheless, all of the different findings reported provide support for an MBI program in promoting psychosocial health and wellbeing with this student group.

These findings contribute to research in the field by addressing the need for school-based programs that could promote wellbeing, student engagement, and resilience in early-adolescent international students (McKeering et al., 2021). The inclusion of different data measures in examining the effectiveness of the MBI program also provides new information to the field of research. It is the first time that student quantitative and qualitative data findings, alongside parent and teacher data findings, have been included in the same study on MBI research with early-adolescent international students. The findings also address several methodological limitations identified in MBI research with this student age group to date

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(McKeering & Hwang, 2019; see Section 2.2.2.2). By doing so, the findings provide empirical evidence-based research to the limited field of research conducted on MBIs with early-adolescent students.

The findings also reported a significant reduction in all constructs of interest in the waitlist control group in the self-report data from baseline to the preintervention time period (prior to them participating in the intervention program). These unexpected findings provide further empirical evidence on the effects of mobility on positive psychology constructs. The reported decrease in the positive psychology constructs examined with the students occurred shortly after a high percentage of the students (28%) were advised they were soon to be moving to a new country. Additionally, for those students not relocating, their relationships with those peers who were soon to move suggest they may also have been affected by the news of friends' imminent relocations. The lowered levels of positive psychology constructs reported at that time therefore validate the findings from Phase 1 of the study on the effects of mobility on wellbeing and resilience constructs. They also align with findings from the literature review that highlighted psychosocial changes during early-adolescence may exacerbate adjustment difficulties with this age group. Similarly, the findings validate the student narratives collected in Phase 2 of the study, which explored the negative feelings and thoughts students perceived or experienced with respect to moving. These findings with the waitlist control group, while unexpected, align with the findings from Phase 1 by identifying a group of students who may benefit from additional support.

#### ***6.4.2 Significance of Phase 2 Findings***

To recap, the significance of the findings derived from Phase 2 is summarised in the following points:

- Student data findings, alongside parent and teacher data findings, provided support for an MBI program in promoting psychosocial health and wellbeing in early-



adolescent international students. This is the first time these data measures have been combined in MBI research with early-adolescent students.

- Student qualitative data findings provided support for the acceptability of an MBI program for this cohort of students and provided valuable information regarding which components of the program the students found beneficial—information that can be used to enhance future MBI programs.
- These findings are important in addressing the need for support programs to be delivered to this at-risk group of students, given findings reported in Phase 1.
- The findings address methodological limitations of prior MBI studies and contribute empirical evidence-based research to the limited research conducted on MBI studies with early-adolescent students to date.

## **6.5 Contributions and Implications From the Study**

The study findings contribute to theory in the field of research in several ways. The findings also raise implications for the international education sector and for mindfulness-based research—implications that are discussed in the following section.

### ***6.5.1 Theoretical Contributions***

The study began by examining three positive psychology constructs identified as having a positive association with adjustment in tertiary-aged international students, including wellbeing (Hilario et al., 2014), student engagement (Shoshani et al., 2016), and resilience (Oyeniya et al., 2021). The inclusion of these constructs together in a *single* study has advanced the field of research by highlighting the significance of the constructs specifically within the international school sector. Additionally, the promotion of these positive psychology constructs in the second phase of the study has provided new information on ways to foster positive transition and adjustment in early-adolescent international students. In doing so, the study addressed a gap in the research field to date, as the majority of research conducted on

adjustment with international students has centred on negative developmental outcomes (e.g., Gruman et al., 2008; South et al., 2007). The focus on promoting positive psychology constructs, as opposed to examining negative psychological outcomes, provides a step forward in examining ways to foster optimal functioning in this student group despite the high rates of mobility they experience.

However, the inclusion of only three positive psychology constructs in the study narrows the findings of the research because it fails to recognise other important constructs that may be relevant. For example, self-esteem, hope, and optimism have all been reported to have a positive association with successful adjustment in tertiary-aged international students (Jackson et al., 2013). Additionally, social constructs such as perceived social support (Alharbi & Smith, 2019) have been reported to have an effect on adjustment with tertiary-aged international students. Therefore, the study not only contributes to research in the field by examining three positive psychology constructs together for the first time in a single study, it also acknowledges that many other constructs may be pertinent to consider in understanding adjustment in early-adolescent international students. Future studies may benefit from incorporating other relevant constructs in this field of research.

Next, the interrelated positive association found between wellbeing, student engagement, and resilience constructs in the study provides a theoretical contribution on the importance of promoting any one of these constructs. As positive psychology is the study of strengths that enable an individual and community to thrive and flourish (Seligman, 2011), the interrelated association found between these constructs aligns with the many identified positive life skills that can promote optimal functioning for the individual (Seligman, 2019). These findings highlight that any improvement across one of these constructs may result in an indirect improvement across another important positive psychology construct to promote optimal functioning within this student group. This information is important given that the minimal research conducted to date with early-adolescent international students has failed to recognise

the broader implications that may arise from the promotion of positive psychology constructs in this student group. Considering the high rates of mobility experienced by this student group, this information suggests that increased levels in one positive psychology construct may result in the promotion of additional positive life skills that may be valuable to this student group during periods of transition. This new information highlights that optimal functioning of early-adolescent international students will be facilitated through the promotion of any one of these positive psychology constructs. These findings also suggest that similar interrelated positive associations may be expected across other positive psychology constructs and could be explored further. However, the cross-sectional design of this study prevented the establishment of causality; therefore, it is unknown whether these associations would remain stable over time. Future research may benefit from employing a longitudinal design to examine causality between other positive psychology constructs.

The study also provides a theoretical contribution to the field of research by identifying the effect that contextual factors may have on positive psychology constructs and the interrelated association between these constructs. Findings identified a cohort of early-adolescent international students who may benefit from additional support, given the effect that contextual factors had on their capacity to thrive and flourish. These findings provide new information on the effect of mobility and demographic factors on positive psychology constructs with this cohort of students. They also contribute to theory on the significance of different mobility factors within this student group. While three different mobility factors were examined in the study, the mobility factor of number of international moves was found to have no effect on wellbeing, student engagement, or resilience constructs in this study. This was unexpected given that research with domestic school-aged students reported number of school moves had a negative effect on positive psychology constructs (Herbers et al., 2013). These findings suggest that there may be some mobility factors more relevant to consider when examining optimal functioning of early-adolescent international students. Future research may

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benefit from examining the effect of mobility factors over time and identifying which mobility factors may be most relevant with early-adolescent international students.

Additionally, while the study was limited to examining mobility and demographic factors, the findings contribute to theoretical development by acknowledging other contextual factors that may affect the interrelated association between positive psychology constructs. This assertion is underpinned by examining the differences reported between early-adolescent and tertiary-aged international students with regard to the effects of mobility on student engagement. The disparity between these findings suggests other contextual factors may moderate the effects of mobility on student engagement across the two groups. Considering the different educational environments attended by both student groups, there could be many varied factors that could influence student-engagement levels. For example, international school-aged students frequently go to an international school that has a culturally mixed cohort of students and teachers and offers an internationally regarded curriculum, such as the international baccalaureate program. This is in contrast to tertiary-aged international students, who may discover they are in the cultural minority with an unknown national curriculum to traverse. Additionally, the discrepancy in gender-effect findings on wellbeing between early-adolescent and tertiary-aged international students corroborates this notion. These findings suggest there are many contextual differences that need to be considered in this field of research and that the association between constructs will continue to be of a dynamic and fluid nature. This premise is also supported in research with international tertiary-aged students that has examined other contextual factor effects (e.g., ethnicity; Kim, 2011) on psychosocial health and wellbeing constructs. Considering the limited contextual factors included in the study, future research may benefit from the inclusion of other contextual factors in examining optimal functioning of early-adolescent international students.

The study findings also provide theoretical contributions to mindfulness literature as pertinent to the field of education. Mindfulness programs in schools is still an emerging field of

research, particularly within the early-adolescent student age group. The findings in this study provide support for such a program in promoting the psychosocial health and wellbeing of students in aspects such as psychological, emotional, cognitive, and social outcomes.

Furthermore, research highlighting the positive association between these outcomes and learning outcomes for the individual (Bücker et al., 2018) suggests long-term benefits from MBI programs in schools. Considering mindfulness programs can be delivered in schools universally, minimising costs and reducing stigma, the study findings provide valuable information on the benefits of mindfulness, specifically within the field of education.

### ***6.5.2 Implications for the International Education Sector***

The study findings contribute new knowledge to sustain and enhance learning within the international education sector. Considering the positive association that wellbeing has on learning outcomes, including intrinsic motivation, academic achievement, and school satisfaction (Bücker et al., 2018), the promotion of wellbeing in this study has significant implications within the field of international education. As fostering student learning and growth is a predictor of future educational outcomes for a student (Wang & Degol, 2014), the findings highlight the potential long-term benefits of wellbeing for the early-adolescent international student. Additionally, improving wellbeing and learning outcomes for the student may have broader implications in fostering a more inclusive and supportive school community (Bücker et al., 2018). This information is pertinent considering recent strategies by countries to improve student experiences within the international education sector (Australian Government Department of Education, Skills, and Employment, 2021; Government of Canada, 2019; United Kingdom Government Department for International Trade & Department for Education, 2021). It is also relevant considering the call for organisations to improve wellbeing in young people (United Nations, 2015; WHO, 2017, 2020). Therefore, by promoting psychosocial health and wellbeing constructs, the study not only potentially contributes to enhanced learning outcomes

within the international education sector but also addresses the need for greater advocacy of wellbeing programs for early-adolescent students.

The significance of wellbeing within the international education sector is even more relevant today, given the impact that the COVID-19 pandemic has had on international students. Approximately 1.2 billion children from 186 countries experienced school closures in 2020 due to the pandemic (Li & Lalani, 2020), with closures in some countries spanning almost 2 years (e.g., Uganda, Bolivia, India, and Nepal; UNESCO, 2022). With the move to online learning during this period, peer-to-peer and student-to-educator interaction was important, particularly given the association between such interaction and student satisfaction and learning progress during online learning (Lin et al., 2017). However, interaction with peers and teachers may be more difficult for an international student who is reporting lower levels of engagement and connectedness. This may therefore affect learning outcomes for international students during periods of online learning. This notion aligns with feedback from international school educators who identified one of the greatest challenges during periods of online learning during the pandemic was establishing authentic peer-to-peer and student-to-educator interactions with their globally mobile cohort of students (Doll et al., 2021). While it is too early to understand the impact that school closures and online learning may have had on long-term learning outcomes with international students, research suggests those with lowered engagement and connectedness may report poorer learning outcomes (Organisation for Economic Cooperation and Development, 2017). This information contributes to international education research by suggesting that adjustment may be even more complicated as a result of the effect of online learning on learning outcomes for these students. These findings not only raise awareness of a group of students who may benefit from further support but also highlight the importance of examining learning processes in supporting early-adolescent international students during periods of adjustment.

### **6.5.3 Implications for Mindfulness-Based Intervention Research**

The study addressed the need for MBI research to be conducted specifically with early-adolescent students, given the limited empirical evidence-based research conducted with this age group of students (McKeering & Hwang, 2019). In doing so, it addressed some of the methodological limitations identified in MBI research to date and the need for program delivery to promote wellbeing with international students (Thomas et al., 2021). By bridging the gap in the limited information on MBI research conducted with both early-adolescent students and international students, the study findings provide information to enable better support for this student group.

Given that previous findings have been inconsistent, with some reporting that MBI dosage may moderate effects on psychosocial health and wellbeing constructs (Dunning et al., 2019), which contradicts with other review findings (e.g., Klingbeil et al., 2017), this study contributes to the field by providing new information on MBI dosage effects with this age group. MBI dosage was increased in this study by extending the 10-lesson *.b* program to 16 lessons, which is the first time an increased dosage of the *.b* mindfulness program has been examined with this age group. Findings reported positive effects on psychosocial health and wellbeing constructs from the 16-lesson *.b* mindfulness program in this study, which contradicts with prior research findings on the 10-lesson *.b* mindfulness program with the same age group of students (e.g., Johnson et al., 2016, 2017; Johnson & Wade, 2021). The findings also align with MBI research with another mindfulness program delivered, the *Learning to Breathe* (L2B) program, which found that dosage of the program moderated the effects reported in adolescent students. For example, no effects were reported in a 7-lesson program (Felder et al., 2019) and only moderate effects were reported in a 9-lesson program (Volanen et al., 2020) compared with significant effects reported in an 11-lesson (Bluth et al., 2016) and 12-lesson L2B program (Fung et al., 2016). These findings provide empirical evidence for the notion posited by several researchers (e.g., Johnson & Wade, 2019; Volanen et al., 2020) that

younger-aged adolescents may benefit from increased classroom dosage of mindfulness in an MBI program.

Student qualitative findings also provide new information on components of the program they engaged with, which can be used to inform the development of future MBI programs. For example, while student narratives highlighted several *.b* practices they enjoyed, the mindful breathing exercises were identified as the most frequently used practice. Support for mindful breathing as an effective mindfulness practice has recently been reported in other MBI research with adolescents (Schussler et al., 2021), suggesting the importance of including this practice over other practices (e.g., mindful walking or eating practices) in future MBI programs with this age group. This is also valuable to consider in light of adopting a long-term whole-school approach to promote optimal functioning with this student group. By employing mindful breathing in the daily lives of these students, mindfulness can be integrated into regular classroom activities in a developmentally appropriate manner (Tan, 2016). This is relevant given that sustainability of practices after an intervention is necessary to support positive outcomes (Bergomi et al., 2015). Employing short mindful breathing exercises during the school day, such as on re-entering the classroom after lunchbreak, may provide a feasible and easy way to continue to incorporate mindfulness practices into the school routine on completion of the program.

Furthermore, findings provide new information on how MBI practices may specifically support those experiencing mobility and transition. Student narratives identified they had employed, or were likely to employ, the mindfulness practices as a way to regulate their emotions when experiencing negative thoughts or feelings associated with moving. Specifically, they reported using the practices to help them feel more settled when experiencing difficulties, such as when saying goodbye to friends when moving. These findings contribute to MBI research by recognising that, through the MBI program, students acquired specific skills they could employ to foster their own psychosocial health and wellbeing. This information has



implications regarding the suitability of MBI programs in supporting other groups experiencing transition and adjustment.

## **6.6 Limitations of the Thesis**

General limitations exist with the study, including the real-world constraints associated with conducting research within educational settings. These include limitations in student recruitment and attrition in the study. As participation was voluntary, requiring both parent and student consent/assent, and the MBI program was only offered as a lunchtime elective, the students who participated in the study may not have been representative of all early-adolescent students at the school. In addition, only one international school participated in the study. Considering this, selection bias may have occurred, as participants from the study may not have represented the target population. Additionally, limitations exist given that the small sample size in the study may have decreased statistical power (Creswell, 2015). Future research would need to include early-adolescent international students from international schools across a range of countries before any conclusions could be generalised to the wider international school sector. An increased level of student participation from more schools in future research would also address the limitations associated with the small sample size in this study. Additionally, findings may be limited due to attrition during the study and exclusion of participants from data analysis who did not attend the minimum number of lessons required (as outlined in Section 5.2.1). It could be argued that students who did not attend the minimum number of MBI lessons did so for a particular reason (e.g., dissatisfaction with the program), and exclusion of this information in the data findings omits valuable contextual information. Future research may benefit from additional analysis to explore attrition in more detail.

Limitations also exist in the research design of the study. For example, while the pragmatic research approach adopted for this study enabled the researcher to incorporate numerous factors in the research, determining how to order different types of data collected and

when to proceed in the sequential design was difficult. Time constraints were also imposed by the school on when research could be conducted. Given this, a cross-sectional design was employed by the researcher in the first phase of the study because it could be implemented in the short time frame allocated by the school to complete that phase of the research. However, this design prevented the researcher from examining effects over time. Future research may benefit from a longitudinal design to better examine causality and effects over time on the constructs of interest.

Finally, the role of the researcher in the study may have attributed to social desirability bias in the findings reported. As the researcher not only delivered the intervention program but also conducted the interviews with students, it is possible students adapted their answers to be more socially acceptable to the researcher. In this study, the researcher made special effort to minimise such bias by engaging in a supportive and open dialogue with the participants. This included asking open-ended questions, sharing aspects about her own experiences, and ensuring neutrality in her verbal and nonverbal behaviour throughout the interviews. Future research may minimise the risk of social desirability bias by recruiting an independent person to conduct the interviews. However, the strong rapport established between the researcher and students during the program and interviews was also identified as an advantage in gathering rich data during the course of the interview (Frey, 2018).

## **6.7 Future Research Directions**

The findings and theoretical contributions of the study can be used to inform future research in the field. Such research may benefit from expanding the conceptual framework proposed in this study. This could be done by reframing the idea of adjustment in future research with early-adolescent international students. While the notion of adjustment in this research has been largely confined to examining the psychological processes of adjustment, the expansion of this framework to include other processes would provide a more comprehensive

framework. A future conceptual model of adjustment with early-adolescent international students may benefit from the inclusion of learning as a process, alongside social and psychological processes. With such an inclusion, a more complex framework of how early-adolescent international students may thrive during periods of transition and adjustment could be examined through academic/cognitive, social, and affective dimensions.

An expanded model could aim to include other constructs identified as relevant in the adjustment of early-adolescent students within the international school environment. This includes examination of other positive psychology constructs that have been identified as relevant to adjustment, such as self-esteem, hope, and optimism. It also encompasses social processes that may affect adjustment, including perceived social support and students' interactions with peers and teachers. Additionally, learning processes should be examined given the association between positive psychology constructs and learning outcomes and the disparity identified in the different learning processes between school-aged and tertiary-aged international students (e.g., class sizes, online learning, new curriculum). By expanding the notion of adjustment with early-adolescent international students to include relevant constructs in learning, social, and psychological processes, a broader overview of the research problem could be examined.

Future research in the field may also benefit from addressing some of the methodological limitations identified in this study. For example, increasing the sample size in future research would result in greater statistical power to examine how other contextual factors may moderate or mediate the effect of an MBI on the constructs of interest. This could include examining the effect of an MBI on wellbeing (e.g., engagement and connectedness) and student engagement (behavioural engagement) subscales, which were identified as relevant in Phase 1 of this study. Subsequent research could also benefit from identifying whether there may be more appropriate measures to use with this cohort of students. For example, the newly created PASS tool (GL Education 2020) for measuring student engagement and wellbeing may be more

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relevant given that it has been designed specifically for use with international students. Additionally, future research should aim to identify whether a more suitable proxy measure could be employed to collect parent and teacher data, as the behavioural and emotional functioning construct measure used in this study (e.g., Strengths and Difficulties Questionnaire; Goodman, 1997) does not aim to promote positive mental health traits within a positive psychology framework.

### **6.7.1 Mindfulness-Based Intervention Research**

Considering the differences reported across the studies that have implemented the *.b* mindfulness program, and the variations in intervention dosage in these studies, future research could benefit from examining this particular mindfulness program further. A meta-analysis with the four studies that have to date employed the *.b* mindfulness program with early-adolescent students may provide valuable information on differences between the studies. Future MBI research with this age group may also benefit from examining specific elements of an MBI program to determine which facets of the program (e.g., observing, describing, acting with awareness) may influence the constructs of interest. Additionally, a comparison of different elements of an MBI program using a dismantling design (Jacobson et al., 1996) could determine which components of the program may benefit the student. For example, one group could participate in the complete *.b* mindfulness program employed in this study, while another group could participate in a shorter program that includes all the mindfulness exercises of the *.b* program (e.g., experiential learning) but without the teacher-led PowerPoint slides used in the *.b* program for each lesson (e.g., didactic learning). This design could provide information on the extent to which each of the program components adds value (Ciarrochi et al., 2016). In considering future MBI research with international students specifically, introducing mobility as a moderator variable may help to determine the strength of MBI effects on positive psychology constructs dependent on the period of time the student has attended the school

and/or resided in the country. This could also be employed with other contextual effects identified as relevant in the field of research in order to better understand how individual contextual factors may moderate the effect of an MBI program on constructs of interest.

## **6.8 Conclusions**

This thesis aimed to better understand and promote wellbeing, student engagement, and resilience in early-adolescent international students given the high rates of mobility and transition they experience. Adopting a sequential explanatory mixed-methods design, the study aimed to address a gap in adjustment research with this cohort by identifying constructs that may promote optimal functioning in this student group. In doing so, it identified the importance of wellbeing, student engagement, and resilience constructs, given their association with each other and with adjustment. The study also identified a cohort of students who may be at risk, given mobility and demographic contextual factors. This knowledge provided justification for the implementation of an MBI program in this study as a possible strategy to support this student group. The MBI was reported to promote psychosocial health and wellbeing in students who participated in the program, suggesting it may foster optimal functioning within this student group.

The study findings provide theoretical contributions to the field of research. The identification of positive psychology constructs provides new information on ways to support early-adolescent international students with adjustment. In doing so, the study addresses conceptual limitations within the international education sector to date, which has largely centred around negative psychological factors. By identifying relevant constructs that can promote optimal functioning in early-adolescent international students in a single study, this research provides new information on ways to enable this student group to thrive and flourish, despite the ongoing adjustments they experience. The interrelated association between these positive psychology constructs, and the effect that contextual factors have on wellbeing, student

engagement, and resilience in early-adolescent international students, bridges the gap in the limited research conducted in this field to date. It also highlights the dynamic and fluid nature of these constructs with early-adolescent international students. Although the study only examined mobility and demographic factor effects, the differences reported between this study with early-adolescent students and prior research with tertiary-aged international students suggests there may be different contextual factors that affect these constructs differently between the two student groups.

The findings are also important in the field of international education research. By identifying a cohort of at-risk students and a period of time in which they may benefit most from support, this study provides new information to the field of research. It also highlights the need for international schools to be responsive to this knowledge by delivering programs and strategies to support this student group. Identifying ways to support these students with the thoughts or feelings they experience during mobility and transition can positively influence their experiences as an international student. This is important to consider given that many countries are considering ways to enhance and sustain growth within the international education sector. Identifying an at-risk cohort of students and providing effective strategies to promote their experiences as international students is a step forward in facilitating such growth. Additionally, given the positive association reported between wellbeing and learning outcomes, the promotion of constructs in this study may not only contribute to positive long-term educational outcomes for the individual students but also foster a more positive learning environment within the international school they attend. In this way, the study findings highlight possible long-term benefits associated with supporting this student group within the international school sector.

The study also provides practical information for educational professionals working with early-adolescent international students. As the *.b* program was identified as a suitable program to promote psychosocial health and wellbeing in the students, it provides an empirical

evidence-based approach to support this at risk cohort of students. The program also offers a cost-effective and universal way for international schools to support all students to thrive within their highly mobile school environment. The study findings offer practical information on dosage of the program and the mindfulness practices students engaged with the most frequently. This provides practical information on ways international educators can embed the program into regular classroom activities to promote long-term outcomes with students.

Although an MBI program is only one possible strategy that could be employed to support this student group, it also provides a path forward in advocating for better support programs to be implemented with this student group.

In conclusion, the empirical findings from the study contribute valuable information on ways in which early-adolescent international students can thrive in the highly mobile international school environment. Recommendations from the study may also inform future research within the international school sector and in the field of mindfulness-based research. The research findings of this thesis provide practical and cost-effective strategies for policymakers and practitioners within the international school sector to better support this student group, at least until more solid empirical-evidence-based research is conducted in this field. As such, this study can ultimately inform policy development within international schools and strengthen psychological, social, and educational support for young people in this sector.

