AN OBSERVATIONAL STUDY OF CHARACTER STRENGTHS AND SUBJECTIVE WELLBEING IN AUSTRALIAN AND SINGAPOREAN PRE-ADOLESCENTS

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TABLE OF CONTENTS

Chapter 1: Overview of Thesis 11
General topic 11
Significance of my research 11
Stating what my gap is 11
Significance of my gap 12
What is the thesis about? 13
How was the research completed? 14
Brief summary of each chapter of the thesis 14
Chapter 2: Introductory Chapter and Literature Review 16
Brief history of research on wellbeing 16
Definitions of wellbeing 17
Current debates about the nature of wellbeing 18
The multidimensional nature of wellbeing 18
Does wellbeing need to be defined in age-specific terms? 18
Measuring wellbeing in children 19
Promoting wellbeing in schools 19
A systematic judgement of the definition of wellbeing used in the research 20
Subjective wellbeing of school students 21
Theoretical perspective 23
Choice of perspective 23
A consideration of perspectives 24
Positive Psychology Perspective 24
Definition of positive psychology perspective 24
Historical background of positive psychology perspective 24
Core concepts of positive psychology perspective on wellbeing 24
Key theoretical constructs that positive psychology is based on 25
Applicability of positive psychology perspective to student wellbeing 26
Testable to the general population of students 27
Criticisms of positive psychology 27
Resilience Perspective 28
Definition of resilience perspective 28

Historical background of resilience perspective 29
Core concepts of resilience perspective on wellbeing 29
Key theoretical constructs that resilience perspective is based on 30
Applicability of resilience perspective to student wellbeing 30
Testable to the general population of students 31
Criticisms of resilience perspective 31
My decision and rationale for my decision 33
Character strengths and subjective wellbeing in different cultures 33
Defining culture 33
Endorsement of character strengths 34
Relationship between character strengths and subjective wellbeing 35
Gap in the literature 36
Similarities between Australia and Singapore 36
Studies conducted in Australia and Singapore 36
A brief note about Australia 37
A brief note about Singapore 37
Summary 37
Character strengths and subjective wellbeing in different age groups 37
Endorsement of character strengths 37
Relationship between character strengths and subjective wellbeing 38
Life satisfaction 38
Happiness 39
Life satisfaction and happiness 39
The importance of the period of pre-adolescence 40
Summary 41
Research Objectives 42
Chapter 3: Method 43
Participants 43
Recruitment 43
Samples 43
Measures 43
Demographic Questions 43
Character Strengths and Virtues 44

Psychometric properties of the VIA-Youth 44
Life satisfaction 48
Happiness 49
Procedure 50
Research design and analysis plan 51
Chapter 4: Results 52
Factor structure of the VIA-Youth 52
Virtues 52
Character Strengths 53
Distribution of data 54
Descriptive statistics 54
Describing the sample 54
Main analysis 54
Comparison of the strength of endorsement of character strengths between Australia and Singapore 58
Relationship between character strengths and wellbeing 61
Relationship between character strengths and life satisfaction 63
Relationship between character strengths and happiness 64
Correlation between two measures of subjective wellbeing 64
Differences between countries in the relationship between character strengths and subjective wellbeing 64
Regression analyses 65
Life satisfaction 65
Happiness 65
Summary 68
Chapter 5: Discussion 69
Integrated findings of this study 69
Integration of current findings into the field 69
Conceptual issues 69
Relevance (Endorsement) of character strengths in pre-adolescence 69
Relationship between character strengths and subjective wellbeing 70
Strengths 73
Limitations 73

Recommendations for future research 75
Chapter 6: Conclusion 77
References 79
Appendix A 90
Appendix B 93
Appendix C 96
Appendix D 97
Appendix E 98
Appendix F 99
Appendix G 100
Appendix H 102
Appendix I 103
Appendix J 105
Appendix K 106
Appendix L 114
Appendix M 117
Appendix N 121
Appendix O 145

ABSTRACT

Student wellbeing has become a core focus for schools and research has shown that student wellbeing is an important influence on many aspects of school participation. As part of their strategy to increase student wellbeing, many education systems around the world have embraced positive psychology, which views developmental problems in the context of the many positive elements present in most behavioural settings. Positive psychology identifies character strengths as universally valid predictors of wellbeing for individuals, regardless of context. However, positive psychology was developed and has mainly been tested in North America, and with older adolescents and adults. Little research has examined the relevance of character strengths and their associations with wellbeing in (1) collectivist cultures and individualist cultures outside North America, or (2) during the transition to adolescence. The aim of this thesis was to examine the level of endorsement of character strengths, and the relationships between character strengths and wellbeing among pre-adolescents in one collectivist culture (Singapore) and one individualist culture outside North America (Australia). Participants were 12 to 13 year-old children in Australia and Singapore. Both countries have advanced economies, high levels of literacy, and provide schooling in English, thereby avoiding the confounding of these variables in previous cross-cultural comparisons. Participants completed 3 self-report questionnaires. Twenty-four character strengths were measured using the Values in Action Inventory of Strengths-Youth (VIA-Youth) scale. Two dimensions of subjective wellbeing were assessed: life satisfaction (Personal Wellbeing Index-School Children) and happiness (Authentic Happiness Inventory). Children making the transition to adolescence gave moderate mean levels of endorsement to all character strengths in both samples. A MANCOVA (with age and gender as covariates) showed that the Australian sample more strongly endorsed 11 character strengths, while the Singaporean sample more strongly endorsed 1 character strength. However, almost all differences were small with nationality accounting for less than 10% of the variance in character strengths. Most character strengths were positively correlated with both measures of wellbeing in both samples. The strength of the relationship was moderate in most cases. Multiple linear regressions showed that character strengths accounted for a moderate to large percentage of individual difference in both measures of wellbeing in both samples. One character strength contributed to independent variance in both measures of wellbeing in both samples: zest. In Australia, several other character strengths also contributed independent variance to life satisfaction, and several other character strengths to happiness. The amount of individual variance contributed by character strengths was moderate to large in both samples for both aspects of wellbeing. The findings suggest that the character strengths assessed by the VIA-Youth are relevant to children making the transition to adolescence in both the individualist (Australian) and collectivist (Singaporean) samples.

DECLARATION

I certify that this study does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text.

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Chapter 1: Overview of Thesis

General topic

My role as a school counsellor is to empower students with skills to overcome the challenges that they face by drawing upon their strengths and available supports. A key challenge, or overall challenge, for students might be described as achieving or maintaining a certain level of felt wellbeing. Schools today, particularly at early and middle stages of schooling, tend to care about student wellbeing, and research suggests that students with wellbeing are more engaged with school (Shoshani, Steinmetz, & Kanat-Maymon, 2016), have higher academic achievement (Ashdown & Bernard, 2012; Dix, Slee, Lawson, & Keeves, 2012) and present fewer classroom management problems for teachers (Ashdown & Bernard, 2012).

Schools' interest in wellbeing coincides with a resurgence of interest in wellbeing in psychological research. The interest in positive psychology was renewed more than a decade ago when Seligman and Csikszentmihalyi (2000) attempted to address the imbalance they perceived in psychology. The focus of psychological research and practice has mostly been on deficits and dysfunctions rather than on potentials and strengths of individuals. The positive psychology perspective was adopted in this study. However, there are a number of challenges for primary and middle schools that wish to apply the findings of research in positive psychology to improve student wellbeing. Positive psychology has focused mostly on adolescents and adults, with little research examining whether positive psychology can be applied during pre-adolescence. There has been a lack of research on collectivist cultures and on individualist cultures outside the U.S. This thesis addresses the paucity of research on pre-adolescents in individualist cultures outside North America and collectivist cultures.

Significance of my research

One of the main tenets of positive psychology of relevance to primary and middle schools is the relationship between character strengths and subjective wellbeing. The research reported in this thesis examines whether there is an association between character strengths and wellbeing. It is unique work because this is the first known study that has examined the relationship between character strengths and wellbeing of pre-adolescents in an individualistic country, Australia and a collectivist country, Singapore with careful elimination of confounding factors.

Stating what my gap is

The gap my research addressed is threefold:

Firstly, the advocates of positive psychology claim that it is applicable universally, but the claim needs to be tested as most positive psychology research has been conducted in North America with a few studies in other countries. There have been very few cross-cultural

studies and they contain many confounding factors. I tested the claim for the relevance of character strengths in an individualistic country outside of North America, Australia, and in a collectivist country, Singapore.

Secondly, the claims of the universal applicability of positive psychology have mostly been tested among adults and adolescents. There has been a dearth of research among pre-adolescents in the area of positive psychology. Pre-adolescence is a critical period as the transition into adolescence takes place along with physical, mental, emotional and social changes. I tested the claim of universal applicability among pre-adolescents in Australia and Singapore.

Thirdly, positive psychology has predicted a relationship between character strengths and subjective wellbeing. I tested this claim among pre-adolescents in Australia and Singapore.

Research to find out if there is a causal relationship between attributes like character strengths and wellbeing is expensive. There is no point in doing that research if there is no association between character strengths and wellbeing. My research is a critical first step in investigating the relationship between character strengths and wellbeing. If my research shows an association between character strengths and wellbeing, this would justify the investment required to conduct a study investigating a possible causal relationship between character strengths and subjective wellbeing. Such a study is a precondition of intervention focused on increasing character strengths.

Significance of my gap

Addressing the gap identified above is of interest to four key audiences: practitioners in the educational field (such as school counsellors, teachers and principals), educational policymakers, theorists of positive psychology and wellbeing and parents.

School counsellors, teachers and principals are very interested in student wellbeing as it has the potential to influence and improve academic performance, engagement in schools, school attendance and school retention. School counsellors have a particular responsibility to increase the wellbeing of students and would be interested in whether the tenets of positive psychology can be applied in practice as a tool for improving student wellbeing (Park & Peterson, 2006b). This study is important for many reasons including the fact that a low sense of wellbeing in students has been found to be an obstacle to learning (Keeling, 2014), and is associated with behavioural difficulties at school (Ashdown & Bernard, 2012), poor academic performance (Forrest, Bevans, Riley, Crespo, & Louis, 2013), low school attendance (Reid, 2008) and a high rate of school dropout (e.g. Quiroga, Janosz, Bisset, & Morin, 2013). Therefore, it is important for schools to focus on supporting student wellbeing in order to improve behaviour and academic potential (Huebner & McCullough, 2000). For these reasons, identifying the predictors of wellbeing is important to teachers and principals.

Educational policymakers will be interested to know if positive psychology can positively affect both student and teacher retention rates and academic achievement in the core subjects and areas like reading, writing, mathematics and science, and also second language learning for others. Educational policymakers will be interested in any work that provides evidence that a positive psychology approach could potentially be worth pursuing (McLeod & Wright, 2015). With respect to my work, implementing a whole-school positive psychology approach would be very expensive but my work provides preliminary evidence that such an investment has the potential to bring great benefits.

Theorists of positive psychology and student wellbeing will be interested in research that addresses the gap identified above. My work tests key predictions of positive psychology with respect to the boundaries of existing theory in terms of both age and cultural context. Theorists will be interested to find out if the claims of positive psychology are also applicable to another individualistic country outside of North America and to a collectivist country. They will also be interested to know if character strengths are relevant to pre-adolescents in both countries.

There are several reasons why parents will be interested in research that addresses the gap identified above. Parents are usually the party that is most committed to the wellbeing of their children for the children's own sake, rather than for any ulterior motive. So parents will be interested to know how positive psychology can potentially improve their children's wellbeing and perhaps also their academic performance.

What is the thesis about?

This study firstly examines the level of endorsement of character strengths and secondly the relationship between character strengths and two dimensions of subjective wellbeing; life satisfaction and happiness in pre-adolescents from two cultural backgrounds, Australia and Singapore.

The main aims of this thesis are to determine the following:

1. Are character strengths endorsed by pre-adolescents in both Australia and Singapore?
2. Are there differences in character strengths endorsed by pre-adolescents in Australia and Singapore?
3. What is the relationship between individual character strengths and subjective wellbeing?
4. Which character strengths are the strongest predictors of subjective wellbeing in Australia and Singapore?
5. Are similar character strengths the strongest predictors of subjective wellbeing in Australia and Singapore?

The first two of the above questions relate to the universality of character strengths, while the last three questions relate to correlations between character strengths and subjective wellbeing.

How was the research completed?

To achieve the aims of my research, I conducted a cross-cultural, cross-sectional, quantitative study of school children from multiple sites in Adelaide, Australia and Singapore. Standard positive psychology tools were used to measure character strengths and two dimensions of subjective wellbeing.

Australia and Singapore were excellent samples for the study due the careful elimination of confounding factors that were found in the few prior studies conducted in individualistic and collectivist countries. Both Australia and Singapore are highly urbanised and enjoy high levels of economic development. Both countries provide schooling in English; have high levels of literacy and familiarity with electronic technology. Therefore, the method of data-collection can be the same in both countries.

Brief summary of each chapter of the thesis

The thesis contains two main components, a literature review and an empirical study. The literature review places research on life satisfaction and happiness in its wider context, and examines the role of culture. The empirical study investigated the relationship between character strengths and two components of subjective wellbeing (life satisfaction and happiness) in pre-adolescents in Australia and Singapore.

The remainder of this thesis is organised as follows:

Chapter 2 examines the literature on positive psychology, character strengths and subjective wellbeing with attention given to the developmental period of pre-adolescence and the role culture plays in relation to character strengths and subjective wellbeing.

Chapter 3 explains the method used in the study. It provides details about the process of recruitment, participants, methods and procedure used in this study. The measures for character strengths and subjective wellbeing are described. The psychometric properties of the measures used in this study are also presented.

The results of the research are presented in Chapter 4. First, the preliminary analysis and evaluation of the measures is explained. An exploratory factor analysis was conducted to justify the use of virtues but it showed that the virtues had psychometric problems as measures. In order to overcome these problems, the decision to conduct the analysis on the basis of the 24 character strengths that make up the 6 virtues was made after a confirmatory factor analysis was made. The results are presented in the following order: (1) exploration of the factor structure of the VIA-Youth; (2) preliminary analyses to determine whether the distribution of data was consistent with the assumptions of the planned

statistical analyses; (3) descriptive statistics for character strengths and the two subjective wellbeing measures, life satisfaction and happiness, for each country; (4) MANCOVA analysis comparing the strength of endorsement of character strengths between Australia and Singapore; (5) correlations between character strengths and the two wellbeing measures and (6) regression analysis to identify the character strengths that made independent contributions to the variance in the two measures of subjective wellbeing in each country.

Chapter 5 draws on the findings of the research and interprets them in the context of previous literature concerning character strengths and subjective wellbeing in various populations across cultures, with attention given to pre-adolescents in cross-cultural comparisons. The cross-cultural findings will be the focus of discussion. This chapter also provides the overall conclusion to the thesis. It integrates the findings, acknowledges the limitations of the study, relates conclusions the thesis allows to the fields of positive psychology with focus on character strengths and subjective wellbeing, outlines some implications for practice and makes recommendations for future research.

Conclusions of the research are presented in Chapter 6. Key contributions of the thesis are highlighted.

Chapter 2: Introductory Chapter and Literature Review

This chapter will focus on introducing wellbeing and on the significance of wellbeing to my research. First, the chapter will introduce the concept of wellbeing by providing a brief history of research into wellbeing, followed by relevant definitions of wellbeing. Current debates about the nature of wellbeing will come next, with a focus on perspectives that could help improve the wellbeing of pre-adolescent school students. After considering alternatives, I will make a systematic judgement about the definition of wellbeing to be used in this research. The focus will then move to a decision about which theoretical framework is the best fit for this research. The strengths and weaknesses of alternatives will be examined and the measures that are specified by the theoretical perspectives will be examined. Next, the lens will be on key aspects of the chosen theoretical perspective. The core prediction is that there is a relationship between character strengths and wellbeing. I will demonstrate that this prediction is not well researched in pre-adolescents and cultures outside North America and I will argue why it is interesting to know if the propositions of the chosen theoretical perspective apply to pre-adolescents and also to cultures outside of North America. A summary statement regarding the gap addressed by this research, aims of the research, theoretical model and hypothesis will conclude the section.

Brief history of research on wellbeing

A notion of wellbeing has existed from time immemorial and scholarship about wellbeing began at least 2500 years ago (Holte et al., 2014). Early scholarship concerning wellbeing and life satisfaction has links to Aristotle (Helliwell, 2003). Later classical philosophers added components such as prosperity, excellence, independence, pleasure and virtuous activity to the Aristotelian notion of what happiness is (Helliwell, 2003), with the Epicureans placing more significance on the importance of pleasures, including the avoidance of pain in body and soul and the Stoics giving their entire attention to living the virtuous life (Annas, 1993; Helliwell, 2003).

The history of the present-day concept of wellbeing dates back to the 20th century and it can be traced to the disciplines of the health sciences and the social sciences. Much of this early modern scholarship focused on objective wellbeing (e.g., absence of diagnosed illness, income). Attention to wellbeing in the field of the health sciences can be traced to the WHO constitution (World Health Organization, 2002), while recent interest in wellbeing in the social sciences can be traced to the "social indicators movement" in the 1960s (Bauer, 1966). Attention to the subjective realm of wellbeing also increased during the same period, (Bradburn, 1969; Bradburn & Caplovitz, 1965). In recent history, the notion of wellbeing has been explored in different disciplines in the humanities (e.g., philosophy, literature, history and religion), health sciences (e.g., public health and medicine) and social sciences (e.g.,

psychology and social work). In recent decades, there has also been increasing attention to the wellbeing of children and adolescents (Ben-Arieh, Casas, Frones, & Korbin, 2014).

Definitions of wellbeing

There is no one, single accepted definition of wellbeing. Rather, different definitions are used in different areas of study. As illustrative examples, I have included definitions of wellbeing from five disciplines: social work, counselling, health, positive psychology and economics. Most of these definitions of wellbeing reflect the focus of the discipline in which they were generated. An example of a definition developed in social work is provided by Ben-Arieh et al. (2014, p. 1): "a desirable state of being happy, healthy, or prosperous". It "refers to both subjective feelings and experiences as well as to living conditions" and it is "related to the fulfillment of desires, to the balance of pleasure and pain, and to opportunities for development and self-fulfillment". The focus of this definition of wellbeing includes an objective component (e.g., living conditions) as well as a subjective component (e.g., pleasure), reflecting the two main aspects of social work practice. This is unlike the focus in an example of a definition for the field of counselling, which focuses solely on subjective aspects of wellbeing: (Myers, Sweeney, & Witmer, 2000, p. 252) offer "a way of life oriented toward optimal health and well-being, in which body, mind, and spirit are integrated by the individual to live life more fully within the human and natural community".

There are however exceptions to discipline-focused definitions of wellbeing. One counter example comes from the World Health Organization (B. J. Smith, Tang, & Nutbeam, 2006, p. 340) which provides a definition developed in the health sciences: "the optimal state of health of individuals and groups. There are two focal concerns: the realization of the fullest potential of an individual physically, psychologically, socially, spiritually and economically, and the fulfilment of one's role expectations in the family, community, place of worship, workplace and other settings". The dimensions of wellbeing included in this definition go beyond those that are directly related to health. A second counter example comes from positive psychology. In positive psychology, the predominant focus of wellbeing research has been on subjective wellbeing: "all of the various types of evaluations, both positive and negative, that people make of their lives. It includes reflective cognitive evaluations, such as life satisfaction and work satisfaction, interest and engagement, and affective reactions to life events, such as joy and sadness" (Diener, 2006, p. 153). Each of the definitions above lists specific, though only partially overlapping, dimensions of wellbeing. In contrast, other scholars define wellbeing in non-specific abstract terms. A third counter example is of this type. In the field of economics, Gough & McGregor (2007, p. 6) define wellbeing as "what people are notionally able to do and to be, and what they have actually been able to do and to be". No economic-specific dimensions of wellbeing being are described. Despite the many differences between these definitions of wellbeing, there is broad agreement that wellbeing is multidimensional, is more than the absence of illness, is not static, and that it exists on a continuum (Ben-Arieh et al., 2014; Holte et al., 2014; Masters, 2004).

In order to maximise the relevance of my research to the work context of school counsellors, it will be helpful to choose a definition that focuses on factors that are amenable to change in a school context, is not culture-bound, is relevant to the age of school students, is able to be measured using valid and reliable measures, is part of a well-developed theoretical framework and includes at least two dimensions (i.e. is multidimensional). For these reasons, I have chosen to adopt the definition of subjective wellbeing. The concept of "subjective wellbeing" meets all of the above criteria. Several of the other definitions fail to meet the criterion of being amenable to change in a school context and/or valid and reliable measures are unavailable.

Current debates about the nature of wellbeing

There are a number of significant, current debates in relation to wellbeing. Four of the debates with the greatest relevance to the current research relate to: the multidimensional nature of wellbeing, whether wellbeing needs to be defined in age-specific terms, measurement of wellbeing in children and how to promote wellbeing in the school context.

The multidimensional nature of wellbeing

One significant debate concerns the number of dimensions that need to be captured in relation to wellbeing (Holte et al., 2014). Even though many definitions of wellbeing include four or more dimensions, in practice most wellbeing research does not explicitly measure so many dimensions. There are three main reasons. The first is that the measurement of so many different dimensions is very complex. The second is that valid and reliable measures are not available for several dimensions included in some definitions. The third is that there are marked individual differences in the contributions that particular dimensions make to a person's evaluation of his/her wellbeing. Despite this debate, there is broad agreement that subjective wellbeing involves two dimensions, one of which is cognitive and the other affective. The current research will assess both of these dimensions.

Does wellbeing need to be defined in age-specific terms?

There is debate around whether or not wellbeing should be defined differently for children and adults. Based on the illustrative examples of the definitions of wellbeing seen earlier, there are dimensions in some definitions (e.g., economic) that may not be applicable to children, while it may also be argued that there may be dimensions of wellbeing that are unique to children. Even when there is agreement about the most relevant definition of wellbeing for children, there is often debate whether the wellbeing is displayed in similar ways by children and adults, whether there are differences between children and adults in the factors that influence wellbeing and about how the wellbeing of children can be best measured (Forster, 2004).

Most research in the speciality field of wellbeing has focused on adults. It has only been since the close of the twentieth century, with the development of the "child indicators movement" (Ben-Arieh, 2007; Holte et al., 2014), that wellbeing researchers have begun to

focus on children and adolescents. As a result, there is currently insufficient evidence to warrant an age-specific definition for the wellbeing of children or adults. However, it appears likely that some of the factors that influence the wellbeing of children and adolescents differ from those that influence adults' wellbeing. This study will clarify whether factors known to influence adults' subjective wellbeing also apply to pre-adolescents. In doing so, this study will adopt measures designed to be age-appropriate for pre-adolescents.

Measuring wellbeing in children

Another debate surrounds the philosophical and scientific question of whether children should report on their own sense of wellbeing, or whether this should be done by adults who have "more developed evaluation capacities" (Holte et al., 2014, p. 578). In previous research, there has been a reliance on data provided by adults, mainly parents and teachers, about the wellbeing of children. Parents can be valuable respondents because they are in a position to assess their own child in many contexts and over a long period of time. However, parents may demonstrate social desirability bias and do not have access to the child's school experiences. Teachers can be valuable respondents because their judgements are informed by experience in working with a large number of children of the same age, so they have comparison points for their judgements, and they may be free from some of the biases that may influence parents. However, teachers spend limited time with individual children and do not have access to their experiences outside of school. Children can be valuable respondents because they are the only ones with access to their experiences both in and out of school: the "perspectives of children and adolescents are essential to understand their social worlds" (Holte et al., 2014, p. 572). However, it has been argued that children "perceive and evaluate the quality of their lives more in the present moment" (Holte et al., 2014, p. 578) as compared to adults who are able to integrate experiences across time. Because subjective wellbeing focuses on the individual's evaluation of his/her own experiences, self-report measures are preferred. This is possible even for child participants because well-recognised and reliable self-report measures for children are now available. This choice also avoids the practical difficulties of involving parents and teachers who have many competing work and/or family commitments. Therefore, this thesis will select children as respondents.

Promoting wellbeing in schools

There have been debates on how best to foster wellbeing, particularly amongst school students (Masters, 2004). Some scholars focus on increasing external resources for parents (e.g., parent social networks (Toumbourou, Douglas, & Shortt, 2004)) or children (e.g., school climate (Ainley, 2004)). Others focus on increasing children's internal resources (assets) (e.g., social-emotional capacities (Bernard, 2004)).

As a school counsellor, a significant part of my work involves promotive programmes, which aim to increase positive outcomes for all students, regardless of whether they have an

identified deficit. This type of intervention involves a "whole-school" approach. Because of this, promotive programmes usually take a strengths-based approach (Park & Peterson, 2009c). The focus of a strengths-based approach can either be external resources or internal assets. An advantage of focusing on internal assets is that they are transportable across contexts (e.g., from school to home and from one school to another). For a school counsellor, strengthening students' internal assets is a main focus. Therefore this thesis will focus on the relationship between children's internal assets and their wellbeing.

A systematic judgement of the definition of wellbeing used in the research

Subjective wellbeing is defined differently by different scholars. However, the definitions provided by Diener (2000) and Ben-Arieh (2014) include positive and negative affect. In one of the most influential definitions, Diener defines subjective wellbeing (SWB) as "life satisfaction (global judgements of one's life), satisfaction with important domains (e.g., work satisfaction), positive affect (experiencing many pleasant emotions and moods), and low levels of negative affect (experiencing few unpleasant emotions and moods)" (Diener, 2000, p. 34). Ben-Arieh defines subjective wellbeing as "a desirable state of being happy, healthy, or prosperous" and it "refers to both subjective feelings and experiences as well as to living conditions" and it is "related to the fulfilment of desires, to the balance of pleasure and pain, and to opportunities for development and self-fulfilment" (Ben-Arieh et al., 2014, p. 1). In contrast, other scholars have proposed definitions that do not require the measurement of negative emotions. For example, (McGillivray & Clarke, 2006, p. 4) define subjective wellbeing as involving "a multidimensional evaluation of life, including cognitive judgments of life satisfaction and affective evaluations of emotions and moods". Despite this difference, there are underlying similarities between these three definitions: all include positive emotions and life satisfaction. The main difference is that some scholars propose definitions that do not require the measurement of negative emotions.