## References

- Ackerman, C. (2021). *What is positive psychology and why is it important?*  
<https://positivepsychology.com/what-is-positive-psychology-definition/>
- Ackerman, C. (2022). *7 great benefits of mindfulness in positive psychology.*  
PositivePsychology.com. <https://positivepsychology.com/mindfulness-positive-psychology-3-great-insights/>
- Adler, A. (2016). *Teaching well-being increases academic performance: Evidence from Bhutan, Mexico, and Peru.* (Publication No. 1572) [Doctoral dissertation, University of Pennsylvania]. Publicly Accessible Penn Dissertations.  
<https://repository.upenn.edu/edissertations/1572>
- Ager, K., Albrecht, N. J., & Cohen, M. (2015). Mindfulness in schools research project: Exploring students' perspectives of mindfulness. *Psychology, 6*(7), 896–914.  
<https://doi.org/10.4236/psych.2015.67088>
- Alharbi, E. & Smith, A. (2018). Review of the literature on stress and wellbeing of international students in English-speaking countries. *International Education Studies, 11*(6), 22–44. <https://doi.org/10.5539/ies.v11n6p22>
- Alharbi, E., & Smith, A. (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. <https://doi.org/10.31757/euer.215>
- Althubaiti, A. (2016). Information bias in health research: Definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare, 9*, 211–217.  
<https://doi.org/10.2147/JMDH.S104807>
- Altinyelken, H. K. (2018). Promoting the psycho-social well-being of international students through mindfulness: A focus on regulating difficult emotions. *Contemporary Buddhism, 19*(2), 185–202. <https://doi.org/10.1080/14639947.2019.1572306>
- Amat, S., Subhan, M., Jaafar, W. M., Mahmud, Z., & Johari, K. S. (2014). Evaluation and psychometric status of the brief resilience scale in a sample of Malaysian international students. *Asian Social Science, 10*(18), 240–245.  
<https://doi.org/10.5539/ass.v10n18p240>
- American Association for Public Opinion Research. (2020). *Response rates: An overview.*  
<https://www.aapor.org/Education-Resources/For-Researchers/Poll-Survey-FAQ/Response-Rates-An-Overview.aspx>



- American Psychological Association. (2012). *Building your resilience*.  
<https://www.apa.org/topics/resilience>
- American Psychological Association. (2021). *Dictionary*. <https://dictionary.apa.org/optimal-functioning>
- Amico K. R. (2009). Percent total attrition: A poor metric for study rigor in hosted intervention designs. *American Journal of Public Health, 99*(9), 1567–1575.  
<https://doi.org/10.2105/AJPH.2008.134767>
- Ang, R., Huan, V., Chan, W., Cheong, S. A., & Leaw, J. N. (2015). The role of delinquency, proactive aggression, psychopathy and behavioral school engagement in reported youth gang membership. *Journal of Adolescence, 41*, 148–156.  
<https://doi.org/10.1016/j.adolescence.2015.03.010>
- Applied Positive Psychology Learning Institute. (2021). *What is positive psychology?*  
<https://appli.edu.au/what-is-positive-psychology>
- Arthurson, K. (2015). Teaching mindfulness to year sevens as part of health and personal development. *Australian Journal of Teacher Education, 40*(5), 27–40.  
<https://doi.org/10.14221/ajte.2015v40n5.2>
- Australian Government Department of Education, Skills, and Employment. (2021). *Australian strategy for international education 2021–2030*. <https://www.dese.gov.au/australian-strategy-international-education-2021-2030/resources/australian-strategy-international-education-2021-2030>
- Azila-Gbettor, E. M., Mensah, C., Atatsi, E. A., & Abiemo, M. K. (2021). Predicting students' engagement from hope and mindfulness. *Journal of Applied Research in Higher Education*. Advance online publication. <https://doi.org/10.1108/JARHE-02-2021-0068>
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky inventory of mindfulness skills. *Assessment, 11*(3), 191–206.  
<https://doi.org/10.1177/1073191104268029>
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*(1), 27–45.  
<https://doi.org/10.1177/1073191105283504>
- Bailey, L. (2015). The experiences of host country nationals in international schools: A case-study from Malaysia. *Journal of Research in International Education, 14*(2), 85–97.  
<https://doi.org/10.1177/1475240915590557>

- Bamford, M. (2020). *International students face life-changing decisions as COVID-19 takes its toll*. ABC Radio Sydney. <https://www.abc.net.au/news/2020-05-12/coronavirus-impact-on-international-students/12224752>
- Bannirchelvam, B., Bell, K. L., & Costello, S. (2017). A qualitative exploration of primary school students' experience and utilisation of mindfulness. *California School Psychologist, 21*(4), 304–316. <https://doi.org/10.1007/s40688-017-0141-2>
- Barnes, V., Davis, H., Murzynowski, J., & Treiber, F. (2004). Impact of meditation on resting and ambulatory blood pressure and heart rate in youth. *Psychosomatic Medicine, 66*(6), 909–914. <https://doi.org/10.1097/01.psy.0000145902.91749.35>
- Bartlett, R., Wright, T., Olarinde, T., Holmes, T., Beamon, E. R., & Wallace, D. (2017). Schools as sites for recruiting participants and implementing research. *Journal of Community Health Nursing, 34*(2), 80–88. <https://doi.org/10.1080/07370016.2017.1304146>
- Baumfield, V., Hall, E., & Wall, K. (2008). *Action research in the classroom*. SAGE Publications. <https://dx.doi.org/10.4135/9780857024305>
- Baxter, A. (2019). Engaging underrepresented international students as partners: Agency and constraints among Rwandan students in the United States. *Journal of Studies in International Education, 23*(1), 106–122. <https://doi.org/10.1177/1028315318810858>
- Béné, C., Wood, G., Newsham, A., & Davies, M. (2012). Resilience: New utopia or new tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes. *IDS Working Papers, 2012*(405), 1–61. <https://doi.org/10.1111/j.2040-0209.2012.00405.x>
- Bergomi, C., Tschacher, W., & Kupper, Z. (2015). Meditation practice and self-reported mindfulness: A cross-sectional investigation of meditators and non-meditators using the Comprehensive Inventory of Mindfulness Experiences (CHIME). *Mindfulness, 6*(6), 1411–1421. <https://doi.org/10.1007/s12671-015-0415-6>
- Bernay, R., Graham, E., Devcich, D. A., Rix, G., & Rubie-Davies, C. M. (2016). Pause, breathe, smile: A mixed methods study of student well-being following participation in an eight-week, locally developed mindfulness program in three New Zealand schools. *Advances in School Mental Health Promotion, 9*(2), 90–106. <https://doi.org/10.1080/1754730X.2016.1154474>
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology, 46*(1), 5–34. <https://doi.org/10.1111/j.1464-0597.1997.tb01087.x>

- Berry, J. G., Ryan, P., Gold, M. S., Braunack-Mayer, A. J., & Duszynski, K. M. (2012). A randomised controlled trial to compare opt-in and opt-out parental consent for childhood vaccine safety surveillance using data linkage. *Journal of Medical Ethics*, 38(10), 619–625. <https://doi.org/10.1136/medethics-2011-100145>
- Bharara, G. (2020). Factors facilitating a positive transition to secondary school: A systematic literature review. *International Journal of School & Educational Psychology*, 8(S1), 104–123. <https://doi.org/10.1080/21683603.2019.1572552>
- Biesta, G. (2010). Pragmatism and the philosophical foundations of mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *SAGE handbook of mixed methods in social and behavioural research* (2nd ed., pp. 95–118). SAGE Publications.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241. <https://doi.org/10.1093/clipsy.bph077>
- Bluth, K., & Blanton, P. W. (2014). Mindfulness and self-compassion: Exploring pathways to adolescent emotional well-being. *Journal of Child and Family Studies*, 23(7), 1298–1309. <https://doi.org/10.1007/s10826-013-9830-2>
- Bluth, K., Gaylord, S. A., Campo, R. A., Mullarkey, M. C., & Hobbs, L. (2016). Making friends with yourself: A mixed methods pilot study of a mindful self-compassion program for adolescents. *Mindfulness*, 7(2), 479–492. <https://doi.org/10.1007/s12671-015-0476-6>
- Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health* 13(119). <https://doi.org/10.1186/1471-2458-13-119>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Brinkmann, S. (2018). The interview. In N. Denzin & Y. Lincoln (Eds.), *The SAGE handbook of qualitative research* (5th ed., pp. 576–599). SAGE Publications.
- Britton, W. B., Lepp, N. E., Niles, H. F., Rocha, T., Fisher, N. E., & Gold, J. S. (2014). A randomised controlled pilot trial of classroom-based mindfulness meditation compared

- to an active control condition in sixth-grade children. *Journal of School Psychology*, 52(3), 263–278. <https://doi.org/10.1016/j.jsp.2014.03.002>
- Brown, A. (2017, November 17). *Positive transitioning: Supporting the transition into a life after school*. Positive Psychology. <https://positivepsychology.com/positive-transitioning-life-after-school/>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Bru, E., Virtanen, T., Kjetilstad, V., & Niemiec, C. (2021). Gender differences in the strength of association between perceived support from teachers and student engagement. *Scandinavian Journal of Educational Research*, 65(1), 153–168. <https://doi.org/10.1080/00313831.2019.1659404>
- Bücker, S., Nuraydin, S., Simonsmeier, B. A., Schneider, M., & Luhmann, M. (2018). Subjective well-being and academic achievement: A meta-analysis. *Journal of Research in Personality*, 74, 83–94. <https://doi.org/10.1016/j.jrp.2018.02.007>
- Burke, C. (2010). Mindfulness-based approaches with children and adolescents: A preliminary review of current research in an emergent field. *Journal of Child and Family Studies*, 19(2), 133–144. <https://doi.org/10.1007/s10826-009-9282-x>
- Carsley, D., Khoury, B., & Heath, N. L. (2018). Effectiveness of mindfulness interventions for mental health in schools: A comprehensive meta-analysis. *Mindfulness*, 9(3), 693–707. <https://doi.org/10.1007/s12671-017-0839-2>
- Carter, M., & McNulty, Y. (2014). International school teachers' professional development in response to the needs of third culture kids in the classroom. In B. Christiansen (Ed.), *Handbook of Research on Global Business Opportunities* (pp. 367–389). IGI Global.
- Cemalcilar, Z., & Falbo, T. (2008). A longitudinal study of the adaptation of international students in the United States. *Journal of Cross-Cultural Psychology*, 39(6), 799–804. <https://doi.org/10.1177/0022022108323787>
- Centers for Disease Control and Prevention. (2021). *International travel during COVID-19*. <https://www.cdc.gov/coronavirus/2019-ncov/travelers/international-travel-during-covid19.html>
- Cheung, C., & Yue, X. D. (2013). Sustaining resilience through local connectedness among sojourn students. *Social Indicators Research*, 111(3), 785–800. <https://doi.org/10.1007/s11205-012-0034-8>

- Chiesa, A., Fazio, T., Bernardinelli, L., & Morandi, G. (2017). Citation patterns and trends of systematic reviews about mindfulness. *Complementary Therapies in Clinical Practice*, 28, 26–37. <https://doi.org/10.1016/j.ctcp.2017.04.006>
- Chiesi, F., Dellagiulia, A., Lionetti, F., Bianchi, G., & Primi, C. (2017). Using item response theory to explore the psychometric properties of the Italian version of the child and adolescent mindfulness measure (CAMM). *Mindfulness*, 8(2), 351–360. <https://doi.org/10.1007/s12671-016-0604-y>
- Ciarrochi J., Atkins, P. W. B., Hayes, L. L., Sahdra, B. K., & Parker, P. (2016). Contextual positive psychology: Policy recommendations for implementing positive psychology into schools. *Frontiers in Psychology*, 7, 1561. <https://doi.org/10.3389/fpsyg.2016.01561>
- Cilar, L., Štiglic, G., Kmetec, S., Barr, O., & Pajnkihar, M. (2020). Effectiveness of school-based mental well-being interventions among adolescents: A systematic review. *Journal of Advanced Nursing*, 76(8), 2023–2045. <https://doi.org/10.1111/jan.14408>
- Cockburn, L. (2002). Children and young people living in changing worlds: The process of assessing and understanding the ‘Third culture kid’. *School Psychology International*, 23(4), 475–485. <https://doi.org/10.1177/0143034302234008>
- Coelho G. L. H., Cavalcanti, T. M., Rezende, A. T., & Gouveia, V. V. (2016). Brief resilience scale: Testing its factorial structure and invariance in Brazil. *Universitas Psychologica*, 15(2), 397–408. <https://doi.org/10.11144/Javeriana.upsyl5-2.brst>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). L. Erlbaum Associates.
- Collaborative for Academic, Social and Emotional Learning. (2017). *Fundamentals of SEL*. <https://casel.org/fundamentals-of-sel/>
- Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M. Gunnar & L. A. Sroufe (Eds.), *Minnesota Symposia on Child Psychology*, 23 (pp. 43–77). Lawrence Erlbaum Associates.
- Costello, E., & Lawler, M. (2014). An exploratory study of the effects of mindfulness on perceived levels of stress among school-children from lower socioeconomic backgrounds. *The International Journal of Emotional Education*, 6(2), 21–39. <https://files.eric.ed.gov/fulltext/EJ1085614.pdf>

- Coulombe, S., Hardy, K., & Goldfarb, R. (2020). Promoting wellbeing through positive education: A critical review and proposed social ecological approach. *Theory and Research in Education*, 18(3), 295–321. <https://doi.org/10.1177/1477878520988432>
- Cowie, H., & Pecherek, A. (1994). *Counselling: Approaches and issues in education*. Routledge.
- Coyne, I. (2010). Research with children and young people: The issue of parental (proxy) consent. *Children & Society*, 24(3), 227–237. <https://doi.org/10.1111/j.1099-0860.2009.00216.x>
- Crane, R. S., Kuyken, W., Williams, J. M., Hastings, R. P., Cooper, L., & Fennell, M. J. (2012). Competence in teaching mindfulness-based courses: Concepts, development and assessment. *Mindfulness*, 3(1), 76–84. <https://doi.org/10.1007/s12671-011-0073-2>
- Creswell, J. W. (1998). *Qualitative inquiry and research design*. SAGE Publications.
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Pearson Education.
- Creswell, J. W. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson Education.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Crockett, L. J., Petersen, A. C., Graber, J. A., Schulenberg, J. E., & Ebata, A. (1989). School transitions and adjustment during early adolescence. *The Journal of Early Adolescence*, 9(3), 181–210. <https://doi.org/10.1177/0272431689093002>
- Culver, J. (2015). *Relationship quality and student engagement* [Unpublished doctoral dissertation]. Wayne State University.
- Cunha, M., Galhardo, A., & Pinto-Gouveia, J. (2013). Child and adolescent mindfulness measure (CAMM): estudo das características psicométricas da versão portuguesa. *Psicologia, reflexão e crítica*, 26(3), 459–468. <https://doi.org/10.1590/S0102-79722013000300005>
- Cunningham, J. A., Kypri, K., & McCambridge, J. (2013). Exploratory randomized controlled trial evaluating the impact of a waiting list control design. *BMC Medical Research Methodology*, 13(1), 150. <https://doi.org/10.1186/1471-2288-13-150>

- Davis, T. S. (2012). Mindfulness-based approaches and their potential for educational psychology practice. *Educational Psychology in Practice*, 28(1), 31–46.  
<https://doi.org/10.1080/02667363.2011.639348>
- de Bruin, E. I., Meppelink, R., & Bögels, S. M. (2015). Mindfulness in higher education: Awareness and attention in university students increase during and after participation in a mindfulness curriculum course. *Mindfulness*, 6(5), 1137–1142.  
<https://doi.org/10.1007/s12671-014-0364-5>
- Denkova, E., Zanesco, A. P., Rogers, S. L., & Jha, A. P. (2020). Is resilience trainable? An initial study comparing mindfulness and relaxation training in firefighters. *Psychiatry Research*, 285, 112794. <https://doi.org/10.1016/j.psychres.2020.112794>
- Dewey, J. (1938). *The theory of inquiry*. Holt, Rinehart & Winston.
- Dillon, A., & Ali, T. (2019). Global nomads, cultural chameleons, strange ones or immigrants? An exploration of Third Culture Kid terminology with reference to the United Arab Emirates. *Journal of Research in International Education*, 18(1), 77–89.  
<https://doi.org/10.1177/1475240919835013>
- Dillon, D. R., O'Brien, D., & Heilman, E. (2000). Literacy research in the next millennium: From paradigms to pragmatism and practicality. *Reading Research Quarterly* 35(1), 10–26. <https://doi.org/10.1598/RRQ.35.1.2>
- Dixon, P., & Hayden, M. (2008). 'On the move': Primary age children in transition. *Cambridge Journal of Education*, 38(4), 483–496. <https://doi.org/10.1080/03057640802489418>
- Doll, K., Ragan, M., Calnin, G., Mason, S., & House, K. (2021). Adapting and enduring: Lessons learned from international school educators during COVID-19. *Journal of Research in International Education*, 20(2), 114–133.  
<https://doi.org/10.1177/14752409211034399>
- Donaldson, S. I., Dollwet, M., & Rao, M. A. (2015) Happiness, excellence, and optimal human functioning revisited: Examining the peer-reviewed literature linked to positive psychology, *The Journal of Positive Psychology*, 10(3), 185–195.  
<https://doi.org/10.1080/17439760.2014.943801>
- Dray, J., Bowman, J., Campbell, E., Freund, M., Hodder, R., Wolfenden, L., Richards, J., Leane, C., Green, S., Lecathelinais, C., Oldmeadow, C., Attia, J., Gillham, K., & Wiggers, J. (2017). Effectiveness of a pragmatic school-based universal intervention targeting student resilience protective factors in reducing mental health problems in adolescents. *Journal of Adolescence*, 57(1), 74–89.  
<https://doi.org/10.1016/j.adolescence.2017.03.009>

- Dray, J., Bowman, J., Freund, M., Campbell, E., Wolfenden, L., Hodder, R., & Wiggers, J. (2014). Improving adolescent mental health and resilience through a resilience-based intervention in schools: Study protocol for a randomised controlled trial. *Trials*, *15*(1), 289. <https://doi.org/10.1186/1745-6215-15-289>
- Dunkel, C., & Sefcek, J. (2009). Eriksonian lifespan theory and life history theory: An integration using the example of identity formation. *Review of General Psychology*, *13*(1), 13–23. <https://doi.org/10.1037/a0013687>
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, *319*, 1687–1688. <https://doi.org/10.1126/science.1150952>
- Dunning, D. L., Griffiths, K., Kuyken, W., Crane, C., Foulkes, L., Parker, J., & Dalgleish, T. (2019). Research review: The effects of mindfulness-based interventions on cognition and mental health in children and adolescents – a meta-analysis of randomized controlled trials. *Journal of Child Psychology and Psychiatry*, *60*(3), 244–258. <https://doi.org/10.1111/jcpp.12980>
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Simon and Schuster.
- Eakin, K. B. (1998). *According to my passport, I'm coming home*. US Department of State, Family Liaison Office. <https://1997-2001.state.gov/flo/paper14.pdf>
- Easthope, H. (2009). Fixed identities in a mobile world? The relationship between mobility, place, and identity. *Identities: Global Studies in Culture and Power*, *16*(1), 61–82. <http://dx.doi.org/10.1080/10702890802605810>
- Elliot, D. E., Reid, K., & Baumfield, V. (2016). Beyond the amusement, puzzlement and challenges: An enquiry into international students' academic acculturation. *Studies in Higher Education*, *41*(12), 2198–2217. <https://doi.org/10.1080/03075079.2015.1029903>
- Embretson, S. E. (2010). *Measuring psychological constructs: Advances in model-based approaches*. American Psychological Association.
- Emerson, L-M., de Diaz, N. N., Sherwood, A., Waters, A., & Farrell, L. (2020). Mindfulness interventions in schools: Integrity and feasibility of implementation. *International Journal of Behavioral Development*, *44*(1), 62–75. <https://doi.org/10.1177/0165025419866906>
- Enders, C. K. (2003). Using the expectation maximization algorithm to estimate coefficient alpha for scales with item-level missing data. *Psychological Methods*, *8*(3), 322–337. <https://doi.org/10.1037/1082-989X.8.3.322>
- Erhart, M., Ellert, U., Kurth, B. M., & Ravens-Sieberer, U. (2009). Measuring adolescents' HRQoL via self reports and parent proxy reports: An evaluation of the psychometric



- properties of both versions of the KINDL-R instrument. *Health and Quality of Life Outcomes*, 7(77), 1–12. <https://doi.org/10.1186/1477-7525-7-77>
- Erikson, E. (1963). *Childhood and society* (2nd ed.). Norton & Co.
- Erikson, E. (1980). *Identity and the life cycle* (2nd ed.). Norton & Co.
- Espil, F. M., Rettger, J. P., Weems, C. F., Neill, E. L., & Carrion, V. G. (2021). Measuring the fidelity of a school-based yoga and mindfulness curriculum for youth: A transdisciplinary feasibility study. *Child Youth Care Forum*, 50(1), 57–75. <https://doi.org/10.1007/s10566-020-09558-1>
- Fail, H., Thompson, J., & Walker, G. (2004). Belonging, identity and third culture kids: Life histories of former international school students. *Journal of Research in International Education*, 3(3), 319–338. <https://doi.org/10.1177/1475240904047358>
- Farrugia, C.A. (2014). *Charting new pathways to higher education: International secondary students in the United States*. Center for Academic Mobility Research, Institute of International Education. <https://www.iie.org/Research-and-Insights/Publications/Charting-New-Pathways-To-Higher-Education-International-Secondary-Students-In-The-United-States>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. <https://doi.org/10.3758/BF03193146>
- Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, 4(1), 6–16. <https://doi.org/10.1177/1558689809349691>
- Feldman, R. S. (2011). *Understanding Psychology* (10th ed.). McGraw-Hill.
- Feldman, G., Dunn, E., Stemke, C., Bell, K., & Greeson, J. (2014). Mindfulness and rumination as predictors of persistence with a distress tolerance task. *Personality and Individual Differences*, 56, 154–158. <https://doi.org/10.1016/j.paid.2013.08.040>
- Felver, J. C., Celis-de Hoyos, C. E., Tezanos, K., & Singh, N. N. (2016). A systematic review of mindfulness-based interventions for youth in school settings. *Mindfulness*, 7(1), 34–45. <https://doi.org/10.1007/s12671-015-0389-4>
- Felver, J. C., Clawson, A. J., Morton, M. L., Brier-Kennedy, E., Janack, P., & DiFlorio, R. A. (2019). School-based mindfulness intervention supports adolescent resiliency: A randomized controlled pilot study. *International Journal of School & Educational Psychology*, 7(sup1), 111–122. <https://doi.org/10.1080/21683603.2018.1461722>

- Felver, J. C., Doerner, E., Jones, J., Kaye, N. C., & Merrell, K. W. (2013). Mindfulness in school psychology: Applications for intervention and professional practice. *Psychology in the Schools, 50*(6), 531–547. <https://doi.org/10.1002/pits.21695>
- Felver, J. C., & Jennings, P. A. (2016). Applications of mindfulness-based interventions in school settings: An introduction. *Mindfulness, 7*(1), 1–4. <https://doi.org/10.1007/s12671-015-0478-4>
- Feuerborn, L. L., & Gueldner, B. (2019). Mindfulness and social-emotional competencies: Proposing connections through a review of the research. *Mindfulness, 10*(9), 1707–1720. <https://doi.org/10.1007/s12671-019-01101-1>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117–142. <https://doi.org/10.2307/1170412>
- Flook, L., Goldberg, S. B., Pinger, L., & Davidson, R. J. (2015). Promoting prosocial behavior and self-regulatory skills in children through a mindfulness-based kindness curriculum. *Developmental Psychology, 51*(1), 44–51. <https://doi.org/10.1037/a0038256>
- Flook, L., Smalley, S. L., Kitil, M. J., Galla, B. M., Kaiser-Greenland, S., Locke, J., Ishijima, E., & Kasari, C. (2010). Effects of mindful awareness practices on executive functions in elementary school children. *Journal of Applied School Psychology, 26*(1), 70–95. <https://doi.org/10.1080/15377900903379125>
- Forbes-Mewett, H., & Sawyer, A-M. (2011). *Mental health issues amongst international students in Australia: Perspectives from professionals at the coal-face*. The Australian Sociological Association Conference, University of Newcastle. November 29 – December 2. <http://www.campusreview.com.au/wp-content/uploads/2011/11/Mental-Health-Issues-among-International-Students-in-Australia.pdf>
- Fowler, J. H., & Christakis, N. A. (2008). Dynamic spread of happiness in a large social network: Longitudinal analysis over 20 years in the Framingham Heart Study. *The British Medical Journal, 337*, 2191–a2338. <https://doi.org/10.1136/bmj.a2338>
- Frank, J. L., Broderick, P. C., Oh, Y., Mitra, J., Kohler, K., Schussler, D. L., Geier, C., Roeser, R. W., Berrena, E., Mahfouz, J., Levitan, J., & Greenberg, M. T. (2021). The effectiveness of a teacher-delivered mindfulness-based curriculum on adolescent social-emotional and executive functioning. *Mindfulness, 12*(5), 1234–1251. <https://doi.org/10.1007/s12671-021-01594-9>

- Fredricks, J. A., Blumenfeld, P. C., Friedel, J., & Paris, A. (2005). School engagement. In K. A. Moore & L. Lippman (Eds.), *What do children need to flourish: Conceptualizing and measuring indicators of positive development* (pp. 305-321). Springer.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Fredricks, J., & McColskey, W. (2012). The measurement of student engagement: A comparative analysis of various methods and student self-report instruments. In S. Christenson, A. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 763–782). Springer.
- Frey, B. (2018). *The SAGE encyclopedia of educational research, measurement, and evaluation* (Vols. 1–4). SAGE Publications. <https://doi.org/10.4135/9781506326139>
- Funder, D. C., & Ozer, D. J. (2019). Evaluating effect size in psychological research: Sense and nonsense. *Advances in Methods and Practices in Psychological Science*, 2(2), 156–168. <https://doi.org/10.1177/2515245919847202>
- Fung, J., Guo, S., Jin, J., Bear, L., & Lau, A. (2016). A pilot randomized trial evaluating a school-based mindfulness intervention for ethnic minority youth. *Mindfulness*, 7(4), 819–828. <https://doi.org/10.1007/s12671-016-0519-7>
- Fung, J., Kim, J. J., Jin, J., Chen, G., Bear, L., & Lau, A. S. (2019). A randomized trial evaluating school-based mindfulness intervention for ethnic minority youth: Exploring mediators and moderators of intervention effects. *Journal of Abnormal Child Psychology*, 47(1), 1–19. <https://doi.org/10.1007/s10802-018-0425-7>
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103–110. <https://doi.org/10.1037/1089-2680.9.2.103>
- Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication*. New York University Press. <https://doi.org/10.18574/nyu/9780814732939.001.0001>
- Gardner, S. (2009). The development of doctoral students: Phases of challenge and support. *ASHE Higher Education Report*, 34(6), 1–127. <https://doi.org/10.1002/aehe.3406>
- Garland, E. L., Farb, N. A., R. Goldin, P., & Fredrickson, B. L. (2015). Mindfulness broadens awareness and builds eudaimonic meaning: A process model of mindful positive emotion regulation. *Psychological Inquiry*, 26(4), 293–314. <https://doi.org/10.1080/1047840X.2015.1064294>

- Gerner, M. E., & Perry, F. (2000). Gender differences in cultural acceptance and career orientation among internationally mobile and non-internationally mobile adolescents. *School Psychology Review, 29*(2), 267–283.  
<https://doi.org/10.1080/02796015.2000.12086014>
- Giannakopoulos, G., Dimitrakaki, C., Papadopoulou, K., Tzavara, C., & Kolaitis, G., Ravens-Sieberer, U., & Tountas, Y. (2013). Reliability and validity of the strengths and difficulties questionnaire in Greek adolescents and their parents. *Health, 5*, 1774–1783.  
<https://doi.org/10.4236/health.2013.511239>
- Giannopoulos, V. L., & Vella-Brodrick, D. A. (2011). Effects of positive interventions and orientations to happiness on subjective well-being. *Journal of Positive Psychology, 6*(2), 95–105. <https://doi.org/10.1080/17439760.2010.545428>
- Gilbert, K. R. (2008). Loss and grief between and among cultures: The experience of third culture kids. *Illness, Crisis, & Loss, 16*(2), 93–109. <https://doi.org/10.2190/IL.16.2.a>
- Gillies, W. D. (1998). Children on the move: Third culture kids, *Childhood Education, 75*(1), 36–38. <https://doi.org/10.1080/0094056.1998.10521975>
- Glass, C. R., Buus, S., & Braskamp, L. A. (2013). *Uneven experiences: What's missing and what matters for today's international students*. Global Perspective Institute.  
<https://www.gpi.hs.iastate.edu/documents/Report-on-International-Students.pdf>
- GL Education. (2020). *Pupil attitudes to self and school (PASS)*. <https://www.gl-education.com/assessments/products/pass/>
- Goodman, R. (1997). Strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry, 38*, 581–586. <https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*(11), 1337–1345. <https://doi.org/10.1097/00004583-200111000-00015>
- Goodman, M. S., Madni, L. A. & Semple, R. J. (2017). Measuring mindfulness in youth: Review of current assessments, challenges, and future directions. *Mindfulness, 8*, 1409–1420. <https://doi.org/10.1007/s12671-017-0719-9>
- Gould, L. F., Dariotis, J. K., Mendelson, T., & Greenberg, M. T. (2012). A school-based mindfulness intervention for urban youth: Exploring moderators of intervention effects. *Journal of Community Psychology, 40*(8), 968–982. <https://doi.org/10.1002/jcop.21505>

- Government of Canada. (2019). *Building in Success: International Education Strategy (2019-2024)*. <https://www.international.gc.ca/education/strategy-2019-2024-strategie.aspx?lang=eng>
- Great Schools Partnership. (2016). *Student engagement*. The Glossary of Education Reform. <https://www.edglossary.org/student-engagement/>
- Greco, L. A., Baer, R. A. & Smith, G. T. (2011). Assessing mindfulness in children and adolescents: Development and validation of the child and adolescent mindfulness measure (CAMM). *Journal of Psychological Assessment, 23*(3), 606–614. <https://doi.org/10.1037/a0022819>
- Greco, L. A., & Hayes, S. C. (Eds.). (2008). *Acceptance and mindfulness treatments for children and adolescents: A practitioner's guide*. New Harbinger.
- Green, W. (2019). Engaging students in international education: Rethinking student engagement in a globalized world. *Journal of Studies in International Education, 23*(1), 3–9. <https://doi.org/10.1177/1028315318814197>
- Green, L. S., & Norrish, J. M. (2013). Enhancing well-being in adolescents: Positive psychology and coaching psychology interventions in schools. In C. Proctor & P. A. Linley (Eds.), *Research applications, and interventions for children and adolescents: A positive psychology perspective* (pp. 211–222). Springer.
- Grimshaw, T., & Sears, C. (2008). ‘Where am I from?’ ‘Where do I belong?’, *Journal of Research in International Education, 7*(3), 259–278. <https://doi.org/10.1177/1475240908096483>
- Grossman, P. (2019). On the porosity of subject and object in “mindfulness” scientific study: Challenges to “scientific” construction, operationalization and measurement of mindfulness. *Current Opinion in Psychology, 28*, 102–107. <https://doi.org/10.1016/j.copsyc.2018.11.008>
- Gruman, D. H., Harachi, T. W., Abbott, R. D., Catalano, R. F., & Fleming, C. B. (2008). Longitudinal effects of student mobility on three dimensions of elementary school engagement. *Child Development, 79*(6), 1833–52. <https://doi.org/10.1111/j.1467-8624.2008.01229.x>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS One, 15*(5), e0232076–e0232076.

<https://doi.org/10.1371/journal.pone.0232076>

- Gullahorn, J. T., & Gullahorn, J. E. (1963). An extension of the U-curve hypothesis. *Journal of Social Issues*, 19(3), 33–47. <https://doi.org/10.1111/j.1540-4560.1963.tb00447.x>
- Hammersley, M. (2012). *Methodological paradigms in educational research*. British Educational Research Association. <https://www.bera.ac.uk/researchers-resources/publications/methodological-paradigms-in-educational-research>
- Hammill, J., Nguyen, T., & Henderson, F. (2022). Student engagement: The impact of positive psychology interventions on students. *Active Learning in Higher Education*, 23(2), 129–142. <https://doi.org/10.1177/1469787420950589>
- Hannaford, J. (2016). Digital worlds as sites of belonging for third culture kids: A new literacies perspective. *Journal of Research in International Education*, 15(3), 253–265. <https://doi.org/10.1177/1475240916677442>
- Harnett, P. H., & Dawe, S. (2012). Review: The contribution of mindfulness-based therapies for children and families and proposed conceptual integration. *Child and Adolescent Mental Health*, 17(4), 195–208.
- Hart T, & Bagiella E. (2012). Design and implementation of clinical trials in rehabilitation research. *Archives of Physical Medicine and Rehabilitation*, 93(8 Suppl.): S117–S126. <https://doi.org/10.1016/j.apmr.2011.11.039>
- Hartas, D. (2019). The social context of adolescent mental health and wellbeing: Parents, friends and social media. *Research Papers in Education*, 36(5), 542–560. <https://doi.org/10.1080/02671522.2019.1697734>
- Hayden, M. (2011) Transnational spaces of education: The growth of the international school sector. *Globalisation, Societies and Education*, 9(2), 211–224. <https://doi.org/10.1080/14767724.2011.577203>
- Hayden, M. (2012). Third culture kids: The global nomads of transnational spaces of learning. In R. Brooks, A. Fuller, & J. Waters (Eds.), *Changing Spaces of Education: New Perspectives on the Nature of Learning: New Perspectives on the Nature of Learning* (pp. 59–78). Routledge. <https://doi.org/10.4324/9780203127568>
- Hayden, M. C., & Thompson, J. J. (2008). International schools: Growth and influence. *UNESCO: International Institute for Educational Planning Fundamentals*. <https://unesdoc.unesco.org/ark:/48223/pf0000180396/PDF/180396eng.pdf.multi>
- Hayden, M. C., & Thompson, J. J. (2017). International schools: Some issues for the future. *The Journal of the Association for the Advancement of International Education*, 44 (123), 1–7.

[https://www.aaie.org/uploaded/publications/InterEd/InterED\\_2017/Spring\\_2017\\_InterE D\\_Vol\\_44\\_No\\_123.pdf](https://www.aaie.org/uploaded/publications/InterEd/InterED_2017/Spring_2017_InterE D_Vol_44_No_123.pdf)

- Hayes, L., & Ciarrochi, J. (2015). *The Thriving Adolescent*. New Harbinger Publications.
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour Research and Therapy*, 44(1), 1–25. <https://doi.org/10.1016/j.brat.2005.06.006>
- He, J., He, L., Zhou, W., Nie, X., & He, M. (2020). Discrimination and social exclusion in the outbreak of COVID-19. *International Journal of Environmental Research and Public Health*, 17(8), 2933. <http://dx.doi.org/10.3390/ijerph17082933>
- Herbers, J. E., Reynolds, A. J., & Chen, C. C. (2013). School mobility and developmental outcomes in young adulthood. *Development and Psychopathology*, 25(2), 501–515. <https://doi.org/10.1017/S0954579412001204>
- Higgins, A., & Wigford, A. (2018). *Wellbeing in international schools: The 2018 report*. ISC Research. <https://www.flipsnack.com/iscresearch/wellbeing-survey-2018.html>
- Hilario, C. T., Vo, D. X., Johnson, J. L., & Saewyc, E. M. (2014). Acculturation, gender, and mental health of southeast Asian immigrant youth in Canada. *Journal of Immigrant and Minority Health*, 16(6), 1121–1129. <https://doi.org/10.1007/s10903-014-9978-x>
- Hjemdal, O., Vogel, P. A., Solem S., Hagen, K., & Stiles, T. (2011). The relationship between resilience and levels of anxiety, depression, and obsessive–compulsive symptoms in adolescents. *Clinical Psychology & Psychotherapy*, 18(4), 314–321. <https://doi.org/10.1002/cpp.719>
- Hodges, T. (2018). *School engagement is more than just talk*. Gallup Education. <https://www.gallup.com/education/244022/school-engagement-talk.aspx>
- Hoersting, R., & Jenkins, S. (2011). No place to call home: Cultural homelessness, self-esteem and cross-cultural identities. *International Journal of Intercultural Relations*, 35(1), 17–30. <https://doi.org/10.1016/j.ijintrel.2010.11.005>
- Huang, L., Kern, M. L., & Oades, L. G. (2020). Strengthening university student wellbeing: Language and perceptions of Chinese international students. *International Journal of Environmental Research and Public Health*, 17(15), 5538. <https://doi.org/10.3390/ijerph17155538>
- Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 428–444). SAGE Publications.

- Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-Being*, 1(2), 137–164. <https://doi.org/10.1111/j.1758-0854.2009.01008.x>
- Huppert, F. A., & Johnson, D. M. (2010). A controlled trial of mindfulness training in schools: The importance of practice for an impact on well-being. *The Journal of Positive Psychology*, 5(4), 264–274. <https://doi.org/10.1080/17439761003794148>
- Huppert, F. A., & So, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social indicators research*, 110(3), 837–861. <https://doi.org/10.1007/s11205-011-9966-7>
- Hurem, A., Rowan, L., & Grootenboer, P. (2021). The link between social wellbeing, belonging, and connectedness of international students in Australian high schools. *Frontiers in Education*, 6. <https://doi.org/10.3389/educ.2021.681956>
- Hwang, Y-S., Goldstein, H., Medvedev, O. N., Singh, N. N., Noh, J-E., & Hand, K. (2019). Mindfulness-based intervention for educators: Effects of a school-based cluster randomized controlled study. *Mindfulness*, 10(7), 1417–1436 <https://doi.org/10.1007/s12671-019-01147-1>
- Hwang, Y. S., & Kearney, P. (2015). *A mindfulness intervention for children with autism spectrum disorder: New directions in research and practice*. Springer.
- IBM Corporation. (2017). *IBM SPSS Statistics for Macintosh, Version 25.0* [Computer software]. IBM Corp.
- IBM Corporation. (2019). *IBM SPSS Statistics for Macintosh, Version 26.0* [Computer software]. IBM Corp.
- International Schools Consultancy. (2019). *ISC research global opportunities report 2019*. <https://iscresearch.com>
- International Schools Consultancy. (2020). *ISC Global report 2020*. <https://iscresearch.com/intelligence/>
- International Schools Consultancy. (2021). *Wellbeing in international schools: The 2021 report*. <https://iscresearch.com/reports/wellbeing-international-schools/>
- International Schools Consultancy. (2022). *Data on international schools*. <https://iscresearch.com/data/>
- Jackson, M., Ray, S., & Bybell, D. (2013). International students in the U.S.: Social and psychological adjustment. *Journal of International Students*, 3(1), 17–28. <https://doi.org/10.32674/jis.v3i1.515>



- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., Gortner, E., & Prince, S. E. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64*(2), 295–304. <https://doi.org/10.1037/0022-006X.64.2.295>
- Jago, R., Davis, L., McNeill, J., Sebire, S. J., Haase, A., Powell, J., & Cooper, A. R. (2011). Adolescent girls' and parents' views on recruiting and retaining girls into an after-school dance intervention: Implications for extra-curricular physical activity provision. *International Journal of Behavioral Nutrition and Physical Activity, 8*(1), 91–99. <https://doi.org/10.1186/1479-5868-8-91>
- Johnson, C., Burke, C., Brinkman, S., & Wade, T. (2016). Effectiveness of a school-based mindfulness program for transdiagnostic prevention in young adolescents. *Behaviour Research and Therapy, 81*, 1–11. <https://doi.org/10.1016/j.brat.2016.03.002>
- Johnson, C., Burke, C., Brinkman, S., & Wade, T. (2017). A randomised controlled evaluation of a secondary school mindfulness program for early adolescents: Do we have the recipe right yet? *Behaviour Research and Therapy, 99*, 37–46. <https://doi.org/10.1016/j.brat.2017.09.001>
- Johnson, B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Pearson Education.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112–133. <https://doi.org/10.1177/1558689806298224>
- Johnson, C., & Wade, T. (2019). Piloting a more intensive 8-week mindfulness programme in early- and mid-adolescent school students. *Early Intervention in Psychiatry, 13*(6), 1495–1502. <https://doi.org/10.1111/eip.12801>
- Johnson, C., & Wade, T. (2021). Acceptability and effectiveness of an 8-week mindfulness program in early- and mid-adolescent school students: A randomised controlled trial. *Mindfulness, 12*(10), 2473–2486. <https://doi.org/10.1007/s12671-021-01716-3>
- Johnstone, J. M., Roake, C., Sheikh, I., Mole, A., Nigg, J. T., & Oken, B. (2016). School-based mindfulness intervention for stress reduction in adolescents: Design and methodology of an open-label, parallel group, randomized controlled trial. *Contemporary Clinical Trials Communications, 4*, 99–104. <https://doi.org/10.1016/j.conctc.2016.07.001>
- Joyce, A., ETTY-Leal, J., Zazryn, T., Hamilton, A., & Hassed, C. (2010). Exploring a mindfulness meditation program on the mental health of upper primary children: A pilot

- study. *Advances in School Mental Health Promotion*, 3(2), 17–25.  
<https://doi.org/10.1080/1754730x.2010.9715677>
- Kaartina, S., Chin, Y. S., Fara Wahida, R., Woon, F. C., Hiew, C. C., Zalilah, M. S., & Mohd Nasir, M. T. (2015). Adolescent self-report and parent proxy-report of health-related quality of life: An analysis of validity and reliability of PedsQL 4.0 among a sample of Malaysian adolescents and their parents. *Health and Quality of Life Outcomes*, 13(1), 44–44. <https://doi.org/10.1186/s12955-015-0234-4>
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156.  
<https://doi.org/10.1093/clipsy.bpg016>
- Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research & Development*, 37(1), 58–71. <https://doi.org/10.1080/07294360.2017.1344197>
- Kahu, E. R., Nelson, K., & Picton, C. (2017). Student interest as a key driver of engagement for first year students. *Student Success*, 8(2), 55–66. <https://doi.org/10.5204/ssj.v8i2.379>
- Kashdan, T. B., & Ciarrochi, J. (2013). *Mindfulness, acceptance and positive psychology: The seven foundations of well-being*. Context Press.
- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for social work research. *Social Sciences*, 8(9), 255.  
<https://doi.org/10.3390/socsci8090255>
- Keeling, A. (2018). *Investment in international schools: An expanding market*. ISC Research.  
[https://www.iscresearch.com/uploaded/images/Publicity/EIFeb18\\_Investment\\_in\\_international\\_schools\\_an\\_expanding\\_market.pdf](https://www.iscresearch.com/uploaded/images/Publicity/EIFeb18_Investment_in_international_schools_an_expanding_market.pdf)
- Kelly, S. (2010). Qualitative interviewing techniques and styles. In I. Bourgeault, R. Dingwall, & R. de Vries (Eds.), *The SAGE handbook of qualitative methods in health research* (pp. 307–326). SAGE Publications.
- Kelly, L. M., & Cordeiro, M. (2020). Three principles of pragmatism for research on organizational processes. *Methodological Innovations*, 13(2).  
<https://doi.org/10.1177/2059799120937242>
- Kern, M. L., Benson, L., Steinberg, E. A., & Steinberg, L. (2016). The EPOCH measure of adolescent well-being. *Psychological Assessment*, 28(5), 586–597.  
<https://doi.org/10.1037/pas0000201>

- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *The Journal of Positive Psychology, 10*(3), 262–271. <https://doi.org/10.1080/17439760.2014.936962>
- Kern, M. L., Zeng, G., Hou, H., & Peng, K. (2019). The Chinese version of the EPOCH measure of adolescent well-being: Testing cross-cultural measurement invariance. *Journal of Psychoeducational Assessment, 37*(6), 757–769. <https://doi.org/10.1177/0734282918789561>
- Kieling, C., Baker-Henningham, H., Belfer, M., Conti, G., Ertem, I., & Omigbodun, O., Rohde, A., Srinath, S., Ulkuer, N., & Rahman, A. (2011). Child and adolescent mental health worldwide: Evidence for action. *The Lancet, 378*(9801), 1515–1525.
- Kim, S.-A. (2011). Predictors of acculturative stress among international music therapy students in the U.S. *Music Therapy Perspectives, 29*(2), 126–132. <https://doi.org/10.1093/mtp/29.2.126>
- Kim, Y. K., Maleku, A., Lemieux, C. M., Du, X., & Chen, Z. (2019). Behavioral health risk and resilience among international students in the United States: A study of socio-demographic differences. *Journal of International Students, 9*(1), 282–305. <https://doi.org/10.32674/jis.v9i1.264>
- Kim, H. J., & Okazaki, S. (2013). Navigating the cultural transition alone: Psychosocial adjustment of Korean early study abroad students. *Cultural Diversity & Ethnic Minority Psychology, 20*(2), 244–253. <https://doi.org/10.1037/a0034243>
- Klimstra, T. A., Luyckx, K., Branje, S., Teppers, E., Goossens, L., & Meeus, W. H. (2013). Personality traits, interpersonal identity, and relationship stability: Longitudinal linkages in late adolescence and young adulthood. *Journal of Youth and Adolescence, 42*(11), 1661–73. <https://doi.org/10.1007/s10964-012-9862-8>
- Klingbeil, D., Renshaw, T., Willenbrink, J., Copek, R., Chan, K., Haddock, A., Yassine, J. & Clifton, J. (2017). Mindfulness-based interventions with youth: A comprehensive meta-analysis of group-design studies. *Journal of School Psychology, 63*, 77–103. <https://doi.org/10.1016/j.jsp.2017.03.006>
- Korobova, N., & Starobin, S. S. (2015). A comparative study of student engagement, satisfaction, and academic success among international and American students. *Journal of International Students, 5*(1), 72–85. <https://doi.org/10.32674/jis.v5i1.444>
- Kubitskey, B., Vath, R., Johnson, H., Fishman, B., Konstantopoulos, S., & Park, G. (2012). Examining study attrition: Implications for experimental research on professional

- development. *Teaching and Teacher Education*, 28(3), 418–427.  
<https://doi.org/10.1016/j.tate.2011.11.008>
- Kuby, A. K., McLean, N. & Allen, K. (2015). Validation of the child and adolescent mindfulness measure (CAMM) with non-clinical adolescents. *Mindfulness*, 6(6), 1448–1455. <https://doi.org/10.1007/s12671-015-0418-3>
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners* (3rd ed.). SAGE Publications.
- Kuyken, W., Nuthall, E., Byford, S., Crane, C., Dalgleish, T., Ford, T., Greenberg, M. T., Ukoumunne, O. C., Viner, R. M., & Williams, J. M. G. (2017). The effectiveness and cost-effectiveness of a mindfulness training programme in schools compared with normal school provision (MYRIAD): Study protocol for a randomised controlled trial. *Trials*, 18(1), 194–194. <https://doi.org/10.1186/s13063-017-1917-4>
- Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett, R., Cullen, C., Hennelly, S., & Huppert, F. (2013). Effectiveness of the mindfulness in schools programme: Non-randomised controlled feasibility study. *British Journal of Psychiatry*, 203(2), 126–131. <https://doi.org/10.1192/bjp.bp.113.126649>
- Kuzel, A. (1992). Sampling in qualitative inquiry. In B. Crabtree & W. Miller (Eds.), *Doing qualitative research* (pp. 31–44). SAGE Publications.
- Lai, J. C. L., & Yue, X. (2014). Using the brief resilience scale to assess Chinese people's ability to bounce back from stress. *SAGE Open*.  
<https://doi.org/10.1177/2158244014554386>
- Lam, K. (2016). School-based cognitive mindfulness intervention for internalizing problems: Pilot study with Hong Kong elementary students. *Journal of Child and Family Studies* 25, 3293–3308. <https://doi.org/10.1007/s10826-016-0483-9>
- Langenkamp, A. G. (2016). Effects of school mobility on adolescent social ties and academic adjustment. *Youth & Society*, 48(6), 810–833.  
<https://doi.org/10.1177/0044118X13517908>
- Langer, Á. I., Medeiros, S., Valdés-Sánchez, N., Brito, R., Steinebach, C., Cid-Parra, C., Magni, A. & Krause, M. (2020). A qualitative study of a mindfulness-based intervention in educational contexts in Chile: An approach based on adolescents' voices. *International Journal of Environmental Research and Public Health*, 17(18), 6927. <https://doi.org/10.3390/ijerph17186927>

- Langer, Á. I., Schmidt, C., Aguilar-Parra, J. M., Cid, C., & Magni, A. (2017). Effects of a mindfulness intervention in Chilean high schoolers. *Revista Medica de Chile*, *145*(4), 476–482. <https://doi.org/10.4067/S0034-98872017000400008>
- Langford, M. E. (1998). Global nomads, third culture kids and international schools. In M. C. Hayden & J. J. Thompson (Eds.), *International education: Principles and practice* (pp. 28–43). Kogan Page.
- Lassander, M., Hintsanen, M., Suominen, S., Mullola, S., Vahlberg, T., & Volanen, S-M. (2021). Effects of school-based mindfulness intervention on health-related quality of life: Moderating effect of gender, grade, and independent practice in cluster randomized controlled trial. *Quality of Life Research*, *30*, 3407–3419. <https://rdcu.be/cA7Bd>
- Layous, K., Nelson, S. K., Oberle, E., Schonert-Reichl, K. A., & Lyubomirsky, S. (2012). Kindness counts: Prompting prosocial behavior in preadolescents boosts peer acceptance and well-being. *PLoS ONE*, *7*(12), e51380. <https://doi.org/10.1371/journal.pone.0051380>
- Lee, J., Koeske, G. F., & Sales, E. (2004). Social support buffering of acculturative stress: A study of mental health symptoms among Korean international students. *International Journal of Intercultural Relations*, *28*(5), 399–414. <https://doi.org/10.1016/j.ijintrel.2004.08.005>
- Leland, M. (2015). Mindfulness and student success. *Journal of Adult Education*, *44*(1), 19–24. <https://files.eric.ed.gov/fulltext/EJ1072925.pdf>
- Lessle, A., Haslberger, A., & Brewster, C. (2020). Expatriate adjustment. In J. Bonache, C. Brewster, & F. Froese (Eds.), *Global mobility and the management of expatriates* (pp. 57–79). Cambridge University Press.
- Li, C., & Lalani, F. (2020). *The COVID-19 pandemic has changed education forever. This is how*. World Economic Forum. <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>
- Li, Y. & Lerner, R. M. (2011). Trajectories of school engagement during adolescence: Implications for grades, depression, delinquency, and substance use. *Developmental Psychology*, *47*(1), 233–247. <https://doi.org/10.1037/a0021307>
- Li, M., Su, H., Liao, Z., Qiu, Y., Chen, Y., Zhu, J., Pei, Y., Jin, P., Xu, J., & Qi, C. (2021). Gender differences in mental health disorder and substance abuse of Chinese international college students during the COVID-19 pandemic. *Frontiers in Psychiatry*, *12*, 710878. <https://doi.org/10.3389/fpsy.2021.710878>

- Liddle, I., & Carter, G. (2015). Emotional and psychological well-being in children: The development and validation of the Stirling children's well-being scale. *Educational Psychology in Practice, 31*(2), 174–185.  
<https://doi.org/10.1080/02667363.2015.1008409>
- Lietaert, S., Roorda, D., Laevers, F., Verschueren, K., & De Fraine, B. (2015). The gender gap in student engagement: The role of teachers' autonomy support, structure, and involvement. *British Journal of Educational Psychology, 85*(4), 498–518. <https://doi.org.ezproxy1.acu.edu.au/10.1111/bjep.12095>.
- Lijadi, A. A., & van Schalkwyk, G. J. (2014). Narratives of third culture kids: Commitment and reticence in social relationships. *The Qualitative Report, 19*(25), 1–18.  
<https://doi.org/10.46743/2160-3715/2014.1213>
- Lijadi, A. A. & van Schalkwyk, G. J. (2018). “The international schools are not so international after all”: The educational experiences of third culture kids. *International Journal of School & Educational Psychology, 6*(1), 50–61.  
<https://doi.org/10.1080/21683603.2016.1261056>
- Lin, C-H., Zhang, Y., & Zheng, B. (2017). The roles of learning strategies and motivation in online language learning: A structural equation modeling analysis. *Computers & Education, 113*, 75–85. <https://doi.org/10.1016/j.compedu.2017.05.014>
- Lippman, L. H., & Rivers, A. M. (2008). *Assessing school engagement: A guide for out-of-school time program practitioners*. Child Trends. <https://www.childtrends.org/wp-content/uploads/2013/05/2008-39AssessingSchoolEngagement.pdf>
- Little, R. J., & Rubin, D. B. (2020). *Statistical analysis with missing data* (3rd ed.). John Wiley & Sons, Inc.
- Liu, Y., & Lu, Z. (2011). The Chinese high school student's stress in the school and academic achievement. *Educational Psychology, 31*(1), 27–35.  
<https://doi.org/10.1080/01443410.2010.513959>
- Lomas, Waters, L., Williams, P., Oades, L. G., & Kern, M. L. (2021). Third wave positive psychology: Broadening towards complexity. *The Journal of Positive Psychology, 16*(5), 660–674. <https://doi.org/10.1080/17439760.2020.1805501>
- Lysgaard, S. (1955). Adjustment in a foreign society: Norwegian Fulbright grantees visiting the United States. *International Social Science Bulletin, 7*, 45–51.
- Magill, N., Knight, R., McCrone, P., Ismail, K., & Landau, S. (2019). A scoping review of the problems and solutions associated with contamination in trials of complex interventions

- in mental health. *BMC Medical Research Methodology*, 19(4), 1–13.  
<https://doi.org/10.1186/s12874-018-0646-z>
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37(1), 153–184. <https://doi.org/10.3102/00028312037001153>
- Marsh, H. W., Huppert, F. A., Donald, J. N., Horwood, M. S., & Sahdra, B. K. (2020). The well-being profile (WB-Pro): Creating a theoretically based multidimensional measure of well-being to advance theory, research, policy, and practice. *Psychological Assessment*, 32(3), 294–313. <https://doi.org/10.1037/pas0000787>
- Masten, A. S. (2013). Risk and resilience in development. In P. D. Zelazo (Ed.), *The Oxford handbook of developmental psychology* (pp. 579–607). Oxford University Press.
- Mauss, I. B., Savino, N. S., Anderson, C. L., Weisbuch, M., Tamir, M., & Ludenslager, M. L. (2012). The pursuit of happiness can be lonely. *Emotion*, 12(5), 908–912.  
<https://doi.org/10.1037/a0025299>
- Maynard, B. R., Solis, M., Miller, V., & Brendel, K. E. (2017). Mindfulness-based interventions for improving cognition, academic achievement, behavior and socio-emotional functioning of primary and secondary students. *Campbell Systematic Review*, 13(1), 1–144. <https://doi.org/10.4073/CSR.2017.5>
- McCaig, N. M. (1992). Birth of a notion. *The Global Nomad Quarterly*, 2(1), 1.
- McCaig, N. M. (1996). Understanding global nomads. In C. D. Smith (Ed.), *Strangers at home: Essays on the effects of living overseas and coming 'home' to a strange land* (pp. 99–120). Aletheia.
- McKeering, P., & Hwang, Y.-S. (2019). A systematic review of mindfulness-based school interventions with early adolescents. *Mindfulness*, 10(4), 593–610.  
<https://doi.org/10.1007/s12671-018-0998-9>
- McKeering, P., Hwang, Y.-S., & Ng, C. (2021). A study into wellbeing, student engagement and resilience in early-adolescent international school students. *Journal of Research in International Education*, 20(1), 69–92. <https://doi.org/10.1177/14752409211006650>
- McKillop-Ostrom, A. (2000). Student mobility and the international curriculum. In M. C. Hayden & J. J. Thompson (Eds.), *International schools and international education: Improving teaching, management and quality* (pp. 73–84). Kogan Page.
- McLachlan, D. A. (2007). Global nomads in an international school: Families in transition. *Journal of Research in International Education*, 6(2), 233–249.  
<https://doi.org/10.1177/1475240907078615>

- Meiklejohn, J., Phillips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., Frank, J., Burke, C., Pinger, L., Soloway, G., Isberg, R., Sibinga, E., Grossman, L., & Saltzman, A. (2012). Integrating mindfulness training into K-12 education: Fostering the resilience of teachers and students. *Mindfulness*, 3, 291–307. <https://doi.org/10.1007/s12671-012-0094-5>
- Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., & Swendsen, J. (2010). Lifetime prevalence of mental disorders in U.S. adolescents: Results from the national comorbidity survey replication–adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(10), 980–989. <https://doi.org/10.1016/j.jaac.2010.05.017>
- Metro-Roland, M. (2018). Community, identity, and international student engagement. *Journal of International Students*, 8(3), 1408–1421. <https://doi.org/10.5281/zenodo.1254603>
- Meyers, M. C., van Woerkom, M., & Bakker, A. B. (2013). The added value of the positive: A literature review of positive psychology interventions in organizations. *European Journal of Work and Organizational Psychology*, 22(5), 618–632. <https://doi.org/10.1080/1359432X.2012.694689>
- Mind and Life Education Research Network (2012). Contemplative practices and mental training: Prospects for American education. *Child development perspectives*, 6(2), 146–153. <https://doi.org/10.1111/j.1750-8606.2012.00240.x>
- Mindfulness in Schools Project. (2015). *b curriculum (ages 11–18)*. <https://mindfulnessinschools.org/teach-dot-b/dot-b-curriculum/>
- Ministry of Education, Singapore. (2018). *Admissions*. <https://www.moe.gov.sg/admissions/returning-singaporeans/other-information>
- Morales, A. (2015). Factors affecting third culture kids (TCKs) transition. *Journal of International Education Research*, 11(1), 51–56. <https://doi.org/10.19030/jier.v11i1.9098>
- Morgan, D. (2014). *Integrating qualitative and quantitative methods: A pragmatic approach*. SAGE Publications.
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling & Development*, 78(2), 137–144. <https://doi.org/10.1002/j.1556-6676.2000.tb02571.x>
- Morse, J. (2018). Reframing rigor in qualitative inquiry. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research*. (5th ed., pp. 796–817). SAGE Publications.