There are some scientific and ethical problems in measuring the affective component of subjective wellbeing. Very complex measurement of frequency, duration and intensity will be required to capture the experience of positive and negative emotions. There is also the need to capture the meaning of these emotions for the participants. There is debate about the number and choice of positive and negative emotions to be assessed. For example, does assessment of negative emotions require measures of sadness, anger, frustration, contempt, disgust, self-loathing etc.? There are other concerns about including measures of affect balance or an independent measure of negative emotions when working with children. There are ethical problems associated with directing children to focus on their negative experiences, given their limited cognitive ability to integrate experience over time. In addition, there is an inconsistency between my professional role as a school counsellor, focused on promoting children's wellbeing, and use of research methods that have the potential to adversely affect students' wellbeing. For all of these reasons, I will adopt

McGillivray and Clarke's (2006) definition of subjective wellbeing, which does not require the measurement of negative emotions.

Scholars in various disciplines study subjective wellbeing with a specific focus on positive affect and satisfaction without measuring negative affect. These include (Blanchflower & Oswald, 2004; Lin, Lin, & Wu, 2010; Toner, Haslam, Robinson, & Williams, 2012) and Deng, Hu, Dong and Wu (2010) in the areas of education and psychology, disability studies, economics and housing, respectively. Thus, my decision to adopt a definition of subjective wellbeing that focuses on positive affect and life satisfaction is consistent with a large body of previous research that has also chosen to assess subjective wellbeing without measuring negative emotions.

There is broad agreement on the definition of each of the two components of subjective wellbeing: life satisfaction and positive affect. Life-satisfaction is "the degree to which a person positively evaluates the overall quality of his/her life as-a-whole. In other words, how much the person likes the life he/she leads" (Veenhoven, 1996, p. 6). Positive affect is usually equated with happiness and measured by measuring happiness (Lyubomirsky, King, & Diener, 2005). The definition of happiness is "the experience of joy, contentment, or positive well-being, combined with a sense that one's life is good, meaningful, and worthwhile" (Lyubomirsky, 2007, p. 32). The definition of happiness focuses on emotions while the definition of life satisfaction focuses on cognitive evaluations. I will adopt life satisfaction and happiness as my measures of subjective wellbeing because of the broad consensus around using them to measure subjective wellbeing. Using life satisfaction and happiness to measure subjective wellbeing overcomes problems of measurement, avoids ethical concerns with encouraging children to focus on negative experiences, and is consistent with the definition of subjective wellbeing by McGillivray et al. (2006) that I have adopted.

Subjective wellbeing of school students

Previous empirical research has examined several factors that influence students' subjective wellbeing. They can be divided into three groups: research focusing on internal psychological resources, research focusing on the quality of relationships and research focusing on external psychological and material resources.

Research that focuses on the association between internal psychological resources and subjective wellbeing among school students includes skills (e.g., coping strategies, social-emotional skills, mood homeostasis and emotional self-regulation) and attributes (e.g., trait mindfulness, personality/temperament and character virtues and strengths). For example, the use of skills such as particular coping strategies is connected with wellbeing among Australian and Italian adolescents and young adults (Bryden, Field, & Francis, 2015; Cicognani, 2011; Tomyn & Cummins, 2010). This applies not just in individualistic western countries but also in a collectivist country where an association between social-emotional

learning skills and subjective wellbeing of Singaporean children and adolescents was identified by Chong and Lee (2015). Homeostatically Protected Mood (HPMood) was seen to influence the composition of subjective wellbeing in a study among Australian adolescents (Tomyn & Cummins, 2010), and findings suggest that subjective wellbeing homeostasis (Cummins, 1995, 2010) regulates and preserves subjective wellbeing (Cummins, Li, Wooden, & Stokes, 2014). In adults, personal goals and avoidance goals preceded life stressors and avoidance coping respectively while they in turn partially mediated between life goals and avoidance goals and longitudinal change in subjective wellbeing respectively in adults of mixed ethnicities (Elliot, Thrash, & Murayama, 2011). In addition, attributes have been found to be assets for subjective wellbeing. For example, the attribute trait mindfulness positively related with wellbeing among Australian and Irish children and adolescents (Burke, 2014; Stokes, 2013). Personality/temperament is linked with subjective wellbeing in Swedish and Spanish adolescents (Garcia, 2011; Viñas, González, Malo, García, & Casas, 2013). A relationship between subjective wellbeing and character virtues and strengths in Israeli and Australian adolescents was identified by Shoshani and Slone (2012) and Toner et al. (2012) respectively. So far most studies on the relationship between internal psychological assets and subjective wellbeing have focused on adolescents and young adults and they have been conducted mainly in Western cultures. These studies suggested that it holds in adolescents and pre-adolescents but there is a gap in this area of research relating to children and pre-adolescents and in non-Western cultures. This study addresses this gap.

Research that focuses on the association between the quality of relationships and subjective wellbeing among school students includes research on relationships with individuals (e.g., attachments) and communities (e.g., social connectedness). A relationship between secure attachments with parents and peers and subjective wellbeing in American adolescents and young adults was found (Armsden & Greenberg, 1987) while social connectedness to school and neighbourhood predicted subjective wellbeing in New Zealander pre-adolescents and adolescents (Jose, Ryan, & Pryor, 2012). Although one of the studies here included pre-adolescents and children, most research concerning the association between relationships and subjective wellbeing focuses on adolescents and young adults in Western cultures.

Research that focuses on the association between external psychological and material resources and subjective wellbeing among school students includes research on psychological resources (e.g., social support) and material resources (e.g., housing and income). Psychological resources such as social support have been found to have a link with wellbeing (T. B. Smith & Silva, 2011), with perceived social support as a predictor of subjective wellbeing in Lebanese college students (Ammar, Nauffal, & Sbeity, 2013) and among Chinese university students (Kong, Zhao, & You, 2012). Research has found links between material resources and subjective wellbeing of Canadian adolescents where housing security tenure influences their sense of wellbeing (Cairney, 2005). A correlation between income and subjective wellbeing was found to be stronger in poorer nations by Veenhoven (1991), with similar findings among college students by Diener and Oishi (2000).

A link between Turkish adolescents' subjective wellbeing and their parents' SES was seen (Eryilmaz, 2010). Findings show that external psychological and material resources have an association with the subjective wellbeing of adolescents and young adults. However, there appears to be a gap in the research relating to the relationship between internal psychological and material resources and the subjective wellbeing of pre-adolescents.

To maximise the relevance of my research to my role as a school counsellor, I chose to focus on internal psychological resources. These are amenable to change in a school context and they are transportable across contexts, which makes them an ideal focus for a school counsellor.

Theoretical perspective

Much of the previous research on the specific factors associated with the subjective wellbeing of school students has not been guided by a coherent theoretical framework. There are a number of advantages to using a theoretical framework. First, a theoretical framework provides a summary of a large number of empirical findings and integrates these into a coherent whole. Second, a theoretical framework attempts to explain why a pattern of results is found, thus allowing for a big picture of a field. Third, a theoretical framework allows predictions to be made and tested in new contexts. Having a theoretical framework will be useful to my research for all of these reasons.

Nevertheless, some of the factors included in past research on subjective wellbeing of students have been guided by a theoretical framework. Two prominent frameworks are positive psychology (Seligman, 2002; Snyder & Lopez, 2002) and resilience (Fergus & Zimmerman, 2005; Laub & Sampson, 2003; Luthar, 2006; Masten, 2011; Zimmerman et al., 2013). I will consider the advantages and disadvantages of these two different frameworks for my current research.

Choice of perspective

As a school counsellor whose main role is to support the emotional needs of the students, it is important to work with a theoretical perspective that is compatible and consistent with my role and one that focuses on factors that are amenable to change in a school context. My role as a school counsellor has three aspects: Promotive, preventative and curative. The promotive aspect of my role as a counsellor is to conduct universal programmes/activities that potentially lead to positive outcomes for all students. The preventative aspect is to work with students who are deemed to be 'at-risk', while the curative aspect is about supporting students who are already facing challenges in their lives.

Two perspectives with a good "fit" for such a context are the positive psychology (Seligman, 2002; Snyder & Lopez, 2002) and resilience (Fergus & Zimmerman, 2005; Laub & Sampson, 2003; Luthar, 2006; Masten, 2011; Zimmerman et al., 2013) perspectives.

A consideration of perspectives

This section will compare the positive psychology and resilience perspectives to determine which one is better suited to the thesis. Firstly, each perspective's definition and historical background will be described, followed by the core concepts and key theoretical constructs of the perspective. Next, the applicability of each perspective to student wellbeing will be examined, followed by a brief overview of common criticisms of each perspective. Lastly, after discussion of both perspectives, the rationale for the decision on the choice of the perspective for the thesis will be provided.

Positive Psychology Perspective

Definition of positive psychology perspective

"Positive psychology is the scientific study of positive experiences and positive individual traits, and the institutions that facilitate their development" (Duckworth, Steen, & Seligman, 2005, p. 630).

Historical background of positive psychology perspective

Positive psychology is not a new phenomenon and many central ideas predate its emergence as a scientific movement (Snyder & Lopez, 2002). It can be dated as far back as Maslow (Maslow, 1954) and James (1890). The roots of positive psychology can be traced to the works of pioneers (Seligman, Steen, Park, & Peterson, 2005) such as Rogers (1951), Maslow (1954, 1962), Jahoda (1958), Erikson (1963, 1982), Vaillant (1977), Deci & Ryan (1985) and Ryff & Singer (1996). Historically, psychological research has been "the study of pathology, weakness, and damage" (Seligman & Csikszentmihalyi, 2000, p. 7) and has focused on identifying and addressing the problems faced by individuals rather than "the study of strength and virtue" (Seligman & Csikszentmihalyi, 2000, p. 7). Seligman (2002) proposes a paradigm shift to focus on positive emotion, virtues and strengths as well as positive institutions (e.g. schools that foster student wellbeing). Seligman's proposed paradigm shift recaptures many elements of the work of earlier pioneers; positive psychology provides "an umbrella under which previously separated lines of work can be placed, leading to new insights" (Peterson & Park, 2003). Positive psychology is distinctive in directing attention towards the strengths of individuals and helping individuals fulfil their potential (Peterson & Park, 2003). Seligman & Csikzentmihalyi (2000, p. 13) foresee "a psychology of positive human functioning will arise that achieves a scientific understanding and effective interventions to build thriving in individuals, families, and communities".

Core concepts of positive psychology perspective on wellbeing

One of the most important core concepts in positive psychology is that of the three pillars of wellbeing. The three pillars are positive experience, positive individual traits and positive institutions (Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). The first pillar, positive experience, is made up of positive emotions and subjective wellbeing and it refers to how people value positive subjective experiences at three time points - the past, present and future (Seligman, 2002). The second pillar, positive individual traits, focuses on the

degree to which a person is able to tap into individual strengths in their everyday life. More specifically, positive individual traits are defined using character strengths and virtues (Seligman & Csikszentmihalyi, 2000); character strengths and virtues are defined in the following paragraph. The third pillar, positive institutions, is about community and refers to the capacity of families, schools, churches and other community organisations to facilitate the development of positive emotions and positive individual traits (Linley & Joseph, 2004). Peterson (2009) expands on Seligman's (2000) three pillars to argue that there is a fourth pillar, positive relationships, which refers to connections among family members, friends and colleagues. However, the first three pillars are most commonly recognised as the key pillars of positive psychology (Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002).

Together, the three pillars capture the essence of what it means to have a psychological good life (Park, 2004). The good life is defined as "experiencing more positive feelings than negative feelings, judging that life has been lived well, identifying and using talents and strengths on an ongoing basis, having close interpersonal relationships, being engaged in work and leisure activities, contributing to a social community, perceiving meaning and purpose to life, and being healthy and feeling safe" (Park & Peterson, 2009a, p. 424).

The "good life" provides a starting point for developing a more precise notion of wellbeing. The development of a theory of wellbeing as part of the positive psychology movement began with the development of Authentic Happiness Theory. Seligman's (2002) Authentic Happiness Theory defines the pursuit of a life of pleasure (the Pleasant Life), engagement (the Good Life), and meaning (the Meaningful Life) as pathways to happiness (Seligman, 2011; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). Seligman extended Authentic Happiness Theory, renaming it Well-being Theory, and adding two additional components: positive relationships and accomplishment. Well-being Theory has five elements: Positive emotion, Engagement, positive Relationships, Meaning and Accomplishment (PERMA). Each of the elements of PERMA contributes to wellbeing, with each element able to be pursued independently of the other elements and each element defined and measured separately from the others.

Key theoretical constructs that positive psychology is based on

One key proposition of positive psychology is that wellbeing is developed through discovering one's unique, individual character strengths and using them creatively to enhance life. Character strengths are defined "as positive traits reflected in thoughts, feelings, and behaviors" (Park, Peterson, & Seligman, 2004). Twenty-four character strengths undergird all elements of PERMA and Seligman's Well-being Theory. Seligman (2011) predicts that the use of character strengths leads to more positive emotion, engagement, better relationships, more meaning and more accomplishment. This thesis tests the prediction that character strengths are associated with subjective wellbeing (life satisfaction and happiness). A listing of character strengths is in Appendix A.

Peterson and Seligman (2004) proposed a theory according to which character strengths can be grouped into six universally-valued virtues: wisdom, courage, humanity, justice, temperance, and transcendence. Other authors (Brdar & Kashdan, 2010; Macdonald, Bore, & Munro, 2008; Peterson, Park, Pole, D'Andrea, & Seligman, 2008; Shryak, Steger, Krueger, & Kallie, 2010), however, have found that the character strengths formed different virtue groups. This thesis tests the prediction that character strengths can be grouped into six universally-valued virtues.

Applicability of positive psychology perspective to student wellbeing

Schools are ideal places to develop wellbeing of students as most children and adolescents spend a high proportion of their time in schools. This means that much of their everyday interaction and experiences at school are likely to affect their wellbeing (Seligman et al., 2009).

A deficit approach to developing student wellbeing would focus on what students lacked in wellbeing. In contrast, a positive psychology approach focuses on building wellbeing by drawing on existing strengths (Park, 2009). Flourishing is promoted through the identification of students "important developmental strengths such as character strengths and life satisfaction, by facilitating their development, and by strengthening and maintaining them [to] achieve the healthy, happy, and good lives that they all deserve" (Park, 2004, p. 51).

Several studies (Buschor, Proyer, & Ruch, 2013; Park & Peterson, 2009b; Peterson, Ruch, Beerman, Park, & Seligman, 2007; Peterson & Seligman, 2004; Proyer, Gander, Wellenzohn, & Ruch, 2013) have found an association between character strengths and life satisfaction or between character strengths and happiness. Life satisfaction and happiness have been shown to increase with the development of particular character strengths (Proctor et al., 2011; Proyer, Gander, Wellenzohn, & Ruch, 2015). Character strengths such as hope, zest, love, gratitude and curiosity consistently show a robust association with life satisfaction (Buschor et al., 2013; Park et al., 2004). Research has shown that character strengths such as hope, kindness, perspective, self-control and social intelligence "can buffer against the negative effects of stress and trauma, preventing or mitigating disorders in their wake" (Park, 2004, p. 42). Exercises that target certain character strengths have been shown to have a positive effect on academic performance and life satisfaction as well as reducing internalizing and externalizing behaviour problems (Park & Peterson, 2009b).

Previous research has found that character strengths are amenable to change and that this change impacts on wellbeing. While few studies focus on pre-adolescents, one study of pre-adolescents (10-12 years; n = 55) found that participation in a 10-week programme which emphasised the understanding and use of character strengths led to increased wellbeing (Suldo, Savage, & Mercer, 2013). Another study (Proctor et al., 2011) found a similar result but with a slightly older sample including pre-adolescents and early adolescents (12 - 14 years; n = 319); their intervention program was used by two schools over a six-month period

and was specifically focused on increasing character strengths. Oppenheimer, Fialkov, Ecker, and Portnoy (2014) worked with a similar age group of young adolescents (eighth-graders) and found that participation in a series of activities designed to identify and build character strengths led to increased wellbeing.

Testable to the general population of students

The core proposition that this thesis seeks to test is that there is a relationship between character strengths and subjective wellbeing (life satisfaction and happiness). This proposition can be tested on the general population of students. Unlike a traditional psychological approach, a positive psychology approach offers the possibility of a universal approach to improve wellbeing across all students.

The twenty-four character strengths can be measured using the Values in Action Inventory of Strengths-Youth (VIA-Youth) (Park & Peterson, 2005). Life satisfaction can be measured using the Personal Wellbeing Index-School Children (PWI-SC) (Cummins & Lau, 2005a) and happiness using the Authentic Happiness Inventory (AHI) (Peterson, 2005).

Criticisms of positive psychology

Key criticisms of a positive psychology perspective include denial of the negative leading to elitism, being not evidence-based, having cultural bias, limiting development of weaknesses and being too focused on subjective rather than objective experiences.

One of the main criticisms of positive psychology is that there is a denial of the negative (Held, 2004; VanNuys, 2010). However, many people argue that positive psychology reclaims the importance of a focus on the positive without discounting the negative: “most psychological phenomena cannot be properly understood without considering both positive and negative experience” (Wong, 2011, p. 70).

Another criticism of positive psychology is that the claims it makes are not evidence-based. Miller argues that positive psychology is largely based on fallacious arguments while Ehrenreich argues that, despite the claims of positive psychologists, on the contrary, there is no evidence that happiness is related to good health (Ehrenreich, 2009; Miller, 2008). Positive psychology needs to show that it is evidence-based.

Positive psychology has been criticised as having cultural bias and missing an explicit moral map (Sundararajan, 2005), which makes claims of positive psychology being universal problematic. Many studies have been conducted with Western, Educated, Industrialised, Rich and Democratic (WEIRD) subjects (Henrich, Heine, & Norenzayan, 2010) and these studies do not paint a universal picture (Fernandez-Rios & Novo, 2012). While there are universalities across cultures, they are nuanced and complex and need to be explored in the context of a moral map that is genuinely cross-cultural. There is a need for a more nuanced version of positive psychology to emerge in time (Sundararajan, 2005).

Some authors (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001) have argued that character strengths limit the development of weaknesses as the identification and subsequent focus on character strengths could place a ceiling over individuals. A separate issue is that an individual may be drawn more towards improving their weaknesses rather than developing their strengths (Baumeister et al., 2001; Linley, 2008; Rozin & Royzman, 2001). Some positive psychology research has investigated improvements to wellbeing through the use of both top and bottom strengths (Proyer et al., 2015; Rust, Diessner, & Reade, 2009). Proyer et al. (2015) found that for those with initially higher overall levels of character strengths, focusing on the bottom five strengths led to greater improvements, whereas those with initially lower overall strengths levels improved more by focusing on their top five strengths.

Another criticism is that positive psychology is too focused on subjective rather than objective experiences. The pursuit of subjective wellbeing has been criticised for being "a futile and contradictory pursuit" (Linley & Joseph, 2004, p. 721) and it has also been criticised as being a Western concept, as it is much easier for someone in the West than in the East to subjectively assess himself or herself (Diener, Oishi & Lucas, 2003). However, Lyubomirsky (Lyubomirsky & Lepper, 1999, p. 138) noted that intuition and everyday experience have been demonstrated to be important indicators of happiness and "lead us to consider the importance of subjective processes in happiness". Lyubomirsky's perspective strengthens and highlights the importance of giving attention to and measuring the subjective wellbeing of individuals.

In summary, positive psychology like any field of research has its critics. However, none of the criticisms raised render a positive psychology perspective ineligible for research into the wellbeing of school children.

Resilience Perspective

Definition of resilience perspective

Resilience is defined as positive adaptation in a context of adversity (Luthar & Cicchetti, 2000). Ungar (2008) defines resilience as follows: "In the context of exposure to significant adversity, whether psychological, environmental, or both, resilience is both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community and culture to provide these health resources and experiences in culturally meaningful ways" (p. 225). Resilience is "a common phenomenon arising from ordinary human adaptive processes" (Masten, 2001, p. 234). A resilience perspective focuses on the development of prevention strategies for young people identified as at-risk using insight gleaned from studying how some young people overcome exposure to adversity. Zimmerman et al. (2013, p. 1) state that a resilience perspective "provides a framework for studying and understanding how some youths overcome risk exposure and guides the development of interventions for prevention using a strengths-based approach".

Historical background of resilience perspective

In the 1970s, the first wave of research on resilience emerged with scientists seeking to better understand and prevent the onset of psychopathology (Anthony & Koupernik, 1974; Garmezy, 1985; Garmezy & Nuechterlein, 1972; Garmezy & Rutter, 1983; Rutter, 1979, 1985; Werner & Smith, 1982). From the outset, there was the need to understand positive adaptation and strengths in contexts of adversity (Luthar & Cicchetti, 2000; Masten & Coatsworth, 1998). The practical importance of resilience research and the urgent need for strategies to help at-risk people has meant that resilience research has always needed to be quickly translated into practice (Masten, 2011). As interest in more integrated approaches to resilience has grown across disciplines, there has also been a growing need for concepts that can work across disciplines and systems (Masten, 2011). In spite of challenges, resilience research over the past forty years has achieved much in terms of strategies that make a discernible impact on human outcomes in at-risk situations (Masten, 2001; Masten, Herbers, Cutuli, & Lafavor, 2008).

Core concepts of resilience perspective on wellbeing

A resilience perspective seeks to define what it is that makes some children thrive even in the face of significant adversity. The core goal of the resilience perspective is "to delineate how adaptive systems develop, how they operate under diverse conditions, how they work for or against success for a given child in his or her environmental and developmental context, and how they can be protected, restored, facilitated, and nurtured in the lives of children" (Masten, 2001, p. 235).

Adversities facing youth can range from short and long term stressors to trauma. The resilience perspective provides a framework for understanding how some youths overcome risk exposure to become healthy adults (Fergus & Zimmerman, 2005; Garmezy, 1991; Gillham et al., 2011; Masten, 1994; Rutter, 1987; Zimmerman & Brenner, 2010). Resilience is related but different to concepts such as competence, coping and positive adjustment.

Assets, resources, risks and vulnerabilities are four key concepts of the resilience perspective. Assets and resources are positive constructs that serve as promotive and protective factors in the face of the negative constructs of risks and vulnerabilities. Assets refer to what is internal to the individual; they include social skills, coping skills, competence, behaviours that develop health, academic skills, being involved in activities in the community (Fergus & Zimmerman, 2005) and racial and ethnic identity (Quintana, 2007). In contrast, resources refer to what is external to the individual; they include the provision of settings that encourage health (Fergus & Zimmerman, 2005), parents, family involvement, adult mentors and caring adults (Zimmerman et al., 2013). As for the negative constructs, vulnerability refers to factors that are internal to the individual, such as a lack of confidence, poor physical health or a genetic predisposition to depression. Risk refers to factors that are external to the individual, such as the inability to access good education, social support or health services. Whether a factor is a risk factor or an asset depends "on

the nature of the factor and the level of exposure to it" (Fergus & Zimmerman, 2005, p. 400).

A resilience perspective has a number of strengths. It was developed for children, rather than being an adult framework that has been adjusted to work with children (Masten, 2001), and its focus on assets and resources provides a strengths-based perspective (O'Connell, 2006; Zimmerman et al., 2013). By encompassing four different aspects of people's lives – assets, resources, risks and vulnerabilities – which cover both positive and negative, as well as internal and external aspects, a resilience perspective captures, at least to some degree, the complexity present in children's lives.

Key theoretical constructs that resilience perspective is based on

The key theory that the resilience perspective is based on is that an outcome of positive adaptation is still possible in a context of adversity if the balance of assets and resources is right: if assets and resources can be adequately maximised and risks and vulnerability can be adequately minimised. Positive adaptation in the face of significant adversity is called resilience.

A practitioner working from the resilience perspective, say, within a school, would look to define assets and resources in the successful child or adolescent's context – including family, school and wider community – that are absent from the context of a child or adolescent who requires intervention. The practitioner would also look to define risks and vulnerabilities absent from the successful child or adolescent's context. Intervention would look to increase those assets and resources and decrease those risks and vulnerabilities for the child or adolescent concerned (Krovetz, 1999; Minnard, 2002). One example of a resilience approach is "Focus for change" (Fergus & Zimmerman, 2005, p. 411). "Focus for change" involves the integration of assets and resources as youths are provided with opportunities for prosocial involvement where "individual and contextual attributes needed to promote healthy development in the face of risk" (Zimmerman et al., 2013, p. 2) take place. These attributes include participation in extra-curricular school and community activities where skills can be enhanced and interests developed (Lerner, Almerigi, Theokas, & Lerner, 2005; Mahoney, Larson, & Eccles, 2005). Knowledge of "cumulative risks, assets, and resources studied over time" (Fergus & Zimmerman, 2005, p. 407) provides a deeper understanding of the process of resilience.

Applicability of resilience perspective to student wellbeing

The resilience perspective aims to improve outcomes across a range of domains, including social, socioeconomic, physical health, and so on. Wellbeing is one domain which a resilience perspective can be applied to. A resilience perspective focuses on assets and resources that have the potential to increase wellbeing and on risk and vulnerabilities that may threaten wellbeing. It seeks to increase wellbeing by maximising assets and resources and minimising risks and vulnerabilities.

A resilience perspective has been used in a number of settings with young people in a school context. Understanding Violence (UV) is a school-based violence prevention program that includes prosocial activities, ethnicity and support from adults (Nikitopoulos, Waters, Collins, & Watts, 2009). Implementation of UV improved youth attitudes, their understanding of the consequences of violence and increased their ability to cope with violence (Nikitopoulos et al., 2009). Youth Empowerment Solutions for Peaceful Communities (YES) is an after-school program for preventing youth violence (Zimmerman, 2011). It aims to help middle school youths strengthen their African-American identity and work with adults to develop and implement community improvement projects. Following implementation of the YES program, there were fewer incidents involving the police in areas around project sites and an increase in both conflict avoidance and conflict resolution (Zimmerman et al., 2013). All of the above programs are focused on positive outcomes; they concentrate on "enhancing youth assets and resources by engaging in prosocial activities to help them develop ethnic identity and connect with adult allies" (Zimmerman et al., 2013, p. 4).

Testable to the general population of students

Resilience can only be measured in the face of adversity (Fergus & Zimmerman, 2005; Masten, 2001). It is difficult to test a resilience perspective universally as a given risk factor may not be present in every individual's life at a particular time and also, risk factors have a different effect on different individuals. Even when exposure to a risk-factor is recognised as being likely to lead to a significant, negative impact for many people, the level of negative outcome may still differ from person-to-person and some people may not suffer any negative outcome. Thus, measures that cater to the level of risk exposure are needed (Fergus & Zimmerman, 2005). There have been studies that attempt to study resilience among adolescents who are not identified as at-risk but these can only be classified as being in the area of development and adjustment in adolescents and not investigative of a resilience perspective in adolescents (Fergus & Zimmerman, 2005). For all of these reasons, the resilience perspective is not testable to the general population of students.