- Nahidi, S. (2014). *Mental health and psychological help-seeking of Iranian international students at UNSW Australia*. [Doctoral thesis, University of New South Wales]. UNSW Digital Archive. <https://doi.org/10.26190/unsworks/18193>
- Nawaz, S. (2011). The relationship of parental and peer attachment bonds with the identity development during adolescence. *FWU Journal of Social Sciences*, 5(1), 104–119.
- Nayak, M., & Narayan, A. (2019). Strengths and weakness of online surveys. *IOSR Journal of Humanities and Social Science*, 24,(5), 31–38. <https://www.iosrjournals.org/iosr-jhss/papers/Vol.%2024%20Issue5/Series-5/E2405053138.pdf>
- Ng, C., Bartlett, B., & Elliott, S. N. (2018). *Empowering engagement: Creating learning opportunities for students from challenging backgrounds*. Springer. <https://doi.org/10.1007/978-3-319-94652-8>
- Noble, T., & McGrath, H. (2015). Prosper: A new framework for positive education. *Psychology of Well-being*, 5(2), 2–17. <https://doi.org/10.1186/s13612-015-0030-2>
- Norrish, J. M., Williams, P., O' Connor, M., & Robinson, J. (2013). An applied framework for positive education. *International Journal of Wellbeing*, 3(2), 147–161. <https://doi.org/10.5502/ijw.v3i2.2>
- Oberg, K. (1960). Cultural shock: Adjustment to new cultural environments. *Practical Anthropology*, 7(4), 177–182. <https://doi.org/10.1177/009182966000700405>
- Ogders, K., Dargue, N., Creswell, C., Jones, M. P., & Hudson, J. L. (2020). The limited effect of mindfulness-based interventions on anxiety in children and adolescents: A meta-analysis. *Clinical Child and Family Psychology Review*, 23(3), 407–426. <https://doi.org/10.1007/s10567-020-00319-z>
- Ogilvie, S., Head, S., Parekh, S., Heintzman, J., & Preyde, M. (2019). Association of school engagement, academic difficulties and school avoidance with psychological difficulties among adolescents admitted to a psychiatric inpatient unit. *Child and Adolescent Social Work Journal*, 36, 419–427. <https://doi.org/10.1007/s10560-018-0570-4>
- Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology*, 8(5), 375–387. <https://doi.org/10.1080/13645570500402447>
- Organisation for Economic Cooperation and Development. (2017). *PISA 2015 Results (Volume III): Students' Well-Being*. <https://doi.org/10.1787/9789264273856-en>
- Owens, R. L., & Waters, L. (2020). What does positive psychology tell us about early intervention and prevention with children and adolescents? A review of positive

- psychological interventions with young people. *The Journal of Positive Psychology*, 15(5), 588–597. <https://doi.org/10.1080/17439760.2020.1789706>
- Oxford Mindfulness Centre. (2017). *MYRIAD project study details published*. <https://www.oxfordmindfulness.org/news/myriad-protocol-published/>
- Oyeniya, O., Smith, R. L., Watson, J. C., & Nelson, K. (2021). A comparison of first-year international students' adjustment to college at the undergraduate and graduate level. *Journal of Comparative & International Higher Education*, 13(2), 112–131. <https://doi.org/10.32674/jcihe.v13i2.2450>
- Padhy, M., Monteiro, S. R., & Chelli, K. (2020). Coping competence, mindfulness, and well-being of Indian adolescents. *Psychological Studies*, 65(4), 531–535. <https://doi.org/10.1007/s12646-020-00584-6>
- Pagnini, F., & Langer, E. (2015). Mindful reappraisal: Comment on “mindfulness broadens awareness and builds eudaimonic meaning: A process model of mindful positive emotion regulation.” *Psychological Inquiry*, 26(4), 365–367. <https://doi.org/10.1080/1047840X.2015.1073660>
- Parker, A. E., Kupersmidt, J. B., Mathis, E. T., Scull, T. M., & Sims, C. (2014). The impact of mindfulness education on elementary school students: Evaluation of the mastermind program. *Advances in School Mental Health Promotion*, 7(3), 184–204. <https://doi.org/10.1080/1754730X.2014.916497>
- Patton, M. (2002). *Qualitative research and evaluation methods*. SAGE Publications.
- Peräkylä, A., & Ruusuvaara, J. (2018). Analysing talk and text. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research*. (5<sup>th</sup> ed., pp. 669–691). SAGE Publications.
- Pidgeon, A. M., & Keye, M. (2014). Relationship between resilience, mindfulness, and psychological well-being in university students. *International Journal of Liberal Arts and Social Science*, 2(5), 27–32. <http://www.ijlass.org/data/frontImages/gallery/Vol. 2 No. 5/3.pdf>
- Pidgeon, A. M., Rowe, N., Stapleton, P. B., Magyar, H. & Lo, B. (2014). Examining characteristics of resilience among university students: An international study. *Open Journal of Social Sciences*, 2(11), 14–22. <https://doi.org/10.4236/jss.2014.211003>
- Pietarinen, J., Soini, T., & Pyhältö, K. (2014). Students' emotional and cognitive engagement as the determinants of well-being and achievement in school. *International Journal of Educational Research*, 67, 40–51. <https://doi.org/10.1016/j.ijer.2014.05.001>

- Pitzer, J., & Skinner, E. (2017). Predictors of changes in students' motivational resilience over the school year: The roles of teacher support, self-appraisals, and emotional reactivity. *International Journal of Behavioral Development, 41*(1), 15–29.  
<https://doi.org/10.1177/0165025416642051>
- Pollock, D. C., & Van Reken, R. E. (2001). *Third culture kids: Growing up among worlds*. Nicholas Brealey Publishing.
- Pollock, D. C., & Van Reken, R. E. (2009). *Third culture kids: Growing up among worlds* (2nd ed.). Nicholas Brealey Publishing.
- Pollock, D. C., Van Reken, R. E., & Pollock, M. V. (2017). *Third culture kids: Growing up among worlds* (3rd ed.). Nicholas Brealey Publishing.
- Popadiuk, N. E. (2009). Unaccompanied Asian secondary students in Canada. *International Journal for the Advancement of Counselling, 31*(4), 229–243.  
<https://doi.org/10.1007/s10447-009-9080-6>
- Powers, A., & Casey, B. J. (2015). The adolescent brain and the emergence and peak of psychopathology. *Journal of Infant, Child, and Adolescent Psychotherapy, 14*(1), 3–15.  
<https://doi.org/10.1080/15289168.2015.1004889>
- Privitera, G. (2019). *Research Methods for the Behavioral Sciences* (3rd ed.). SAGE Publications.
- Purser, R. E., & Milillo, J. (2015). Mindfulness revisited: A Buddhist-based conceptualization. *Journal of Management Inquiry, 24*(1), 3–24.  
<https://doi.org/10.1177/1056492614532315>
- Quach, D., Jastrowski, K., & Alexander, K. (2016). A randomised controlled trial examining the effect of mindfulness meditation on working memory capacity in adolescents. *Journal of Adolescent Health, 58*(5), 489–496.  
<https://doi.org/10.1016/j.jadohealth.2015.09.024>
- Ragelienė, T. (2016). Links of adolescents identity development and relationship with peers: A systematic literature review. *Journal of the Canadian Academy of Child and Adolescent Psychiatry 25*(2), 97–105.
- Rassart, J., Luyckx, K., Apers, S., Goossens, E., & Moons, P. (2012). Identity dynamics and peer relationship quality in adolescents with a chronic disease: The sample case of congenital heart disease. *Journal of Developmental & Behavioral Pediatrics, 33*(8), 625–632. <https://doi.org/10.1097/DBP>
- Razza, R., Bergen-Cico, D., Reid, S., & Uveges, R. L. (2021). The benefits of mindfulness for promoting resilience among at-risk adolescents: Results from the inner strength teen

- program. *ECNU Review of Education*, 1–23.  
<https://doi.org/10.1177/2096531120982254>
- Reeves, C. (2006). Developing a comprehensive support programme for families in transition: A working model in practice. *International Schools Journal*, 26(1), 30–36.
- Rempel, K. D. (2012). Mindfulness for children and youth: A review of the literature with an argument for school-based implementation. *Canadian Journal of Counselling and Psychotherapy*, 46(3), 201–220.
- Rhein, D. (2018). International university students in Thailand: Shifting from universalistic models to an ethnicity matters approach. *Journal of Research in International Education*, 17(3), 286–308. <https://doi.org/10.1177/1475240918817412>
- Ricarte, J. J., Ros, L., Latorre, J. M., & Beltran, M. T. (2015). Mindfulness-based intervention in a rural primary school: Effects on attention, concentration, and mood. *International Journal of Cognitive Therapy*, 8(3), 258–270. <https://doi.org/10.1521/ijct.2015.8.03>
- Richards, J., Ahrens, K., Sandler, P., & Richardson, L. (2009). Surveying adolescents enrolled in a regional health plan: Mail & phone follow-up—what works at what cost? *Journal of Adolescent Health*, 44(2), S37. <https://doi.org/10.1016/j.jadohealth.2008.10.102>
- Roberts, K., Dowell, A. & Nie, J-B. (2019). Attempting rigour and replicability in thematic analysis of qualitative research data; a case study of codebook development. *BMC Medical Research Methodology* 19(66). <https://doi.org/10.1186/s12874-019-0707-y>
- Robertson, S. (2011). Cash cows, backdoor migrants, or activist citizens? International students, citizenship, and rights in Australia. *Ethnic Racial Studies*, 34(12), 2192–2211. <https://doi.org/10.1080/01419870.2011.558590>
- Rodríguez-Fernández, A., Ramos-Díaz, E. & Axpe, I. (2018). The role of resilience and psychological well-being in school engagement and perceived academic performance: An exploratory model to improve academic achievement. In B. Bernal-Morales (Ed.), *Health and academic achievement* (pp. 159–176). IntechOpen. <https://doi.org/10.5772/intechopen.68719>
- Rodríguez-Rey, R., Alonso-Tapia, J., & Hernansaiz-Garrido, H. (2016). Reliability and validity of the brief resilience scale (BRS) Spanish version. *Psychological Assessment*, 18(5), e101–e110. <https://doi.org/10.1037/pas0000191>
- Roscoe, L. J. (2009). Wellness: A review of theory and measurement for counselors. *Journal of Counseling and Development*, 87(2), 216–226. <https://doi.org/10.1002/j.1556-6678.2009.tb00570.x>

- Rose, T., Joe, S., Williams, A., Harris, R., Betz, G., & Stewart-Brown, S. (2017). Measuring mental wellbeing among adolescents: A systematic review of instruments. *Journal of Child and Family Studies*, 26(9), 2349–2362. <https://doi.org/10.1007/s10826-017-0754-0>
- Roth, P. L. (1994). Missing data: A conceptual review for applied psychologists. *Personnel Psychology*, 47(3), 537–560. <https://doi.org/10.1111/j.1744-6570.1994.tb01736.x>
- Royal College of Psychiatrists. (2021, April 8). *Country in the grip of a mental health crisis with children worst affected, new analysis finds*. [Press release]. <https://www.rcpsych.ac.uk/news-and-features/latest-news/detail/2021/04/08/country-in-the-grip-of-a-mental-health-crisis-with-children-worst-affected-new-analysis-finds>
- Rusk, R. D., & Waters, L. (2015). A psycho-social system approach to well-being: Empirically deriving the five domains of positive functioning. *The Journal of Positive Psychology*, 10(2), 141–152. <https://doi.org/10.1080/17439760.2014.920409>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Sabouripour, F., & Roslan, S. B. (2015). Resilience, optimism and social support among international students. *Asian Social Science*, 11(15), 159–170. <https://doi.org/10.5539/ass.v11n15p159>
- Sahdra, B. K., Ciarrochi, J., & Parker, P. (2016). Nonattachment and mindfulness: Related but distinct constructs. *Psychological Assessment*, 28(7), 819–829. <https://doi.org/10.1037/pas0000264>
- Sahdra, B. K., Ciarrochi, J., Parker, P., & Scrucca, L. (2016). Using genetic algorithms in a large nationally representative American sample to abbreviate the multidimensional experiential avoidance questionnaire. *Frontiers in Psychology*, 7, 1–14. <https://doi.org/10.3389/fpsyg.2016.00189>
- Schaetti, B. F. (1996). *Transition programming in international schools: An emergent mandate*. Transition Dynamics. <https://transitiondynamics.wordpress.com/resources-and-products/articles-and-publications/transition-programming-in-international-schools/>
- Schaetti, B. F. (1998). Transitions resource teams: A good answer to an important question. *International Schools Journal*, 17(2), 52–59.
- Schilpzand, E. J., Sciberras, E., Efron, D., Anderson, V., & Nicholson, J. M. (2015). Improving survey response rates from parents in school-based research using a multi-level

- approach. *PloS One*, *10*(5), Article e0126950.  
<https://doi.org/10.1371/journal.pone.0126950>
- Schonert-Reichl, K. A., & Lawlor, M. S. (2010). The effects of a mindfulness-based education program on pre- and early adolescents' well-being and social and emotional competence. *Mindfulness*, *1*(3), 137–151. <https://doi.org/10.1007/s.12671-010-0011-8>
- Schooler, J. W., Ariely, D., & Loewenstein, G. (2003). The pursuit and assessment of happiness can be self-defeating. *The Psychology of Economic Decisions*, *1*, 41–70.
- Schussler, D. L., Oh, Y., Mahfouz, J., Levitan, J., Frank, J. L., Broderick, P. C., & Mitra, J. L. (2021). Stress and well-being: A systematic case study of adolescents' experiences in a mindfulness-based program. *Journal of Child and Family Studies*, *30*(2), 431–446.  
<https://doi.org/10.1007/s10826-020-01864-5>
- Schwartz, S. J., Zamboanga, B. L., Weisskirch, R. S., & Wang, S. C. (2010). The relationships of personal and cultural identity to adaptive and maladaptive psychosocial functioning in emerging adults. *Journal of Social Psychology*, *150*(1), 1–33.  
<https://doi.org/10.1080/00224540903366784>
- Sciotto, M. J., Veres, D. A., Marinstein, T. L., Bailey, B. F., & Cehelyk, S. K. (2021). Effects of a school-based mindfulness program for young children. *Journal of Child and Family Studies*, *30*, 1516–1527. <https://doi.org/10.1007/s10826-021-01955-x>
- Scott, B. A., & Barnes, C. M. (2011). A multilevel field investigation of emotional labor, affect, work withdrawal, and gender. *Academy of Management Journal*, *54*(1), 116–136.  
<https://doi.org/10.5465/AMJ.2011.59215086>
- Searle, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations*, *14*(4), 449–464. [https://doi.org/10.1016/0147-1767\(90\)90030-Z](https://doi.org/10.1016/0147-1767(90)90030-Z)
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. The Guilford Press.
- Seidman, I. (2006). *Interviewing as qualitative research. A guide for researchers in education and the social sciences*. Teacher's College Press.
- Seligman, M. E. P. (2002). *Authentic happiness*. Free Press.
- Seligman, M. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.
- Seligman, M. E. P. (2019). Positive psychology: A personal history. *Annual Review of Clinical Psychology*, *15*(1), 1–23. <https://doi.org/10.1146/annurev-clinpsy-050718-095653>

- Seligman, M. E. P., & Adler, A. (2019). Positive education. In J. F. Helliwell, R. Layard, & J. Sachs (Eds.), *Global happiness and wellbeing policy report: 2019* (pp. 52–71). Sustainable Development Solutions Network.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5–14. <https://doi.org/10.1037/0003-066X.55.1.5>
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *The American Psychologist*, *60*(5), 410–421. <https://doi.org/10.1037/0003-066X.60.5.410>
- Semple, R. J., Droutman, V., & Reid, B. A. (2017). Mindfulness goes to school: Things learned (so far) from research and real world experiences. *Psychology in the Schools*, *54*(1), 29–52. <https://doi.org/10.1002/pits.21981>
- Semple, R. J., Lee, J., & Miller, L. F. (2006). Mindfulness-based cognitive therapy for children. In R. A. Baer (Ed.), *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications* (pp. 143–166). Elsevier Academic Press.
- Semple, R. J., Lee, J., Rosa, D., & Miller, L. F. (2010). A randomised trial of mindfulness-based cognitive therapy for children: Promoting mindful attention to enhance social-emotional resiliency in children. *Journal of Child and Family Studies*, *19*(2), 218–229. <https://doi.org/10.1007/s10826-009-9301-y>
- Shankland, R., & Rosset, E. (2016). Review of brief school-based positive psychological interventions: A taster for teachers and educators. *Educational Psychology Review*, *29*(2), 1–30. <https://doi.org/10.1007/s10648-016-9357-3>
- Shoshani, A., Nakash, O., Zubida, H., & Harper, R. A. (2016). School engagement, acculturation, and mental health among migrant adolescents in Israel. *School Psychology Quarterly*, *31*(2), 181–197. <http://dx.doi.org/10.1037/spq0000133>
- Sibinga, E., Perry-Parrish, C., Chung, S., Johnson, S., Smith, M., & Ellen, J. M. (2013). School-based mindfulness instruction for urban male youth: A small randomized controlled trial. *Preventive Medicine*, *57*(6), 799–801. <https://doi.org/10.1016/j.ypmed.2013.08.027>
- Sibinga, E., Webb, L., Ghazarian, S. R., & Ellen, J. M. (2016). School-based mindfulness instruction: An RCT. *Pediatrics*, *137*(1). <https://doi.org/10.1542/peds.2015-2532>
- Simsek, M., Costa, R., & de Valk, H. A. (2021). Childhood residential mobility and health outcomes: A meta-analysis. *Health & Place*, *71*. Article 102650. <https://doi.org/10.1016/j.healthplace.2021.102650>

- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice friendly meta-analysis. *Journal of Clinical Psychology, 65*(5), 467–87. <https://doi.org/10.1002/jclp.20593>
- Smith, B., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194–200. <https://doi.org/10.1080/10705500802222972>
- Sobri, N. A., Hashim, I. H. M., & Mohammad, T. (2019). Validity and reliability of the Malay-translated version of the EPOCH measure of adolescent well-being questionnaire. *Management Research Spectrum, 9*(1), 59–62.
- South, S. J., Haynie, D. L., & Bose, S. (2007). Student mobility and school dropout. *Social Science Research, 36*(1), 68–94. <https://doi.org/10.1016/j.ssresearch.2005.10.001>
- Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology, 5*(1), Article 25338. <https://doi.org/10.3402/ejpt.v5.25338>
- Stevens, J. (2009). *Applied multivariate statistics for the social sciences* (5th ed.). Routledge.
- Sünbül, Z. A. (2018). Psychometric evaluation of child and adolescent mindfulness measure (CAMM) with Turkish sample. *International Journal of Education and Psychological Research, 7*(2), 56–59. <https://files.eric.ed.gov/fulltext/ED588075.pdf>
- Tabachnick, B., & Fidell, L. (2013). *Using multivariate statistics* (6th ed.). Pearson Education.
- Tan, L. B. (2016). A critical review of adolescent mindfulness-based programmes. *Clinical Child Psychology and Psychiatry, 21*(2), 193–207. <https://doi.org/10.1177/1359104515577486>
- Tebes, J. K. (2012). Philosophical foundations of mixed methods research: Implications for research practice. In L. Jason & D. Glenwick (Eds.), *Methodological approaches to community-based research* (1st ed., pp. 13–31). American Psychological Association. <https://doi.org/10.1037/13492-002>
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. SAGE Publications.
- Tejlingen, E., & Hundley, V. (2004). Pilot study. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The SAGE encyclopedia of social science research methods* (pp. 824–825). SAGE Publications.



- Thomas, J., Humeidan, M., Barrack, C., & Huffman, K. L. (2021). Mindfulness, stress reactivity, and depressive symptoms among “third culture kids” in the United Arab Emirates. *Journal of Cross-Cultural Psychology*, 52(2), 192–208.  
<https://doi.org/10.1177/0022022120987620>
- Ting-Toomey, S. (1999). *Communicating across cultures*. The Guilford Press.
- Tran, O. K., Gueldner, B. A., & Smith, D. (2014). Building resilience in schools through social and emotional learning. In M. J. Furlong, R. Gilman, & E. S. Huebner (Eds.), *Handbook of positive psychology in schools* (2nd ed., pp. 316–332). Routledge.
- Trinh, A. N., & Conner, L. (2019). Student engagement in internationalization of the curriculum: Vietnamese domestic students’ perspectives. *Journal of Studies in International Education*, 23(1), 154–170. <https://doi.org/10.1177/1028315318814065>
- Trowler, V. (2010). *Student engagement literature review*. Higher Education Academy.
- United Kingdom Government Department for International Trade & Department for Education. (2021). *International Education Strategy: 2021 update: Supporting recovery, driving growth*.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/958990/International-Education-Strategy-2021-Update.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/958990/International-Education-Strategy-2021-Update.pdf)
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*.  
<https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
- United Nations Educational, Scientific and Cultural Organization. (2022). *Education: From disruption to recovery*. <https://en.unesco.org/covid19/educationresponse>
- United Nations Educational, Scientific and Cultural Organization – Institute for Statistics. (2009). *Global education digest 2009: Comparing education statistics across the world*.  
<http://unesdoc.unesco.org/images/0018/001832/183249e.pdf>
- Urbaniak, G. C., & Plous, S. (2013). *Research randomizer* (Version 4.0) [Computer software].  
<https://www.randomizer.org/>
- Ussher, M. H., Owen, C. G., Cook, D. G., & Whincup, P. H. (2007). The relationship between physical activity, sedentary behaviour and psychological wellbeing among adolescents. *Social Psychiatry and Psychiatric Epidemiology*, 42(10), 851–856.  
<https://doi.org/10.1007/s00127-007-0232-x>
- van Agteren, J., Iasiello, M., Lo, L., Batholomaeus, J., Kopsaftis, Z., Carey, M., & Kyrios, M. (2021). A systematic review and meta-analysis of psychological interventions to

- improve mental wellbeing. *Nature Human Behaviour*, 5, 631–652.  
<https://doi.org/10.1038/s41562-021-01093-w>
- Van Dam, N. T., van Vugt, M. K., Vago, D. R., Schmalzl, L., Saron, C. D., Olendzki, A., Meissner, T., Lazar, S. W., Kerr, C. E., Gorchov, J., Fox, K. C. R., Field, B. A., Britton, W. B., Brefczynski-Lewis, J. A., & Meyer, D. E. (2018). Mind the hype: A critical evaluation and prescriptive agenda for research on mindfulness and meditation. *Perspectives on Psychological Science*, 13(1), 36–61.  
<https://doi.org/10.1177/1745691617709589>
- van den Bos, E., de Rooij, M., Miers, A. C., Bokhurst, C. L., & Westenberg, P. M. (2014). Adolescents' increasing stress response to social evaluation: Pubertal effects on cortisol and alpha-amylase during public speaking. *Child Development*, 85(1), 220–236.  
<https://doi.org/10.1111/cdev.12118>
- van der Oord, S., Bögels, S. M., & Peijnenburg, D. (2012). The effectiveness of mindfulness training for children with ADHD and mindful parenting for their parents. *Journal of Child and Family Studies*, 21(1), 139–147. <https://doi.org/10.1007/s10826-011-9457-0>
- Van Horne, S., Lin, S., Anson, M., & Jacobson, W. (2018). Engagement, satisfaction, and belonging of international undergraduates at U.S. research universities. *Journal of International Students*, 8(1), 351–374. <https://doi.org/10.32674/jis.v8i1.169>
- van Loon, A. W. G., Creemers, H., Beumer, W., Okorn, A., Vogelaar, S., Saab, N., Miers, A., Westenberg, P., & Asscher, J. (2020). Can schools reduce adolescent psychological stress? A multilevel meta-analysis of the effectiveness of school-based intervention programs. *Journal of Youth and Adolescence*, 49(6), 1127–1145.  
<https://doi.org/10.1007/s10964-020-01201-5>
- Viafora, D. P., Mathiesen, S. G., & Unsworth, S. J. (2015). Teaching mindfulness to middle school students and homeless youth in school classrooms. *Journal of Child and Family Studies*, 24(5), 1179–1191. <https://doi.org/10.1007/s10826-014-9926-3>
- Viglas, M., & Perlman, M. (2018). Effects of a mindfulness-based program on young children's self-regulation, prosocial behavior and hyperactivity. *Journal of Child and Family Studies*, 27, 1150–1161. <https://doi.org/10.1007/s10826-017-0971-6>
- Volanen, S., Lassander, M., Hankonen, N., Santalahti, P., Hintsanen, M., Simonsen, N., Raevuori, A., Mullaola, S., Vahlberg, T., But, A., & Suominen, S. (2020). Healthy learning mind – effectiveness of a mindfulness program on mental health compared to a relaxation program and teaching as usual in schools: A cluster-randomised controlled

- trial. *Journal of Affective Disorders*, 260, 660–669.  
<https://doi.org/10.1016/j.jad.2019.08.087>
- Wang, J. (2008). A study of resiliency characteristics in the adjustment of international graduate students at American universities. *Journal of Studies in International Education*, 13(1), 22–45. <https://doi.org/10.1177/1028315307308139>
- Wang, M-T., & Degol, J. (2014). Staying engaged: Knowledge and research needs in student engagement. *Child Development Perspectives*, 8(3), 137–143.  
<https://doi.org/10.1111/cdep.12073>
- Ward, C. A., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock* (2nd ed.). Routledge.
- Ward, C., & Kennedy, A. (1994). Acculturation strategies, psychological adjustment, and sociocultural competence during cross-cultural transitions. *International Journal of Intercultural Relations*, 18(3), 329–344. [https://doi.org/10.1016/0147-1767\(94\)90036-1](https://doi.org/10.1016/0147-1767(94)90036-1)
- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations*, 23(4), 659–677. [https://doi.org/10.1016/S0147-1767\(99\)00014-0](https://doi.org/10.1016/S0147-1767(99)00014-0)
- Ward, C., & Rana-Deuba, A. (1999). Acculturation and adaptation revisited. *Journal of Cross-Cultural Psychology*, 30(4), 422–442. <https://doi.org/10.1177/0022022199030004003>
- Waters, L. (2011). A review of school-based positive psychology interventions. *The Australian Educational and Developmental Psychologist*, 28(2), 75–90.  
<https://doi.org/10.1375/aedp.28.2.75>
- Waters, L., & Loton, D. (2019). SEARCH: A meta-framework and review of the field of positive education. *International Journal of Applied Positive Psychology*, 4(1–2), 1–46.  
<https://doi.org/10.1007/s41042-019-00017-4>
- Weare, K. (2013). Developing mindfulness with children and young people: A review of the evidence and policy context. *Journal of Children's Services*, 8(2), 141–153.  
<https://doi.org/10.1108/JCS-12-2012-0014>
- Weare, K. (2019). Mindfulness and contemplative approaches in education. *Current Opinion in Psychology*, 28, 321–326. <https://doi.org/10.1016/j.copsyc.2019.06.001>
- Weare, K. & Nind, M. (2011). Mental health promotion and problem prevention in schools: What does the evidence say? *Health Promotion International*, 26(suppl\_1), i29–i69.  
<https://doi.org/10.1093/heapro/dar075>

- Wekullo, C. S. (2019). International undergraduate student engagement: Implications for higher education administrators. *Journal of International Students*, 9(1), 320–337.  
<https://doi.org/10.32674/jis.v9i1.257>
- White, L. S. (2012). Conducting school-based research: Lessons learned from an after-school intervention study. *Journal of Pediatric Health Care*, 26(1), 75–79.  
<https://doi.org/10.1016/j.pedhc.2011.05.001>
- White, M. A. (2016). Why won't it stick? Positive psychology and positive education. *Psychology of Well-Being*, 6(1), 1–16. <https://doi.org/10.1186/s13612-016-0039-1>
- White, K., Lubans, D. R., & Eather, N. (2022). Feasibility and preliminary efficacy of a school-based health and well-being program for adolescent girls. *Pilot and Feasibility Studies*, 8(1), 1–15. <https://doi.org/10.1186/s40814-021-00964-3>
- White, M. A., & Murray, A. S. (2015). *Evidence-based approaches in positive education implementing a strategic framework for well-being in schools*. Springer.
- White, M. A., & Waters, L. E. (2015). A case study of “the good school:” Examples of the use of Peterson’s strengths-based approach with students. *The Journal of Positive Psychology*, 10(1), 69–76. <https://doi.org/10.1080/17439760.2014.920408>
- Whyte, S. J. (2016). *Thinking about our feelings: A pedagogical innovation centred on the skills of emotional intelligence with third culture kids*. (Publication No. 10626047) [Doctoral dissertation, University of Newcastle Upon Tyne]. ProQuest Dissertations and Theses Global.
- Windle, G., Bennett, K. M., & Noyes, J. (2011). A methodological review of resilience measurement scales. *Health and Quality of Life Outcomes*, 9(1), 8.  
<https://doi.org/10.1186/1477-7525-9-8>
- Wolfenden, L., Kypri, K., Freund, M., & Hodder, R. (2009). Obtaining active parental consent for school-based research: A guide for researchers. *Australia and New Zealand Journal of Public Health*, 33(3), 270–275. <https://doi.org/10.1111/j.1753-6405.2009.00387.x>
- Wong, P. T. P. (2011). Positive psychology 2.0: Towards a balanced interactive model of the good life. *Canadian Psychology*, 52(2), 69–81. <https://doi.org/10.1037/a0022511>
- World Health Organization. (2016). *Adolescents’ mental well-being*.  
[http://www.euro.who.int/data/assets/pdf\\_file/0020/303482/HBSC-No.7\\_factsheet\\_Well-being.pdf](http://www.euro.who.int/data/assets/pdf_file/0020/303482/HBSC-No.7_factsheet_Well-being.pdf)
- World Health Organization. (2017). *Global accelerated action for the health of adolescents*.  
<https://www.who.int/publications/i/item/9789241512343>

- World Health Organization. (2019). *The WHO special initiative for mental health (2019-2023): Universal health coverage for mental health*. World Health Organization. <https://apps.who.int/iris/handle/10665/310981>.
- World Health Organization. (2020). *Guidelines on promotive and preventative mental health interventions for adolescents – Helping adolescents thrive (HAT)*. <https://apps.who.int/iris/bitstream/handle/10665/336864/9789240011854-eng.pdf>
- World Health Organization. (2021). *Adolescent mental health*. <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- Xiong, Y., Prasath, P. R., Zhang, Q., & Jeon, L. (2022). A mindfulness-based well-being group for international students in higher education: A pilot study. *Journal of Counseling and Development, 100*(4), 374–385. <https://doi.org/10.1002/jcad.12432>
- Yoo, M-R., Choi, S. Y., Kim, Y. M., Han, S-J., Yang, N-Y., Kim, H., Chang, H. K., Lee, M-R., & Son, Y-J. (2013). Acculturative stress, resilience, and depression among Chinese students in Korea. *The Journal of Korean Academic Society of Nursing Education, 19*(3), 320–329. <https://doi.org/10.5977/jkasne.2013.19.3.320>
- Yusof, N., Ang, R., & Oei, T. P. (2017). The psychometric properties of the School Engagement Measure in adolescents in Singapore. *Journal of Psychoeducational Assessment, 35*(5), 521–533. <https://doi.org/10.1177/0734282916639441>
- Zeedyk, M. S., Gallacher, J., Henderson, M., Hope, G., Husband, B., & Lindsay, K. (2003). Negotiating the transition from primary to secondary school: Perceptions of pupils, parents and teachers. *School Psychology International, 24*, 67–79. <https://doi.org/10.1177/0143034303024001010>
- Zenner, C, H., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools: A systematic review and meta-analysis. *Frontiers in Psychology, 5*, 603. <https://doi.org/10.3389/fpsyg.2014.00603>
- Zhai, Y, & Du, X. (2020). Mental health care for international Chinese students affected by the COVID-19 outbreak. *Lancet Psychiatry, 7*(4):e22. [https://doi.org/10.1016/S2215-0366\(20\)30089-4](https://doi.org/10.1016/S2215-0366(20)30089-4)
- Zhang, J., & Goodson, P. (2011). Predictors of international students’ psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations, 35*(2), 139–162. <https://doi.org/10.1016/j.ijintrel.2010.11.011>
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. (2004). The scientific base linking social and emotional learning to school success. In J. E. Zins, R. P. Weissberg,

M. C. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 3–22). Teachers College Press.



## Appendices

### Appendix A: Summary of MBI Studies With Early-Adolescent School Students

Study	Design	Participants	Objective	Measures	Type of measure	Results
Arthurson (2015)	Mixed-methods design with single group	30 students from Year 7 at a private school  (age range 11–12 years)	To explore whether a mindfulness-based school program: <ul style="list-style-type: none"> <li>• would be useful for children in dealing with their emotions, and</li> <li>• would offer activities that were suitable for use, suitable in a classroom environment, and offer long-term usage beyond the intervention duration</li> </ul>	Student self-report questionnaire  Smiley-face emotion evaluation sheet  Postprogram interview with school counsellor and teacher  Classroom observations by teacher and researcher	Student self-report  Interview with facilitator and teacher  Student classroom observations	Different activities appealed to different students, with a few activities not being well regarded by the majority  Flexibility in duration and scheduling of the program was identified as important by the teacher and facilitator  A suitable space is important for delivery of the program  Students identified practices learnt could be helpful in managing future emotions  Experience of facilitator is important



Study	Design	Participants	Objective	Measures	Type of measure	Results
Barnes, Davis, Murzynowski, & Treiber (2004)	Pre–post randomised design with active control group  The control group undertook health education	73 middle-school students from four science classes at a public school  ( $M = 12.3$ years, $SD = 0.6$ ; 47% females)  (intervention group $n = 34$ ; health education control group $n = 39$ )	To evaluate the effects of a mindfulness program on resting and ambulatory blood pressure and heart rate	Resting SBP  DBP  HR  Height and weight  Spielberger Anger Expression Scale and Neighbourhood Stress Index  Self-report on physical activity	Physical measures  Student self-report	Between-group comparison:  <ul style="list-style-type: none"> <li>Only the mindfulness group showed significant decreases in (1) resting SBP and (2) daytime after-school ambulatory SBP, DBP, and HR</li> </ul>
Bernay, Graham, Devcich, Rix, & Rubie-Davis (2016)	Pre-, post-, and 3-month follow-up mixed-methods design without control group	124 elementary school children from 3 New Zealand schools aged 9–12 years ( $M = 11.14$ , $SD = 1.18$ ; 51% females)	To examine the effects of a mindfulness-based intervention on student wellbeing  To understand the students perception of the program	Mindful Awareness Attention Scale for Children  Stirling Children’s Wellbeing Scale  Teacher observation of student behaviour  Student interview	Student self-report measure  Teacher observations recorded in journals  Student interviews ( $n = 6$ )	Within-group comparison:  <ul style="list-style-type: none"> <li>No increase in mindfulness between baseline and postintervention but an increase at 3-month follow up (Partial <math>\eta^2 = .05</math>, <math>p = .005</math>)</li> <li>Significant increase in student wellbeing postintervention but return to baseline at 3-month follow up (Partial <math>\eta^2 = .04</math>, <math>p = .008</math>)</li> <li>Changes to mindfulness were positively related to changes in wellbeing (<math>r = .38</math>, <math>p &lt; .001</math>)</li> </ul> <p>Student interviews: Active</p>

Study	Design	Participants	Objective	Measures	Type of measure	Results
						engagement and acceptability of the program, and positive social-emotional benefits  Teacher observations: Improvement in student behaviour and classroom climate
Britton, Lepp, Niles, Rocha, Fisher, & Gold (2014)	Pre-post randomised control trial with active control group  (Intervention = Asian history class with mindfulness; Active control = African history class + experiential activity)	101 sixth-grade students from two consecutive years in an independent Quaker school  ( <i>M</i> = 11.79 years, <i>SD</i> = 0.41; females 46%)	To examine the effects of a nonelective mindfulness-based intervention on mental health and affect in middle-school children	Youth Self Report  Modified Spielberger State-Trait Anxiety Inventory – Child Version  Cognitive and Affective Mindfulness Scale – Revised  Student journal entries	Student self-report  Student journal entry	Between- and within-group comparison:  <ul style="list-style-type: none"> <li>• A reduction in both suicidal ideation (likelihood ratio = 7.73, <i>p</i> = .005) and affective disturbance (Cohen's <i>d</i> = .41, <i>p</i> = .05) found only in the mindfulness group</li> <li>• No significant changes in mindfulness among any groups over time (Cohen's <i>d</i> = .00, <i>p</i> = .78)</li> </ul> <p>Both groups showed improvements on internalising problems, externalising problems, attention problem subscales and affect measures, but no difference in magnitude between the groups</p>

Study	Design	Participants	Objective	Measures	Type of measure	Results
Costello & Lawler (2014)	Pre–post mixed-methods design	63 children from sixth grade in two schools at risk of socioeconomic exclusion in Dublin  (age range 11–12 years; 73% females)	To examine the effects of daily mindfulness-based practice on perceived stress levels in primary school children at risk of socioeconomic exclusion  To explore children’s perspectives on mindfulness programs and outcomes	Student self-reflection journals recorded after each session  Semistructured interviews with students and teachers  PSS-10	Student interviews ( $n = 16$ )  Teacher interviews ( $n = 2$ )  Student self-report	Significant reductions found in students’ perceived stress levels ( $p < .001$ ) postintervention  Thematic analysis identified 5 key themes:  <ul style="list-style-type: none"> <li>• Conceptualisation of stress</li> <li>• Awareness</li> <li>• Self-regulation</li> <li>• Classroom regulations</li> <li>• Addressing future stress</li> </ul>
Johnson, Burke, Brinkman, & Wade (2016)	Pre-, post-, and 3-month follow-up randomised control design with control group  The control group undertook normal curricular lessons (pastoral care and community projects)	308 students from Year 7 (one public primary school) and Year 8 (three public and one private high school) from urban coeducational schools  ( $M = 13.63$ years, $SD = 0.43$ ; 48% females)  (intervention group $n = 132$ ; control group $n = 176$ )	To assess whether an MBI could be replicated in an Australian school context independent of program developers, and to examine its effect on anxiety, depression, and eating disorders in early-adolescent students  To examine whether any benefits were moderated by increased home practice	Negative affect: DASS-21  Weight and shape concern: EDE-Q  Wellbeing: WEMWBS  Mindfulness: CAMM  Difficulties in Emotion Regulation Scale  Self-compassion: SCS  Acceptability and Home Practice Questionnaire	Student self-report	Between-group comparison:  <ul style="list-style-type: none"> <li>• No improvements in all outcome variables at post-and follow-up time intervals for the intervention group compared with the control group (Cohen’s <math>d =</math> from .01 to .28, <math>p &gt; .05</math>)</li> <li>• Anxiety was higher in intervention group for males at follow-up (Cohen’s <math>d = .22</math>, <math>p &lt; .05</math>)</li> </ul> Intervention group:  <ul style="list-style-type: none"> <li>• High acceptability of the program and facilitator (mean score of 7 out of 10)</li> <li>• Low rates of home-practice uptake (26%)</li> </ul>
Johnson, Burke,	Pre-, post- and follow-	555 students from	To evaluate a tighter	Negative affect:	Student self-	Between-group comparison:

Study	Design	Participants	Objective	Measures	Type of measure	Results
Brinkman, & Wade (2017)	up randomised control design with two different intervention groups (with and without parent involvement) and a control group  The control group undertook normal curricular lessons (pastoral care, community projects, etc.)	four urban coeducational secondary schools (one private, three public)  ( $M = 13.44$ years, $SD = 0.33$ ; 45% females)  (intervention group with parent involvement $n = 191$ ; intervention group without parent involvement $n = 186$ ; control group $n = 178$ )	replication of a mindfulness program  To identify whether parent involvement in the program increases home-practice compliance and intervention effects	DASS-21  Weight and shape concern: EDE-Q  Wellbeing: WEMWBS  Mindfulness: CHIME-A	report	<ul style="list-style-type: none"> <li>No differences in outcomes between any of the groups at post-, 6-month, or 12-month follow-up (Cohen's <math>d =</math> from .002 to .37, <math>p &lt; .05</math>)</li> </ul>
Johnson and Wade (2021)	Pre-, post-, and two follow-up time periods (3-months; 9-months), cluster randomised control design with intervention group and control group (usual curriculum)	476 students from Year 8 (one public high school and two private schools) and Year 10 (two private high schools) from two urban schools and one rural school  (Year 8: $M = 13.67$ years, $SD = 0.42$ ; 49.1% females; Year 10: $M = 15.52$ years, $SD = 0.37$ ; 46.7% females)	To examine the effect of a mindfulness-based program on mindfulness, depression, anxiety, eating disorder risk factors, and wellbeing in students in Year 8 and Year 10	Negative affect: DASS-21  Generalised Anxiety Disorder Scale  Weight and shape concern: EDE-Q  Wellbeing: WEMWBS  Mindfulness: CHIME-A  Course acceptability	Student self-report  Student and teacher questionnaire	<p>For younger students, there were no differences at postintervention on any outcomes for the mindfulness group compared with the control group (Cohen's <math>d &lt; .22</math>), and at follow-up the mindfulness group were worse in wellbeing (<math>d = -.25</math>) and two aspects of mindfulness (<math>d = -.30</math> to <math>-.39</math>).</p> <p>For older students, there were no significant differences between the intervention group and control group at postintervention (<math>d &lt; .17</math>) or follow-up (<math>d &lt; .22</math>).</p> <p>Level of acceptability was moderate and did not differ by age</p>

Study	Design	Participants	Objective	Measures	Type of measure	Results
Joyce, ETTY-Leal, Zazryn, Hamilton, & Hassed (2010)	Pre–post mixed-methods design without control group	175 children from two primary schools in Melbourne from Grades 5 and 6 aged 10–13 years  ( <i>M</i> = 11.3 years; 44% females)	To examine the effect of a mindfulness-based program on mental health measures in students aged 10–13 years	SDQ  CDI-M  Teacher questionnaire and discussion on facilitation of the program	questionnaire  Student self-report  Teacher one-page questionnaire  30-minute teacher interview	Within-group comparison:  <ul style="list-style-type: none"> <li>• Significant decrease in the Total Difficulties Score of SDQ (Cohen's <math>d = .38, p &lt; .00</math>) and CDI (Cohen's <math>d = .27, p &lt; .01</math>) for all students</li> <li>• Significant improvement in the Prosocial scale of SDQ (Cohen's <math>d = .21, p &lt; .05</math>) for students identified in the “borderline” or “abnormal” category</li> </ul> Positive teacher feedback on their experience with the program
Lassander, Hintsanen, Suominen, Mullola, Vahlberg, & Volanen (2021)	Pre-, post- and follow-up randomised control design with intervention group, active control (relaxation program), and inactive control group	2,754 students from 56 Finnish comprehensive schools  (Aged 12–15 years; 50% females)  (Intervention group $n = 1,220$ ; active control group $n = 1,181$ ; inactive control group $n = 353$ )	To evaluate the effects of a mindfulness school program on health-related quality of life in early adolescents compared with an active control group and inactive control group moderated by gender, grade, and independent practice	HRQoL (KINDL-R)  Student follow-up questionnaire	Student self-report  Student questionnaire	The mindfulness intervention group reported a significant improvement in HRQoL (mean difference $\beta = 1.587, p < .001$ ) at post- and follow-up measures compared with the active control group.  Moderating effects on HRQoL were also found for gender, grade, and independent practice. Females, Grade 7 and Grade 8 students, and students with regular independent practice benefited most
Quach, Jastrowski, & Alexander (2016)	Pre–post randomised control design with two different intervention groups and a waitlist	198 students aged 12–15 years from a large junior high school and predominantly from	To evaluate the effects of a mindfulness school program on working memory capacity in	AOSPAN  PSS-10	Student self-report and cognitive assessment	Between-group comparison:  The mindfulness intervention group reported a significant improvement in

Study	Design	Participants	Objective	Measures	Type of measure	Results
	control group	low-income households  ( <i>M</i> = 13.18 years, <i>SD</i> = 0.72; 62% females)  (Mindfulness intervention group <i>n</i> = 61; Hatha yoga intervention group <i>n</i> = 68; waitlist control group <i>n</i> = 57)	adolescents compared to a hatha yoga intervention and control group  To examine the effect of both interventions on perceived stress and anxiety	Screen for Child Anxiety and Related Emotional Disorders  CAMM		working memory capacity (AOSPAN, Partial $\eta^2 = .24$ , $p < .001$ ) compared to the hatha yoga (Partial $\eta^2 = .04$ , $p = .11$ ) and control groups (Partial $\eta^2 = .01$ , $p < .46$ )  No significant between-group differences found for stress and anxiety
Schonert-Reichl & Lawlor (2010)	Pre–post nonrandomised quasi-experimental design with a waitlist control group	246 students aged 9–13 years from Grades 4 to 7 in 12 elementary urban schools  (Intervention <i>n</i> = 139; <i>M</i> = 11.1 years, <i>SD</i> = 1.18; 49% females; waitlist control <i>n</i> = 107; <i>M</i> = 11.65 years, <i>SD</i> = 0.83; 47% females)	To examine the effects of a mindfulness-based program on optimism, self-concept, positive affect, and social-emotional functioning in preadolescent and early-adolescent students	Optimism scale from Resilience Inventory  PANAS  School self-concept and general self-concept subscales from the Self-Description Questionnaire  Social-Emotional Competence teacher rating scale	Student self-report  Teacher report on student	Between-group comparison:  <ul style="list-style-type: none"> <li>• Increase in self-reported optimism (Partial <math>\eta^2 = .018</math>, <math>p &lt; .05</math>) and positive affect (Partial <math>\eta^2 = .009</math>, <math>p &lt; .10</math>) for the intervention group compared with the control group</li> <li>• An increase in self-reported general self-concept for preadolescents only (Partial <math>\eta^2 = .014</math>, <math>p &lt; .05</math>)</li> <li>• Increase in teacher reports of attention (Partial <math>\eta^2 = .120</math>, <math>p &lt; .001</math>), emotional regulation (Partial <math>\eta^2 = .041</math>, <math>p &lt; .001</math>), and social and emotional competence (Partial <math>\eta^2 = .260</math>, <math>p &lt; .001</math>) for the intervention group</li> <li>• Reduction in teacher reports of aggression (Partial <math>\eta^2 = .074</math>,</li> </ul>

Study	Design	Participants	Objective	Measures	Type of measure	Results
						<i>p</i> < .001)
Sibinga, Perry-Parrish, Chung, Johnson, Smith, & Ellen (2013)	Pre-, post-, and 3-month follow-up randomised controlled design with active control group  The control group undertook health education	41 male students from Grade 7 and Grade 8 at a small school for boys from low-income urban families  ( <i>M</i> = 12.5 years; 100% males)  (Mindfulness intervention group <i>n</i> = 22; Health education group <i>n</i> = 19)	To determine whether a mindfulness-based school intervention is associated with reduced psychological symptoms and enhanced coping in urban male adolescents	Psychological functioning (SCL-90-R)  Coping (COPE)  Mindfulness (CAMM)  Sleep measures: sleep diary, Respironics, Mini-Mitter Actiwatch, wrist actigraph  Salivary cortisol	Student self-report  Physiological assessments	Between-group comparison:  • The mindfulness group reported less anxiety (Cohen's <i>d</i> = .79, <i>p</i> = .01), less rumination (Cohen's <i>d</i> = .64, <i>p</i> = .02) and improved negative coping (Cohen's <i>d</i> = .87, <i>p</i> = .06), compared to the active control group
Sibinga, Webb, Ghazarian, & Ellen (2016)	Pre-post randomised trial with active control group  The control group undertook health education	300 students from Grades 5 to 8 inclusive from two public schools ( <i>M</i> = 12.0 years; 51% females)  (Intervention <i>n</i> = 159; active control of a health education program <i>n</i> = 141)	To examine the effects of a mindfulness-based intervention on the negative effects of stress and trauma in low-income, minority students in middle school	Mindfulness: CAMM  Psychological symptoms: CDI-S SCL-90-R MASC  Mood and emotion regulation: PANAS Dissociative Experiences: DES State Anger: STAXI-2  Coping:	Student self-report	Between-group comparison:  • Postprogram, the intervention group reported lower levels on somatisation ( $\beta = -.13, p = .03$ ), depression ( $\beta = -.16, p = .02$ ), negative coping ( $\beta = -.13, p = .003$ ), negative affect ( $\beta = -.13, p = .04$ ), rumination ( $\beta = -.13, p = .02$ ), self-hostility ( $\beta = -.14, p = .02$ ), and posttraumatic stress symptoms ( $\beta = -.15, p = .02$ ), compared to the active control group

Study	Design	Participants	Objective	Measures	Type of measure	Results
				CRSQ Brief COPE CSE		
				Posttraumatic symptoms: CPSS		
Viafora, Mathiesen & Unsworth (2015)	Pre–post quasi-experimental design with two treatment groups and a nonequivalent comparison group	63 students from Grade 6 to 8 inclusive (aged 11–13 years) from four middle-school classrooms at two schools (52% females)  (Intervention group $n = 28$ ; waitlist nonequivalent group $n = 20$ ; school with students facing homelessness $n = 15$ )	To examine whether an 8-week mindfulness course would foster protective coping factors in adolescents attending a traditional school or a school with students at risk of homelessness  To evaluate the acceptability and feasibility of the course	CAMM AFQ-Y SCS-C Program evaluation questionnaire	Student self-report  Open-ended evaluation questionnaire	No significant interaction between time and group found for the AFQ-Y and SCS-C  Only students in traditional classrooms reported increased mindfulness from pre- to postintervention ( $p < .01$ )  Students facing homelessness reported higher evaluations of the course and its generalisability for use in the future

*Note.* AFQ-Y = Avoidance and Fusion Questionnaire for Youth; AOSPAN = Automated Operation Span Task; CAMM = Child Acceptance and Mindfulness Measure; CDI-M = Children's Depression Inventory – Modified; CDI-S = Children's Depression Inventory – Short; CHIME-A = Comprehensive Inventory of Mindfulness Experiences – Adolescents; COPE = Coping Orientation to Problems Experienced; DASS-21 = Depression Anxiety and Stress Scale; CRSQ = Children's Response Styles Questionnaire; DBP = diastolic blood pressure; CSE = Coping Self-Efficacy Scale; DES = Dissociative Experiences Scale; EDE-Q = Eating Disorder Examination – Questionnaire; HR = heart rate; HRQoL = Health-Related Quality of Life; MASC = Multidimensional Anxiety Scale for Children; PANAS = Positive and Negative Affect Schedule; PSS10 = Perceived Stress Scale; SBP = systolic blood pressure; SCL-90-R = Symptom Checklist-90-Revised; SCS = Self-Compassion Scale; SCS-C = Self-Compassion Scale for Children; SDQ = Strengths and Difficulties Questionnaire; STAXI-2 = State-Trait Anger Expression Inventory – 2; WEMWBS = Warwick-Edinburgh Mental Wellbeing Scale;

Adapted from “A systematic review of mindfulness-based school interventions with early adolescents,” by P. McKeering and Y-S. Hwang, 2019, *Mindfulness*, 10(4), 597–602.