Criticisms of resilience perspective

Criticisms of a resilience perspective include having the need for an adversity to be present before the perspective can be tested, that resilience is not always visible and varies from person-to-person, that resilience research tends to focus only on risks, vulnerabilities, assets and resources which may not depict the complete picture, a need for greater analyses to explore relationships between factors, a need for longitudinal research that study the effects of change, a need for more cross-cultural research and culturally-appropriate measures and the need for common terminology and assessments that are more consistent with the resilience perspective.

The most significant critique of the resilience perspective is that it can only be tested when the individual faces an adversity (Fergus & Zimmerman, 2005; Masten, 2001). This means a

resilience perspective cannot be used for universal measures to improve wellbeing, or for universal preventative measures that take a pro-active approach to improving wellbeing without any significant adversity having presented.

Resilience is not always obvious in every situation and may be visible in one context but not in another. There are also age, gender, socio-economic and country-of-origin differences with regard to the process of resilience (Fergus & Zimmerman, 2005). This complicates the development of strategies to improve resilience, particularly in a cross-cultural context.

While the resilience perspective was developed for children and youth, most resilience research usually includes only a single risk-factor and a single protective factor (Zimmerman et al., 2013). In reality, people "are actually exposed to multiple risks, may possess multiple assets, and may have access to multiple resources" (Fergus & Zimmerman, 2005, p. 406).

Considerations of the interaction that occurs between assets, resources, and risks and vulnerabilities are important (Fergus & Zimmerman, 2005) as multiple levels of interaction can occur (Masten, 2011). This also helps shed light on the possible reasons why some youths are able to overcome significant adversity and achieve positive outcomes. Analyses guided by a resilience perspective could examine relationships among risks and promotive factors (Fergus & Zimmerman, 2005). "Each of these risk exposures may be responsive to different assets and resources and may be related to different adverse outcomes" (Fergus & Zimmerman, 2005, p. 406) with tailoring of interventions to developmental timing needed so as to optimise outcomes (Toth & Cicchetti, 1999). Analyses with greater attention to cumulative effects could ascertain the effects of different promotive factors (Zimmerman et al., 2013).

Longitudinal research that examines the effects of change over time and also how certain assets and resources may be more important during particular developmental stages (Zimmerman et al., 2013) is needed because, currently, most longitudinal research covers only two time points (Fergus & Zimmerman, 2005). When it comes to research into adolescent substance use, violent behaviour and sexual behaviour, it is of importance "to include many waves of observation over longer periods of time to understand more completely the developmental factors associated with resilience processes" (Fergus & Zimmerman, 2005, p. 410).

There is insufficient cross-cultural research on the resilience perspective as most research focuses mainly on white or African-American youths. Cross-cultural research on other ethnic groups or on recent immigrants would serve to broaden the applicability of the resilience perspective (Fergus et al., 2005). There is a need for "culturally appropriate measures that assess well being and competence, particularly for international research" (Masten, 2011, p. 502).

The lack of a universal language has impeded the progress of the field and the use of a self-report assessment may not be fully consistent with resilience perspective (Fergus & Zimmerman, 2005).

In summary, while like any field resilience has its critics, a resilience perspective is well-suited to research on wellbeing with school children, provided that research focuses on children experiencing adversity.

My decision and rationale for my decision

I will only be able to test the predictions of the resilience perspective if I am working with an individual who has experienced or is undergoing adversity. This is likely to happen at different times with different types of adversities across a population of students but it will not happen with every student at a given point in time. So testing the predictions of the resilience perspective becomes problematic. Both positive psychology and resilience focus on positive outcomes rather than psychopathology, which is important for a school context. Both have been used in a school setting. However, the positive psychology perspective can be applied for a universal intervention strategy, whereas the resilience perspective cannot. For these reasons, after systematically considering the advantages and disadvantages of both positive psychology and resilience perspectives, I have chosen the positive psychology perspective.

Positive psychology makes many predictions about wellbeing, one of which is the relationship between character strengths and wellbeing. Other predictions include that there is a relationship between positive emotions and wellbeing, and participation in positive institutions and wellbeing. I am choosing to focus on one of these predictions: that character strengths are related to wellbeing. Further, I am investigating this prediction for pre-adolescents, and in both an individualist and a collectivist culture.

Character strengths and subjective wellbeing in different cultures

Defining culture

Culture is composed of subjective and material culture. The focus of research on culture to date has mostly been on material culture: for example, architecture, food and clothes. Subjective culture is defined as “shared attitudes, beliefs, categorizations, expectations, norms, roles, self-definitions, values, and other such elements of subjective culture found among individuals whose interactions were facilitated by shared language, historical period, and geographic region” (Triandis, 1972, p. 3) and much of subjective culture is “organized around the concepts of the individual or the collective” (Triandis, 1993, pp. 177-178). If cultures differ in values and attitudes, then the attention given to the fostering of certain character strengths more than others will also differ from culture to culture.

Cultures have been classified along many dimensions. For example, Hofstede (2001) classifies culture along four dimensions: individualism, masculinity, power distance and uncertainty avoidance. I have chosen individualism and collectivism as the dimensions of culture that will be the focus of my comparison due to the availability of theory and the particular relevance of these dimensions for the study of character strengths.

In an individualistic culture, the interest of the individual is more important than that of the group and vice-versa for a collectivist culture. To date, there have been many studies that focus on character strengths and subjective wellbeing in various cultures. However, most of the studies have been conducted in western countries and on individualist cultures.

Endorsement of character strengths

The applicability of character strengths in individualist cultures outside the U.S. and in collectivist cultures requires more investigation, although there is some theoretical evidence that character strengths can be applied across cultures. The largest and culturally most diverse study was conducted on adults from 54 nations (n=34,100), including Australia and Singapore, and 50 U.S. states (n=83,576) (Park, Peterson, & Seligman, 2006). Results showed strong similarity across nations but with some cross-cultural differences: "the occasional departures of a given strength for a given nation from the typical ranking of strengths found worldwide" (Park et al., 2006, p. 125), an interesting result being the high ranking of zest for collectivist Singapore. Specific groupings of nations emerged, for example where the Scandinavian nations were appreciably more similar to one another and also where the United Kingdom, Australia and New Zealand showed more similarities to one another. Overall, the study suggests that further investigation of cross-cultural differences with respect to endorsement of character strengths is warranted.

In an investigation with cultures that are perhaps even more widely differing than the nations collected by Park et al. (2006), a study of Kenyan Maasai, Inughuit in Greenland and U.S. college students found high rates of agreement about the existence, importance and desirability of character strengths across widely differing cultures (Biswas-Diener, 2006). However, while character strengths were similarly endorsed for both youth and elders in all cultures, there were cultural and gender-based differences between the samples. For example, the character strength of modesty was endorsed as being ''very important'' by a small proportion (14%) of 519 Americans, and received the lowest rating for almost half (44%) of the 71 Inughuit, and all (100%) for the 123 Maasai. A possible reason may be that the value given to modesty in the various cultures is changing. While this study appears to affirm the conclusion that the endorsement of character strengths is broadly similar across cultures but with some cross-cultural differences, one significant issue with this study is the number of confounding factors present, of which differences in the economy of individual countries, lifestyle, language and mode of data collection stand out.

Another study to find broad similarity but some cross-cultural difference concerned U.S. students of different ethnicities and socioeconomic levels from seven states. The main

ethnic difference was among non-White students (especially African Americans) where the score on the character strength of spirituality was significantly higher than for White students (Park & Peterson, 2005).

Overall, research into the endorsement of character strengths across cultures affirms broad similarity but with some cross-cultural difference. Each country has, to a large degree, a national character (Inkeles & Levinson, 1969; Peabody, 1985), and "different strengths come to the fore in different places for idiosyncratic cultural and historical reasons" (Park et al., 2006, p. 120). While there appears to be strong similarity in strengths ranking across many different countries, there are anomalies worthy of further investigation that suggest a role for culture in influencing the relative ranking of strengths.

Relationship between character strengths and subjective wellbeing

There is some evidence that some aspects of the relationship between character strengths and subjective wellbeing are universal, but other aspects vary according to culture.

A study conducted between young adults in the U.S. and Japan (Shimai, Otake, Park, Peterson, & Seligman, 2006) was the first study that compared the relationship between character strengths and wellbeing in an individualist and in a collectivist culture. The character strengths of hope, zest, curiosity and gratitude were associated with happiness in both groups (Shimai et al., 2006). This study had a number of confounding factors including language and a much smaller number of Japanese compared to the U.S. participants.

Another study that was the first of its kind focused on two very different cultures in Australia. It examined the level of subjective wellbeing of Indigenous Australian adolescents using the Personal Wellbeing Index-School Children. The mean subjective wellbeing score for the Indigenous Australian adolescents is within the Australian adult normative range. They scored significantly higher on Safety and Community connection but significantly lower on Standard of living, Achieving in life and future security (Tomyn, Tyszkiewicz, & Norrish, 2014). This study suggests that a high proportion of Indigenous Australians youths have lower subjective wellbeing than the general population and that a considerable number of females are more vulnerable to having lower subjective wellbeing. The results also show that Indigenous adolescents are resilient and enjoy "collective mean happiness within the expected normal range" (p. 1028). The limitation of the study is the high possibility of acquiescence bias in this study (Cronbach, 1946). The main confounding factor is that the sample is not representative of Indigenous Australian young people as they were mostly 'at risk' youths. The gap could be addressed with a more representative cross-section of the population that allows for more reliable conclusions to be drawn.

A mix of both individualistic and collectivistic cultures can be seen within the same school due to the racial and ethnic mix of students. A study conducted among Indigenous and non-Indigenous "at-risk" Australian adolescents showed a decrease in subjective wellbeing from early to mid-adolescence before reaching lows at about 19 years of age. In the Indigenous

sample, the males scored higher than the females in the domains of the Personal Wellbeing Index-School Children (Tomyn, Cummins, & Norrish, 2014).

Gap in the literature

In summary, the theoretical evidence suggests that there is broad similarity but also non-trivial differences in the endorsement of character strengths across cultures: "… continuing effort is needed to understand differences and similarities in how these strengths are shown and what the consequences and correlates of these strengths might be in different cultures." (Park & Peterson, 2006b, p. 905) Our results tell us that most strengths in our classification are valued universally." However, more research is needed in this area. With respect to the relationship between character strengths and subjective wellbeing, previous cross-cultural studies have had significant confounding variables, such as the language used in the mode of data collection, and the method of data collection. There is a need for studies that compare groups from individualist and collectivist cultures to examine the relationship between character strengths and wellbeing, and with as few confounding factors as possible. My study goes some way towards addressing this gap because it compares a highly individualist culture (Hofstede (2001) ranks Australia 2nd after the U.S.) with a strongly collectivist culture (Singapore ranks 39th of 41 countries for individualism (Hofstede, 2001)).

Similarities between Australia and Singapore

Australia and Singapore are ideally suited for study comparing individualism and collectivism with minimal confounding factors. They have both had a British colonial history, are both in the same geographical location, are multi-cultural, are post-industrial advanced economies and highly urbanised. In addition, they have similar schooling in English and the younger population in both countries is technologically competent.

Studies conducted in Australia and Singapore

Possible evidence regarding individualism and collectivism differences between Australia and Singapore is seen in research that investigates the relationship between character strengths and subjective wellbeing that has been conducted in Australia but not in Singapore. Toner et al. (2012) conducted one of the only studies on the relationship between character strengths and wellbeing in an Australian context. The study was conducted among adolescents in a privileged private school in Australia. Findings showed consistently that the character strengths accounted for 41% of variance in Australian adolescents' life satisfaction scores and 53% of the variance in their happiness scores, using the measures of Personal Wellbeing Index-School Children and Authentic Happiness Index respectively. There have been studies in the area of wellbeing with a recent exploratory comparison of children's wellbeing in the dimensions of health, behaviours, environment, material wellbeing, educational wellbeing and psychosocial wellbeing in eleven eastern and southeastern Asian countries. Singapore ranked third best in this study (Cho, 2014).

However, studies that examine specifically the relationship between character strengths and subjective wellbeing in Singapore have not yet been conducted.

A brief note about Australia

Australia is the only nation to occupy an entire continent with about one third of the country situated in the tropics. It has a land mass of nearly 7.7 million square km. Australia has a population of approximately 24 million people of whom 89% are urbanised. Australia's lifestyle reflects its mainly Western origins, but Australia is also a multicultural society which has been enriched by its indigenous population and settlers from about 200 nations of the world. English is the official language. Australia celebrated its national Centenary in 2001.

A brief note about Singapore

The Republic of Singapore sits 137 kilometres north of the equator, separated from Malaysia by the Strait of Johor and from Indonesia by the Strait of Singapore. Singapore is made up of the main island, which is 42 kilometres long and 23 kilometres wide, and 63 surrounding islets. The population of Singapore is 5.54 million of which 100% are urbanised (The World Bank, 2016). The major ethnic groups are Chinese, Malay, Indians and Eurasians, with English, Mandarin, Malay and Tamil being the four official languages. Singapore celebrated her Golden Jubilee in 2015.

Summary

This study addresses the gap seen in many earlier comparative studies, especially those conducted between individualist and collectivist cultures, by the significant reduction of confounding factors.

Character strengths and subjective wellbeing in different age groups

Endorsement of character strengths

The lower age boundary for developmentally-appropriate application of character strengths is not known although we know that character strengths can be applied for adolescents as well as adults. There is evidence that the distribution and effects of character strengths differ somewhat for children and adults. Some studies suggest that some character strengths are endorsed more strongly by adults than youth and appear to require "cognitive and emotional maturation" (Park & Peterson, 2009c, p. 69). A large (n = 17,056) study of U.K. adults (Linley et al., 2007) found that most strengths have a small but significant positive correlation with age. Overall, the limited evidence available suggests that while there are some similarities in the endorsement of character strengths across age groups, there are also differences which need to be more thoroughly explored.

Certain character strengths appear to be more evident in youths than in adults and vice versa. In what appears to be the only comparative study of youth and adults, while with gratitude, humour and love being most common character strengths in youth. Some

character strengths appear to be eroded as individuals mature into adulthood. Park and Peterson (2006b) found that fifth graders (10 years old) record higher levels of endorsement of character strengths than eighth graders (13 years old).

Park and Peterson (2006a) found that open-mindedness, gratitude, forgiveness, modesty and authenticity increase with age. In what appears to be the only study involving young children, Park and Peterson (2006a) used parents' reports of their children to find that love, kindness, creativity, curiosity and humour were the most prevalent character strengths in young children from the U.S. (3-9 years; n = 680) whereas the most prevalent character strengths in adults from 54 countries (n = 117,636) were found to be kindness, fairness, honesty, gratitude and judgement (Park et al., 2006).

Park and Peterson (2006b) found that while the endorsement of most strengths is similar across both youth and adults, there are several exceptions: hope, teamwork and zest are more strongly endorsed by U.S. youth while appreciation of beauty and excellence, authenticity, leadership and open-mindedness are more strongly endorsed by U.S. adults. Overall, existing research shows a small but consistent relationship between age and particular character strengths. However, existing research is limited and almost exclusively focused on adults in a U.S. context. Some studies focus on youth and very young children, but there is a gap in the research for the pre-adolescent age group. In this study, I will investigate if character strengths are applicable to pre-adolescents through whether they perceive the relevance of character strengths.

Relationship between character strengths and subjective wellbeing

A growing body of research suggests that the relationship between character strengths and wellbeing varies according to age. Some research focuses on life satisfaction, a cognitive component of wellbeing. Other research focuses on happiness, an affective component of wellbeing. Still other research focuses on both life satisfaction and happiness.

Life satisfaction

There is some evidence that the relationship between character strengths and life satisfaction (a cognitive dimension of subjective wellbeing) varies with age. In studies with adults, hope and zest are most frequently correlated with life satisfaction (Buschor et al., 2013; Martinez-Marti & Ruch, 2014; Park et al., 2004; Shimai et al., 2006). Curiosity, gratitude, love, hope and zest also showed a strong correlation with life satisfaction in a number of studies (Buschor et al., 2013; Park et al., 2004; Peterson et al., 2007; Proyer & Gander, 2011; Shimai et al., 2006). Similarly to adults, several studies found that for pre-adolescents and early adolescents, hope and zest showed a strong relationship with life satisfaction (Park & Peterson, 2006b; Toner et al., 2012). Overall, more research is needed to fully establish how an association between character strengths and life satisfaction varies with age.

Happiness

While some research (Park & Peterson, 2006a; Toner et al., 2012) has shown that certain character strengths have an associative relationship with happiness (an emotional dimension of subjective wellbeing), very little research exists on the relationship between character strengths and happiness in different age groups. Hope and zest are frequently associated with happiness in both children (Park & Peterson, 2006a) and adults (Martinez-Marti & Ruch, 2014) from both individualist countries such as the U.S. (Park & Peterson, 2006a; Shimai et al., 2006), Australia (Toner et al., 2012) and Switzerland (Martinez-Marti & Ruch, 2014; Weber & Ruch, 2012) and in a collectivist country like Japan (Shimai et al., 2006). Love is a character strength that has also been shown to be associated with happiness among children in the U.S. (Park & Peterson, 2006a), and adolescents in Australia (Toner et al., 2012) and Swiss adults (Weber & Ruch, 2012). For young children from the U.S., hope, zest and love were found to be associated with happiness (Park & Peterson, 2006a). Gratitude has been found to be associated with happiness for German-speaking Swiss adults (Martinez-Marti & Ruch, 2014) and Swiss pre-adolescents and early adolescents (Weber & Ruch, 2012).

The limited research on the relationship between character strengths and happiness in adolescents has varied findings. Curiosity and love were found to be associated with happiness for adolescents in Australia (Toner et al., 2012) while Park and Peterson (2006b) found that hope, zest, love and gratitude were associated with happiness in pre-adolescents in the U.S.

Life satisfaction and happiness

Certain character strengths show a strong relationship with subjective wellbeing (life satisfaction and happiness). Findings have shown different endorsement of character strengths in both adults and children with regard to the relationship between character strengths and subjective wellbeing (Peterson, Park, Pole, D'Andrea, & Seligman, 2008). Hope, zest, love, curiosity and gratitude consistently had a strong relationship with life satisfaction and happiness in U.S. adults while for Swiss adults, the strengths were hope, zest, love, curiosity and perseverance (Buschor et al., 2013; Peterson et al., 2007). A study was conducted in an exclusive Australian private school using AHI, PWI-SC and VIA-Youth. The AHI and PWI-SC scores were separately regressed onto the VIA-Youth scores to investigate which character strengths predicted subjective wellbeing with the result that hope, zest, caution (prudence) and leadership contributed to both the life satisfaction and happiness levels (Toner et al., 2012). The gap remains for future studies to be conducted across schools of different socioeconomic backgrounds and in other cultural contexts. Overall, research on the relationship between character strengths and subjective wellbeing indicates some similarities but also some differences between adults, youth and children.

The importance of the period of pre-adolescence

The age range considered as pre-adolescence differs across contexts, but in most economically developed countries, pre-adolescence is defined as being between 9 and 14 years of age (Corsaro, 2005). Pre-adolescence is defined as follows:

> the transition from childhood to adolescence that is marked by a number of life changes, including the onset of formal operations, greater family independence, increased responsibilities, early romantic relationships, and puberty (Shoshani & Slone, 2012, p. 1164).

The distinctive characteristics of the period involve changes in cognitive abilities that allow reasoning about abstract concepts and hypothetical events. Pre-adolescents begin to develop the capacity for greater critical reasoning. They experience a heightened focus on both achievement in an academic learning context and the psychosocial skills needed in the classroom and on the playground (Talley & Montgomery, 2013).

During pre-adolescence, children's friendships take on increasing importance (Hernandez, 2000). Many pre-adolescents begin to define their identity in terms of their membership of peer and social groups rather than their families. As a result of these changes, there is a shift in pre-adolescents' perception of what characterises social success; dominance, disengenuity and special skills (eg. sports, music) become more important (Kiefer & Ryan, 2008).

Taking on increased responsibilities in various aspects of life is also a feature of pre-adolesence. Pre-adolescence is the time when students transition from primary school to middle or high school. Their school work becomes more rigorous and they are usually expected to do more homework. In their new schools students are often expected to manage multiple student-teacher relationships and navigate their way around the school to different classrooms for different subjects (Mayer & Carter, 2003). There may be also increased responsibilities at home and among their peers. Pre-adolescents may be expected to care for younger siblings and be independent in taking care of their daily needs, such as travelling to school and preparing meals both for themselves and their siblings. Pre-adolescents may be expected to be more independent financially, receiving a larger amount of pocket money, some of which needs to be used to purchase necessary items rather than being entirely discretionary money.

The physical changes and challenges of puberty are another characteristic of pre-adolesence. Puberty typically begins during pre-adolesence. It is associated with dramatic hormonal changes, physical development, a growth spurt, acne, concern about body image, and changes to emotional regulation (Pinyerd & Zipf, 2005). These hormone changes often also trigger an interest in romantic relationships (Neemann, Hubbard & Masten, 1995).

Typically, pre-adolescence has been characterised as a time of risk: a stage where the young person is vulnerable to both internal changes in their bodies as well as external stressors

(Shoshani & Slone, 2012). Pre-adolescents are viewed as having immature cognitive, social and coping skills to deal with these risks. However, pre-adolescence can also be characterised as a time of potential, and positive psychology focuses on that potential. From a positive psychology perspective, pre-adolescence is an important time to investigate character strengths and their potential to support pre-adolescents in their time of transition. The developmental transition of pre-adolescence can lead to significant growth or poor outcomes, and positive psychology focuses on the potential of character strengths to help pre-adolescents to follow a more adaptive developmental trajectory (Shoshani & Sloane, 2012).

Despite the potential of character strengths to support people in phases of developmental transition, to date positive psychology has focused mostly on adolescents and adults. There has been little research examining whether positive psychology can be applied during pre-adolescence. In particular, most studies on character strengths have focused on adults. I have been able to locate only four studies (Gillham et al., 2011; Park & Peterson, 2003, 2005, 2006; Toner et al., 2012) that have focused on children and adolescents, and two studies that focused on pre-adolescents and school experiences and school adjustment (Shoshani & Sloane, 2012; Weber & Ruch, 2012), only one of which also looked at subjective wellbeing, but with an emphasis on virtues and using a different measure of character strengths (Shoshani & Slone, 2012). Other research that has focused on pre-adolescents has tended to focus on other adaptive outcomes. This thesis will address this gap in the literature by testing, in the pre-adolescent age group, the prediction of positive psychology that character strengths can be deployed to support people in times of developmental transition.

Summary

There have been studies conducted investigating the relationship between character strengths and subjective wellbeing for adults, but only limited research exists for children and adolescents. Further, the research that does exist for children and adolescents suggests that there is some variation in the relationship between character strengths and subjective wellbeing for adolescents as compared to adults. There is a gap in the research for pre-adolescents, with only a few studies focusing on this age group. Therefore, a closer examination of the relationship between character strengths and subjective wellbeing is needed.

It looks as though the predictions that character strengths are associated with subjective wellbeing hold true for adults, adolescents and very young children but we do not yet know if the same predictions also hold true for pre-adolescents. This study will extend current understanding by examining whether pre-adolescents endorse character strengths as being relevant to their lives and whether the predicted relationships between character strengths and subjective wellbeing apply during pre-adolescence, in two different cultural contexts.

The prediction that character strengths are associated with subjective wellbeing has not been well-researched in pre-adolescents and in cultures outside of North America. This study specifically investigates whether the proposition that character strengths are associated with subjective wellbeing apply to cultures outside North America; specifically, this research focuses on Australia and Singapore and the age group of pre-adolescence.

The empirical study seeks to test the prediction the character strengths are associated with subjective wellbeing in two cultures: Australia and Singapore. This prediction has been said to have universal relevance and applicability. Although the applicability of a positive psychology approach to wellbeing has been demonstrated for adults and adolescents in Western countries, and mainly in the U.S., the cultural and age boundaries within which the approach can be applied in other cultural contexts or age groups remain little understood.

Therefore this study examines the level of endorsement of character strengths and the relationship between character strengths and two dimensions of subjective wellbeing; life satisfaction and happiness in pre-adolescents from two cultural backgrounds; Australia and Singapore.

Research Objectives

The main aims of this thesis are to determine the following:

1. Are character strengths endorsed by pre-adolescents in both Australia and Singapore?
2. Are there differences in character strengths endorsed by pre-adolescents in Australia and Singapore?
3. What is the relationship between individual character strengths and subjective wellbeing?
4. Which character strengths are the strongest predictors of subjective wellbeing in Australia and Singapore?
5. Are similar character strengths the strongest predictors of subjective wellbeing in Australia and Singapore?

Chapter 3: Method

Participants

Recruitment

In order to match the samples in both countries as closely as possible, recruitment was guided by four criteria. First, I targeted students from middle-and low-income families in both countries. In Australia, I approached schools that had a catchment area recorded as lower- and middle-income suburbs in the 2011 Australian Census. Because no census data were available for Singapore, I approached schools with a reputation of having a catchment of lower- and middle-income families. In order to recruit similar sample sizes in Australia and Singapore, it was necessary to approach more schools in Australia. My target age group (12-13 years) attend the final year of primary school in Australia, but the first year of secondary school in Singapore. Thus, the population of individual schools in Australia was smaller than the population of schools in Singapore. Second, I targeted state-funded co-educational schools in both countries. Third, all schools were located within the metropolitan area of the cities of Adelaide, Australia and Singapore. Fourth, all schools delivered tuition in the English language and used computers extensively.

Twelve Australian school principals (participation rate: 48%; n = 12) and three Singaporean school principals (participation rate: 33.33%; n = 3) accepted the invitation to participate in the study. Letters of information were distributed to parents of Grade 7 students in the participating schools. Because the consent rate was anticipated to be much lower in Australia than in Singapore, more letters were distributed in Australia (Australia: n = 852; Singapore: n = 396).

Samples

Students whose parents provided consent but who did not meet the inclusion criterion for age or who provided incomplete data were excluded from the sample. The final samples consisted of 12- and 13-year-old Grade 7 students in Australia (n = 367; 47.4% male) and Singapore (n = 323; 57.1% male).

Measures

Participants completed three self-report measures, in English, the language in which the measures had been developed.

Demographic Questions

Students' age, gender, and the postcode for their school were measured by single-item measures.

Character Strengths and Virtues

Character strengths were measured using the youth form of the *Values in Action Inventory of Strengths* scale (VIA-Youth) (Park & Peterson, 2005), which was designed to be age-appropriate for 10- to 17-year-old children.

The measure draws on character strengths identified in religious traditions relevant to Australia and Singapore (Christianity, Confucianism, Taoism, Buddhism, Hinduism, Islam and Judaism) (Dahlsgaard, Peterson, & Seligman, 2005).