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## Appendix B: Ethics Approval Letter

**From:** Res Ethics Res.Ethics@acu.edu.au  
**Subject:** 2017-243H Ethics application approved!  
**Date:** 1 November 2017 at 14:43  
**To:** Yoon-Suk Hwang Yoon-Suk.Hwang@acu.edu.au  
**Cc:** Res Ethics Res.Ethics@acu.edu.au, phillipa.mckeering@myacu.edu.au

RE

Dear Applicant,

Principal Investigator: Dr Yoon-Suk Hwang  
Student Researcher: Philippa McKeering (HDR Student)  
Ethics Register Number: 2017-243H  
Project Title: Acculturation and wellbeing for international school students: Examining the effects of a mindfulness-based intervention  
Date Approved: 01/11/2017  
Ethics Clearance End Date: 31/12/2018

This is to certify that the above application has been reviewed by the Australian Catholic University Human Research Ethics Committee (ACU HREC). The application has been approved for the period given above subject to providing permission letter from the school principal before data collection commences.

Researchers are responsible for ensuring that all conditions of approval are adhered to, that they seek prior approval for any modifications and that they notify the HREC of any incidents or unexpected issues impacting on participants that arise in the course of their research. Researchers are also responsible for ensuring that they adhere to the requirements of the National Statement on Ethical Conduct in Human Research, the Australian Code for the Responsible Conduct of Research and the University's Code of Conduct.

Any queries relating to this application should be directed to the Ethics Secretariat ([res.ethics@acu.edu.au](mailto:res.ethics@acu.edu.au)). It is helpful if you quote your ethics approval number in all communications with us.

If you require a formal approval certificate in addition to this email, please respond via reply email and one will be issued.

We wish you every success with your research.

Kind regards,

Kylie Pashley  
on behalf of ACU HREC Chair, Dr Nadia Crittenden

Senior Research Ethics Officer | Research Services Office of the Deputy Vice Chancellor (Research) Australian Catholic University

THIS IS AN AUTOMATICALLY GENERATED RESEARCHMASTER EMAIL

## Appendix C: Headmaster Information Letter for Phase 1 & Phase 2



### Wellbeing of international school students

Dear Headmaster,

We are seeking your consent for students and teachers from Years 6 to 8 who wish to engage in the research being conducted at School X to participate in either the first or both phases of the research project described below.

#### *What is the project about?*

##### ***Phase 1:***

This phase of the research project will investigate things that may influence the wellbeing and support of international school students as they adjust to a new school and/or country (e.g., effect of mobility). It is hoped this information can then be used to better support the transition phase of international school students in the future.

##### ***Phase 2:***

The second phase of the research project will investigate the effect of a mindfulness-based school program on the wellbeing of international school students. The mindfulness program, known as the '*.b* curriculum,' has reported many benefits to improving students' wellbeing at school (further information on the program can be found at <https://mindfulnessinschools.org>). The program is delivered as classroom lessons in which key topics are explored and discussed and mindfulness practices are taught. The research aims to understand whether mindfulness lessons can support international students as they transition to a new school and/or country. Given the high mobility of international school students, it is hoped this research can identify a program that can provide support to these students as they adjust to a new environment.

#### *Who is undertaking the project?*

This project is being conducted by Phillipa McKeering and will form the basis for the degree of Doctorate of Education at Australian Catholic University under the supervision of Dr Hwang. Phillipa has tertiary qualifications in Psychology, Education, and Mental Health and is an accredited Mindfulness instructor. She has several years of experience in developing and implementing mindfulness programs with school students to support and enhance their wellbeing.

#### *Are there any risks associated with participating in this project?*

There is a low risk that by participating in the program or by answering the questionnaires your students may experience an unpleasant feeling or thought (e.g., recalling when they had to say goodbye to a close friend when relocating). If this happens and provokes strong emotions, they will be asked to stop their participation in either the program or in the completion of the questionnaire. The student would then be given a break and reminded that they are under no obligation to continue their participation in the study. If they continued to show signs of discomfort, their participation in the study would stop and the Head of Student Services at School X will be notified.

#### *What will the students at my school be asked to do?*

##### ***Phase 1:***

- The students will be asked to complete questionnaires that include statements and questions on their wellbeing, student engagement and resilience experience.
- For example, they may be asked to circle a statement that best describes their experience, such as 'I am interested in the work at school' and 'I tend to get over hard times quickly'.
- The questionnaires will take approximately 20–30 minutes to complete. The students will be asked to complete the questionnaires in morning form time with their form teacher at an appropriate time during the first two weeks of December.

**Phase 2:**

- 50 students who were participants in the first phase of the research project and have voluntarily submitted consent forms to take part in the mindfulness program, will be randomly selected for participation in the second phase of the study. 25 students will participate in the program in Term 2 and the remaining 25 students would participate in the program in Term 3.
- The mindfulness program comprises of 16 lessons delivered twice a week over an eight-week period in a designated classroom during lunch recess. Each class will follow a similar structure with a presentation of key themes, group discussion, and mindfulness practices. The program also includes optional homework exercises for the students to do each week. These lessons will be audio recorded to ensure that the researcher is being consistent in their program delivery.
- The students would also be asked to complete a wellbeing questionnaires three times during the research project: before the program starts, after the program finishes, and 11 weeks after completion of the program. The second group would also complete an additional questionnaire at the beginning of Term 2. The students would be advised of this in advance and the questionnaires will be completed during lunch recess. The questionnaires are expected to take 20–30 minutes to complete. The students will be required to attend 75% of lessons in order to participate in this research project.
- For example, students will be asked to circle a statement that best describes their experience, such as ‘My classroom is a fun place to be,’ and ‘I am optimistic about my future’.
- The students will also be asked to complete a short program satisfaction survey at the end of the mindfulness program that is expected to take 5 minutes to complete.
- Ten students will also be selected to participate in a 20–30-minute interview at the end of the program. This interview is to enable the researcher to better understand individual students’ experiences with the program. Students selected to participate in this component of the study would be assigned a pseudonym to protect their privacy. These interviews will be audio recorded for transcription purposes only, and all recorded data will be deleted immediately after transcription has been completed. The interview would be scheduled at a convenient time for each selected student.

***What will the teachers at my school be asked to do?***

**Phase 1:**

- Form teachers will be required to assist the researcher in the distribution and collection of information letters and consent forms.
- Form teachers will be required to administer the questionnaires to the students during morning form time at an appropriate time in the first two weeks of December.
- Form teachers will be required to read from a scripted text prepared by the researcher in administering the questionnaires.

**Phase 2:**

- Teachers will be invited to complete an online questionnaire on different emotional and behavioural measures in relation to their student before and after they have participated in a school-based mindfulness program.
- For example, they will need to respond to statements such as ‘considerate of other people’s feelings,’ and ‘thinks things out before acting,’ with a response of ‘not true’, ‘somewhat true’, or ‘certainly true’.
- The questionnaires will take approximately 5–10 minutes to complete, and participation will be between January and June 2018.

***What will the parents at my school be asked to do?***

**Phase 2:**

- Parents will be invited to complete an online questionnaire on different emotional and behavioural measures in relation to their child before and after they have participated in a school-based mindfulness program.
- For example, they will need to respond to statements such as ‘considerate of other people’s feelings,’ and ‘thinks things out before acting,’ with a response of ‘not true’, ‘somewhat true’, or ‘certainly true’.
- The questionnaires will take approximately 5–10 minutes to complete, and participation will be between January and June 2018.

***How much time will the project take?***

The first phase of the study will be delivered at the school in December 2017. The second phase of the study will be delivered at school between January and June 2018 (with final data collection occurring in September 2018). The researcher will require access to the same classroom at lunch recess during the second phase of the project. In addition to this, the researcher will provide weekly feedback to the Head of Student services during the research project to ensure that any issues or concerns are being addressed. All questionnaires and interviews will also be conducted during this time.

***What are the benefits of the research project?***

***Phase 1:***

The research project will enable a better understanding of what factors may support and inhibit the wellbeing of international school students as they adjust to a new school and/or country. In doing this, better support can be provided to students during this transition phase in the future.

***Phase 2:***

Mindfulness school programs have reported significant benefits on students' wellbeing at school. Benefits have been reported across numerous measures including emotional, behavioural, cognitive, and social functioning of the student. The research project will examine what effect such a program has on different wellbeing measures specifically with international school students. It is envisaged a mindfulness program may support international students in their wellbeing during the process of relocation to a new school and/or country.

***How will data be stored and kept confidential?***

All collected data will be kept secure and confidential, with only the research team having access to the collected raw data. Any information provided will be treated in the strictest confidence by the researchers. All participants will be assigned a unique code number on their questionnaires to protect their privacy.

***Can participants withdraw from the study?***

Participation in this research is completely voluntary. Students, their parents, and teachers all need to have returned signed consent forms to participate in the study. Schools, teachers, and students are not under any obligation to participate. Those that do agree to participate can withdraw at any time without adverse consequences, and this will not affect any relationships within school.

***Where will the results of the study be shared?***

The results from the study will be written up as a report and will be presented to the College leadership team during the school year 2018–2019. The results may also appear in academic journals. However, your name, your students' names, your teachers' names, and the school's name will NOT appear in any report or journal.

***Who do I contact if I have questions about the project?***

Mrs Phillipa McKeering

Dr Yoon-Suk Hwang

***What if I have a complaint or any concerns?***

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2017-243H). If you have any complaints or concerns about the conduct of the project, you may write to the Manager of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research). Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

Manager, Ethics, c/o Office of the Deputy Vice Chancellor (Research)  
Australian Catholic University, North Sydney Campus  
PO Box 968, NORTH SYDNEY, NSW 2059  
Ph.: 02 9739 2519 / Email: [resethics\\_manager@acu.edu.au](mailto:resethics_manager@acu.edu.au)

***How do I provide consent for school participation?***

To record your approval for your school to participate in the research project, please sign each of the two enclosed copies of the consent form recording your decision. One of these forms is for you to retain for your records, and the other is returned directly to Mrs Phillipa McKeering using the reply-paid envelope or email [phillipa\\_mckeering@myacu.edu.au](mailto:phillipa_mckeering@myacu.edu.au)

We thank you for your careful consideration and assistance with this research project. Please keep this sheet for your information and do not hesitate to contact us if more information is required.

Yours sincerely,



**Phillipa McKeering**  
**Researcher**  
**Date: 25/10/17**

**Yoon-Suk Hwang**  
**Principal Investigator**  
**Date: 25/10/17**

## Appendix D: Headmaster Consent Form for Phase 1 & Phase 2



### Wellbeing of international school students

I have read and understood the information provided in the Information letter to the Headmaster. I am aware of Phillipa McKeering's doctorate research and agree to allow her to carry out her research with interested students, teachers, and parents from Years 6 to 8 at this School. Any questions I have asked have been answered to my satisfaction. The timeframe and logistics around the research have been discussed and Phillipa has also received approval to make contact with the appropriate year level heads and form teachers as required for support in data collection or distribution.

- I understand confidentiality and privacy for all participating students, teachers, and parents will be adhered to during the research project.
- I understand all data will be unidentifiable and that student, teacher, parent, and school anonymity will be upheld in any published work that arises from the research project.
- Security around data collection and storage has been discussed.
- I understand the research will be conducted on the school premises between December 2017 and September 2018.
- I understand that in the first phase of the study, students will be invited to complete a questionnaire on their wellbeing, student engagement, and resilience. I understand this questionnaire should take 20–30 minutes to complete and will be conducted during morning form time with students' form teachers.
- I understand that 50 students who have completed the first phase of the study, and who have voluntarily submitted consent forms to take part in the mindfulness program, will be randomly selected to participate in the mindfulness school program. I understand 25 students will participate in the program in Term 2, and the remaining students will participate in Term 3. I understand the program comprises of 16 lessons, delivered twice a week for eight weeks in a designated classroom during lunch recess.
- I understand that students participating in the mindfulness program will be invited to complete wellbeing questionnaires three times during the study between January and June 2018 and that the lessons will be audio recorded. I understand the second group will complete an additional questionnaire in September 2018.
- I understand teachers of students participating in the mindfulness program will be invited to participate in a short online questionnaire on their student's emotional and behavioural functioning at the beginning and at the end of the student's participation in the program.
- I understand parents of the students participating in the mindfulness program will be invited to participate in a short online questionnaire on their child's behavioural and emotional functioning at the beginning and at the end of their child's participation in the program.
- I understand ten students who have participated in the mindfulness program will be interviewed by the researcher at the end of the program. I understand this interview will be conducted in a meeting room within the senior school library to ensure a quiet and visible location. I understand these interviews will

be audio-recorded for transcriptions purposes with the recordings deleted immediately after transcription has been completed.

- I understand that all participants can withdraw from the program at any time without any penalties.
- I understand no one is able to participate in the research project unless signed parent/guardian or teacher consent forms have been received as well as student assent forms.
- I understand the school will be requested to provide teachers to sit in on some of the mindfulness lessons being delivered.
- I understand any child that displays signs of discomfort during the research project will cease participation immediately, and Head of Student Services, Ms XXXXX will be notified immediately.

*By signing the consent form below, I agree to all the bullet points listed above.*

I can be contacted to discuss the school's approval for the program to proceed.

Name of Headmaster: \_\_\_\_\_

School: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Nominated Liaison Officer: \_\_\_\_\_

Position: \_\_\_\_\_

Email address: \_\_\_\_\_

Signature of Researcher: \_\_\_\_\_ Date: \_\_\_\_\_

***Please return this copy to the researcher in the reply-paid envelope.***



## Appendix E: Parent Information Letter for Phase 1



### Wellbeing of international school students

Dear Parents/Guardians,

We are seeking your consent for your child to engage in the research project described below.

#### ***What is the project about?***

The research project will investigate things that may influence the wellbeing and support of your child as they adjust to a new school and/or country. It is hoped this information can then be used to better support the transition phase of international school students in the future.

#### ***Who is undertaking the project?***

This project is being conducted by Phillipa McKeering and will form the basis for the degree of Doctorate of Education at Australian Catholic University under the supervision of Dr Hwang. Phillipa has tertiary qualifications in Psychology, Education, and Mental Health and has been working with international school students on wellbeing programs to support and enhance their wellbeing.

#### ***Are there any risks associated with participating in this project?***

There is a low risk that in answering the questionnaire it may bring up unpleasant or difficult memories of when your child relocated to Singapore (e.g., having to say goodbye to a close friend). If this happens and provokes strong emotions, your child will be asked to stop completing the questionnaire immediately and your child's form teacher will be advised.

#### ***What will my child be asked to do?***

- Your child will be asked to complete questionnaires that include statements and questions on their wellbeing and mobility experience.
- For example, they may be asked to circle a statement that best describes their experience, such as 'I am interested in the work at school' and 'I tend to get over hard times quickly'.
- The questionnaires will take approximately 20–30 minutes to complete. Your child will be asked to complete the questionnaires in morning form time with their form teacher during the second week in December 2017.

#### ***What are the benefits of the research project?***

The research project may not directly benefit your child. However, it will enable a better understanding of what factors may support and inhibit the wellbeing of international school students as they adjust to a new school and/or country. In doing this, better support can be provided to students during this transition phase in the future.

#### ***How will data be stored and kept confidential?***

All collected data will be kept secure and confidential, with only the research team having access to the collected raw data. Any information provided will be treated in the strictest confidence by the researchers. Participants will be assigned a unique code number on their questionnaires to protect their privacy.

#### ***Can participants withdraw from the study?***

Participation in this study is completely voluntary. You and your child are not under any obligation to participate. If you agree to participate, you can withdraw from the study at any time without adverse consequences.


#### ***Where will the results of the study be shared?***

The results from the study will be written up as a report and will be presented to the College leadership team. The results may also appear in academic journals. However, your name, your child's name and the school's name will NOT appear in any report or journal.

***Who do I contact if I have questions about the project?***

Mrs Phillipa McKeering

Dr Yoon-Suk Hwang



***What if I have a complaint or any concerns?***

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2017-XXX). If you have any complaints or concerns about the conduct of the project, you may write to the Manager of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research). Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

Manager, Ethics, c/o Office of the Deputy Vice Chancellor (Research)

Australian Catholic University, North Sydney Campus

PO Box 968, NORTH SYDNEY, NSW 2059/

Ph.: 02 9739 2519 / Email: [resethics.manager@acu.edu.au](mailto:resethics.manager@acu.edu.au)

***How do I provide consent for my child to participate?***

If you and your child wish to participate in the study, you and your child will be asked to separately sign two copies of the consent form, one for your records and one for the researchers. Participation will only proceed if both you and your child sign the consent forms. Please return completed forms to your child's form teacher by 1<sup>st</sup> December 2017. Please retain the information letter for your record.

Yours sincerely,

**Phillipa McKeering**

**Researcher**

**Date:**

**Yoon-Suk Hwang**

**Principal Investigator**

**Date:**

## Appendix F: Student Information Letter for Phase 1



### Wellbeing of international school students

Dear Students,

You are invited to participate in the research project described below.

#### ***What is the project about?***

The research project will investigate things that may influence your wellbeing and support your adjustment to a new school and/or country. It is hoped this information can then be used to better support the transition phase of international school students in the future.

#### ***Who is undertaking the project?***

This project is being conducted by Pip McKeering and will form the basis for the degree of Doctorate of Education at Australian Catholic University under the supervision of Dr Hwang. Pip has tertiary qualifications in Psychology, Education, and Mental Health and has been working with international school students on wellbeing programs to support and enhance their wellbeing.

#### ***Are there any risks associated with participating in this project?***

There is a low risk that in answering the questionnaire it may bring up unpleasant or difficult memories of when you relocated to Singapore (e.g., having to say goodbye to a close friend). If this happens and provokes strong emotions, you are asked to stop the questionnaire immediately and to inform your form teacher.

#### ***What will I be asked to do?***

- You will be asked to complete questionnaires that include statements and questions on your wellbeing and mobility experience.
- For example, you will be asked to circle a statement that best describes your experience, such as 'I am interested in the work at school' and 'I tend to get over hard times quickly'.
- The questionnaires will take approximately 20–30 minutes to complete. You will be asked to complete them in morning form time with your form teacher during the second week in December 2017.

#### ***What are the benefits of the research project?***

The research project may not directly benefit you. However, it will enable a better understanding of what factors may support and inhibit the wellbeing of international school students as they adjust to a new school and/or country. In doing this, better support can be provided to students during this transition phase in the future.

#### ***How will my answers be stored and kept safe?***

All collected questionnaires will be kept safe. Only the research team will see them. Your questionnaires will have a code number on them instead of your name, to protect your privacy.

#### ***Can I stop being part of the study?***

Yes. If you decide to be part of the study and then change your mind, that is fine. Your decision will not make any difference to your relationship with your teacher, parent/guardian, and school. Should you withdraw from the study at any time, all data collected will be discarded and not used for this study or any other research.

#### ***Where will the results of the study be shared?***

The results from the study will be written up as a report. Results will also appear in academic journals. However, your name, your teacher's name and your school's name will NOT appear in any report and journal.

***Who do I contact if I have questions about the project?***

Mrs Phillipa McKeering

Email: [phillipa.mckeering@myacu.edu.au](mailto:phillipa.mckeering@myacu.edu.au)

Ph: (+65) 9382 5644

Dr Yoon-Suk Hwang

Email: [yoonsuk.hwang@acu.edu.au](mailto:yoonsuk.hwang@acu.edu.au)

Ph: (+617) 3623 7818

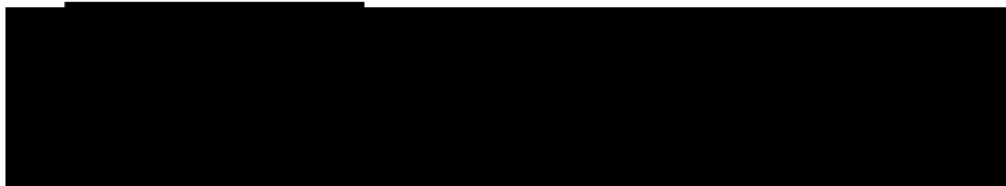
***What if I have a complaint or any concerns?***

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2017-243H). If you have any complaints or concerns about the conduct of the project, please contact the Manager of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research) at [resethics.manager@acu.edu.au](mailto:resethics.manager@acu.edu.au) and Ph: (+612) 9739 2519. Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

***I want to participate! How do I sign up?***

If you wish to be part of the study, please let your parent/guardian know. You will be asked to sign two copies of the consent form, one for you to keep, and one for us. Please return one copy to your teacher checking that both you and your parent/guardian sign the consent form. Please hand your completed form to your form teacher by 1st December 2017. Please retain the information letter for your record.

Yours sincerely,



**Phillipa McKeering**  
**Researcher**  
**Date: 13/11/2017**

**Yoon-Suk Hwang**  
**Principal Investigator**  
**Date: 13/11/2017**

**Appendix G: Parent and Student Consent Form for Phase 1**



**PARENT/GUARDIAN CONSENT FORM**

**TITLE OF PROJECT:** Wellbeing of international school students

**PRINCIPAL INVESTIGATOR:** Dr Yoon-Suk Hwang

**STUDENT RESEARCHER:** Mrs Phillipa McKeering

- I have read the participant information letter or have had this letter explained to me in a language I understand. I understand the aims, procedures, and any identified risk of this project, as described within it, and have had any questions I have asked answered to my satisfaction.
- I agree to my child participating in a questionnaire on their wellbeing and student engagement experience and understand they will be completed in morning form time with my child's form teacher.
- I understand that participation in the project is entirely voluntarily and that I can withdraw my consent at any time without any consequences. I understand that all information obtained in this study will be kept confidential. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify my child in any way.

*By signing the consent form below, I agree to all the bullet points listed above.*

NAME OF PARENT/GUARDIAN: .....

SIGNATURE.....

DATE.....

NAME OF CHILD.....

FORM CLASS.....

SIGNATURE OF RESEARCHER:..... DATE:.....

**STUDENT CONSENT FORM**

**TITLE OF PROJECT:** Wellbeing of international school students

**PRINCIPAL INVESTIGATOR:** Dr Yoon-Suk Hwang

**STUDENT RESEARCHER:** Mrs Phillipa McKeering

- I have read the student information letter or have had this letter explained to me in a language I understand. I understand the aims, procedures, and any identified risk of this project, as described within it, and have had any questions I have asked answered to my satisfaction.
- I agree to participating in a questionnaire on my wellbeing and student engagement and understand they will be completed in morning form time with my form teacher.
- I understand that participation in the project is entirely voluntarily and that I can withdraw my consent at any time without any consequences. I understand that all information obtained in this study will be kept confidential.

*By signing the consent form below, I agree to all the bullet points listed above.*

NAME OF STUDENT.....

FORM CLASS.....

SIGNATURE.....

DATE.....

SIGNATURE OF RESEARCHER:..... DATE:.....

**Please return this copy to your form teacher by 1<sup>st</sup> December 2017.**

## Appendix H: Demographic Survey

Dear Student,

Many thanks for your time in completing the questionnaire. Please answer each question or statement as best you can and check that you have not missed any sections.

Student Name: \_\_\_\_\_

Date \_\_\_\_\_

### Part A: Personal details

1. Age: \_\_\_\_\_

2. Gender: Male                      Female

3. Nationality: (on your passport, if dual passports please record both):

\_\_\_\_\_

4. How long have you resided in Singapore?

Less than a year    1–2 years              3–4 years              5–6 years              More than 6 years

5. How long have you attended this school?

6 months              1 year              2 years              3 years              More than 3 years

6. How many different countries have you lived in?

1                      2                      3                      4                      5 or more

## Appendix I: The EPOCH Measure of Adolescent Wellbeing

This is a survey about you. Please read each of the following statements. Circle how much each statement describes you. Please be honest – there are no right or wrong answers.