The VIA-Youth was developed and used mostly in the U.S., and it has also been tested in Australia, Europe, Africa and Israel for the investigation of character strengths among 10-17 year olds. The measure appears to be useful for young people in a wide range of cultural contexts outside the U.S. While it does not appear to have been used before in Singapore, it has been used successfully in a wide range of other cultural contexts (Gillham et al., 2011; Park & Peterson, 2006b; Ruch, Weber, Park & Peterson, 2014; Shoshani & Slone, 2012; Toner et al., 2012; van Eeden, Wissing, Dreyer, Park, & Peterson, 2014; Wagner & Ruch, 2015; Weber & Ruch, 2012) which makes it plausible that it is also useful in research with young people in Singapore. It has been used successfully with pre-adolescents before (Park & Peterson, 2006b; Ruch et al., 2014; Shoshani & Slone, 2012; Weber & Ruch, 2012).

The VIA-Youth contains 198 items that are rated on a five-point Likert-like scale (i.e., 1 = Not like me at all, 2 = A little like me, 3 = Somewhat like me, 4 = Mostly like me, 5 = Very much like me). Each of the character strengths is assessed by 7 - 9 items. Sample items include: "When my friends are upset, I listen to them and comfort them." (Kindness); and **"**I always feel that I am loved." (Love)

The scale can be completed in 40-45 minutes. One-third of items are reverse-scored. The score for each of the character strength is the mean of the relevant items. Higher scores reflect higher endorsement of the character strength.

The scoring instructions suggest that the character strengths can be organised into six super-ordinate virtues: Wisdom and Knowledge, Courage, Humanity, Justice, Temperance and Transcendence. However, previous investigations of the structure of the VIA-Youth with samples of young people have found only three or four factors (Park & Peterson, 2005). The final analysis plan for the current study will be decided after an Exploratory Factor Analysis has investigated whether the responses on the VIA can be summarised into six virtues.

Psychometric properties of the VIA-Youth

Although many studies have produced evidence relevant to character strengths among pre-adolescents, our knowledge is limited because many studies report data for the VIA-Y by Dahlsgaard (2005) (e.g., Shoshani & Slone, 2012) rather than the VIA-Youth developed by Park & Peterson (2005), or have created a custom-designed adaptation of the adult VIA-IS for children and adolescents (e.g., Imura, Aoki, Takahashi, Nonaka, & Yamada, 2013), or

have used only a subset of items from the VIA-Youth (e.g., Kurniawan & Scheithauer, 2013; Ngai, 2015), or have pooled pre-adolescents with much older adolescents or young adults (e.g., Ngai, 2015; Weber & Ruch, 2012) or focused on specific populations (e.g., childhood cancer survivors: Guse & Eracleous, 2011; class clowns: Ruch, Platt, & Hoffman, 2014). The summary and psychometric properties of the VIA-Youth for virtues and character strengths that follows focuses only on studies that provided evidence relevant to the VIA-Youth (Park & Peterson, 2005), and used general population samples of pre-adolescents or a pooled sample of pre-adolescents and young adolescents.

Virtues

Peterson and Seligman (2004) classified the 24 character strengths into six virtues. The VIA-Youth was designed to measure these six virtues. However, when the factor structure of the VIA-Youth has been examined (Ferragut, Blanca, & Ortiz-Tallo, 2014), studies have only found either four or five virtues (e.g., Park & Peterson, 2005, 2006b; Ruch et al., 2014; Toner et al., 2012). Even when studies are able to find the same number of virtues, the nature of these virtues has often differed (e.g., Buschor et al., 2013; Gillham et al., 2011; Ruch et al., 2014; Toner et al., 2012) and they have often showed little overlap with the six virtues proposed by Peterson and Seligman (2004) (e.g., Toner et al., 2012). As a result of such differences with the factor structure for virtues in the VIA-Youth, no information about the internal consistency, validity and reliability of the six virtues has been reported. One study that calculated scores for the six virtues (Ferragut et al., 2014) reported internal consistency for individual character strengths, but not for the virtues.

Due to the lack of empirical support for VIA-Youth as a measure of six virtues, the factor structure of the VIA-Youth will be examined before conducting the main analyses. If six virtues are not found, then following the practice of previous researchers, I will conduct the main analyses based on the 24 character strengths if the factor structure of the VIA-Youth supports these.

Character Strengths

Internal Consistency

Only two studies have examined the internal consistency of the VIA-Youth in pre-adolescents (10-13 years). Park and Peterson (2006b) reported satisfactory to good alpha scores ($\alpha = 0.72–0.91$) for all character strengths. However, Wagner and Ruch (2015) reported satisfactory to good Cronbach alpha scores ($\alpha = 0.61$-0.88) for only 22 of the 24 character strengths. The exceptions were modesty ($\alpha = 0.51$) and curiosity ($\alpha = 0.55$). There is less consistent evidence of the internal consistency of the VIA-Youth among samples that pool pre-adolescents and adolescents. For example, van Eeden et al. (2014) reported that for some subsamples, none of the 24 character strengths had satisfactory internal consistency. Indeed, for every subsample, at least one character strength showed unsatisfactory internal consistency. In addition, Weber, Wagner & Ruch (2016) reported unsatisfactory internal consistency for two character strengths (humility: $\alpha = 0.51$; curiosity:

α = 0.55). None of the studies above were conducted in Australia or Singapore. The only study to report the internal consistency for the VIA-Youth in a sample of Australian school students (15-18 years) found unsatisfactory internal consistency for one character strength (self-regulation: α = 0.48)(Toner et al., 2012).

There is also inconsistent evidence of the internal consistency of the VIA-Youth across cultures. Most of the available evidence comes from Western countries. One study showed satisfactory to high internal consistency for the VIA-Youth in pre-adolescents in North America (Park & Peterson, 2006b). Satisfactory alpha scores have also been reported for older school students in the U.S. (Park & Peterson, 2005). However, some studies in other Western countries, including Australia, have found unsatisfactory internal consistency for some character strengths (Toner et al., 2012; Wagner & Ruch, 2015; Weber et al., 2016). In the only study of the complete VIA-Youth in a non-Western sample, van Eeden et al. (2014) found unsatisfactory internal consistency for some or all character strengths in a pooled sample of African pre-adolescents and adolescents (13-17 years). In conclusion, the extent to which the VIA-Youth is internally consistent in Western, individualist countries outside North America (e.g., Australia) and in non-Western collectivist cultures (e.g., Singapore) is unclear.

The pattern of findings in previous research confirm the decision to examine the factor structure of the VIA-Youth in each of the samples in this study prior to the main analyses being conducted.

Validity

Construct validity

Two studies provide evidence concerning the construct validity of the VIA-Youth among pre-adolescents. Park and Peterson (2006a) reported very low associations between teacher's ratings of student's character strengths and student's self-reports of these character strengths on the VIA-Youth (all r values accounted for ‹10% of variance). However, Ruch et al. (2014) reported many moderate to strong associations between student self-reports and parent reports using the VIA-Youth (r = 0.22-0.70). In conclusion, evidence for the construct validity of the VIA-Youth among pre-adolescents is inconsistent.

Concurrent validity

Only one study reported evidence concerning the concurrent validity of the VIA-Youth among pre-adolescents. Park and Peterson (2006b) found that students' ratings of their own character strengths showed modest but statistically significant relationships with the VIA-Youth scores for all but four of the character strengths.

Convergent validity

Only two studies provide evidence for the convergent validity of the VIA-Youth among pre-adolescents. Park and Peterson (2006b) reported particular character strengths showed moderate associations with scores on the Social Skills Rating Scale (effect sizes about .20 in

both cases). Park and Peterson (2006b) also reported weak associations between a student's Grade Point Average (GPA) and particular character strengths (effect scores ranged from .03 to .09).

Additional evidence of convergent validity is reported by studies with a pooled sample of pre-adolescents and adolescents. Like Park and Peterson (2006b) for pre-adolescents, several authors have found a relationship between particular character strengths and aspects of school performance. Wagner and Ruch (2015) reported a weak to moderate association between particular character strengths and school achievement (r = 0.21 – 0.33). Weber and Ruch (2011) found a weak association between particular character strengths and school success (GPA) in both the middle (r = 0.19) and at the end (r = 0.17) of the school year. More social aspects of school functioning have also been associated with particular character strengths: positive school functioning was found to have a moderate association (Wagner & Ruch, 2015: r = .31 - .40) and positive classroom behaviour (Weber & Ruch, 2012: r = .21 - .24) a weak association. Moving beyond a link directly related to school functioning, Ruch et al. (2014) found a weak to strong (r = 0.10 – 0.54) association between particular character strengths and general self-efficacy in a sample of 10-17 year old Swiss students.

Overall, initial evidence is consistent with the VIA-Youth showing convergent validity. However, there is insufficient evidence to support a judgement concerning the validity of the VIA-Youth among pre-adolescents in Western countries. There is no relevant evidence concerning the validity of the VIA-Youth in non-Western countries.

Reliability

Only one study has investigated the reliability of the VIA-Youth in pre-adolescents. Park and Peterson (2006b) found satisfactory six month test-retest reliability for most character strengths among pre-adolescents in the U.S. (r › .50). The exceptions were teamwork (r = .46) and modesty (r = .48). Test-retest reliability data are also available for a study that pooled pre-adolescents and adolescents. Ruch et al. (2014) reported satisfactory to good (r › .61) four month test-retest reliability for all character strengths. There is no data for test-retest reliability of the VIA-Youth available for pre-adolescents or adolescents in Australia or Singapore.

Summary

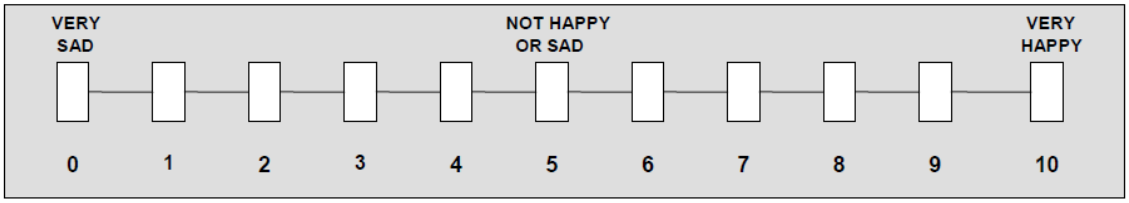
The VIA-Youth has been identified as a valid measure of character strengths (Park & Peterson, 2003; Park & Peterson, 2005; Park & Peterson, 2006; Ruch et al., 2014; van Eeden et al., 2014) and has been shown to be reliable for a period of 4 months. In some previous research in the U.S. and Europe, the VIA-Youth has shown good levels of internal consistency (α > .65 - .91) for all scales (Park & Peterson, 2006b; Peterson & Seligman, 2004; Weber et al., 2012).

Life satisfaction

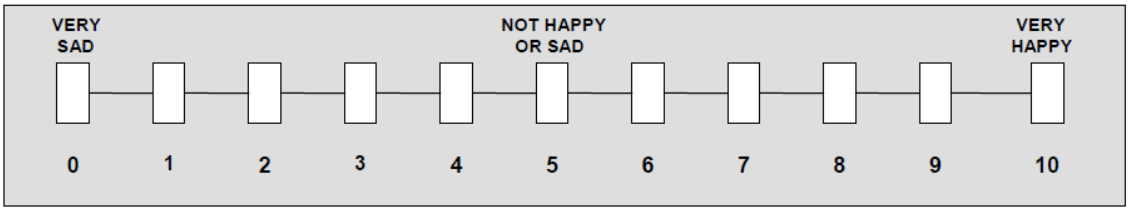
Life satisfaction was measured using the Personal Wellbeing Index-School Children (PWI-SC) (Cummins & Lau, 2005a). The PWI-SC is a parallel version of the PWI-Adult (International Wellbeing Group, 2013) designed for primary and secondary school students. It is unidimensional and consists of seven questions each measuring life satisfaction in one of seven domains of life (standard of living, health, life achievement, personal relationships, personal safety, community-connectedness and future security). Each of the seven questions on specific domains has the same structure: "How happy are you… " and then focuses on a particular domain: e.g., "How happy are you…with your health?". Each item is rated using an 11-point scale (0 = Very Sad; 5 = Not happy or sad; 10 = Very Happy). One of the pieces of information that the PWI-SC provides is a summative score (range 0 to 100) of the seven domain-specific questions. It takes approximately 5-10 minutes to complete the questionnaire.

Sample items from the PWI-SC include:

1. **[Domain: Standard of Living]**
   How happy are you …
   about the things you have? Like the money you have and the things you own?



2. **[Domain: Personal Health]**
   How happy are you …
   with your health?



The psychometric properties of the PWI-SC have been investigated and indicate that the PWI-SC is a valid and reliable instrument for measuring the subjective wellbeing (SWB) of young people (Dias & Bastos, 2014; Tomyn, Tyszkiewicz, & Cummins, 2011). However, to date there is no available evidence regarding the psychometric properties of the scale when used among pre-adolescents. A longitudinal study was conducted (Tomyn, Tyszkiewicz, et al., 2011) to investigate the psychometric properties of the PWI-SC using traditional tests of

reliability and validity among a sample of adolescents and young adults. Tomyn et al. (2011) report on two independent studies that collected information on the psychometric properties of the PWI-SC. They report good internal consistency (α = .82) on a sample of 12 to 20 year olds (n = 351). Toner et al. (2012) also found good internal consistency (α = .84).

While there is not extensive research on the use of PWI-SC in cross-cultural contexts, it was found (Tomyn, Tamir, Stokes, & Dias, 2015) to have good internal consistency when used on a pooled sample of 12 to 18 year old Portuguese pre-adolescents, adolescents and young adults (n = 573; α = .84) and on Australians in the same age range (n = 1104; α = .81). In other research of pooled samples comparing at-risk Indigenous Australian pre-adolescents, adolescents and young adults (12 – 19 years) with other Australians in the same age range, the PWI-SC was also found to have good internal consistency (at-risk Indigenous Australians n = 1378, α = .83; at-risk non-Indigenous Australians n = 6401, α = .81; non-Indigenous, not-at-risk Australians n = 983, α = .81) (Tomyn, Norrish, & Cummins, 2013).

One significant question about the validity of the PWI-SC when used with pre-adolescents and adolescents "is whether the domains form a coherent scale and whether they are sufficient to reasonably represent the construct of SWB in children" as the scale was designed for adults (Cummins, 2014, p. 649). However, the validity of the PWI-SC appears to be as strong as the PWI-A (Cummins, 2014).

The PWI-SC has been widely-used in Australia (Tomyn, 2013; Tomyn, Norrish, & Cummins, 2011; Tomyn et al., 2013; Tomyn, Tyszkiewicz, et al., 2014) and in Asian contexts, with the Chinese (Cantonese) language translation used successfully in Hong Kong (Cummins & Lau, 2005b). Participants of BRiTA Futures Primary School program completed PWI-SC along with other measures. At the start of the program, the global quality of life score was 78.5%SM (*n* = 117) and the mean total score was 80.0%SM (*n* = 114) (Mitchelson et al., 2010). For non-Western participants, the normative range is generally 60 - 70%SM (Lau, Cummins, & McPherson, 2005) while for the Western participants, it is 70 - 80%SM (Cummins, 1996).

Happiness

Happiness was measured using the Authentic Happiness Inventory (AHI) (Peterson, 2005). It consists of 24 items that assess three components of happiness (pleasure, engagement, and meaning), rated using question-specific five-point scales. It takes approximately 10-20 minutes to complete the AHI (Toner et al., 2012).

Sample items from the Authentic Happiness Inventory (AHI) include:

- I am usually in a bad mood.
- I am usually in a neutral mood.
- I am usually in a good mood.
- I am usually in a great mood.
- I am usually in an unbelievably great mood.

- I have sorrow in my life.
- I have neither sorrow nor joy in my life.
- I have more joy than sorrow in my life.
- I have much more joy than sorrow in my life.
- My life is filled with joy.

The AHI has been used mostly among adults. Little research exists on the psychometric properties of the AHI when used with pre-adolescents and I have been unable to locate published works where the AHI is being used with pre-adolescents. However, on a sample of Australian adolescents (15 – 18 years), Toner et al. (2012) found good internal consistency (α = .93).

The same three measures used in this research (VIA-Youth, PWI-SC and AHI) have been used in a previous study in a private Australian high school (Toner et al., 2012).

Procedure

Consent to conduct the study through schools was obtained from the Department of Education and Child Development, South Australia, for the Australian sample, and the Ministry of Education, Singapore for the Singaporean sample.

Upon receiving approval from the school principals, arrangements were made to meet with the Year 7/Secondary 1 teachers to brief them in greater depth about the study and also to provide information about the procedure for the data collection.

The students were briefed about the study by their teachers, told that their participation in the study was voluntary, and given forms for parental consent.

The teachers selected a convenient two-lesson period for data collection, which occurred in class groups in a school computer laboratory under the supervision of their regular class teacher. The author was also present during all data collection in order to answer any questions from the students or teachers.

The students completed demographic items and the three measures on a computer using an on-line portal created by the University of Pennsylvania (http://www.authentichappiness.sas.upenn.edu/CharacterStrengthsWellbeing/survey.aspx?id=1638). Participants completed the measures in a set order: PWI-SC, AHI and VIA-Youth. There were eight items per screen for PWI-SC, AHI and VIA-Youth. Students selected their answer by clicking on the drop-down boxes (PWI-SC and AHI) or radio buttons (VIA-Youth). Because data collection was lengthy, students were allowed to take breaks.

Arrangements were made for either the teacher, principal, vice-principal, school counsellor and/or the Christian Pastoral Support Worker to be available should any of the students require debriefing during or after the data collection. The students were presented with a token of appreciation where they could choose an item.

If students who had parental consent to participate were absent from school, arrangements were made with the class teacher for the author to return to the school on another day(s) to allow the students to complete the measures.

Research design and analysis plan

The study used a cross-sectional design. Data were analysed using SPSS version 22 (IBM Corp. Released 2013).

The strength of endorsement of the character strengths by pre-adolescents was examined by inspecting the distribution of scores and means for each character strength in each of the samples (Aim 1).

National differences in the endorsement of character strengths were examined using a MANCOVA in which age and gender were included as covariates in order to compensate for any age and gender differences between the two national samples (Aim 2).

The relationship between character strengths and subjective wellbeing was examined using Pearson Product Moment correlations in each of the samples (Aim 3).

Differences between the two national samples in the magnitude of correlations between character strengths and life satisfaction and happiness were examined using Fishers r-to-z transformation (Aim 4).

Character strengths that made independent contributions to the variance in pre-adolescents' subjective wellbeing were identified using multiple linear regression analyses (Aim 5).

Chapter 4: Results

The results are presented in six main sections: (1) exploration of the factor structure of the VIA-Youth; (2) preliminary analyses to determine whether the distribution of data was consistent with the assumptions of the planned statistical analyses; (3) descriptive statistics showing the level of endorsement for character strengths, and scores for the two subjective wellbeing measures (life satisfaction and happiness) for each country; (4) MANCOVA analysis comparing the strength of endorsement of character strengths between Australia and Singapore; (5) correlations between character strengths and the two wellbeing measures; and (6) regression analysis to identify the character strengths that made independent contributions to the variance in the two measures of subjective wellbeing in each country.

Factor structure of the VIA-Youth

Virtues

There is strong theoretical support for the existence of six virtues (Peterson & Seligman, 2004). However, many evaluations of the VIA-Youth of have failed to confirm that it measures six virtues (e.g., Park & Peterson, 2005, 2006b). Therefore, in order to determine whether the main analyses could proceed using the six virtues, an exploratory factor analysis was conducted.

The exploratory factor analysis examined whether the 24 character strengths mapped onto six virtues. In the first step, I examined the Kaiser-Meyer-Olkin measure of sampling adequacy (Australia: 0.954; Singapore: 0.945) (Appendix O). Because these values were above 0.6, both sample sizes were large enough to allow an exploratory factor analysis. I also examined if there was sufficient evidence of correlations between the character strengths for factors to be identified using Bartlett's test of sphericity (Australia: $\chi^2_{(276)} = 6295.4$, $p < .001$; Singapore: $\chi^2_{(276)} = 5031.7$, $p < .001$) (Appendix O). Because these values were statistically significant, both sample sizes met this criterion.

In step two, I used a Promax rotation because I anticipated that the factors would be correlated. The factor correlation matrix showed that all the values off the diagonals were greater than 0.2 for both samples (Australia: $r \geq 0.295$; Singapore: $r \geq 0.515$) (Appendix O). These results confirmed that the Promax rotation was most appropriate.

I then looked at the Eigen values to determine the number of factors. However, neither sample yielded a 6 factor solution. For the Australian sample, the factor analysis yielded 5 factors with Eigen value > 1.0. For the Singaporean sample, the factor analysis yielded 4 factors with Eigen value > 1.0. The five factors explained a total of 71.6% of the variance in character strengths in the Australian sample, while the four factors explained 65.8% of the variance in character strengths in the Singaporean sample (Appendix O). In addition, neither factor solution aligned well with the virtues identified by Peterson & Seligman (2004):

wisdom, courage, humanity, justice, temperance and transcendence. There were also only limited similarities between the Australian and Singaporean samples in the character strengths that mapped onto each factor.

In conclusion, the results of the factor analysis led to the decision not to use virtues as the basis for the main analyses. To determine whether the main analyses could be based on character strengths, I conducted a second factor analysis. I examined whether the factor structure of the VIA-Youth was consistent with measurement of twenty-four character strengths.

Character Strengths

No previous research has examined whether the factor structure of the VIA-Youth was consistent with measurement of 24 character strengths. However, several studies have reported satisfactory to good internal consistency for all or almost all character strengths. The alpha levels reported by the two studies that have focused on for pre-adolescents were between .72 to .91 and above 0.6 for only 22 of 24 character strengths (Park & Peterson, 2006b; Wagner & Ruch, 2015). Therefore, in order to determine whether the planned analyses could proceed using the 24 character strengths, a confirmatory factor analysis was conducted: "It is common practice to do confirmatory factor analysis (CFA) in measurement development when there is a theoretical framework in place. Although we will eventually undertake CFA, we first decided to do exploratory factor analysis (EFA) …" (Park & Peterson, 2006b, p. 901).

A confirmatory factor analysis examined whether the factor structure of the VIA-Youth was consistent with the measurement of 24 character strengths. First, I examined the Kaiser-Meyer-Olkin measure of sampling adequacy (Australia: 0.928; Singapore: 0.866) (Appendix O). Because these values were above 0.6, both samples were large enough to allow a confirmatory factor analysis. I also examined, if there was sufficient evidence of correlations between the character strengths for factors to be identified using Bartlett's test of sphericity (Australia: $\chi^2_{(19,503)} = 62{,}697.0$, $p < .001$; Singapore: $\chi^2_{(19,503)} = 46{,}163.4$, $p < .001$) (Appendix O). Because these values were statistically significant, both sample sizes met the criterion.

In step two, I used a Promax rotation because I anticipated that the factors would be correlated. The correlation matrix showed that many values off the diagonals were greater than 0.3 in both samples (Appendix O). These results confirmed that the Promax rotation was most appropriate.

I then looked at the Eigen values. Both samples yielded 24 character strengths factors with Eigen value > 1.0. The 24 factors explained a total of 56.6% of the variance in character strengths in the Australian sample, while the 24 factors explained 58.7% of the variance in character strengths in the Singaporean sample. The vast majority VIA-Youth items loaded onto the relevant factors in both samples. In conclusion, the findings of the factor analysis were consistent with the VIA-Youth measuring 24 character strengths (Size of 198 by 198

corrected matrix and patterned matrix precluded inclusion in the thesis. A request can be made to the author for a copy).

Therefore, I examined the internal consistency of the 24 character strengths by calculating Cronbach alpha. All the character strengths showed satisfactory internal consistency for research purposes (alpha > .60) in both samples. Most alpha values were above .70 for both the Australian (87.5%) and Singaporean (62.5%) samples.

Distribution of data

To examine the normality of the distribution of data for character strengths, satisfaction of life and positive affect, I calculated the skewness and kurtosis statistics. For Australia, the VIA-Youth scores for each of the 24 character strengths were approximately normally distributed with low skewness (-.806 to .138) and kurtosis (-.766 to .994). Similarly, the total scores for the PWI-SC and AHI were approximately normally distributed with low skewness (PWI-SC: -.754; AHI: -.120) and kurtosis (PWI-SC: .359; AHI: -.105). Similar results were found for Singapore. VIA-Youth scores for each of the 24 character strengths were approximately normally distributed with low skewness (-.593 to .259) and kurtosis (-.332 to 1.177). Similarly, the total scores for the PWI-SC and AHI were approximately normally distributed with low skewness (PWI-SC: -.627; AHI: .144) and kurtosis (PWI-SC: 1.059; AHI: .071).

In conclusion, all deviations from a normal distribution were minor, and the distributions for all variables in both samples were within the limits of robustness of the planned parametric analyses.

Descriptive statistics

Describing the sample

For PWI-SC, the range of possible score is from 0 to 100. The mean levels of life satisfaction reported in both Australia and Singapore were above the mid-point (50) on the scale.

For AHI, the range is from 1 to 5, with the mid-point being 3. The mean levels of happiness reported in both Australia and Singapore were near the mid-point.

Visual inspection of standard deviations revealed no marked differences between the samples in variance. In addition, there was no evidence of ceiling or floor effects for any variable. Therefore, the planned analyses could proceed.

Main analysis

The first aim (Chapter 1, p. 11-12) of this study was to determine whether pre-adolescents in an individualist culture outside North America (Australia) and a collectivist culture with similar levels of economic development (Singapore) perceive the character strengths identified by the VIA-Youth to be relevant to their own lives. There was moderate to high endorsement of all character strengths in both samples. In Australia, the means for all character strengths were above the midpoint on the rating scale. In Singapore, all but one

mean for character strength were above the midpoint on the rating scale. The single exception was at the midpoint on the scale (Table A). Table A gives the figures for the means, standard deviation and Cronbach alphas of character strengths in Australia and Singapore. Thus, it was concluded that the pre-adolescents in these samples perceived the character strengths to be relevant to their own lives.