When something good happens to me, I have people who I like to share the good news with.	Almost never	Sometimes	Often	Very Often	Almost always
I finish whatever I begin.	Almost never	Sometimes	Often	Very often	Almost always
I am optimistic about my future.	Almost never	Sometimes	Often	Very often	Almost always
I feel happy.	Almost never	Sometimes	Often	Very often	Almost always
When I do an activity, I enjoy it so much that I lose track of time.	Almost never	Sometimes	Often	Very often	Almost always
I have a lot of fun.	Almost never	Sometimes	Often	Very often	Almost always
I get completely absorbed in what I am doing.	Almost never	Sometimes	Often	Very often	Almost always
I love life.	Almost never	Sometimes	Often	Very often	Almost always
I keep at my schoolwork until I am done with it.	Almost never	Sometimes	Often	Very often	Almost always
When I have a problem, I have someone who will be there for me.	Almost never	Sometimes	Often	Very often	Almost always
I get so involved in activities that I forget about everything else.	Almost never	Sometimes	Often	Very often	Almost always
When I am learning something new, I lose track of how much time has passed.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me
In uncertain times, I expect the best.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me
There are people in my life who really care about me.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me
I think good things are going to happen to me.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me
I have friends that I really care about.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like



						me
Once I make a plan to get something done, I stick to it.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me	
I believe that things will work out, no matter how difficult they seem.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me	
I am a hard worker.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me	
I am a cheerful person.	Not at all like me	A little like me	Somewhat like me	Mostly like me	Very much like me	

## Appendix J: Student Engagement Measure (SEM) – MacArthur (Wave 1 Version)

Here are some statements or descriptions about how you might be feeling at school at the moment. For each one, please circle the number which best describes your thoughts and feelings; there are no right or wrong answers.

Statements	Never	On occasion	Some of the time	Most of the time	All of the time
I pay attention in class	1	2	3	4	5
When I am in class I just act as if I am working	1	2	3	4	5
I follow the rules at school	1	2	3	4	5
I get in trouble at school	1	2	3	4	5
I feel happy in school	1	2	3	4	5
I feel bored in school	1	2	3	4	5
I feel excited by the work in school	1	2	3	4	5
I like being at school	1	2	3	4	5
I am interested in the work at school	1	2	3	4	5
My classroom is a fun place to be	1	2	3	4	5
When I read a book, I ask myself questions to make sure I understand what it is about	1	2	3	4	5
I study at home even when I don't have a test	1	2	3	4	5
I try to watch TV shows about things we are doing in school	1	2	3	4	5
I check my schoolwork for mistakes	1	2	3	4	5
I read extra books to learn more about things we do in school	1	2	3	4	5

## Appendix K: Brief Resilience Scale (BRS)

Please circle the statement that best describes your experience:

I tend to get over hard times quickly.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have a hard time coping through stressful events.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
It does not take me long to recover from a stressful event.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
It is hard for me to return to normal when something bad happens.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I usually come through difficult times with little trouble.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I tend to take a long time to get over troubles in my life.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree

## Appendix L: Parent Information Letter for Phase 2



### Mindfulness program for student wellbeing

Dear Parents/Guardians,

We are seeking your consent for your child to engage in the research project described below.

#### *What is the project about?*

The research project will investigate the effect of a mindfulness-based school program on the wellbeing of international school students. The mindfulness program, known as the 'b curriculum,' has reported many benefits to improving students' wellbeing at school (further information on the program can be found at <https://mindfulnessinschools.org>). The program is delivered as classroom lessons in which key topics are explored and discussed and mindfulness practices are taught to you. The research aims to understand whether mindfulness lessons can support international students as they transition to a new school and/or country. Given the high mobility of international school students, it is hoped this research can identify a program that can provide support to these students as they adjust to a new environment.

#### *Who is undertaking the project?*

This project is being conducted by Phillipa McKeering and will form the basis for the degree of Doctorate of Education at Australian Catholic University under the supervision of Dr Hwang. Phillipa has tertiary qualifications in Psychology, Education, and Mental Health and is an accredited Mindfulness instructor. She has several years of experience in developing and implementing mindfulness programs with school students to support and enhance their wellbeing.

#### *Are there any risks associated with participating in this project?*

There is a low risk that by participating in the program or by answering the questionnaires your child may experience an unpleasant feeling or thought (e.g., recalling a time when he/she had a disagreement with a friend). If this happens and provokes strong emotions, they will be asked to stop their participation in either the program or in the completion of the questionnaire. Your child would then be given a break and reminded that they are under no obligation to continue their participation in the study. If they continued to show signs of discomfort, their participation in the study would stop and the Head of Student Services at School X will be notified.

#### *What will my child be asked to do if successfully selected?*

- Your child will be asked to participate in 16 mindfulness lessons delivered twice a week over an eight-week period in a designated classroom during lunch recess. Each class will follow a similar structure with a presentation of key themes, group discussion, and mindfulness practices. The program also includes optional homework exercises for your child to do each week. These lessons will be audio-recorded to ensure that the researcher is being consistent in their program delivery.
- Your child would also be asked to complete a short questionnaire on their wellbeing before the program starts, after the program finishes, and 11 weeks after completion of the program. Your child would be advised of this in advance and the questionnaires will be completed during lunch recess. The questionnaires are expected to take 20–30 minutes to complete. Your child will be required to attend 75% of lessons in order to participate in this research project.
- For example, your child will be asked to circle a statement that best describes their experience, such as 'my classroom is a fun place to be,' and 'I am optimistic about my future'.
- Your child will also be asked to complete a short program satisfaction survey at the end of the mindfulness program that is expected to take 5 minutes to complete.
- Some students will also be selected to participate in a 20–30-minute interview at the end of the program. This interview is to enable the researcher to better understand individual students' experiences with the program. If your child was selected to participate in this component of the study, they would be assigned

a pseudonym to protect their privacy. These interviews will be audio recorded for transcription purposes only, and all recorded data will be deleted immediately after transcription has been completed. The interview would be scheduled at a convenient time for each selected student.

***What will I be asked to do if my child is successfully selected?***

- If your child participates in the program, you will be invited to complete an online questionnaire on different wellbeing measures related to your child (e.g., behavioural, and emotional) before and after they have participated in the mindfulness program.
- For example, you will need to respond to statements such as ‘considerate of other people’s feelings,’ and ‘thinks things out before acting,’ with a response of ‘not true’, ‘somewhat true’, or ‘certainly true’.
- The questionnaires will take approximately 5–10 minutes to complete, and participation will be between January and June 2018.

***How much time will the project take?***

If your child is selected to participate in the mindfulness program, it will be delivered at school between January and June 2018. An email will be sent out in January to advise you of whether your child has been selected and if so, what days he/she is required to attend the program. All questionnaires and interviews will also be conducted during this time.

***What are the benefits of the research project?***

Mindfulness school programs have reported significant benefits on students’ wellbeing at school. Benefits have been reported across numerous measures including emotional, behavioural, cognitive, and social functioning of the student. The research project will examine what effect such a program has on different wellbeing measures specifically with international school students. It is envisaged a mindfulness program may support international students in their wellbeing during the process of relocation to a new school and/or country.

***How will data be stored and kept confidential?***

All collected data will be kept secure and confidential, with only the research team having access to the collected raw data. Any information provided will be treated in the strictest confidence by the researchers. All participants will be assigned a unique code number on their questionnaires to protect their privacy.

***Can participants withdraw from the study?***

Participation in this study is completely voluntary. You and your child are not under any obligation to participate. If you agree to participate, you can withdraw from the study at any time without adverse consequences to your relationships with your child’s teacher and the school.

***Where will the results of the study be shared?***

The results from the study will be written up as a report and will be presented to the College leadership team. The results may also appear in academic journals. However, your name, your child’s name and the school’s name will NOT appear in any report or journal.

***Who do I contact if I have questions about the project?***



***What if I have a complaint or any concerns?***

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2017–XXX). If you have any complaints or concerns about the conduct of the project, you may write to the Manager of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research). Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

Manager, Ethics, c/o Office of the Deputy Vice Chancellor (Research)  
Australian Catholic University, North Sydney Campus  
PO Box 968, NORTH SYDNEY, NSW 2059  
Ph.: 02 9739 2519 / Email: [resethics\\_manager@acu.edu.au](mailto:resethics_manager@acu.edu.au)

***How do I provide consent for my child and me to participate?***

If you and your child wish to participate in the study, you and your child will be asked to separately sign two copies of the consent form, one for your records and one for the researchers. Please return one set of copies signed

by you and your child, ensuring you have ticked all appropriate boxes. Participation will only proceed if both you and your child sign consent forms. Please return completed forms to your child's form teacher by 10th January 2018. Please retain the information letter for your record.

Yours sincerely,

**Phillipa McKeering**  
**Researcher**  
**Date:**

**Yoon-Suk Hwang**  
**Principal Investigator**  
**Date:**

## Appendix M: Student Information Letter for Phase 2



### **Mindfulness program for student wellbeing**

Dear Students,

You are invited to participate in the research project described below.

#### ***What is the project about?***

The research project will examine if a mindfulness program can improve your wellbeing and support you as an international school student. The mindfulness program, known as the 'b curriculum,' has reported many benefits to improving students' wellbeing at school (<https://mindfulnessinschools.org>)

#### ***Who is undertaking the project?***

This project is being conducted by Phillipa McKeering and will form the basis for the degree of Doctorate of Education at Australian Catholic University under the supervision of Dr Hwang. She has several years of experience in developing and implementing mindfulness programs with school students to support and enhance their wellbeing.

#### ***Are there any risks associated with participating in this project?***

There is a low risk that by participating in the program or by answering the questionnaires you may experience an unpleasant feeling or thought (e.g., recalling a time when you had a disagreement with a friend). If this happens and provokes strong emotions, you are asked to stop your participation in either the program or in the completion of the questionnaire. The researcher will give you the opportunity to have a break. If you continue to experience signs of discomfort after a break, you will be advised to stop participating in the study and the Head of Student Services at School X will be notified.

#### ***What will I be asked to do?***

- You will be asked to participate in 16 mindfulness lessons delivered twice a week for eight weeks during lunch recess. Each class will follow a similar structure and these lessons will be audio-recorded to ensure consistency in the program.
- You will be asked to complete a short questionnaire on your wellbeing three times during the period January to June 2018. The group participating in the program in Term 3 will also complete a final questionnaire in September 2018. You will be given these dates in advance, and this will be done during recess. The questionnaires should take 20–30 minutes to complete. You will also be required to attend 75% of lessons in order to participate in the research project.
- For example, you will be asked to circle a statement that best describes your experience, such as 'my classroom is a fun place to be,' and 'I am optimistic about my future'.
- You will also be asked to complete a short program satisfaction survey at the end of the mindfulness program. It is expected to take 5 minutes to complete.
- Some students will be selected to participate in an interview at the end of the program. This interview is to enable the researcher to better understand individual students' experiences with the program. Your privacy would be protected in the interview, and it would be scheduled at a convenient time for you.

#### ***How much time will the project take?***

The mindfulness program will be delivered during lunch recess at school between January and June 2018. If you are selected, an email will be sent to your parent/guardian advising them of what days you will attend the program.

#### ***What are the benefits of the research project?***

Mindfulness school programs have reported many benefits on students' wellbeing at school including how you may feel, behave, and interact with others. The researcher hopes that your participation in the program will improve your overall feeling of wellbeing and may support you in future moves you make.

***How will my answers be stored and kept safe?***

All collected questionnaires will be kept safe. Only the research team will see them. Your questionnaires will have a code number on them instead of your name, to protect your privacy.

***Can I stop being part of the study?***

Yes. If you decide to be part of the study and then change your mind, that is fine. Your decision will not make any difference to your relationship with your teacher, parent/guardian, and school. Should you withdraw from the study at any time, all data collected will be discarded and not used for this study or any other research.

***Where will the results of the study be shared?***

The results from the study will be written up as a report. Results will also appear in academic journals. However, your name, your teacher's name and your school's name will NOT appear in any report and journal.

***Who do I contact if I have questions about the project?***

Mrs Phillipa McKeering

Dr Yoon-Suk Hwang

***What if I have a complaint or any concerns?***

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2017-XXX). If you have any complaints or concerns about the conduct of the project, please contact the Manager of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research) at [resethics.manager@acu.edu.au](mailto:resethics.manager@acu.edu.au) and Ph: (+612) 9739 2519. Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

***I want to participate! How do I sign up?***

If you wish to be part of the study, please let your parent/guardian know. You will be asked to sign two copies of the consent form, one for you to keep and one for us. Please return one copy to your teacher checking that both you and your parent/guardian sign the consent form. Please hand your completed form to your form teacher by 10<sup>th</sup> January 2018. Please retain the information letter for your record.

Yours sincerely,

**Phillipa McKeering**  
**Researcher**  
**Date:**

**Yoon-Suk Hwang**  
**Principal Investigator**  
**Date:**



**Appendix N: Parent and Student Consent Form for Phase 2**



**TITLE OF PROJECT:** Mindfulness program for student wellbeing  
**PRINCIPAL INVESTIGATOR:** Dr Yoon-Suk Hwang  
**STUDENT RESEARCHER:** Mrs Phillipa McKeering

- I have read the parent information letter or have had this letter explained to me in a language I understand. I understand the aims, procedures, and any identified risk of this project, as described within it, and have had any questions I have asked answered to my satisfaction.
- I agree to my child participating in a mindfulness program if selected. I understand the program will be delivered twice a week for eight weeks at school and will be audio-recorded for program evaluation. I agree to my child completing questionnaires on their wellbeing three times during January to June 2018 and understand these will take 20–30 minutes to complete.
- I agree to participate in two online questionnaires (approximately 5–10 minutes) on my child’s wellbeing at the beginning and end of their participation in the program.
- I agree to my child participating in an interview at the end of the program if selected. I understand this would be take approximately 20–30 minutes, would be conducted at a convenient time, and would be audio recorded for transcription purposes only.
- I understand that participation in the project is entirely voluntarily and that I can withdraw my consent at any time without any consequences. I understand that all information obtained in this study will be kept confidential. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify my child in any way.
- I agree to provide my contact details so I can be notified if my child has been selected in the program or other relevant information.

*By signing the consent form below, I agree to all the bullet points listed above.*

NAME OF PARENT/GUARDIAN: .....

SIGNATURE.....

DATE.....

Email address..... Phone number:.....

SIGNATURE OF RESEARCHER.....

DATE.....

**STUDENT CONSENT FORM**

**TITLE OF PROJECT:** Mindfulness program for student wellbeing  
**PRINCIPAL INVESTIGATOR:** Dr Yoon-Suk Hwang  
**STUDENT RESEARCHER:** Mrs Phillipa McKeering

- I have read the student information letter or have had this letter explained to me in a language I understand. I understand the aims, procedures, and any identified risk of this project, as described within it, and have had any questions I have asked answered to my satisfaction.

- I agree to participate in a mindfulness program if selected. I understand the program will be delivered twice a week for eight weeks at school and will be audio-recorded for program evaluation.
- I agree to complete questionnaires on my wellbeing three times during January to June 2018 and understand these will take 20–30 minutes to complete.
- I agree to participate in an interview at the end of the program if selected. I understand this would be take approximately 20–30 minutes, would be conducted at a convenient time, and would be audio recorded for transcription purposes only.
- I understand that participation in the project is entirely voluntarily and that I can withdraw my consent at any time without any consequences. I understand that all information obtained in this study will be kept confidential.
- I agree to provide my contact details to the researcher ONLY if I want the researcher to contact me as well as my parent/guardian regarding my selection for the program and days of attendance etc.

*By signing the consent form below, I agree to all the bullet points listed above.*

NAME OF STUDENT.....FORM CLASS.....

SIGNATURE.....

DATE.....

Email address.....

Phone number:.....

SIGNATURE OF RESEARCHER:..... DATE:.....

**Please return this copy to your form teacher by 10<sup>th</sup> January 2018.**

## Appendix O: Information Letter for Teachers for Phase 2



### Mindfulness program for student wellbeing

Dear Teachers,

You are invited to participate in the research project described below.

#### *What is the project about?*

The research project will investigate the effect of a mindfulness-based school program on the wellbeing of international school students. The program being delivered is a well-regarded mindfulness school program by Mindfulness in Schools Project (MiSP) known as the 'b curriculum' (<https://mindfulnessinschools.org>). The research aims to understand whether mindfulness lessons can support international students as they transition to a new school and/or country. Given the high mobility of international school students, it is hoped this research can identify a program that can provide support to these students as they adjust to a new environment.

#### *Who is undertaking the project?*

This project is being conducted by Phillipa McKeering and will form the basis for the degree of Doctorate of Education at Australian Catholic University under the supervision of Dr Hwang. Phillipa has tertiary qualifications in Psychology, Education, and Mental Health and is an accredited Mindfulness instructor. She has several years of experience in developing and implementing mindfulness programs with school students to support and enhance their wellbeing.

#### *Are there any risks associated with participating in this project?*

There are no foreseeable risks in your participation with this project.

#### *What will I be asked to do?*

- You will be invited to complete an online questionnaire on different wellbeing measures in relation to your student (e.g., emotional, and behavioural) before and after they have participated in a school-based mindfulness program.
- For example, you will need to respond to statements such as 'considerate of other people's feelings,' and 'thinks things out before acting,' with a response of 'not true', 'somewhat true', or 'certainly true'.
- The questionnaires will take approximately 5–10 minutes to complete, and participation will be between January and June 2018.

#### *What are the benefits of the research project?*

Mindfulness school programs have reported significant benefits on students' wellbeing at school across numerous measures including behaviour in the classroom, student engagement, and cognitive performance. With this in mind, the research project will examine what effect such a program has by collecting data from the student, their parent/guardian, and their teacher. It is envisaged a mindfulness program may support international students in their wellbeing during the process of relocation to a new school and/or country.

#### *Can I withdraw from the study?*

Participation in this study is completely voluntary. You are not under any obligation to participate. If you agree to participate, you can withdraw from the study at any time without adverse consequences.

#### *How will data be stored and kept confidential?*

All collected data will be kept secure, with only the research team having access to the collected raw data. Any information provided will be treated in the strictest confidence by the researchers. All participating teachers will be assigned a unique code number on their questionnaires to protect their privacy.


#### *Where will the results of the study be shared?*

The results from the study will be written up as a report and will be presented to the College leadership team. The results may also appear in academic journals. However, your name, your student's name and the school's name will NOT appear in any report or journal.

***Who do I contact if I have questions about the project?***

Mrs Phillipa McKeering

Dr Yoon-Suk Hwang



***What if I have a complaint or any concerns?***

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2017-243H). If you have any complaints or concerns about the conduct of the project, you may write to the Manager of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research). Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

Manager, Ethics, c/o Office of the Deputy Vice Chancellor (Research)

Australian Catholic University, North Sydney Campus

PO Box 968, NORTH SYDNEY, NSW 2059

Ph.: 02 9739 2519 / Email: [resethics.manager@acu.edu.au](mailto:resethics.manager@acu.edu.au)

***I want to participate! How do I sign up?***

If you wish to participate in the study, please complete the online survey for your student through the link provided. The questionnaire needs to be completed by **25th January 2018**. Please retain the information letter for your record.

Yours sincerely,



**Phillipa McKeering**

**Researcher**

Date: 20/01/2018

**Yoon-Suk Hwang**

**Principal Investigator**

Date: 20/01/2018

**Appendix P: Teacher Consent Form for Phase 2**



**TEACHER CONSENT FORM**

**TITLE OF PROJECT:** Mindfulness program for student wellbeing

**PRINCIPAL INVESTIGATOR:** Dr Yoon-Suk Hwang

**STUDENT RESEARCHER:** Mrs Phillipa McKeering

- I have read the teacher information letter or have had this letter explained to me in a language I understand. I understand the aims, procedures, and any identified risk of this project, as described within it, and have had any questions I have asked answered to my satisfaction.
- I agree to participate in two online questionnaires on my student's wellbeing at the beginning and end of their participation in a mindfulness school program and understand these questionnaires are approximately 5-10 minutes in duration.
- I understand that participation in the project is entirely voluntarily and that I can withdraw my consent at any time without any consequences.
- I understand that all information obtained in this study will be kept confidential
- I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify me, my student, or my school in any way.

*By signing the consent form below, I agree to all the bullet points listed above.*

NAME OF TEACHER: .....

SIGNATURE.....

DATE.....

SIGNATURE OF RESEARCHER:..... DATE:.....

**Please return this copy to Head of Student Services by 25<sup>th</sup> January 2018.**

## Appendix Q: Postprogram Satisfaction Survey

Dear Participant,

Many thanks for your time in participating in this study. As the mindfulness program has now finished, I am interested to better understand how useful or not the program may have been to you. Can you please circle the number that best describes your own experience with the program with 1 = not useful through to 10 = very useful.

- Breath counting 1 2 3 4 5 6 7 8 9 10
  - FOFBOC practice 1 2 3 4 5 6 7 8 9 10
  - Beditation practice 1 2 3 4 5 6 7 8 9 10
  - Recognising “story telling” 1 2 3 4 5 6 7 8 9 10
  - Mindful eating practice 1 2 3 4 5 6 7 8 9 10
  - Mindful movement practice 1 2 3 4 5 6 7 8 9 10
  - Thought buses activity 1 2 3 4 5 6 7 8 9 10
  - 7-11 exercise 1 2 3 4 5 6 7 8 9 10
  - Mindful morning practice 1 2 3 4 5 6 7 8 9 10
  - Mindful listening practice 1 2 3 4 5 6 7 8 9 10
- 
- What was the most important thing you believe you have learnt from this program?
  
  - What did you like the most?
  
  - What did you like the least?
  
  - How often are you practising being mindful at the moment?
  
  - How often did you practice the homework?

Finally, I am interested to conduct short interviews with a few participants in the coming weeks to discuss your experience with the program in more detail. Can you please indicate below whether you are interested to be contacted for an interview.

- yes
- no

## Appendix R: Mindfulness Program Description

### *Detailed Lesson Plan for Each Mindfulness Session*

Lesson	Aim / Theme	Objectives/Lesson Flow ( <i>Didactic learning</i> )	Exercises ( <i>Experiential</i> )
1	Introduction  (Introduction booklet to page 11)	<ul style="list-style-type: none"> <li>• Introduce mindfulness in a way that is engaging, entertaining and persuasive</li> <li>• Discuss how we retrain our brain (cab driver example)</li> <li>• Discuss what mindfulness is and ‘possibilities’ for the class</li> <li>• Introducing the aspect of ‘observing’ in mindfulness</li> <li>• Discuss logistics for future classes (i.e., start times, location, home practice etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• ‘Where is your mind’ exercise</li> </ul>
2	Introduction  (Introduction booklet – pages 12–32)	<ul style="list-style-type: none"> <li>• Revisit ‘Possibilities’ of mindfulness</li> <li>• Kung Fu panda clip</li> <li>• Look at the relationship between mindfulness and concentration</li> <li>• Training the muscle of your mind</li> <li>• Look at how mindfulness is being used in many different situations (i.e., sport, music, corporate world)</li> <li>• Mindfulness = calm &amp; happy (example of how I use mindfulness to remain calm)</li> <li>• Mindfulness = feeling connected. What does this mean?</li> <li>• Testimonial from past students</li> </ul>	<ul style="list-style-type: none"> <li>• Grp discussion – 3 words from ‘possibilities’ sheet explores common words</li> <li>• Kung Fu panda worksheet</li> <li>• .b exercise</li> <li>• White polar bear experiment &amp; discussion</li> </ul> <p>(Student worksheets: 1,3,4)</p>
3	‘Playing Attention’  (Lesson one booklet to page 17)	<ul style="list-style-type: none"> <li>• Discuss class rules (be in your own bubble, give space to others, be here etc.)</li> <li>• Introducing students to the faculty of attention; how to direct and explore it, and how it can be hijacked</li> <li>• Torchlight example</li> <li>• Understanding the untrained mind’s fickle nature – like a little puppy</li> <li>• Puppy animation</li> <li>• Introduction of tools to train attention</li> <li>• Introduction of key attitudes of attention-training; kindness, patience, repetition</li> </ul>	<ul style="list-style-type: none"> <li>• Class rules group discussion/input</li> <li>• Attention exercise that is hijacked. Grp discussion</li> <li>• Mini body-scan exercise</li> <li>• Body-scan worksheet and discussion (to be reviewed at end of course)</li> <li>• (Student worksheets: 7,8,9,10)</li> </ul>
4	‘Playing Attention’  (Lesson one booklet – pages 18–25)	<ul style="list-style-type: none"> <li>• Discussion of the untrained mind being like a puppy</li> <li>• Introduction to the objectives of the breathing awareness exercise in aiming and sustaining your attention</li> <li>• Introduce strategies to help stabilise our attention</li> <li>• Discuss objectives of the finger breathing exercise and settings it can be used in</li> <li>• Introduction to Home Practice. Show how to access the site and provide password to students for the site <a href="http://www.dotbe.org">www.dotbe.org</a></li> <li>• Watch the animation beginning so they</li> </ul>	<ul style="list-style-type: none"> <li>• Breathing awareness exercise (2 mins)</li> <li>• Worksheet and group discussion on exercise</li> <li>• Finger breathing exercise</li> <li>• Discussion of both exercises and preferences/differences experienced</li> </ul> <p>(Student worksheets: 11,12,13)</p> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Puppy animation and body</li> </ul>

		know what to expect	scan
			<ul style="list-style-type: none"> <li>• Worksheet to record experience in different days/times</li> </ul>
5	<p>‘Taming the Animal Mind’</p> <p>(Lesson two booklet – pages 1–16)</p>	<ul style="list-style-type: none"> <li>• Cultivating curiosity and kindness</li> <li>• To explore that the mind has a life of its own – we often can’t control it</li> <li>• To nurture an attitude of curiosity, kindness, acceptance, and openness that helps us to deal more skilfully with these fluctuating mind-states</li> <li>• To teach that by ‘anchoring’ our attention in the lower half of the body we can begin to turn towards calm even when our minds are stormy. Anchoring slows our heart rate, steadies our breathing, and calms our thinking</li> </ul>	<ul style="list-style-type: none"> <li>• Review of home practice</li> <li>• Grp discussion/pair work on which animal they are</li> <li>• Animation worksheet &amp; discussion</li> <li>• FOFBOC</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• FOFBOC exercise and worksheet</li> </ul> <p>(Student worksheets: 14,15,16,17,18,19)</p>
6	<p>‘Recognising Worry’</p> <p>(Lesson three booklet – pages 1–14)</p>	<ul style="list-style-type: none"> <li>• Examining the habit of worrying and the tricks our mind plays on us</li> <li>• The differences between a thinking and sensing mode</li> <li>• The mind habitually interprets and ‘tells stories’ about what is happening</li> <li>• We can get stuck in our heads and ‘ruminate’ or ‘catastrophise’</li> <li>• Such rumination is not only stressful it can affect our bodies and our behaviour.</li> <li>• The relationship between thoughts, feelings, body sensations, and actions</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• .b practice</li> <li>• Grp discussion on last lesson</li> <li>• 7-11 Breathing awareness exercise</li> <li>• Catastrophising group exercises: ‘Sam’</li> <li>• ‘A scenario for you’ worksheet</li> <li>• Animation: recognising worry. Worksheet &amp; group discussion</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Optional breathing awareness exercise</li> </ul> <p>(Student worksheets: 21,22,23)</p>
7	<p>‘Recognising Worry’</p> <p>(Lesson 3 Booklet – pages 13–24)</p>	<ul style="list-style-type: none"> <li>• Revisit of relationship between thinking, feeling, body sensations and actions</li> <li>• Woody Allen clip</li> <li>• Rumination is not only ‘stressful’ – it affects our bodies and behaviour, from sleep and sport to spots and studies</li> <li>• Over thinking = Catastrophising</li> <li>• Practices like the ‘7-11’ and Beditation help us deal with this by switching us from ‘thinking’ mode to ‘sensing’ mode</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• 1 min breathing exercise</li> <li>• Woody Allen clip and discussion</li> <li>• Hot cross bun scenario worksheet</li> <li>• Beditation (15 min practice)</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Beditation and worksheet</li> </ul> <p>(Student worksheets: 24,25,26)</p>
8	<p>‘Being Here Now’</p> <p>(Lesson 4 Booklet – pages 1–14)</p>	<ul style="list-style-type: none"> <li>• To explain how ‘autopilot’ prevents us from being alive and awake to our experience in the here and now</li> <li>• Discuss what the concept of ‘being present’ what does it mean?</li> <li>• To learn to appreciate and savour the pleasant – mindful eating</li> <li>• To recognise life is not always wonderful and dealing more intelligently with stressful time</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• Finger breathing</li> <li>• Animation group discussion &amp; worksheet</li> <li>• Autopilot worksheet and discussion</li> <li>• Mindful eating exercise &amp; discussion</li> <li>• .b exercise</li> </ul>



		<ul style="list-style-type: none"> <li>• Recognising our different body sensations when we like and dislike things</li> <li>• Recognising how we react rather than respond out of habit</li> <li>• To learn how a .b can quickly bring our attention into the here and now, and help us to respond rather than react to what is difficult</li> <li>• Victor Frankl quote</li> </ul>	<p>Home practice:</p> <ul style="list-style-type: none"> <li>• Worksheet</li> <li>• .b buddy</li> <li>• Mindful mouthful</li> <li>• Sit like a statue</li> </ul> <ul style="list-style-type: none"> <li>• (Student worksheets: 27,28,29,30,32,33)</li> </ul>
9	<p>‘Moving Mindfully’</p> <p>(Lesson 5 Booklet – pages 1–25)</p>	<p>For students to understand that:</p> <ul style="list-style-type: none"> <li>• Mindfulness is not just about being still, as in the FOFBOC or Beditation. It is also about movement. We spend a great deal of time doing actions ‘mindlessly’ ... in autopilot</li> <li>• Examining what ‘flow’ and being ‘in the zone’ mean and how this practice is used</li> <li>• Last Samurai clip</li> <li>• One such activity is walking. We are rarely ‘present’ when we walk</li> <li>• Learning to move mindfully can also be used as a resource for peak performance in sport, music, and the performing arts</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• Standing practice</li> <li>• Group discussion on Last Samurai clips</li> <li>• Mindful walking practice</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Worksheet</li> <li>• Samurai walking</li> <li>• Choose a routine activity to do mindfully each day</li> </ul> <p>(Student worksheets: 35,36,37,38)</p>
10	<p>Stepping Back – part 1</p> <p>(Lesson 6 – up to page 13)</p>	<ul style="list-style-type: none"> <li>• Examining the relationship we have with thinking</li> <li>• Looking at how we are <i>relating</i> to our thinking in this moment</li> <li>• Understanding we have the capacity to ‘step back’ from our thoughts</li> <li>• Learning that it can be helpful to see thoughts as ‘traffic’ flowing through the mind</li> <li>• Animation clip explaining thought buses than can carry us off and take us for a ride</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• .b</li> <li>• Reflect on today’s mind traffic</li> <li>• Animation worksheet</li> <li>• Mindful listening practise</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Beditation</li> <li>• Routine activity to do mindfully each day</li> </ul> <p>(Student worksheets: 40,41)</p>
11	<p>Stepping Back – part 2</p> <p>(Lesson 6 – pages 14–25)</p>	<ul style="list-style-type: none"> <li>• Revisit last lesson’s animation on thought buses</li> <li>• Neuroscience of our thoughts and how we make our own neural pathways</li> <li>• “Neurons that fire together wire together” – what does that mean</li> <li>• Identify some of the particular ‘thought-buses’ that pass through their mind</li> <li>• Recognise that they don’t have to ‘get on the bus’ of these difficult thoughts</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• FOFBOC</li> <li>• Thought bus activity &amp; discussion</li> <li>• Mindful standing exercise with thought traffic</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Thought traffic exercise and observation worksheet</li> <li>• FOFBOC</li> </ul> <ul style="list-style-type: none"> <li>• (Student worksheets: 42,43,44)</li> </ul>
12	<p>Befriending the difficult</p> <p>(Lesson 7 booklet – pages 1–25)</p>	<ul style="list-style-type: none"> <li>• Understanding stress: where it comes from, why it is necessary, how it works and the potentially harmful effects</li> <li>• Fight or flight response – what does this mean</li> <li>• Discussing the long-term effects of stress</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• Finger breathing exercise</li> <li>• Animation worksheet</li> <li>• Stress situation game &amp; discussion</li> </ul>

		<ul style="list-style-type: none"> <li>• Identifying and drawing the “stress signature” – where in the body do they feel stress?</li> <li>• Learning to respond rather than react, by ‘turning towards’ and ‘being with’ difficult emotions</li> </ul>	<ul style="list-style-type: none"> <li>• Stress signature worksheet</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Worksheet</li> <li>• The practice promise</li> </ul> <p>(Student worksheets: 46,47,49,50,52,53)</p>
13	<p>Taking in the good – part 1</p> <p>(Lesson 8 – up to page 11)</p>	<ul style="list-style-type: none"> <li>• To encourage an appreciation of what is good in life</li> <li>• Explain mindfulness is about the heart too</li> <li>• To explain how even the ordinary can be experienced as ‘good’ if we are more fully aware of it</li> <li>• To teach advice of those who have done this even in awful circumstances</li> <li>• Auschwitz and Alice Hertz-Sommer video</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• <i>.b</i></li> <li>• grape mindful eating exercise</li> <li>• gratitude worksheet and discussion</li> <li>• Alice Hertz-Sommer video &amp; worksheet</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Worksheet – ‘3 good things’</li> </ul> <p>(Student worksheets: 57,58)</p>
14	<p>Taking in the good – part 2</p> <p>(Lesson 8 – pages 12–21)</p>	<ul style="list-style-type: none"> <li>• Animation on taking in the good</li> <li>• To teach a practice of ‘taking in the good’ so that what is good turns from an idea into an experience</li> <li>• Soul Pancake clip</li> <li>• Discuss ways to implement gratitude in our daily lives</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• Animation clip and worksheet</li> <li>• FOFBOC &amp; Gratitude awareness practice</li> <li>• Soul Pancake worksheet</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Gratitude letter</li> </ul> <p>(Student worksheets: 55,56,59,60,61)</p>
15	<p>Pulling it all together</p> <p>(Lesson 9)</p>	<ul style="list-style-type: none"> <li>• Reflecting on what has been covered in the past 14 lessons by revisiting each lesson</li> <li>• Discussing the different mindfulness practices introduced</li> <li>• Identifying what individual students may have found most useful in the <i>.b</i> course</li> </ul>	<ul style="list-style-type: none"> <li>• Review home practice</li> <li>• <i>.b</i></li> <li>• Beditation</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Identify what practices work best for you and why. Reflect on the possibilities of the course</li> </ul>
16	<p>Pulling it all together</p> <p>(Lesson 9)</p>	<ul style="list-style-type: none"> <li>• Mindfulness quiz</li> <li>• To consider what areas of their life they might apply their new mindfulness skills</li> <li>• Baz Luhrmann video clip</li> <li>• Examine how mindfulness could be used in mobility challenges faced by international students</li> </ul>	<ul style="list-style-type: none"> <li>• Mindful eating practice</li> <li>• Postprogram survey</li> </ul> <p>Home practice:</p> <ul style="list-style-type: none"> <li>• Letter to self</li> </ul>

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(Mindfulness in Schools Project, 2015)

The *.b* Mindfulness in Schools Project (MiSP) curriculum (2015) is copyrighted and cannot be shared through this study. For more information, or to acquire a copy of the MiSP curriculum, please visit <https://mindfulnessinschools.org>

## Appendix S: Fidelity and Competency Check

### *Proficiency Scores Across Domains for Randomly Selected Mindfulness Lesson*

Group	Lesson	Competency scores			
		Coverage, pacing and organisation	Embodiment of mindfulness	Guiding mindfulness practices	Lesson Average
Intervention group	Lesson 2	5	4	5	4.67
	Lesson 7	4	5	6	5
	Lesson 8	6	5	5	5.33
	Lesson 12	5	5	5	5
Waitlist control group	Lesson 5	5	5	6	5.33
	Lesson 8	6	5	6	5.66
	Lesson 13	4	5	4	4.33
	Lesson 15	5	5	5	5
	Competency Average	5	4.88	5.25	5.04

*Note.* Score competencies: 1 = Incompetent, 2 = Beginner, 3 = Advanced Beginner, 4 = Competent, 5 = Proficient, 6 = Advanced

## Appendix T: Student Engagement Measure (SEM) – MacArthur (Wave 2 Version)

Here are some statements or descriptions about how you might be feeling at school at the moment. For each one, please circle the number which best describes your thoughts and feelings; there are no right or wrong answers.

Statements	Never	On occasion	Some of the time	Most of the time	All of the time
I follow the rules at school	1	2	3	4	5
I get in trouble at school	1	2	3	4	5
When I am in class I just act as if I am working	1	2	3	4	5
I pay attention in class	1	2	3	4	5
I complete my work on time	1	2	3	4	5
I like being at school	1	2	3	4	5
I feel excited by the work in school	1	2	3	4	5
My classroom is a fun place to be	1	2	3	4	5
I am interested in the work at school	1	2	3	4	5
I feel happy in school	1	2	3	4	5
I feel bored in school	1	2	3	4	5
I check my schoolwork for mistakes	1	2	3	4	5
I study at home even when I don't have a test	1	2	3	4	5
I try to watch TV shows about things we are doing in school	1	2	3	4	5
When I read a book, I ask myself questions to make sure I understand what it is about	1	2	3	4	5
I read extra books to learn more about things we do in school	1	2	3	4	5
If I don't know what a word means when I am reading, I do something to figure it out	1	2	3	4	5
If I don't understand what I read, I go back and read it over again	1	2	3	4	5
I talk with people outside of school about what I am learning in class	1	2	3	4	5

## Appendix U: The Child and Adolescent Mindfulness Measure (CAMM)

We want to know about what you think, how you feel, and what you do. Read each sentence. Then, circle the number that tells how often each sentence is true for you.

Statements	Never true	Rarely true	Sometimes true	Often true	Always true
I get upset with myself for having feelings that don't make sense	0	1	2	3	4
At school, I walk from class to class without noticing what I'm doing	0	1	2	3	4
I keep myself busy, so I don't notice my thoughts or feelings	0	1	2	3	4
I tell myself that I shouldn't feel the way I'm feeling	0	1	2	3	4
I push away thoughts that I don't like	0	1	2	3	4
It's hard for me to pay attention to only one thing at a time	0	1	2	3	4
I get upset with myself for having certain thoughts	0	1	2	3	4
I think about things that have happened in the past instead of thinking about things that are happening right now	0	1	2	3	4
I think that some of my feelings are bad and that I shouldn't have them	0	1	2	3	4
I stop myself from having feelings that I don't like	0	1	2	3	4

## Appendix V: Strengths and Difficulties Questionnaire (SDQ)

For each item, please mark the box for Not True, Somewhat True, or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of this young person's behaviour over the last six months or this school year.

Statement	Not True	Somewhat True	Certainly True
Restless, overactive, cannot stay still for long	0	1	2
Often complains of headaches, stomach-aches, or sickness	0	1	2
Often loses temper	0	1	2
Would rather be alone than with other youth	0	1	2
Generally, well behaved, usually does what adults request	0	1	2
Many worries or often seems worried	0	1	2
Constantly fidgeting or squirming	0	1	2
Has at least one good friend	0	1	2
Often fights with other youth or bullies them	0	1	2
Often unhappy, depressed, or tearful	0	1	2
Generally liked by other young children	0	1	2
Easily distracted, concentration wanders	0	1	2
Nervous in new situations, easily loses confidence	0	1	2
Often lies or cheats	0	1	2
Picked on or bullied by other young children	0	1	2
Thinks things out before acting	0	1	2
Steals from home, school or elsewhere	0	1	2
Gets along better with adults than with other young children	0	1	2
Many fears, easily scared	0	1	2
Good attention span, sees tasks through to the end	0	1	2

## Appendix W: Semistructured Interview Questions

The reason for this interview is to enable me to better understand your experiences as an international student as well as with the mindfulness program. There are no right or wrong answers here. I encourage you to answer the questions honestly and to provide as much information as possible. If at any time, you feel uncomfortable during the interview, please raise your hand and we will stop the interview immediately. I expect the interview will go for approximately 20–30 minutes. At the conclusion of the interview, I will write up the notes of this interview and will provide you with a copy of the script for your own reference. I will also tape this interview with your approval. Do you have any questions? Are you happy for the interview and taping to commence?

*(Audio recording starts)*

*Researcher to state date, time, and provide pseudonym for the participant.*

*Participant to verbally approve for interview to be recorded.*

Thank you for your time today in talking about your experiences in moving to Singapore as well as with the mindfulness program. Can I please ask you to provide me with as much information for each question as possible? Are you ready to begin?

Part A:

- Can you tell me about your experience as an international student? (how long have you been here for, how many schools, where else have you lived?)
- Do you remember what you thought or felt when you were told you were moving to Singapore? (or moving schools in Singapore if you have been here for a long time)
- What do you think some of the challenges could be in moving to another country? (or saying goodbye to a close friend who is leaving).
- Can you talk about any recent challenges you have experienced in leaving or having a friend leave?
- Do you think there has been anything you have learnt during the program that could help you with any challenges in an upcoming (or recent) move? (For future moves, what might you do to help with any challenges?) How might these things help?

I am also interested to better understand your experience with the mindfulness program. Are you happy to continue?

Part B:

1. How did the program go for you?
2. Were there particular things you did/didn't find useful?
3. What other situations did you find it useful at school and/or home?
4. Has the program helped in other areas? Have you used it in any other context (e.g., friendships, sport etc.)?
5. Have you noticed any changes in you since you started the program?
6. Do you think the program has helped you feel more connected or engaged at school? (e.g., friendships, community, sense of belonging).

7. What did you enjoy most about the program? What did you like least in the program?
8. Do you think the program helped in your overall wellbeing?

Is there anything else you would like to comment on or discuss in this interview? Are you happy to receive a copy of this interview for you to check that I have accurately recorded what you have said? If so, please provide best contact details.



## Appendix X: Timeframe for Phase 2 of the Study

### *Timeframe for Intervention Program Delivery and Data Collection for Phase 2*

Week	Program	Action	Comment
1	Presentation to students and parents	Consent forms to be handed out and returned.  Random assignment of students to experimental or waitlist control group	Form teachers to help chase up.  Students/parents advised of group details
2	Time-1 Data collection	Completion of baseline data for both groups (Baseline)	Demographic survey and 4 student self-report questionnaires
3	Mindfulness program: Week 1	Experimental group	Lessons 1 and 2  Teacher/parent preintervention questionnaire for experimental group
4	Mindfulness program: Week 2	Experimental group	Lessons 3 and 4
5	Mindfulness program: Week 3	Experimental group	Lessons 5 and 6
6	<b>Midterm break</b>		
7	Mindfulness program: Week 4	Experimental group	Lessons 7 and 8
8	Mindfulness program: Week 5	Experimental group	Lessons 9 and 10
9	Mindfulness program: Week 6	Experimental group	Lessons 11 and 12
10	Mindfulness program: Week 7	Experimental group	Lessons 13 and 14
11	Mindfulness program: Week 8	Experimental group	Lessons 15 and 16 Postprogram survey completed
12	Time-2 Data collection	Experimental group (postintervention)  Waitlist control group (preintervention)	4 student self-report questionnaires  Teacher/Parent postintervention questionnaire for experimental group  4 student self-report questionnaires  Teacher/Parent preintervention questionnaire for waitlist control group

Week	Program	Action	Comment
13	Mindfulness program: Week 1	Waitlist control group	Lessons 1 and 2
14	Mindfulness program: Week 2	Waitlist control group	Lessons 3 and 4
15	<b>School holidays</b>		
16			
17	Mindfulness program: Week 3	Waitlist control group	Lessons 5 and 6
18	Mindfulness program: Week 4	Waitlist control group	Lessons 7 and 8
19	Mindfulness program: Week 5	Waitlist control group	Lessons 9 and 10
20	Mindfulness program: Week 6	Waitlist control group	Lessons 11 and 12
21	Mindfulness program: Week 7	Waitlist control group	Lessons 13 and 14
22	Mindfulness program: Week 8	Waitlist control group	Lessons 15 and 16 Postprogram survey completed
23	Time-3 Data collection	Experimental group (follow-up intervention)	4 student self-report questionnaires
		Waitlist control group (postintervention)	Teacher/Parent postintervention questionnaire for waitlist control group
			4 student self-report questionnaires
			Approval sought to conduct interviews with 10 interviews
24	Semistructured interviews	5 participants from experimental group	
		5 participants from waitlist control group	
25	End of school year		
26	<b>School holidays</b>		
27			
28			
29			
30			
31			
32			
33			
34	Time-4 Data collection	Waitlist control group (follow-up intervention)	4 student self-report questionnaires

## Appendix Y: Coded Student Participant Interview Transcripts

### *Students' Experiences With Moving as an International School Student*

#### Example of student responses: perceptions of moving

- P1 • (Do you remember what you thought or felt when you were told you were moving to Singapore?) Yeah. When mum told me about the move I remember thinking I will feel scared when I start to think about what school will I go to, who will be my friends. ... It was difficult when I arrived as I thought the school was going to be much smaller than it was.
- P3 • (What are you thinking or feeling about your upcoming move to the UK?) I think I will be unhappy leaving friends here when I move as everything here is really close and it will be difficult for me to see my friends when I live so far away.  
• (Are there other thoughts or feelings you have about relocating?) Yes, I think I will be excited seeing my new house as the photos look good and it will be good to have so much space around us.
- P5 • (Do you remember what you thought or felt when you were told you were moving from Singapore?) I was quite surprised. I think I will be worried about missing my good friends. We have been together for a few years now.
- P6 • (You move in a few weeks' time. How are you feeling about the move?) I think it will be difficult saying goodbye to my friends. I think I will feel terrible, I will feel really sad. I wish I was staying a few days after school finishes to do proper farewells but we fly out that afternoon.  
• (What challenges do you expect with the move?) At the beginning I didn't think it was going to be too bad and I was really excited, but now I know everything I know it won't be easy.

#### Example of student responses: experiences of moving

- P3 • (How are you feeling about the move?) I think it will be difficult for us all. Dad has to stay here with work for another 6 months or so, which is sad. The last move was easier as the whole family moved together at the same time.
- P8 • (Can you tell me about your experience in moving to Singapore?) I remember that I cried a lot – I didn't want to leave my school and friends in India. The move was difficult for us all as there was so much to do. My mum was so busy with setting up house she couldn't spend as much time with me. When I started at XX School, I was really nervous, and I couldn't believe I had to learn a different curriculum and that I had to sit exams two weeks after starting. It was pretty overwhelming. But now that I am here I don't want to go back to India.
- P10 • (Do you remember what you thought or felt when moved to Singapore?) I was about 9 or 10 years of age when we moved. One of the difficulties was the shipping took so long to get here and when it did arrive a lot of our belongings

were lost in the move, it was devastating ...lots of our memories were lost, we didn't know what to do. Also, my father had to stay behind for a few months which made us feel a bit lonely in finding our way in a new country without him with us.

#### Example of student responses: support strategies with moving

- P1
- (Are you using any strategies to help you with these difficulties from moving?)  
Mmm - a bit. I use social media to reconnect with old friends which has helped when I feel sad. It makes me feel less lonely here. I am also trying lots of different activities and I am still trying to find my thing with sport as I know finding like-minded students will help me to settle in.
  - (Is there anything you have learnt in the mindfulness program that could help support you with difficulties you are experiencing from your recent move here?)  
Yes, I used to try to block thoughts or images of my past life in Shanghai out, now I do some finger breathing to help me settle my emotions down. It makes me feel less overwhelmed by everything going on.
- P2
- (What things might you do to feel a bit better about xx finishing up at the school soon?) I know I'm going to really miss him but I'm not so worried now that we have shared emails and phone numbers as I know that will help us keep in contact.
  - (Do you think there is anything you have learnt during the program that could help you with the challenges you mention in having to say goodbye to your friends soon?) Mmm - I might try the 7/11 or mindful eating exercise when saying goodbye to everyone ... it could help me feel a bit better. Make me feel less worried about when we will see each other again.
- P5
- (What strategies have you used in coping with recently saying goodbye to xx?)  
Well, we still keep in contact with each other, so I don't feel so alone. We are texting and facetimeing each other a lot.
  - (Do you think there has been anything you have learnt during the program that might help you with the challenges you mention with friends moving away?) I could do a .b to help me feel that this is happening, but it's not always going to be bad ... it will help me cope with that feeling.

## Students' Experiences With the Intervention Program

### Example of student responses: affective responses to the program

- P1 • (How did the program go for you?) It was enjoyable and it gave me something new to try.
- P4 • (How did the program go for you?) I found it really helpful because it helped me to find a focus especially in lessons.  
• (What did you enjoy most in the program?) The exercises and knowing that I was not the only person interested in mindfulness and learning about it. It was nice having a friend there to do it with me and I found it interesting trying something new.
- P7 • (How did the program go for you?) I enjoyed the program, there were lots of different aspects I took out of it that I have used for future reference. Yeah, I thought it was good.
- P9 • (How did the program go for you?) It was good. I definitely learnt a lot of things from it, which I can use like later on.

### Example of student responses: benefits experienced from the program

- P1 • (Were there particular things you did/didn't find useful with the program?) Yeah, some of the focusing exercises were good like the finger breathing and mindful breathing exercises. It helped me to forget about worrying thoughts and not focus on the past.  
• (Were there other aspects of the program you enjoyed?) It was good doing the program at lunchtime. It gave me something to do. I also felt closer with the other students by doing the program and it has helped me make friends at this school.
- P5 • (Were there particular things you did/didn't find useful with the program?) It helped me before my exams. I felt stressed waiting to go into the classroom for the exam, so I did a finger breathing exercise to help me focus better with the exam. I noticed I felt calmer after doing the exercise.  
• (Have you noticed any changes in you since you completed the program?) Yes, it makes me feel more grateful when doing the exercises. Also, in studying for the 11+ entrance exams, I noticed since doing the exercises that I am more confident that I can do it, instead of freaking out about the assessments.  
• (Is there anything else you would like to add?) I just really feel that I now take the good things in, ... I feel grateful and have a positive outlook on life.
- P8 • (Were there particular things you did/didn't find useful with the program?) When I was studying Chinese, my brain felt all cramped, so I did a FOFBOC to help me get more focused. I was worried I wouldn't remember all the characters for the exam and after the FOFBOC I stopped stressing out so much and I just started focusing on what I needed to learn.  
• (Do you think the program has improved your wellbeing?) Yeah – I think so. I have not always been very happy, and I feel a lot happier since I finished the

program.

- P10
- (Have you noticed any changes in you since completing the program?) Not really, but I can see I am more careful about things now. I notice things a lot more. I concentrate on my thinking a lot more and I only think of one thing at a time now.
  - (What did you enjoy the most about the program?) I enjoyed working with my friend in the class as a pair and hearing my friend's thoughts about certain things ... it made us closer as friends. We had different views, but we were able to help each other, which made it easier.
  - (Do you think the program has improved your wellbeing?) I think I have become a bit more optimistic since completing the program. (Are there any specific examples you can give me?) Well, I took up yoga after the program. It's really good, I feel a lot stronger from it. I think the program gave me the confidence to try new things.

Example of student responses: useful aspects of the program

- P2
- (What did you enjoy about the program?) It was good doing the classes with other boys in my year level and sharing what we thought in the group discussion parts of each lesson. It was helpful hearing about other people's worries and it made me feel I wasn't the only one thinking that way.
  - (What did you like least about the program?) It was one of the activities, writing things down on the worksheets. I couldn't figure out how to write them.
- P3
- (What did you like least about the program?) The worksheets. I found it more effective talking than writing it down on a piece of paper.
- P7
- (Were there particular things you did/didn't find useful?) I really enjoyed doing the mindfulness exercises. I always felt doing the FOFBOC or 7/11 exercise were the best in making me feel less worried about whatever was going on.