Table A: Descriptive statistics [Means, Standard Deviation and Cronbach alpha of Character strengths in Australia and Singapore]

Character strengths	Australia			Singapore		
	Mean	Standard Deviation	Cronbach Alpha	Mean	Standard Deviation	Cronbach alpha
Character strengths						
Appreciation of beauty and excellence	3.68	.77	.78	3.78	.68	.71
Authenticity	3.68	.67	.78	3.39	.58	.64
Bravery	3.79	.67	.77	3.46	.64	.69
Creativity	3.75	.71	.79	3.49	.70	.77
Curiosity	3.68	.65	.72	3.53	.62	.69
Fairness	3.62	.64	.74	3.50	.59	.67
Forgiveness	3.29	.63	.67	3.33	.60	.71
Gratitude	4.06	.66	.79	3.72	.65	.75
Hope	3.73	.73	.83	3.49	.68	.77
Humour	3.91	.74	.82	3.51	.72	.78
Kindness	3.63	.54	.78	3.54	.51	.72
Leadership	3.35	.75	.81	3.24	.70	.77
Love	3.36	.53	.79	2.99	.56	.74
Love of learning	3.48	.67	.80	3.51	.63	.74
Modesty	3.45	.62	.66	3.49	.54	.63
Open-mindedness	3.52	.69	.77	3.41	.58	.68
Persistence	3.59	.76	.83	3.38	.59	.69
Perspective	3.57	.65	.74	3.30	.61	.72
Prudence	3.33	.68	.73	3.14	.57	.61
Self-regulation	3.42	.68	.69	3.31	.59	.64
Social intelligence	3.62	.67	.74	3.42	.59	.64
Spirituality	3.20	.94	.81	3.75	.77	.78

Teamwork	3.94	.68	.82	3.61	.64	.76
Zest	3.66	.76	.81	3.42	.74	.79
Life satisfaction	80.23	12.74	.85	68.96	15.38	.82
Happiness	3.19	.67	.95	2.91	.64	.94

Comparison of the strength of endorsement of character strengths between Australia and Singapore

Aim 2a (Chapter 1, p. 11-12) was to determine whether the strength of endorsement of character strengths differed between pre-adolescents living in an individualist culture outside North America (Australia) and in a collectivist culture with a similar level of economic development (Singapore). A MANCOVA controlling for age and gender differences between the samples revealed a multivariate main effect for only one of the covariates (gender: Wilks' λ =.722, $F_{(24,614)} = 9.8$, $p < .001$, partial $\eta^2 = .278$; age: Wilks' $\lambda = .953$, $F_{(24, 614)} = 1.2$, $p = .193$, partial $\eta^2 = .047$) (Table B). Table B gives the figures for the (MANCOVA) differences in the endorsement of character strengths between Australia and Singapore.The gender effect is of interest, but not the thesis here. The question it raises will be discussed later. The MANCOVA also showed a large main effect for nationality (Wilks' $\lambda = .660$, $F_{(24, 614)} = 13.2$, $p < .001$, partial $\eta^2 = .340$). This reflects the overall higher level of endorsement of character strengths by pre-adolescents in Australia than by pre-adolescents in Singapore.

Tests of between-subjects effects were examined to identify the character strengths that were endorsed more strongly in one sample than in the other. To compensate for multiple comparisons, a Bonferroni correction was used (i.e., the criterion for significance was .05/24 = .002). Differences were found for half of the character strengths. Eleven character strengths were more highly endorsed by Australians: authenticity ($F_{(1)} = 27.2$, $p < .001$, partial $\eta^2 = .04$), bravery ($F_{(1)} = 33.2$, $p < .001$, partial $\eta^2 = .05$), creativity ($F_{(1)} = 17.1$, $p < .001$, partial $\eta^2 = .03$), gratitude ($F_{(1)} = 33.3$, $p < .001$, partial $\eta^2 = .05$) , hope ($F_{(1)} = 13.7$, $p < .001$, partial $\eta^2 = .02$), humour ($F_{(1)} = 39.6$, $p < .001$, partial $\eta^2 = .06$), love ($F_{(1)} = 61.5$, $p < .001$, partial $\eta^2 = .09$), perspective ($F_{(1)} = 20.4$, $p < .001$, partial $\eta^2 = .03$), social intelligence ($F_{(1)} = 10.3$, $p = .001$, partial $\eta^2 = .02$), teamwork ($F_{(1)} = 34.9$, $p < .001$, partial $\eta^2 = .05$) and zest ($F_{(1)} = 14.3$, $p < .001$, partial $\eta^2 = .02$) (Table B). In contrast, one character strength was more highly endorsed by Singaporeans: spirituality ($F_{(1)} = 57.8$, $p < .001$, $\eta^2 = .08$).There was no difference in the endorsement of the remaining twelve character strengths (partial eta squared $\leq .013$ in all cases). In summary, although many differences between the two national samples were found, in all cases the magnitude of the difference was small. Nationality accounted for less than 10% of the variance for all character strengths.

Differences in endorsement can reflect real differences in cultural priorities or be an artefact of cultural differences in the manner in which the rating scale is used. However, if the differences in this study were the product of this type of artefact we would expect differences for all character strengths and would not expect Singaporean students to endorse any character strengths more highly than Australian students. No differences were found for half the character strengths and one difference favoured Singapore.

A parallel MANCOVA analysis addressed Aim 2b (Chapter 1, p. 11-12) which explored whether there were differences between Australian and Singaporean pre-adolescents in their self-rating of their level of subjective wellbeing. There was no main effect for either covariate (gender: Wilks' λ =.99, $F_{(2,661)}$ = 3.08, p > .01, partial η^2 = .009; age: Wilks' λ = 1.00, $F_{(2,661)}$ = 0.11, p > .01, partial η^2 < .001). However, it showed a moderate main effect for nationality (Wilks' λ = .85, $F_{(2, 661)}$ = 56.7, p < .001, partial η^2 = .146). Overall, pre-adolescents in Australia rated their subjective wellbeing as being higher than did their peers in Singapore. Tests of between-subjects effects were examined to identify the domains that were rated more highly in one sample than in the other. The mean scores for both the PWI-SC (life satisfaction) and AHI (happiness) were higher for Australians (life satisfaction 80.23; happiness 3.19) than for Singaporeans (life satisfaction 68.96; happiness 2.91) (PWI-SC: $F_{(1)}$ = 112.8, p < .001, partial η^2 = .146; AHI: $F_{(1)}$ = 26.6, p < .001, partial η^2 = .039) (Table A).

Table B: MANCOVA – Are there differences between the 2 countries in the endorsement of twenty-four character strengths

	Nationality			Corrected Model		
Character strengths	F	Sig.	Partial η^2	F	Sig.	Partial η^2
Appreciation of beauty and excellence	7.33	.01	.01	34.19	<.01	.14
Authenticity	27.16	<.01	.04	13.05	<.01	.06
Bravery	33.25	<.01	.05	13.87	<.01	.06
Creativity	17.11	<.01	.03	7.79	<.01	.04
Curiosity	5.10	.02	.01	3.10	.03	.01
Fairness	3.99	.05	.01	7.01	<.01	.03
Forgiveness	.63	.43	<.01	2.73	.04	.01
Gratitude	33.30	<.01	.05	16.10	<.01	.07
Hope	13.69	<.01	.02	7.07	<.01	.03
Humour	39.65	<.01	.06	18.19	<.01	.08
Kindness	2.13	.15	<.01	13.53	<.01	.06
Leadership	6.36	.01	.01	2.44	.06	.01
Love	61.48	<.01	<.01	25.09	<.01	.11
Love of learning	.52	.47	<.01	.30	.82	<.01
Modesty	.06	.81	<.01	9.63	<.01	.04
Open-mindedness	2.72	.10	.01	1.50	.21	.01
Persistence	8.59	<.01	.03	5.48	<.01	.03
Perspective	20.38	<.01	<.01	12.52	<.01	.06
Prudence	7.94	.01	.01	4.76	<.01	.02
Self-regulation	1.04	.31	<.01	3.30	.02	.02
Social intelligence	10.30	<.01	.02	6.17	<.01	.03
Spirituality	57.76	<.01	.08	22.26	<.01	.10
Teamwork	34.89	<.01	.05	16.73	<.01	.07
Zest	14.27	<.01	.02	5.93	<.01	.03

Relationship between character strengths and wellbeing

The third and fourth aims both related to the relationship between character strengths and subjective wellbeing in each sample. In both cases, a Bonferroni correction was used to compensate for repeated comparisons (i.e., criterion for significance was $p < .002$).

The third aim (Chapter 1, p. 11-12) was to determine whether the relationships between character strengths and subjective wellbeing that are predicted by positive psychology are seen among pre-adolescents in an individualist culture outside North America (Australia) and a collectivist culture with a similar level of economic development (Singapore). This aim was addressed by examining the direction and magnitude of Pearson correlations between character strengths and life satisfaction (Table C) and happiness (Table D). Table C gives the figures for the correlations between character strengths and life satisfaction and Table D gives the figures for the correlations between character strengths and happiness.

Table C: Correlations between character strengths and life satisfaction in Australia and Singapore

Character Strengths	(PWI-SC) Life Satisfaction		
	Australia (n=367)	Singapore (n=323)	Difference Z score (Fisher r to z transformation)
Appreciation of beauty and excellence	.19*	.11	.34
Authenticity	.37*	.27*	1.45
Bravery	.20*	.24*	-0.45
Creativity	.27*	.33*	0.35
Curiosity	.19*	.17	.29
Fairness	.26*	.21*	0.7
Forgiveness	.25*	.16	1.21

Gratitude	.49*	.32*	2.53
Hope	.49*	.39*	1.63
Humour	.33*	.18*	2.04
Kindness	.24*	.18*	.82
Leadership	.33*	.20*	1.84
Love	.54*	.38*	2.66
Love of learning	.35*	.23*	1.71
Modesty	.02	.01	0.17
Open-mindedness	.31*	.23*	1.03
Persistence	.45*	.26*	2.85
Perspective	.40*	.28*	1.75
Prudence	.33*	.30*	.42
Self-regulation	.25*	.17	1.01
Social intelligence	.41*	.28*	1.91
Spirituality	.16*	.17	-0.04
Teamwork	.43*	.19*	3.27*
Zest	.54*	.40*	2.35

* $p < .002$

Table D: Correlations between character strengths and happiness in Australia and Singapore

Character Strengths	(AHI) Happiness		
	Australia (n=367)	Singapore (n=323)	Difference Z score (Fisher r to z transformation)
Appreciation of beauty and excellence	.27*	.17	1.46
Authenticity	.48*	.27*	3.04
Bravery	.35*	.27*	1.17
Creativity	.44*	.33*	.173
Curiosity	.26*	.30*	-0.48
Fairness	.41*	.25*	2.29
Forgiveness	.34*	.13	2.86
Gratitude	.55*	.42*	2.29
Hope	.68*	.51*	3.33*
Humour	.41*	.25*	2.25
Kindness	.36*	.25*	1.43
Leadership	.52*	.31*	3.24*
Love	.58*	.47*	1.95
Love of learning	.50*	.39*	1.65
Modesty	.04	<.01	0.47
Open-mindedness	.50*	.37*	2.04
Persistence	.63*	.36*	5.31*
Perspective	.59*	.42*	2.85
Prudence	.49*	.37*	1.86
Self-regulation	.48*	.22*	3.74*
Social intelligence	.54*	.37*	2.77
Spirituality	.29*	.23*	.74
Teamwork	.51*	.25*	.389*
Zest	.72*	.55*	3.56*

* $p < .002$

Relationship between character strengths and life satisfaction

In Australia, all but one of the character strengths were positively correlated with life satisfaction. The exception was modesty. Most of the correlations were of moderate size. Two character strengths, love and zest, were strongly correlated to life satisfaction.

In Singapore, all but six of the character strengths were positively correlated with life satisfaction. The exceptions were appreciation of beauty and excellence, curiosity, forgiveness, modesty, self-regulation and spirituality. Most of the correlations were of moderate size. No character strengths were strongly correlated to life satisfaction. The different scores will be dealt with in a section to follow.

Relationship between character strengths and happiness

In Australia, all but one of the character strengths were positively correlated with happiness. The exception was modesty. Most of the correlations were moderate size. Eleven character strengths (authenticity, bravery, creativity, gratitude, hope, humour, love, perspective, social intelligence, teamwork and zest) were strongly correlated to happiness.

In Singapore, all but three of the character strengths were positively correlated with happiness. The exceptions were appreciation of beauty and excellence, forgiveness, and modesty. Most of the correlations were of moderate size. Two character strengths, hope and zest were strongly correlated to happiness.

This pattern of findings is consistent with Seligman's (2009) prediction that character strengths are positively associated with subjective wellbeing across cultures.

Correlation between two measures of subjective wellbeing

The correlation analyses also showed that there was a strong positive association between the two domains of SWB (PWI-SC and AHI) (Australia: $r(365) = 0.61$, $p < 0.001$; Singapore: $r(321) = 0.51$, $p < 0.001$).

Both the PWI-SC and AHI are designed to assess subjective wellbeing. The PWI-SC is designed to measure the cognitive domain (life satisfaction) while the AHI is designed to measure the affective domain (happiness) of subjective wellbeing. Because the AHI has rarely been used with young people, I checked whether the AHI and PWI-SC were positively correlated in my Australian and Singaporean sample of pre-adolescents. They were positively associated in both samples. However, greater variance (36%) was explained in Australians than in Singaporeans (25%) The findings are consistent with the conclusion that the AHI measures the affective component of subjective wellbeing in my samples. Therefore I proceeded with the planned analyses.

Differences between countries in the relationship between character strengths and subjective wellbeing

The fourth aim (Chapter 1, p. 11-12) was to determine whether the strength of the relationships between character strengths and subjective wellbeing differs between pre-adolescents in an individualist culture outside North America (Australia) and those in a collectivist culture with a similar level of economic development (Singapore). This aim was addressed using Fisher r-to-z transformations. A Bonferroni correction = $.05/24 = p < .002$ was employed (Field, 2005, p. 339).

One of the relationships between character strengths and life satisfaction was stronger for the Australian sample than for the Singaporean sample: (Teamwork), and six of the relationships between character strengths and happiness were stronger for the Australian sample than for the Singaporean sample (Tables C and D).

Regression analyses

The fifth aim (Chapter 1, p. 11-12) was to identify the character strengths that make unique contributions to the life satisfaction and happiness of pre-adolescents in Australia and Singapore by regressing character strengths onto life satisfaction and happiness for each sample.

Life satisfaction

For the Australian sample, the total variance in life satisfaction explained by character strengths was 39.0%, ($F(24,329) = 10.4$, $p < .001$). Four character strengths (bravery, love, self-regulation and zest) accounted for independent variance in life satisfaction (Table E). Table E gives the figures for the regression between character strengths and life satisfaction and happiness in Australia and Singapore.

For the Singaporean sample, the total variance in life satisfaction explained by character strengths was 22.6%, ($F(24, 277) = 4.7$, $p < .001$). Only one character strength (zest) accounted for independent variance in life satisfaction (Table E).

Happiness

For the Australian sample, the total variance in happiness explained by character strengths was 63.7%, ($F(24,328) = 26.8$, $p < .001$). Five character strengths (curiosity, hope, love of learning, perspective and zest) accounted for independent variance in happiness (Table E).

For the Singaporean sample, the total variance in happiness explained by character strengths was 40.8%, ($F(24, 280) = 9.7$, $p < .001$). Only one character strength (zest) accounted for independent variance in happiness (Table E).

Table E: Regression between character strengths and life satisfaction (PWI-SC) and happiness (AHI) in Australia and Singapore

Character Strengths	PWI-SC						AHI					
	Australia			Singapore			Australia			Singapore		
	B	β	t	B	β	t	B	β	t	B	β	t
Appreciation of beauty and excellence	-.66	-.04	-.76	-1.54	-.07	-1.02	-.07	-.08	-1.82	-.08	-.09	-1.45
Authenticity	1.66	.09	1.27	2.90	.11	1.51	.12	.12	2.07	.02	.02	.23
Bravery	-4.0	-.23	-3.5*	.93	.04	.52	-.10	-.11	-2.13	-.07	-.07	-.98
Creativity	-.70	-.04	-.66	-.31	-.02	-.18	.02	.02	.38	-.02	-.03	-.35
Curiosity	-2.18	-.12	-2.05	-2.03	-.09	-1.05	-.13	-.12	-2.72*	-.04	-.04	-.60
Fairness	-1.5	-.08	-1.15	1.43	.06	.73	-.06	-.06	-1.04	.07	.06	.91
Forgiveness	.75	.04	.72	1.44	.06	.98	.11	.10	2.37	-.05	-.04	-.83
Gratitude	2.81	.16	1.98	1.15	.05	.54	-.11	-.11	-1.80	.13	.13	1.59
Hope	1.90	.12	1.44	4.03	.19	1.82	.19	.21	3.28*	.19	.20	2.28
Humour	.89	.06	.94	-.34	-.02	-.25	.08	.09	1.99	-.03	-.03	-.48
Kindness	-2.06	-.09	-1.22	-2.39	-.08	-.98	-.13	-.10	-1.73	-.13	-.11	-1.49
Leadership	-.08	-.01	-.08	-.67	-.03	-.39	.02	.03	.53	-.03	-.03	-.48
Love	.4.12	.19	2.88*	4.77	.18	2.39	.15	.12	2.48	.15	.13	1.93
Love of learning	3.09	.18	2.55	-.10	-<.01	-.05	.17	.17	3.25*	.11	.11	1.43
Modesty	-1.07	-.06	-1.04	-.60	-.02	-.34	-.09	-.08	-1.97	-.07	-.06	-1.01
Open-mindedness	-.25	-.01	-.19	-2.17	-.09	-.87	<.01	<.01	.07	-.02	-.02	-.19
Persistence	1.89	.12	1.49	.17	.01	.08	.08	.09	1.40	.08	.08	.97
Perspective	1.63	.09	1.02	2.55	.11	1.06	.21	.20	2.99*	.18	.18	2.04
Prudence	.75	-.04	.63	3.52	.14	1.70	.04	.04	.74	.07	.07	.96
Self-regulation	-3.26	-.19	-2.86*	-1.09	-.04	-.55	.09	.09	1.81	-.10	-.10	-1.37
Social intelligence	-.11	-.01	-.07	-2.39	-.10	-1.05	-.06	-.06	-.88	-.02	-.02	-.26
Spirituality	1.07	-.09	-1.68	-1.39	-.07	-1.08	-	-	-.07	-.04	-.05	-.88

							<.01	<.01				
Teamwork	2.19	.13	1.61	-.02	-<.01	-.01	-.06	-.07	-1.08	-.07	-.07	-.90
Zest	3.18	.21	2.74*	5.02	.25	2.77*	.29	.33	5.73*	.29	.34	4.21*

p < .01

Summary

There were five main findings.

Pre-adolescents' levels of endorsement of measures of character strengths in both Australian and Singaporean samples were moderate to high, allowing the conclusion that the VIA-Youth assessed character strengths of relevance for the participants' endorsements in both samples (Aim 1). However, there were differences between samples in level of endorsement of half of the character strengths. In all cases the magnitude of these differences was small. Nationality accounted for less than 10% of the variance (Aim 2a). However, students in Australia rated their subjective wellbeing more highly than students in Singapore. Again, the magnitude of the effect was small (Aim 2b).

In Australia, all character strengths except modesty were positively correlated with life satisfaction. In Singapore, the vast majority of character strengths were also positively correlated with life satisfaction. With one exception, there were no differences in strength of relationship between character strengths and life satisfaction in Australia and Singapore. However, there were differences in strength of relationship between character strengths and happiness. Relationships were stronger in the Australian sample for four character strengths.

Character strengths accounted for more than 20% of the variance in each of the measures of subjective wellbeing in both samples. Indeed, character strengths accounted for more than 60% of the variance in happiness for the Australian sample. A single character strength, zest, contributed independent variance to both measures of subjective wellbeing in both samples.

Chapter 5: Discussion

Integrated findings of this study

This study sought to increase understanding of the relationship between character strengths and subjective wellbeing among pre-adolescents. It is the first study to empirically test several key predictions of positive psychology among pre-adolescents in one individualist culture outside North America (Australia) and one collectivist culture with similar levels of economic development (Singapore). The observed levels of endorsement confirm that the character strengths assessed by the VIA-Youth are relevant cross-culturally. Only small differences between Australia and Singapore in the strength of endorsement were found. The findings also confirm the prediction of positive psychology that there is a relationship between character strengths and subjective wellbeing. This is one of the few studies to examine this prediction among pre-adolescents in an individualist culture outside North America, and it is the first study to examine the prediction among pre-adolescents in a collectivist culture. Individual differences between students in both domains of subjective wellbeing were largely accounted for by difference in the character strengths (22-63% of the variance). Zest was an important predictor of both domains of subjective wellbeing in both samples. In Singapore, zest was the only independent predictor of individual differences in subjective wellbeing, whereas other character strengths also contributed to these individual differences in the Australian sample.

Integration of current findings into the field

In various ways, this study adds to understanding in the field, both conceptually and methodologically.

Conceptual issues

Relevance (Endorsement) of character strengths in pre-adolescence

The study sought to examine whether the character strengths identified by positive psychology are relevant to pre-adolescents in Australia and Singapore by examining the extent to which they were endorsed. There were moderate to high levels of endorsement of all character strengths in both samples. Only two previous studies have used the same measure of character strengths among pre-adolescents. These were conducted in the U.S. (Park & Peterson, 2006b) and Switzerland (Wagner & Ruch, 2015). The findings of the present study are consistent with their results. Both previous studies also reported moderate to high mean levels of endorsement of all character strengths. Taken together, the results of the current study and previous research indicate that the 24 character strengths identified by positive psychology are relevant to pre-adolescents in four cultural contexts. This conclusion is consistent with Seligman's (2004) claim that the 24 character strengths have universal relevance across cultures. Only one previous study has examined the endorsement of character strengths among adolescents in either of the focus countries. Toner et al. (2012) also reported moderate to high levels of endorsement of all character strengths among male and female adolescents attending high school in Australia.

Despite the moderate to high endorsement of all character strengths in both samples, the level of endorsement of most character strengths was higher in the Australian sample than in the Singaporean

sample. This does not appear to be a reflection of a simple response bias, because in two cases there was stronger endorsement of character strengths by the Singaporean than by the Australian samples. However, the magnitude of effect for the differences between the samples was very small and unlikely to be of any practical significance.

Relationship between character strengths and subjective wellbeing

The second aim of the current research was to test if the relationship between character strengths and subjective wellbeing that is predicted by positive psychology (Peterson et al., 2007; Seligman et al., 2009) is present during pre-adolescence. The finding that the vast majority of character strengths were positively associated with both the cognitive and affective domains of subjective wellbeing in pre-adolescents in both samples is consistent with this prediction. Indeed, character strengths accounted for a very large amount of variance in life satisfaction and happiness in both samples.

The only previous research using the same measure of character strengths and focusing on pre-adolescence has been conducted in the U.S. (Park & Peterson, 2006b) and Switzerland (Wagner & Ruch, 2015)[1]. Park and Peterson (2006b) focused on only one domain of subjective wellbeing, life satisfaction, and used a different measure, Student's Life Satisfaction Scale (SLSS)) (Park & Peterson, 2006b). Despite being in a different country (the U.S.) and using a different measure, Park and Peterson's correlation had the same result as that of the Australian sample in the current research: the four character strengths that contributed the largest amount of variance to the results were hope, love, gratitude and zest. When comparing Park and Peterson's correlation to that of the Singaporean sample in the current research, although the effect sizes are smaller, three of the four character strengths identified by Park and Peterson (hope, zest and love) accounted each for more than ten percent of the variance in life satisfaction.

However, the current research went further than Park and Peterson by using a regression to test for independent contributions to variance. In the Australian sample, the regression results showed that only two of the four character strengths identified in the correlation - zest and love – explained independent variance in life satisfaction. In addition, two other character strengths came out of the regression analysis as explaining independent variance in life satisfaction: bravery and self-regulation. These latter strengths were not evident in Park and Peterson's correlation. In the Singaporean sample here, only one strength explained independent variance in life satisfaction: zest.

In another western country, Switzerland, Wagner and Ruch (2015) studied the correlation between character strengths and school achievement in pre-adolescents. Similarly to the current study, they found that there was a correlation between some character strengths and school achievement. However, they only found this correlation for six character strengths: love of learning, perseverance, zest, gratitude, hope, and perspective. They did not conduct a regression analysis.

[1] While Shoshani and Sloane (2012) studied pre-adolescents in Israel, their research is not included here because they do not analyse individual character strengths but instead pool them into factors which account for very little variance in subjective wellbeing.

Overall, together with previous findings, the current study shows that in three individualist and one collectivist cultures, there is a significant correlation between character strengths and life satisfaction. The fact that the same character strengths were found to correlate with life satisfaction in pre-adolescents, despite a different life satisfaction measure being used, adds weight to this claim. The correlation is less strong in Singapore, but this makes sense because Singapore is a collectivist culture and character strengths are measures of individual strengths. The regression analysis in the current research provides new information about the relationship between character strengths and life satisfaction in pre-adolescents in Australia and Singapore.

One previous study used the same measures of character strengths, as well as life satisfaction and happiness, to test the relationship between character strengths and subjective wellbeing among adolescents (15-18 years) in Australia (Toner et al., 2012). Toner et al. (2012) do not provide information about their correlation results, so it is not possible to do comparisons with the current study. However, like the current study, they conducted a regression analysis based on the twenty-four character strengths. With respect to life satisfaction, similarly to the current study, Toner et al. (2012) found that a large amount of the variance in life satisfaction was explained by character strengths. However, they found nine character strengths, as compared to four in the current study, contributed independent variance to life satisfaction. The only character strength in common between the two studies was zest, which was a large contributor to independent variance in the current study and a small contributor in Toner's study. The largest contributor to life satisfaction for Toner was hope, as compared with zest in the current study. With respect to happiness, for the Toner study the largest contributor was again hope, as compared with zest in the current study. There were three common contributors to happiness between the two studies: curiosity, hope and zest. Overall, hope is the most important predictor of subjective wellbeing in Toner's study, whereas zest is the most important predictor in the current study.

Taken together, the results of the current study and previous research suggest the predictions of positive psychology can be applied during pre-adolescence but with more confidence in some contexts than others. No other study has found that zest is the single independent predictor of life satisfaction or happiness as it is in this study for Singapore, or the largest independent predictor of life satisfaction and happiness as it is for Australia. It would be interesting to see if the importance of zest could be replicated in this age group in other countries, and whether other countries were more similar to Australia or Singapore in the profile of relationships that they exhibit. Despite cultural differences, it is noteworthy that zest is the only character strength that predicts both life satisfaction and happiness in both Australia and Singapore.

While the prediction that character strengths are a positive resource to support positive adaptation holds true in both Australia and Singapore, and in the U.S. and Switzerland, the relationship between character strengths and life satisfaction, and character strengths and happiness, is stronger in Australia than Singapore. This makes sense because Singapore is a collectivist culture and character strengths are individual measures. Although different measures were used in the U.S. study, the results of that study are more similar to the results of the Australian sample in the current study than are the Australian results to the Singaporean results in the current study. This suggests that while character strengths are

related to subjective wellbeing in both cultures in this study, there are important cultural differences in the way that this relationship is expressed. As well as culture, age and Socio-Economic Status (SES) may be factors in the strength of the relationship between character strengths and subjective wellbeing. The differences in results between this study and the study by Toner et al. (2012) may be caused by age, with some character strengths having a developmental trajectory. Perhaps as students get older, their capacity to think about the future, which is related to hope - the most important predictor in Toner's study, may develop considerably. Another factor may be the sampling method; the study by Toner et al. (2012) was conducted in an exclusive private school, whereas the current study involved fifteen public schools with a variety of SES profiles. Students from different SES backgrounds are likely to have different life stressors which may change the relative importance of different character strengths. For example, students in public schools would more than likely have financial stressors which would reasonably be expected not to be the case for students in a high-fee private school.

A common finding across all studies is the importance of zest. Even though zest is a stronger predictor of subjective wellbeing in the current study as compared to some previous studies, zest is consistently a predictor of life satisfaction and happiness across all studies discussed here. It would be interesting to see if, taking into consideration variables such as age, SES background, and culture, the importance of zest is replicated. Since zest is particularly important in Singapore, it would be most interesting examine how the relationship between zest and subjective wellbeing plays out in other traditionally collectivist countries. The current study eliminated language as a confounding factor because both countries have education in English. Both countries also use information technology and have advanced economies. Hong Kong would be a very interesting place for future research, as like Singapore, it is post-colonial, with high levels of literacy, a history of education being taught in English, and with the use of information technology being common. Making use of an effective translation, Japan and Dubai would also be interesting places to explore to see if the relationship between zest and subjective wellbeing holds across other traditionally collectivist cultures as well as Singapore.

Methodological issues concerning the concept of virtues

The current study contributed to our knowledge about the factor structure of the VIA-Youth. First, the current study found no evidence that the VIA-Youth assesses 6 virtues in pre-adolescents. It found that the twenty-four character strengths were organised into five virtues in the Australian sample and four in the Singaporean sample. These findings are consistent with the only previous study to have examined the factor structure of the VIA-Youth among pre-adolescents. Park & Peterson (2006b) found 4 factors when the VIA-Youth was used among pre-adolescents in the U.S. The findings are also consistent with previous research involving adolescents in Australia. Toner et al. (2012) found 5 factors when the VIA-Youth was used among pre-adolescents. In conclusion, currently available evidence consistently fails to find six virtues when using the VIA-Youth.

However, the current study found some evidence to support the claim that the VIA-Youth assesses 24 character strengths. This study also explored the factor structure of the VIA-Youth regarding the 24 character strengths. There is one known study (Park & Peterson, 2006b) which used the VIA-Youth

among pre-adolescents with which to compare the current findings, and there is insufficient evidence to allow the conclusion that the VIA-Youth assesses 24 character strengths.

The consistent finding that the VIA-Youth does not assess the six virtues proposed by Seligman may reflect developmental processes or measurement issues. Character strengths could be emerging properties which are not organised during pre-adolescence, but which combine into virtues with increasing maturity (Park & Peterson, 2006a, 2006b). Alternatively, the findings may reflect inadequacy of the measurement tool to capture virtues in young people. The failure to find evidence that the VIA-Youth measures six virtues has no implications for the validity of Seligman's proposal that character strengths among adults are organised into six virtues.

Strengths

This study has conceptual and methodological strengths. This is the first known study where the character strengths and wellbeing of pre-adolescents in an individualist and a collectivist culture were examined with careful elimination of confounding factors. Previous cross-cultural comparisons of character strengths have been limited by many confounding variables (Biswas-Diener, 2006; Shimai et al., 2006). In particular, previous studies have required use of translated measures. This introduces the problem of linguistic equivalence, where the validity of the comparison between cultures is influenced by the manner in which the translation captures the meaning of the original. In this study this problem was eliminated by selecting two cultures in which children are educated in the same language, English, which is also the original language for all the measures. In addition, differences in familiarity with technology have often resulted in different data collection methods for different cultural groups (Biswas-Diener, 2006). Furthermore, cross-cultural comparisons have used samples of very different sizes (Shimai et al., 2006). The current study overcomes this by using large samples of similar sizes. An additional strength in the current study was that culture was not confounded with economic development. This has not been the case in most previous cross-cultural studies (Biswas-Diener, 2006; Park et al., 2006). A single exception is a comparison involving the comparison between the U.S. and Japan (Shimai et al., 2006). In conclusion, the current study uses best practice in the elimination of confounding factors.

Limitations

This study also has several conceptual and methodological limitations. While this study found an association between character strengths and subjective wellbeing, it did not investigate whether there were any mediator variables that were part of the relationship. Given that characters strengths are relatively stable over time, whereas happiness fluctuates significantly over time, it is likely that any relationship between character strengths and happiness involves one or more mediator variables. Further investigation is required to determine what these mediators are.

The current study also does not allow for conclusions to be drawn about a possible causal relationship between character strengths and subjective wellbeing. For example, it is not possible to tell based on this study if when we are happy, we will be more grateful or if when we are grateful, we will be happier. As such, we are unable to know about the direction of influence of the distribution of virtues and

character strengths (i.e. if the character strengths influence subjective wellbeing or vice versa) across pre-adolescents.

In addition, the observational study does not allow us to determine whether character strengths have a developmental trajectory. An experimental or intervention study is recommended for future research. More specifically, a longitudinal study would be helpful because it would potentially provide data about the developmental trajectory of character strengths.

There may also be issues with ascribing cultural values to countries. The study was conducted in two multicultural countries with representative samples from urban Australia and Singapore. The Australia sample is taken as an individualistic national group, and the Singaporean sample as a collectivist national group, rather than as cultural sub-groups. Australia is ranked highly in individualism at 90 (Hofstede, Hofstede, & Minkov, 2010). Singapore is an atypical first-world collectivist culture at 20 (Hofstede et al., 2010) for individualism, so doing the analyses by country was a reasonable choice. However, no analyses of the variety of cultural values within countries were conducted and conclusions were drawn on a national basis. This may mean that within-country differences could have been obscured, particularly because overall small differences in the level of endorsement were found in my study. An age-appropriate measure to test individualism and collectivism could have been administered to participants in the study to highlight both national and within-country differences in each sample.

There is a possible methodological limitation relating to the consistent ordering of questionnaires. All participants completed all questionnaires in the same order. The two measures of subjective wellbeing (PWI-SC and AHI) were completed by all the participants before they completed the VIA-Youth. This means that questions about levels of life satisfaction and happiness may have primed responses to character strengths endorsement. For example, if the participant had high levels of life satisfaction and happiness, zest and appreciation for beauty and excellence may have been primed while hope and persistence may have been primed if the participant had low levels of life satisfaction and happiness. A better approach would have been to counter-balance the order of questionnaire completion to eliminate the risk of the results being influenced the order of questionnaire completion.

One might also mention that the exclusive reliance on self-reports of subjective wellbeing (life satisfaction and happiness) and character strengths may be problematic as by its nature it is highly subjective with a possible flaw that participants may alter responses because they may want to be deemed as socially desirable (Argyle, 1987). Future studies could include assessment of character strengths and subjective wellbeing through qualitative research such as semi-structured and structured interviews and focus group discussions as well as through objective school records including teacher and parent observations and reports of character strengths as well as informant reports (Park & Peterson, 2006a).

Finally, the measures used would not have captured all cultural concepts fully. One example is seen when a student asked the author, “We are Irish and we believe in ‘faeries’ but where are the ‘faeries’?” Here, the participant’s cultural concept of spirituality was not fully captured in the VIA-Youth. One

might assume that there was an inability of the VIA-Youth in capturing the full essence and meanings of all cultural and spiritual orientations of every culture.

Recommendations for future research

More investigation is needed to clarify the lower age boundary for the relevance of character strengths and to determine whether all twenty-four character strengths are universally endorsed by pre-adolescents or only in some cultures. Future research needs to be conducted in a variety of different contexts and/or culture groups. In terms of schools, in order to provide a sample covering a wide variety of participants, there could be a mix of both public/government and private schools or single-sex and co-educational schools. There is a need for research where confounding factors are minimised, so research could be conducted between countries with certain common characteristics (e.g., between two Spanish-speaking countries where one is economically-advanced and affluent and the other is poorer) or between different subcultures within one country (e.g., between a more economically and technologically advanced part of a country/city versus a more rural part of the country/city). Given that Cho (2014) has done a study of wellbeing on Asian countries which found that children in Korea, Japan and Singapore had relatively high levels of wellbeing, whereas children in Malaysia, Vietnam, Indonesia, and Thailand have relatively lower levels of wellbeing, a further study might focus on Korea, Japan and Singapore and another study on those countries with lower levels of wellbeing.

The fact that this study finds an association between character strengths and subjective wellbeing for pre-adolescents means that there is a need for experimental studies to investigate a possible causal relationship. One question that needs to be investigated is whether character strengths are malleable; is it possible to intervene to increase character strengths? A second question is then whether an increase in character strengths causes an increase in subjective wellbeing. Two existing studies (Proctor et al., 2011; Rashid et al., 2013) suggest that for pre-adolescents, participating in targeted activities aimed at increasing character strengths improves wellbeing. Rashid et al. (2013) found that participating in strengths building exercises increased wellbeing and Proctor et al. (2011) found that participation in exercises designed to increase character strengths results in increased life satisfaction. However, more research is needed in this area.

Moving between studies of conceptual mapping of character based on self-reports and questions of educational practice involves entering a middle ground that is both complex and shifting. One way of taking on this challenge that is gaining precedence is to conduct studies that are both experimental and interventionist, linking strongly between initial conceptual definition based on research and subsequent task definition based on school practice. The creation of a cycle including and alternating between theory and practice in this way is a worthy goal, and such efforts have been referred to as ''implementation science'' (Kelly & Perkins, 2014, p. 1). Such studies would both free the research effort from unnecessary abstraction and quickly point to the relevance that the research has for a given educational practice. For a school counsellor the aim would be to quickly work out what kind of universal interventions would be most effective for increasing student wellbeing. In the current study, zest was an independent predictor of subjective wellbeing in both countries for both the affective and cognitive domains of subjective wellbeing. More research focusing on zest and other character

strengths identified as independent predictors in this study could be encouraged. For example, if it is found that there is a causal relationship between character strengths and subjective wellbeing, then it may be useful for studies to explore whether zest is malleable and can be increased through, for example, outdoor programs (e.g., camping, hiking). Firstly, however, there is a need to clarify what self-reports that lead to a high 'zest' score are about, and what they might indicate in terms of a follow-up response. There has to be some searching of what lies behind the presumed statistical stability of the notion in a measuring instrument. Secondly, the question of what action is possible in any given situation needs to be thoughtfully considered, and some analysis has to be undertaken of practicable ways of changing that situation in support of any such action. Thirdly, while it may seem an obvious point to make, discussion of these points with the relevant practitioners and those implementing any action is critical. It is all part of each party to the operation feeling that they understand what is to happen and why. Essentially, change only happens locally, and with local support (Fullan & Miles, 1992).

Perhaps most importantly, as positive psychology has argued, research studies need to proceed from a wider perspective that sees and deals with both the positives and negatives that are actually apparent in fields of professional practice, if the aim is improvement of policy and action. Thinking only of problems can lead to existing solutions being ignored.

The current study has indicated that ordinary, not selected or elite, 12- and 13-year olds in different cultural traditions, that have for historical reasons similar educational provision, report life satisfaction and happiness both well above the notional mid-point of the scales. So, as they terminate primary school (Australia) or commence high school (Singapore) these pupils are positive rather than negative. While issues such as pupil anxiety, mental health risks, bullying, abuse and disadvantage at school are still a reality for some students, and a reality that is worthy of effort to address, to focus only on these issues can be seen as rather unbalanced as a contribution to acknowledging where we start from in efforts to improve things. In this way the point of positive psychology is usefully underlined in this study.

Chapter 6: Conclusion

Student wellbeing has become part of the core concerns of schools and research has shown that student wellbeing is an important influence on school engagement (Shoshani et al., 2016), academic achievement (Ashdown & Bernard, 2012; Dix et al., 2012) and positive classroom behaviour (Ashdown & Bernard, 2012). As part of their strategy to increase student wellbeing, many education systems around the world have embraced positive psychology which views developmental problems in the context of the many positive elements present in most behavioural settings. There has been increasing interest in incorporating aspects of positive psychology into the education system. In particular, concepts from positive psychology have been adopted by many schools in Australia, including Geelong Grammar School in Victoria (Toner et al., 2012), and Mount Barker High School (2016) and St Peter's College in South Australia (White & Waters, 2015), and some schools in Singapore (Sharp, 2015).

One key proposition of positive psychology is that wellbeing is developed through the use of universally-valued character strengths. However, to date there is insufficient empirical evidence to show that the twenty-four character strengths identified by positive psychology are universally relevant or to show that there is a relationship between these character strengths and wellbeing among most of the school-age population. The empirical research that has been conducted is largely focused on adolescents and adults, and much of this has taken place in North America. In particular, little previous research has examined the relevance of character strengths among school students facing the challenges of transition from primary to secondary education and the other challenges of pre-adolescence. In addition, no previous research has examined the relevance of character strengths or their relationship to wellbeing among pre-adolescents in a collectivist culture and few have studied this in an individualist culture outside North America. This thesis has addressed this gap by conducting the first observational study of character strengths and subjective wellbeing in pre-adolescents in an individualist culture outside North America, Australia, and a collectivist culture, Singapore. It is also the first to compare character strengths in a collectivist culture in a context in which culture is not confounded with language and/or level of economic development.

The findings of the current study are broadly consistent with the predictions of positive psychology. Character strengths were endorsed by pre-adolescents in both Australia and Singapore, with only small differences in the levels of endorsement. In addition, character strengths accounted for a moderate to large percentage of the individual differences between students in subjective wellbeing in both Australia and Singapore. Zest contributed independently to both the cognitive and affective domains of subjective wellbeing in both countries. In Australia, three other strengths also contributed independently to individual differences in the cognitive domain of subjective wellbeing (bravery, love and self-regulation), and four other strengths contributed to individual differences in the affective domain of subjective wellbeing (curiosity, hope, love of learning and perspective). In Singapore, zest was the only character strength to contribute independently to individual differences in subjective wellbeing. Overall, the findings demonstrate that there may be both universal and culture-specific aspects to the relationship between character strengths and subjective wellbeing.

One strategy shared by this and almost all previous research is that they provide no evidence of a causal relationship between character strengths and subjective wellbeing. There appear to be only three exceptions for school-aged populations (Oppenheimer et al., 2014; Proctor et al., 2011; Suldo et al., 2013). There is therefore insufficient evidence to support the effectiveness of targeting character strengths as a strategy for enhancing wellbeing among school students. Only experimental studies would be able to address this gap. If a causal relationship between character strengths and subjective wellbeing can be established, it will be important to also identify possible mediator variables in the relationship between character strengths and subjective wellbeing.

Despite the many challenges faced by school students during this transitional age, most students are able to achieve moderate to high levels of life satisfaction and happiness. This reflects the "ordinary magic" (Masten, 2001) of resilience among young people. Schools and parents have generally focused on deficits and problems. The results of the current study and the perspective of positive psychology point us towards a paradigm shift to focus on the strengths of all school students, and the ways to tap and develop these.

This research extends knowledge about a specific focus of positive psychology: character strengths, and their relationship to student wellbeing. The research tests the claim for the universal applicability of character strengths with respect to culture by comparing the relevance of character strengths in an individualist culture outside of North America and a collectivist culture when the confounding variables that have plagued previous comparisons are minimised. The research also tests the claim for the universal applicability of character strengths with respect to age by investigating this claim among pre-adolescents in Australia and Singapore. Finally, the research tests the prediction of positive psychology that there is a relationship between character strengths and subjective wellbeing by investigating this claim among pre-adolescents in Australia and Singapore. This study is the first of its kind to compare individualist and collectivist cultures in the pre-adolescent age group with minimal confounding factors, and as such represents a significant and innovative contribution to the field.

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Appendix A

The VIA Classification of Character Strengths

1. **Wisdom and** Knowledge – Cognitive strengths that entail the acquisition and use of knowledge

• **Creativity** [originality, ingenuity]: Thinking of novel and productive ways to conceptualize and do things; includes artistic achievement but is not limited to it
• **Curiosity** [interest, novelty-seeking, openness to experience]: Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating; exploring and discovering
• **Judgment** [critical thinking]: Thinking things through and examining them from all sides; not jumping to conclusions; being able to change one's mind in light of evidence; weighing all evidence fairly
• **Love of Learning**: Mastering new skills, topics, and bodies of knowledge, whether on one's own or formally; obviously related to the strength of curiosity but goes beyond it to describe the tendency to add systematically to what one knows
• **Perspective** [wisdom]: Being able to provide wise counsel to others; having ways of looking at the world that make sense to oneself and to other people

2. **Courage** – Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal

• **Bravery** [valor]: Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if there is opposition; acting on convictions even if unpopular; includes physical bravery but is not limited to it
• **Perseverance** [persistence, industriousness]: Finishing what one starts; persisting in a course of action in spite of obstacles; "getting it out the door"; taking pleasure in completing tasks
• **Honesty** [authenticity, integrity]: Speaking the truth but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretense; taking responsibility for one's feelings and actions
• **Zest** [vitality, enthusiasm, vigor, energy]: Approaching life with excitement and energy; not doing things halfway or halfheartedly; living life as an adventure; feeling alive and activated

3. **Humanity** - Interpersonal strengths that involve tending and befriending others

• **Love**: Valuing close relations with others, in particular those in which sharing and caring are reciprocated; being close to people

• **Kindness** [generosity, nurturance, care, compassion, altruistic love, “niceness”]: Doing favors and good deeds for others; helping them; taking care of them
• **Social Intelligence** [emotional intelligence, personal intelligence]: Being aware of the motives and feelings of other people and oneself; knowing what to do to fit into different social situations; knowing what makes other people tick

4. **Justice** - Civic strengths that underlie healthy community life

• **Teamwork** [citizenship, social responsibility, loyalty]: Working well as a member of a group or team; being loyal to the group; doing one’s share
• **Fairness**: Treating all people the same according to notions of fairness and justice; not letting personal feelings bias decisions about others; giving everyone a fair chance.
• **Leadership**: Encouraging a group of which one is a member to get things done and at the time maintain time good relations within the group; organizing group activities and seeing that they happen.

5. **Temperance** – Strengths that protect against excess

• **Forgiveness**: Forgiving those who have done wrong; accepting the shortcomings of others; giving people a second chance; not being vengeful
• **Humility**: Letting one’s accomplishments speak for themselves; not regarding oneself as more special than one is
• **Prudence**: Being careful about one’s choices; not taking undue risks; not saying or doing things that might later be regretted
• **Self-Regulation** [self-control]: Regulating what one feels and does; being disciplined; controlling one’s appetites and emotions

6. **Transcendence** - Strengths that forge connections to the larger universe and provide meaning

• **Appreciation of Beauty and Excellence** [awe, wonder, elevation]: Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life, from nature to art to mathematics to science to everyday experience
• **Gratitude**: Being aware of and thankful for the good things that happen; taking time to express thanks
• **Hope** [optimism, future-mindedness, future orientation]: Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about
• **Humor** [playfulness]: Liking to laugh and tease; bringing smiles to other people; seeing the light side; making (not necessarily telling) jokes

• **Spirituality** [faith, purpose]: Having coherent beliefs about the higher purpose and meaning of the universe; knowing where one fits within the larger scheme; having beliefs about the meaning of life that shape conduct and provide comfort

Appendix B

Dear Audrey,
The Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. Your ethics final approval notice can be found below.

FINAL APPROVAL NOTICE

Project No.:	**5696**
Project Title:	An investigation of the relationship between character strengths and Australian and Singaporean preadolescents' sense of wellbeing
Principal Researcher:	Ms Audrey Ang
Email:	ang0019@flinders.edu.au
Address:	School of Education
Approval Date:	31 August 2012
Ethics Approval Expiry Date:	**30 November 2012**

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided.

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. Participant Documentation

Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

- all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
- the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted overseas.
- the SBREC contact details, listed below, are included in the footer of all letters of introduction and information sheets.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 'INSERT PROJECT No. here following approval'). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.

2. Annual Progress / Final Reports

In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research (March 2007)* an annual progress report must be submitted each year on the **31 August** (approval anniversary date) for the duration of the ethics approval using the annual progress / final report pro forma. *Please retain this notice for reference when completing annual progress or final reports.*

If the project is completed *before* ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please submit either (1) a final report; or (2) an extension of time request and an annual report.
Your first report is due on **31 August 2013** or on completion of the project, whichever is the earliest.

3. Modifications to Project

Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such matters include:

- proposed changes to the research protocol;
- proposed changes to participant recruitment methods;
- amendments to participant documentation and/or research tools;
- extension of ethics approval expiry date; and
- changes to the research team (addition, removals, supervisor changes).

To notify the Committee of any proposed modifications to the project please submit a Modification Request Form to the Executive Officer. Please note that extension of time requests should be submitted prior to the Ethics Approval Expiry Date listed on this notice.

Change of Contact Details

Please ensure that you notify the Committee if either your mailing or email address changes to ensure that correspondence relating to this project can be sent to you. A modification request is not required to change your contact details.

4. Adverse Events and/or Complaints

Researchers should advise the Executive Officer of the Ethics Committee on 08 8201-3116 or human.researchethics@flinders.edu.au immediately if:

- any complaints regarding the research are received;
- a serious or unexpected adverse event occurs that effects participants;
- an unforseen event occurs that may affect the ethical acceptability of the project.

Joanne Petty
Administration Support
Social and Behavioural Research Ethics Committee
c.c Dr Julie Clark
Ms Jessie Jovanovic

Joanne Petty
Administration Support, Social and Behavioural Research Ethics Committee
Research Services Office |Union Building Basement
Flinders University
Sturt Road, Bedford Park | South Australia | 5042
GPO Box 2100 | Adelaide SA 5001
P: +61 8 8201-3116 | F: +61 8 8201-2035 |Web: Social and Behavioural Research Ethics Committee

Appendix C

Government of South Australia
Department for Education and Child Development

Policy and Communications

31 Flinders Street
Adelaide SA 5000
GPO Box 1152
Adelaide SA 5001
DX 541

Tel: 8226 4108
Fax: 8226 1605

DECD CS_12_25.12

29 August 2012

Dear Principal/Director/Site Manager

The research project titled *"An investigation of the relationship between character strengths and Australian and Singaporean pre-adolescents' sense of wellbeing"* has been reviewed centrally and granted approval for access to Department for Education and Child Development (DECD) sites. However, the researcher will still need your agreement to proceed with this research at your site.

We have asked Ms Ang to note that one of the questionnaires is lengthy and may pose difficulties for some students and/or require a longer timeframe to complete than has been indicated in the information sheet. Given that there are a number of wellbeing related research projects currently underway in DECD sites, we have also endeavoured to ensure that this research will not result in any overlap or duplication of research effort. We are satisfied that the arrangements as outlined by Ms Ang are suitable in this regard.

Once approval has been given at the local level, it is important to ensure that the researchers fulfil their responsibilities in obtaining informed consent as agreed, that individuals' confidentiality is preserved and that safety precautions are in place.

Researchers are encouraged to provide feedback to sites used in their research, and you may wish to make this one of the conditions for accessing your site. To ensure maximum benefit to DECD, researchers are also asked to supply the department with a copy of their final report which will be circulated to interested staff and educators for future reference.

Please contact Allison Cook, Project Officer – Research and Innovation on (08) 8226 4108 for further clarification if required, or to obtain a copy of the final report.

Yours sincerely

Sadie C. Muncham
for

Ben Temperly
HEAD OF POLICY AND COMMUNICATIONS

Appendix D

Approval from MOE for data-collection

From: Choi Peng LEONG (MOE) [LEONG_Choi_Peng@moe.gov.sg]
Sent: Tuesday, 18 September, 2012 12:01:13 PM
To: Audrey Ang
Cc: Puay Huay TOH (MOE)
Subject: RE: Request from Westwood Secondary School

Dear Audrey,

Your request has just been approved. Would you like to collect the approval letter personally from us ?

Thanks.

Ms Leong Choi Peng
Data Control Officer 8, Planning Division • Tel: +65 6879 5976 • Fax: +65 6776 2921
Ministry of Education • 1 North Buona Vista Drive, Singapore 138675 • http://www.moe.gov.sg
Integrity the Foundation • People our Focus • Learning our Passion • Excellence our Pursuit

Appendix E

Ms Sandra Gwee

Principal

Westwood Secondary School

11 Jurong West St. 25

Singapore 648350

Dear Ms Gwee

Request to conduct research in Westwood Secondary School

I am in my final year of the Doctor of Education program and am working with Dr Julie Clark and Ms Jessie Jovanovic; my supervisors from the School of Education at *Flinders University*.

I plan to look at the relationship of character strengths and wellbeing of pre-adolescents of 12-13 year olds from Year 7 in Adelaide and Secondary 1 in Singapore. I would like look at the cross-cultural and possibly socio-economic differences of both countries. I will be using 3 online questionnaires - *Values In Action-Child (VIA-Child), Authentic Happiness Inventory (AHI)* and *Personal Wellbeing Index - School Children (PWI-SC)*. The VIA-Child could require 45-60 minutes and the AHI and PWI-SC about 30 minutes. I will be sharing the results of my study with the school and it is my hope that the findings of my research will be helpful in the future planning of wellbeing programs for your students.

The identity of the students will be kept confidential and the information from the findings will be de-identified. I have applied for ethics approval to *Flinders University* and approval to conduct research to *DECD* (South Australia) and am applying to *MOE* (Singapore). The Information Letter for Participants and their Parents, Parental Consent Form and other paperwork have been prepared. I would really appreciate if your school can be a part of my research.

Thank you very much.

Yours sincerely

Audrey Ang

Appendix F

May 2012

To Whom It May Concern

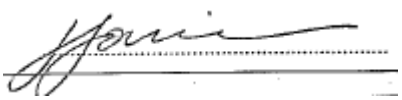
Thank you for supporting Ms Audrey Ang's doctoral research study "An investigation of the relationship between character strengths and Australian and Singaporean preadolescents' sense of wellbeing." This study will yield important information about how character strengths may influence the sense of wellbeing preadolescents report they have. It fulfils an under-researched area in this age group, and across cultural contexts.

Ms Ang is completing her Doctor of Education, and comes to the research with significant interest and experience in the areas of wellbeing, primary and secondary pedagogy and school counselling.

Please find attached to this letter an information sheet and letter of consent for your perusal and signature (if both you and/or your child agree to participating). The research project was approved by the *Flinders University's Social and Behavioural Research Ethics Committee* in June 2012.

If you require any further information about the project, or have any concerns which you would like to raise with me directly as one of Ms Ang's supervisors, please do not hesitate to contact me on the details above.

Yours sincerely



Jessie Jovanovic
Topic Coordinator

Appendix G

INFORMATION LETTER FOR SCHOOLS

Dear Sir/Mdm

I am writing to invite your School's classes with 12-13-year-old students to participate in my research project entitled *"An investigation of the relationship between character strengths and Australian and Singaporean pre-adolescents' sense of wellbeing"*. Further details about the research and how your School can participate can be found below.

Investigator:
Ms Audrey Ang
Doctor of Education Candidate
School of Education
Flinders University
Ph: 0426 566 636 (office hours only)

Description of the study:
Following the work of Dr Martin Seligman and associates in the field of positive psychology, this project will be looking at how the character strengths of 12-13-year-olds may influence their sense of wellbeing. This project is supported by Flinders University's School of Education.

Purpose of the study:
The study aims to see whether and how character strengths in youth may act as a protective factor in life, either by improving our attitudes and outlook on life or promoting our sense of wellbeing, or both.

What will the school be asked to do?
I will need the assistance of the Principal to approach the teachers to explain the nature of my research for them to participate in the research. I will the assistance of class teachers in the distribution of information letters, the collection of consent forms, and the administration of the three questionnaires.

What will students in the relevant-aged classes be asked to do??
I plan to make two visits (Visit 1: 45 minutes and Visit 2: 1 hour) to each school to ask you/your child to complete three questionnaires:

- Visit 1: To sign up for an email address to be used as username/personal code (10 minutes), to complete demographic information on Survey Monkey (10 minutes), *Authentic Happiness Inventory (AHI)* questionnaire; a 24-item measure of pleasure, engagement and meaning in life (10-15 minutes to complete) AND the *Personal Wellbeing Index-School Children (PWI-SC)* questionnaire; a 7-item self-report on experiences of happiness and quality of life (5-10 minutes to complete).
- Visit 2: *Values In Action-Child (VIA-Child)* questionnaire; a 198-item self-report measure of 24 character strengths. This will take approximately 45-60 minutes to complete.

I will brief classroom teachers about the administration of these questionnaires and will be present throughout these two visits, if requested.

What benefit will students gain from being involved?
On completion of the two online surveys, the VIA-Child and the AHI, participating students will be able to see their results and gain further insight into who they are as an individual, including their possible signature character strengths.

Will students or the school be identifiable by being involved in this study?
In order to match the students' responses with responses across the questionnaires, they will be asked to place a personal code on the questionnaire(s). Only the student will know his or her code to ensure their responses remain anonymous and confidential. The school will also not be identified in any way, as all reported findings and data analyses will be kept anonymously, securely and confidentially. Pseudonyms will be used as required.

The research findings will form part of my dissertation for a Doctor of Education, and may be reported upon in possible future publications. However, student responses will remain anonymous and personal information will be securely stored for seven years in Flinders University's School of Education in a de-identified form.

Are there any risks or discomforts to being involved?
I hope to minimize any disruption to student learning and the school curriculum. Students can take a rest during the completion of these questionnaires during either visit. I would also like to ask that the school counsellor and/or chaplain be on-hand to offer counselling services should students want to speak with someone during, or following the completion of the questionnaire(s).

How do we agree to participate?
Participation is voluntary. Students may refuse to complete one or more of the questionnaires and is free to withdraw from the research at any time without any ill effect or consequences at school. Please read and sign the attached consent form if you are happy for the researcher to approach relevant class teachers and students about this research project and their participation.

How will the School receive feedback?
I will be sharing the results of my findings with participating schools, with the hope that the project's findings could be used in the planning of future wellbeing programmes for students.

I look forward to hearing from you in due course, and am more than happy to be contacted should you have any queries about this research project.

Kind regards

Audrey Ang

Appendix H

SCHOOL CONSENT FORM FOR PARTICIPATION IN RESEARCH

An investigation of the relationship between character strengths and Australian and Singaporean pre-adolescents' sense of wellbeing.

I …..... being over the age of 18 years, and acting as the School's representative hereby consent to participating, as requested, in the Letter of Introduction and Information Sheet in the research project on 'An investigation of the relationship between character strengths and Australian and Singaporean preadolescents' sense of wellbeing'.

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
4. I understand that by participating in the research at the School:

   - We may not directly benefit from taking part in this research.
   - We are free to withdraw from the project at any time and to decline to answer particular questions.
   - While the information gained in this study will be published as explained, the School, nor any child will be identified, and individual information will remain confidential.
   - Whether individual child participates or not, or withdraws after participating, will have no effect on any treatment or service that is being provided to him/her at the school.
   - Whether an individual child participates or not, or withdraws after participating, will have no effect on his/her progress in his/her course of study, or results gained.
   - Individual children may ask to stop completing the questionnaire(s) at any time, and he/she may withdraw at any time from the session or the research without disadvantage.

School Principal's signature……Date……...

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

Researcher's name Audrey Ang

Researcher's signature……..Date…….

NB: Two signed copies should be obtained; one for the parent/caregiver and one for the researcher's records on behalf of the University.

Appendix I

INFORMATION LETTER FOR PARTICIPANTS & THEIR PARENTS

Dear Parents, Caregivers & Participants

I am writing to invite you/your child to participate in my research project entitled *"An investigation of the relationship between character strengths and Australian and Singaporean pre-adolescents' sense of wellbeing"*. Further details about the research and how you /your child can participate can be found below.

Investigator:
Ms Audrey Ang
Doctor of Education Candidate
School of Education
Flinders University
Ph: 0426 566 636 (office hours only)

Description of the study:
Following the work of Dr Martin Seligman and associates in the field of positive psychology, this project will be looking at how the character strengths of 12-13-year-olds may influence their sense of wellbeing. This project is supported by Flinders University's School of Education.

Purpose of the study:
The study aims to see whether and how character strengths in youth may act as a protective factor in life, either by improving our attitudes and outlook on life or promoting our sense of wellbeing, or both.

What will you/your child be asked to do?
I plan to make two visits (Visit 1: 45 minutes and Visit 2: 1 hour) to each school to ask you/your child to complete three questionnaires:

- Visit 1: To sign up for an email address to be used as username/personal code (10 minutes), to complete demographic information on Survey Monkey (10 minutes), *Authentic Happiness Inventory (AHI)* questionnaire; a 24-item measure of pleasure, engagement and meaning in life (10-15 minutes to complete) AND the *Personal Wellbeing Index-School Children (PWI-SC)* questionnaire; a 7-item self-report on experiences of happiness and quality of life (5-10 minutes to complete).
- Visit 2: *Values In Action-Child (VIA-Child)* questionnaire; a 198-item self-report measure of 24 character strengths. This will take approximately 45-60 minutes to complete.

Your classroom teacher will be briefed about the administration of these questionnaires and I will be present in the school throughout the two visits.

What benefit will you/your child gain from being involved?
On completion of the two online surveys, the VIA-Child and the AHI, you/your child will be able to see their results and gain further insight into who they are as an individual, including their possible signature character strengths.

The research findings will form part of my dissertation for a Doctor of Education, and may be reported upon in possible future publications. However, you/your child's responses will remain anonymous and his/her personal information will be securely stored for seven years in Flinders University's School of Education in a de-identified form.

Are there any risks or discomforts to being involved?
I hope to minimize any disruption to your child's learning and the school curriculum. You/your child can take a rest during the completion of these questionnaires during either visit. The school counsellor and/or chaplain will also be on-hand to offer counselling services should you/your child want to speak with someone during, or following the completion of the questionnaire(s).

How do I agree to participate?
Participation is voluntary. You/your child may refuse to complete one or more of the questionnaires and is free to withdraw from the research at any time without any ill effect or consequences at school. Please read and sign the attached consent form if you/your child agree to participate.

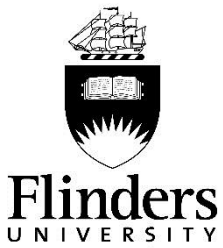
How will I receive feedback?
I will be sharing the results of my findings with participating schools, with the hope that the project's findings could be used in the planning of future wellbeing programmes for students. You are most welcome to request this summary of findings from the school directly.

I look forward to hearing from you in due course, and am more than happy to be contacted should you have any queries about this research project.

Kind regards

Audrey Ang

Appendix J



PARENTAL CONSENT FORM FOR CHILD PARTICIPATION IN RESEARCH

An investigation of the relationship between character strengths and Australian and Singaporean pre-adolescents' sense of wellbeing.

I ..... being over the age of 18 years hereby consent to my child ..... participating, as requested, in the Letter of Introduction and Information Sheet in the research project on 'An investigation of the relationship between character strengths and Australian and Singaporean pre-adolescents' sense of wellbeing'.

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
4. I understand that:

   - My child may not directly benefit from taking part in this research.
   - My child is free to withdraw from the project at any time and is free to decline to answer particular questions.
   - While the information gained in this study will be published as explained, my child will not be identified, and individual information will remain confidential.
   - Whether my child participates or not, or withdraws after participating, will have no effect on any treatment or service that is being provided to him/her at the school.
   - Whether my child participates or not, or withdraws after participating, will have no effect on his/her progress in his/her course of study, or results gained.
   - My child may ask to stop completing the questionnaire(s) at any time, and he/she may withdraw at any time from the session or the research without disadvantage.

Parent's signature……Date……...

Participant's signature……Date……...

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

Researcher's name Audrey Ang

Researcher's signature……..Date…….

NB: Two signed copies should be obtained; one for the parent/caregiver and one for the researcher's records on behalf of the University.

Appendix K

Protocol for data-collection in Australia & Singapore schools

Research title:

An investigation of the relationship between character strengths and Australian and Singaporean pre-adolescents' sense of wellbeing.

Data will be collected in primary schools in Adelaide and secondary schools in Singapore among pre-adolescents between 12-13 years old. Pilot test will be conducted in Flagstaff Hill Primary School and data will be collected in Singapore in September and in Adelaide in October.

The research seeks to answer the following questions:

- What is the relationship between individual character strengths and wellbeing?
- Which character strengths have the strongest predictive properties of wellbeing?
- Are there differences (and similarities) in character strengths between pre-adolescents in Australia and Singapore?

The researcher and teacher to assure the students that the questionnaires has been seen by the school Principal/Vice-Principal and teachers and their parents are also welcomed to view the website and questionnaires and that details such as their first name and family name will be kept confidential.

The creators of the questionnaires have taken measures to protect the identity of the users and the privacy policy for the Authentic Happiness site is as follows:
http://www.authentichappiness.sas.upenn.edu/HeartsInHealthcare/popup.aspx?id=57

In order to further protect their identity, there will be the creation of an email account via Hotmail solely for the purpose of the research and after which can be deleted.

The students will be strongly encouraged to answer as honestly as possible and that there is not going to be any implication in any way. In this way, a most accurate assessment of their character strengths and wellbeing can then be measured.

The teacher, Principal, Vice-Principal, school counsellor and/or the Christian Pastoral Support Worker will be present should you require de-briefing during or after the questionnaires.

Procedure:

To log into portal
http://www.authentichappiness.sas.upenn.edu/CharacterStrengthsWellbeing/default.aspx

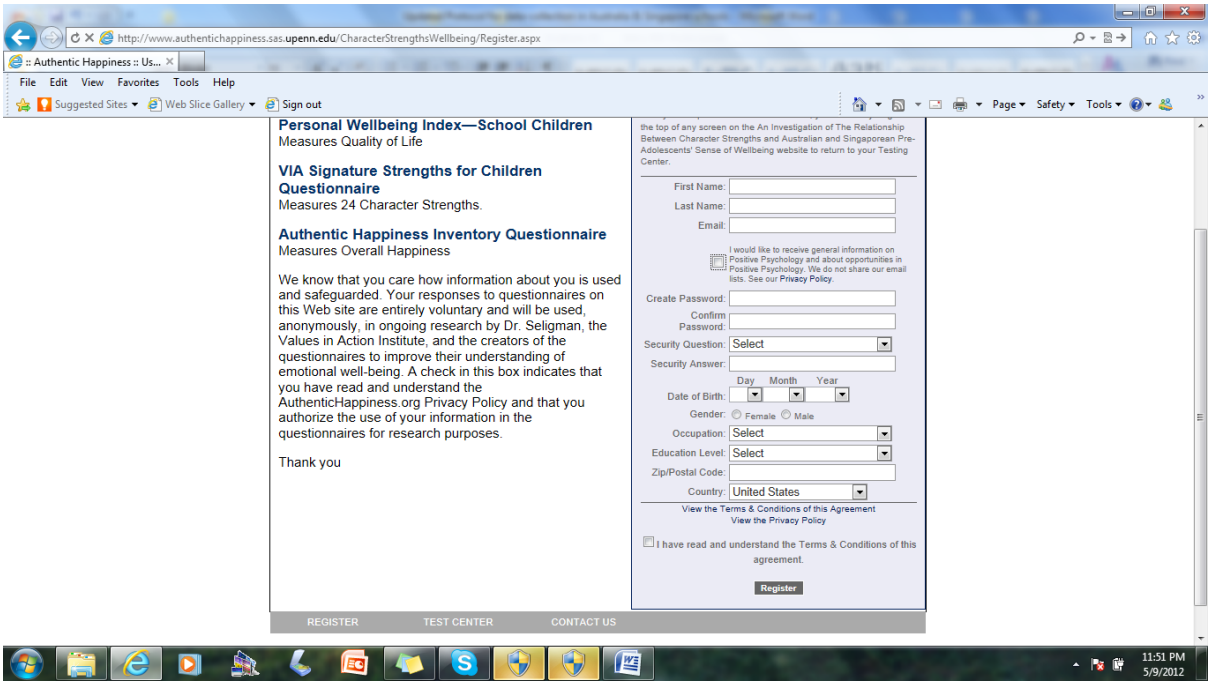
1. To complete Free Registration on portal: (Should complete in 10 minutes)

   The format for the setting up of the email address:

- If the student is studying in Australia, he/she will have the letter 'a' in front of the email address
- If the student is studying in Singapore, he/she will have the letter 's' in front of the email address
- If a student is born on 27th with the family name being ang, the student will have 'a' or 's' in front followed by 27 and the last 2 alphabets of his/her family name (Example: a27ng@hotmail.com or s27ng@hotmail.com)
- The password will be the student's name (first name).

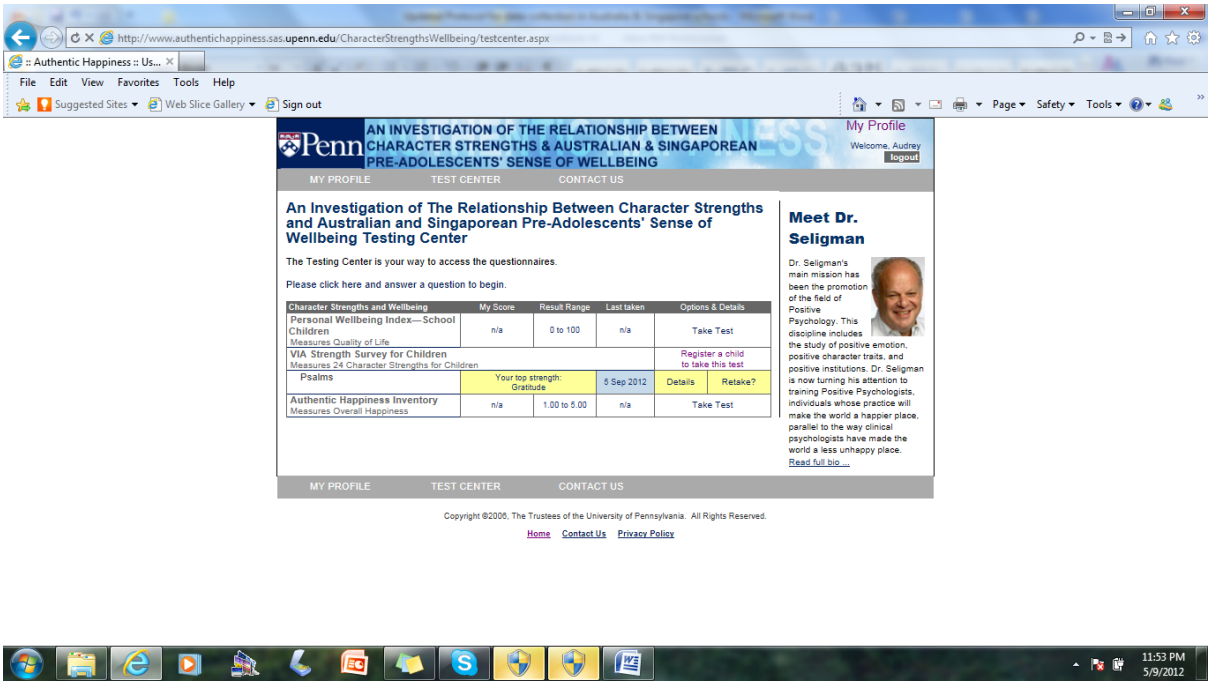
For security question - please choose the security question you prefer except for the choice on high school mascot.

For Zip/Postcode - please place school's postcode as the answer.

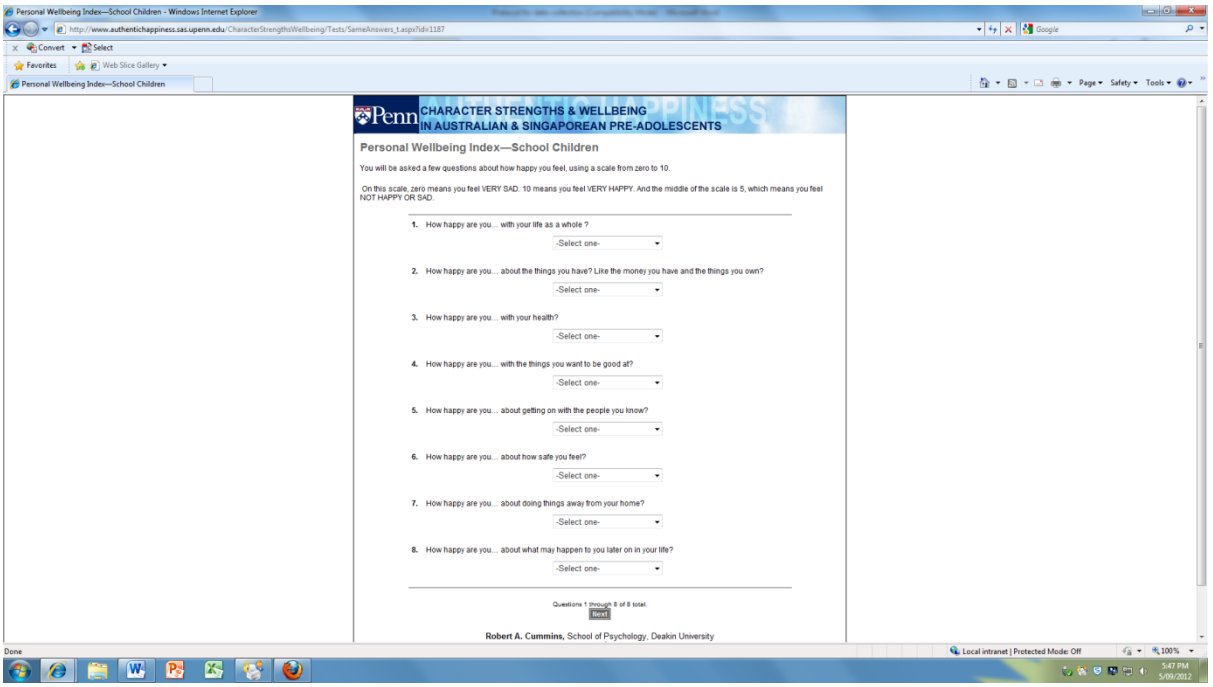

http://www.authentichappiness.sas.upenn.edu/CharacterStrengthsWellbeing/Register.aspx
:: Authentic Happiness :: Us...
File Edit View Favorites Tools Help
Suggested Sites Web Slice Gallery Sign out
Page Safety Tools
Personal Wellbeing Index—School Children
Measures Quality of Life
VIA Signature Strengths for Children Questionnaire
Measures 24 Character Strengths.
Authentic Happiness Inventory Questionnaire
Measures Overall Happiness
We know that you care how information about you is used and safeguarded. Your responses to questionnaires on this Web site are entirely voluntary and will be used, anonymously, in ongoing research by Dr. Seligman, the Values in Action Institute, and the creators of the questionnaires to improve their understanding of emotional well-being. A check in this box indicates that you have read and understand the AuthenticHappiness.org Privacy Policy and that you authorize the use of your information in the questionnaires for research purposes.
Thank you
the top of any screen on the An Investigation of The Relationship Between Character Strengths and Australian and Singaporean Pre-Adolescents' Sense of Wellbeing website to return to your Testing Center.
First Name:
Last Name:
Email:
I would like to receive general information on Positive Psychology and about opportunities in Positive Psychology. We do not share our email lists. See our Privacy Policy.
Create Password:
Confirm Password:
Security Question: Select
Security Answer:
Day Month Year
Date of Birth:
Gender: Female Male
Occupation: Select
Education Level: Select
Zip/Postal Code:
Country: United States
View the Terms & Conditions of this Agreement
View the Privacy Policy
I have read and understand the Terms & Conditions of this agreement.
Register
REGISTER TEST CENTER CONTACT US
11:51 PM
5/9/2012

You are now log into the portal and ready to begin the questionnaires.

Please start with Authentic Happiness Inventory followed by Personal Wellbeing Index-School Children.

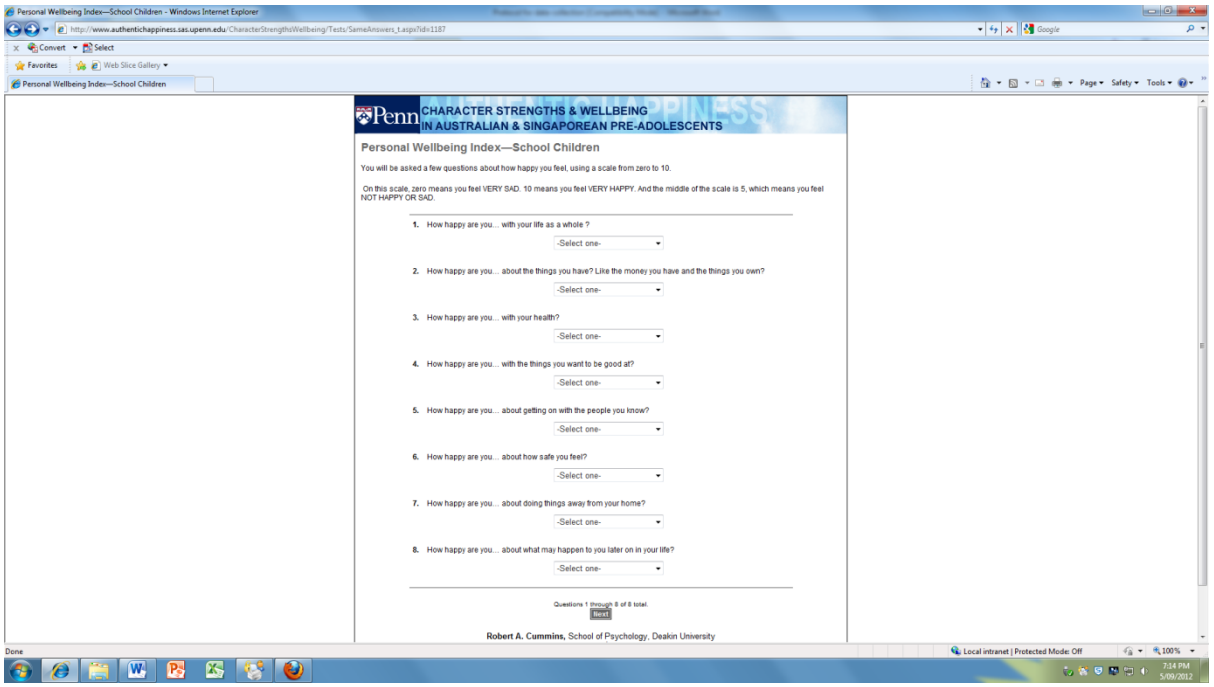


2. Completion of Authentic Happiness Inventory: (Should complete in 10-15 minutes)



You will get to see your scores upon completion of Authentic Happiness Inventory.

3. Completion of Personal Wellbeing Index-School Children: (Should complete in 5-10 minutes)



You will get to see your scores upon completion of Personal Wellbeing Index-School Children.

4. Completion of Values In Action-Child (VIA-Child): (Should complete in 30-45 minutes)

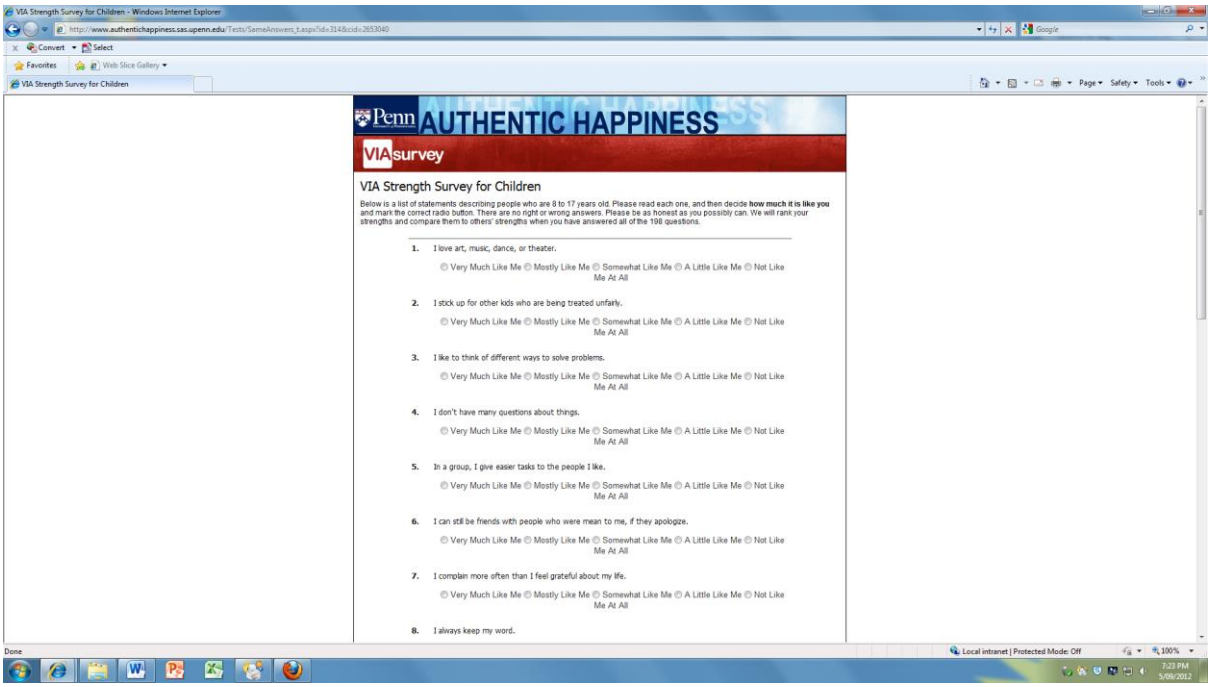
Using the same username name which is the student's email address (Example: s27ng@hotmail.com or a27ng@hotmail.com with the password being the student's name (first name)).

The teachers may need to run through a list of words that are spelt using American spelling and to also assist students who may have difficulty with the language or needing IT support.

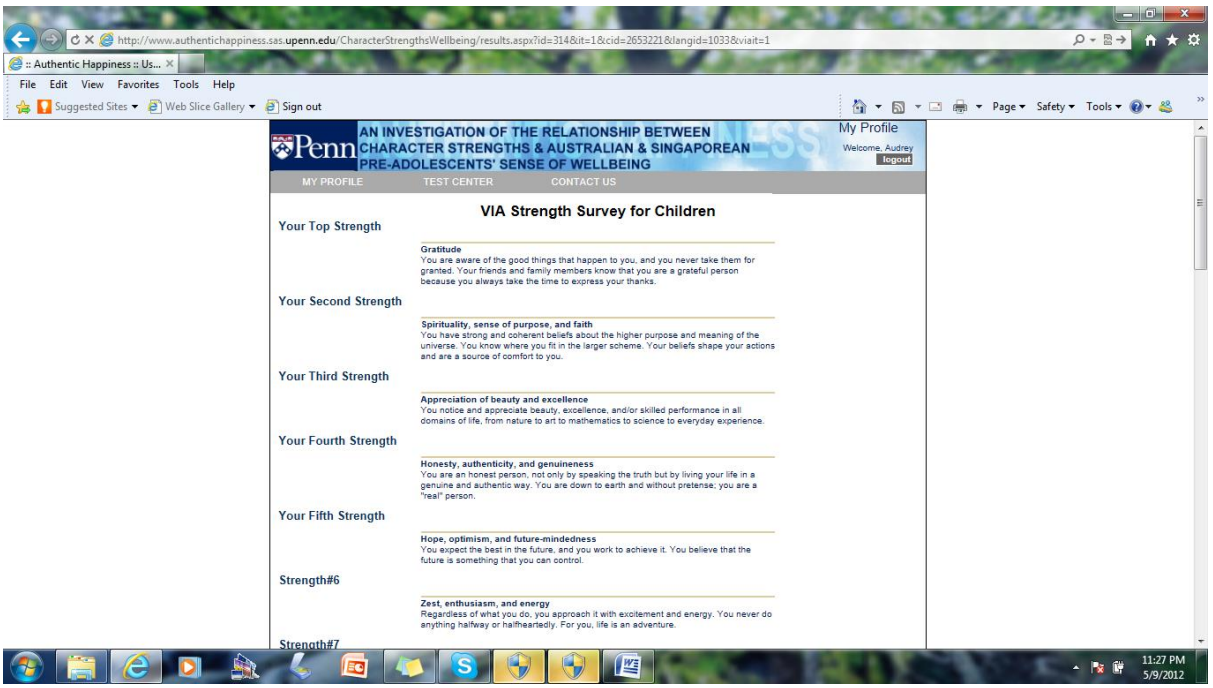
Words to take note of a few words that are in American spelling:

- Question 1 – theatre (British spelling: theatre)
- Questions 6 & 30 - apologize (British spelling: apologise)
- Question 62 - organizing (British spelling: organising)
- Question 77 - favors (British spelling: favours)

There will be break at the 15th minute for you to have short rest or stretch for 2-5 minutes.



Upon the completion of VIA-Child, the students get to see their individual profile of 5 signature strengths and 19 other strengths.



Appendix L

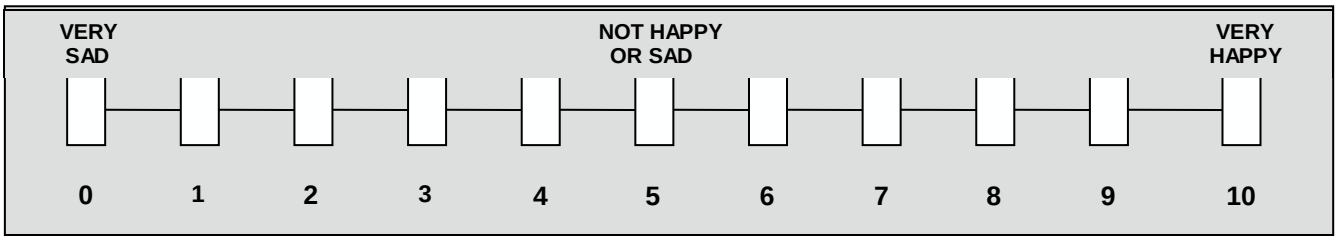
Personal Wellbeing Index – School Children

Personal Wellbeing Index – School Children/Adolescents [Life Domains]

1. **[Domain: Standard of Living]**

   How happy are you …

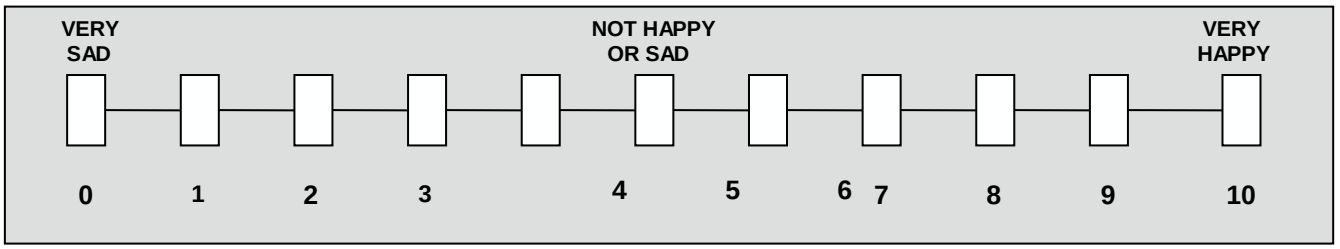
   about the things you have? Like the money you have and the things you own?



2. **[Domain: Personal Health]**

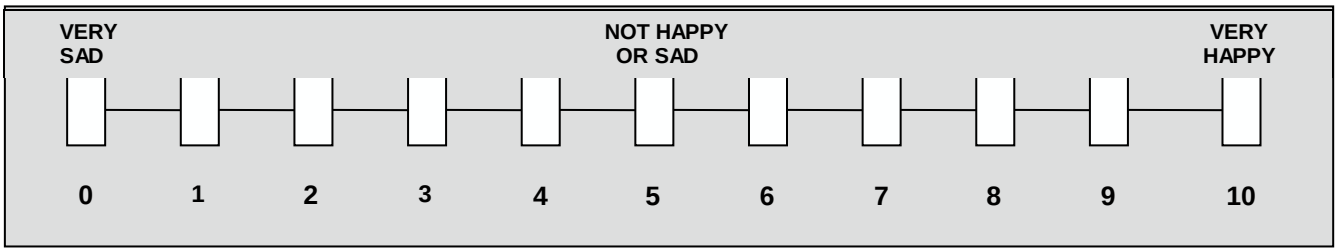
   How happy are you …

   with your health?



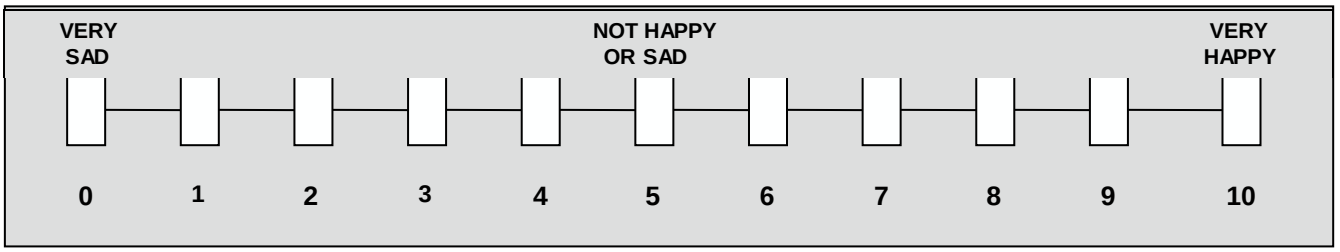
3. **[Domain: Achievement in Life]**

How happy are you …
with the things you want to be good at ?



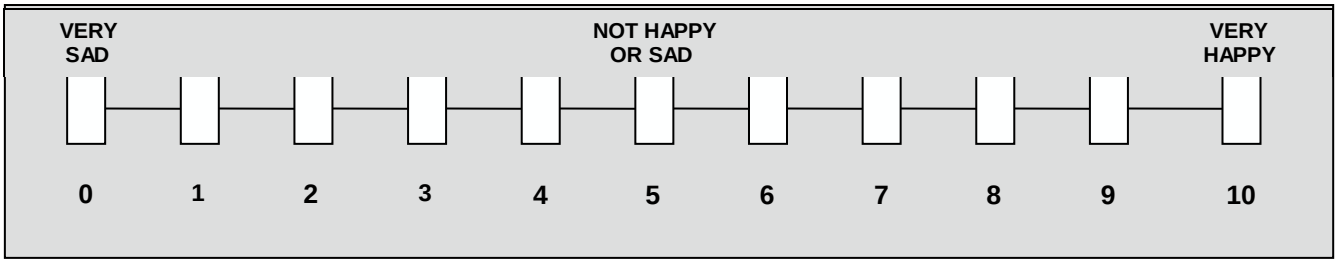
4. **[Domain: Personal Relationships]**

How happy are you …
about getting on with the people you know ?



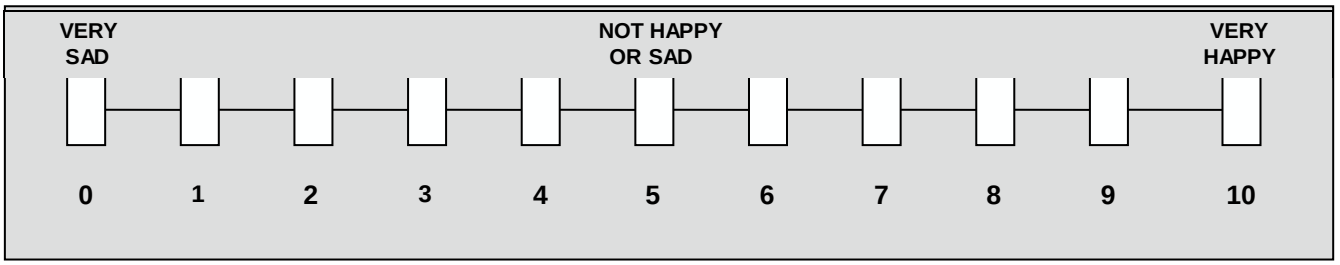
5. **[Domain: Personal Safety]**

How happy are you …
about how safe you feel ?



6. **[Domain: Feeling Part of the Community]**

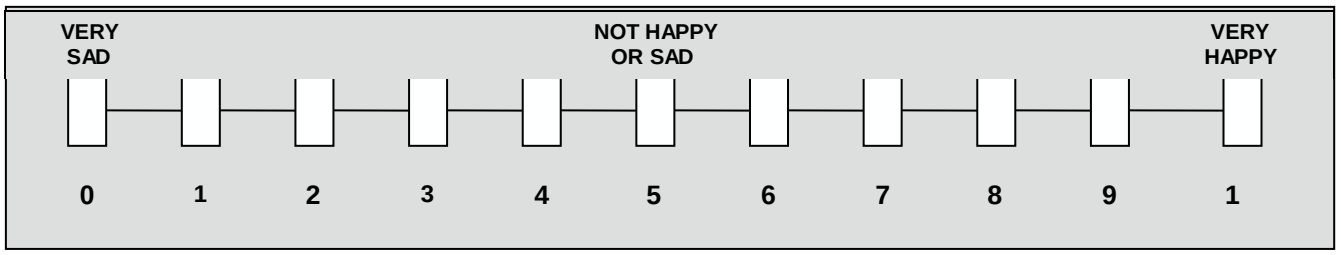
How happy are you …
about doing things away from your home ?



7. **[Domain: Future Security]**

How happy are you …

about what may happen to you later on in your life ?



Appendix M

AUTHENTIC HAPPINESS INVENTORY

Please read each group of statements carefully. Then pick the one statement in each group that best describes the way you have been feeling for the past week, including today. Be sure to read all of the statements in each group before making your choice in the dropdown list next to the statements.

1. -

A. I feel like a failure.

B. I do not feel like a winner.

C. I feel like I have succeeded more than most people.

D. As I look back on my life, all I see are victories.

E. I feel I am extraordinarily successful.

2. -

A. I am usually in a bad mood.

B. I am usually in a neutral mood.

C. I am usually in a good mood.

D. I am usually in a great mood.

E. I am usually in an unbelievably great mood.

3. -

A. When I am working, I pay more attention to what is going on around me than to what I am doing.

B. When I am working, I pay as much attention to what is going on around me as to what I am doing.

C. When I am working, I pay more attention to what I am doing than to what is going on around me.

D. When I am working, I rarely notice what is going on around me.

E. When I am working, I pay so much attention to what I am doing that the outside world practically ceases to exist.

4. -

A. My life does not have any purpose or meaning.

B. I do not know the purpose or meaning of my life.

C. I have a hint about my purpose in life.

D. I have a pretty good idea about the purpose or meaning of my life.

E. I have a very clear idea about the purpose or meaning of my life.

5. -

A. I rarely get what I want.

B. Sometimes, I get what I want, and sometimes not.

C. Somewhat more often than not, I get what I want.

D. I usually get what I want.

E. I always get what I want.

6. -

A. I have sorrow in my life.

B. I have neither sorrow nor joy in my life.

C. I have more joy than sorrow in my life.

D. I have much more joy than sorrow in my life.

E. My life is filled with joy.

7. -

A. Most of the time I feel bored.

B. Most of the time I feel neither bored nor interested in what I am doing.

C. Most of the time I feel interested in what I am doing.

D. Most of the time I feel quite interested in what I am doing.

E. Most of the time I feel fascinated by what I am doing.

8. -

A. I feel cut off from other people.

B. I feel neither close to nor cut off from other people.

C. I feel close to friends and family members.

D. I feel close to most people, even if I do not know them well.

E. I feel close to everyone in the world.

9. -

A. By objective standards, I do poorly.

B. By objective standards, I do neither well nor poorly.

C. By objective standards, I do rather well.

D. By objective standards, I do quite well.

E. By objective standards, I do amazingly well.

10. -

A. I am ashamed of myself.

B. I am not ashamed of myself.

C. I am proud of myself.

D. I am very proud of myself.

E. I am extraordinarily proud of myself.

11. -

A. Time passes slowly during most of the things that I do.

B. Time passes quickly during some of the things that I do and slowly for other things.

C. Time passes quickly during most of the things that I do.

D. Time passes quickly during all of the things that I do.

E. Time passes so quickly during all of the things that I do that I do not even notice it.

12. -

A. In the grand scheme of things, my existence may hurt the world.

B. My existence neither helps nor hurts the world.

C. My existence has a small but positive effect on the world.

D. My existence makes the world a better place.

E. My existence has a lasting, large, and positive impact on the world.

13. -

A. I do not do most things very well.

B. I do okay at most things I am doing.

C. I do well at some things I am doing.

D. I do well at most things I am doing.

E. I do really well at whatever I am doing.

14. -

A. I have little or no enthusiasm.

B. My enthusiasm level is neither high nor low.

C. I have a good amount of enthusiasm.

D. I feel enthusiastic doing almost everything.

E. I have so much enthusiasm that I feel I can do most anything.

15. -

A. I do not like my work (paid or unpaid).

B. I feel neutral about my work.

C. For the most part, I like my work.

D. I really like my work.

E. I truly love my work.

16. -

A. I am pessimistic about the future.

B. I am neither optimistic nor pessimistic about the future.

C. I feel somewhat optimistic about the future.

D. I feel quite optimistic about the future.

E. I feel extraordinarily optimistic about the future.

17. -

A. I have accomplished little in life.

B. I have accomplished no more in life than most people.

C. I have accomplished somewhat more in life than most people.

D. I have accomplished more in life than most people.

E. I have accomplished a great deal more in my life than most people.

18. -

A. I am unhappy with myself.

B. I am neither happy nor unhappy with myself--I am neutral.

C. I am happy with myself.

D. I am very happy with myself.

E. I could not be any happier with myself.

19. -

A. My skills are never challenged by the situations I encounter.

B. My skills are occasionally challenged by the situations I encounter.

C. My skills are sometimes challenged by the situations I encounter.

D. My skills are often challenged by the situations I encounter.

E. My skills are always challenged by the situations I encounter.

20. -

A. I spend all of my time doing things that are unimportant.

B. I spend a lot of time doing things that are neither important nor unimportant.

C. I spend some of my time every day doing things that are important.

D. I spend most of my time every day doing things that are important.

E. I spend practically every moment every day doing things that are important.

21. -

A. If I were keeping score in life, I would be behind.

B. If I were keeping score in life, I would be about even.

C. If I were keeping score in life, I would be somewhat ahead.

D. If I were keeping score in life, I would be ahead.

E. If I were keeping score in life, I would be far ahead.

22. -

A. I experience more pain than pleasure.

B. I experience pain and pleasure in equal measure.

C. I experience more pleasure than pain.

D. I experience much more pleasure than pain.

E. My life is filled with pleasure.

23. -

A. I do not enjoy my daily routine.

B. I feel neutral about my daily routine.

C. I like my daily routine, but I am happy to get away from it.

D. I like my daily routine so much that I rarely take breaks from it.

E. I like my daily routine so much that I almost never take breaks from it.

24. -

A. My life is a bad one.

B. My life is an OK one.

C. My life is a good one.

D. My life is a very good one.

E. My life is a wonderful one.

Questions 1 through 24 of 24 total.

Next

Appendix N

VIA Strength Survey for Children

Below is a list of statements describing people who are 8 to 17 years old. Please read each one, and then decide **how much it is like you** and mark the correct radio button. There are no right or wrong answers. Please be as honest as you possibly can. We will rank your strengths and compare them to others' strengths when you have answered all of the 198 questions.

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1. I love art, music, dance, or theater.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

2. I stick up for other kids who are being treated unfairly.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

3. I like to think of different ways to solve problems.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

4. I don't have many questions about things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

5. In a group, I give easier tasks to the people I like.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

6. I can still be friends with people who were mean to me, if they apologize.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

7. I complain more often than I feel grateful about my life.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

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8. I always keep my word.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

9. No matter what I do, things will not work out for me.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

10. People often tell me that I act too seriously.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

11. I keep at my homework until I am done with it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

12. I make good judgments even in difficult situations.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

13. When my friends are upset, I listen to them and comfort them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

14. When people in my group do not agree, I can't get them to work together.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

15. I always feel that I am loved.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

16. I am excited when I learn something new.

Very Much Like Me Mostly Like Me Somewhat Like Me A

Little Like Me Not Like Me At All

17. I think that I am always right.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

18. I am very careful at whatever I do.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

19. If I have money, I usually spend it all at once without planning.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

20. In most social situations, I talk and behave the right way.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 1 through 20 of 198 total.

21. I often feel that someone "up there" in heaven watches over me.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

22. If my team does not choose my idea, I don't want to work with the team.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

23. I usually know what really matters.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

24. I am very enthusiastic.

Very Much Like Me Mostly Like Me Somewhat Like Me A

Little Like Me Not Like Me At All

25. When I see beautiful scenery, I stop and enjoy it for a while.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

26. I don't stand up for myself or others.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

27. It is difficult for me to come up with new ideas.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

28. I am interested in all kinds of things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

29. Even when my team is losing, I play fair.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

30. Even if someone hurts me, I forgive them if they apologize.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

31. I can find many things to be thankful for in my life.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

32. I lie to get myself out of trouble.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

33. I think good things are going to happen to me.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

34. I rarely joke with others.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

35. If a task is hard, I give up easily.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

36. When I make a decision, I consider the good and the bad in each option.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

37. When I hear about people who are sick or poor, I worry about them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

38. I'm not good at taking charge of a group.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

39. I love my family members no matter what they do.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

40. I learn things only when someone makes me.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

41. Even when I am really good at something, I don't show off about it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

42. I often do things without thinking.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

43. I get things done that need to get done, even when I don't feel like doing them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

44. I always know what to say to make people feel good.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

45. I don't believe in God or a higher power.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

46. I work really well with a group.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

47. People often say that I give good advice.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

48. I always feel tired.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

49. I get bored when I look at art or watch a play.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

50. I have the courage to do the right thing even when it is not popular.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

51. I like to create new or different things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

52. I am curious about how things work.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

53. When I work in a group, I give an equal chance to everybody.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

54. I easily forgive people.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

55. When someone helps me or is nice to me, I always let them know I am grateful.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

56. I tell the truth, even if it gets me in trouble.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

57. I give up hope when things do not go well.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

58. I am good at making people laugh.

Very Much Like Me Mostly Like Me Somewhat Like Me A

Little Like Me Not Like Me At All

59. Whenever I do something, I put all my effort into it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

60. If I like one option, I don't think about other possibilities.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 41 through 60 of 198 total.

Previous Next

61. I am very concerned about others when they have problems.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

62. I am good at organizing group activities and making them happen.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

63. I don't have someone to talk when I need to.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

64. When there is a chance to learn new things I actively participate.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

65. If I have done something good, I tell everyone about it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

66. I avoid people or situations that might get me into trouble.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

67. If I want something, I can't wait.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

68. I know what to do to avoid trouble with others.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

69. I believe that someone in heaven will guide me to do right thing.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

70. When I work with a group, I am very cooperative.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

71. I am not good at finding solutions to conflicts.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

72. I am always excited about whatever I do.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

73. I often notice pretty things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

74. When I see someone being mean to others, I tell them that is wrong.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

75. I always have lots of creative ideas.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

76. I always want to know more.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

77. I do favors for the people I know, even if it is not fair to others.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

78. When people say they are sorry, I give them a second chance.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

79. I am a grateful person.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

80. I often make excuses.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 61 through 80 of 198 total.

Previous Next

81. I believe that things will always work out no matter how difficult they seem now.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

82. People say that I am not playful.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

83. I keep trying even after I fail.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

84. I always listen to different opinions before I make up my mind.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

85. I rarely help others.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

86. When there is a group project to do, other kids want me to be in charge.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

87. It is difficult for me to make new friends.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

88. When I am reading or learning something new, I often forget how much time passed.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

89. I don't act like I am better than anybody else.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

90. I often make mistakes because I am not careful.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

91. Even when I get really angry, I can control myself.

Very Much Like Me Mostly Like Me Somewhat Like Me A

Little Like Me Not Like Me At All

92. I am good at getting along with all sorts of people.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

93. When I pray, it makes me feel better.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

94. If it is helpful, I am always willing to do more work for our team.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

95. Before my friends make an important decision, they often ask my opinion.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

96. I always feel full of energy.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

97. Seeing pretty pictures or listening to beautiful music makes me feel better.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

98. When I see someone being picked on, I don't do anything about it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

99. I think that I am very creative.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

100. I am not curious about things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 81 through 100 of 198 total.

Previous Next

101. Even when I don't like someone, I treat them fairly.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

102. Even when someone says they are sorry, I stay mad at them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

103. I don't feel grateful that often.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

104. People can always count on me to tell the truth.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

105. I am very positive about the future.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

106. People say that I am humorous.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

107. I don't put things off for tomorrow if I can do them today.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

108. I make decisions only when I have all of the facts.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

109. If I am busy, I don't stop to help others who need it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

110. I am a leader that others trust and look up to.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

111. Even when my family members and I fight, I still love them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

112. I get bored when I read or learn things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

113. I don't feel comfortable getting all the praise just for myself.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

114. Before I do things, I always think about consequences.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

115. Even when I really want to do something right now, I can wait.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

116. I often make other people upset without meaning to.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

117. I believe that all things happen for a reason.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

118. I listen to others in our group when we make decisions.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

119. People say that I am very wise.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

120. I am always very active.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 101 through 120 of 198 total.

Previous Next

121. I really appreciate beautiful things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

122. I speak up for what is right, even when I am afraid.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

123. I often come up with different ways of doing things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

124. I ask questions all the time.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

125. Even if someone is not nice to me, I still treat them fairly.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

126. Even if people have hurt me, I don't want to see them suffer.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

127. When good things happen to me, I think about the people who helped me.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

128. I lie to get what I want.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

129. I will achieve my goals.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

130. I often make jokes to get others out of a bad mood.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

131. People can count on me to get things done.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

132. Before I make a final decision, I think about all the possibilities.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

133. I am always kind to other people.

Very Much Like Me Mostly Like Me Somewhat Like Me A

Little Like Me Not Like Me At All

134. When I play with other kids, they want me to be the leader.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

135. It is hard for me to get close to people.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

136. I love to learn new things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

137. Even if I am good at something, I give other kids a chance at it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

138. I usually don't make the same mistake two times in a row.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

139. I can wait for my turn without getting frustrated.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

140. I usually understand how I feel and why.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 121 through 140 of 198 total.

Previous Next

141. I have a faith.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

142. If I don't agree with the group decision, I don't go along with it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

143. I often come up with solutions to problems that make everybody happy.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

144. I am not often that excited about things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

145. When I see art or listen to music, I often forget how much time passed.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

146. I do what is right even if others tease me for it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

147. I always like to do things in different ways.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

148. I always have many questions about many things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

149. I treat everyone's opinion as equally important.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

150. When someone does something mean to me, I try to get even with them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

151. I often feel grateful for my parents and family.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

152. If I make a mistake, I always admit it even if it is embarrassing.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

153. I am always hopeful no matter how bad things look.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

154. I am good at bringing smiles to people.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

155. I am a hard worker.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

156. I always keep an open mind.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

157. When I see people who need help, I do as much as I can.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

158. When I am in charge, I am good at making my group follow what I ask them to do.

Very Much Like Me Mostly Like Me Somewhat Like Me A

Little Like Me Not Like Me At All

159. I share my feelings with my friends or family.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

160. I love to learn how to do different things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 141 through 160 of 198 total.

Previous Next

161. I don't brag about my accomplishments.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

162. I don't do things that I might later regret.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

163. Even if I want to say something, I can keep it to myself.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

164. I am good at knowing what people want without asking.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

165. I don't pray, even when I am by myself.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

166. Even if I do not agree, I respect the opinion of others in my team.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

167. I often make poor choices.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

168. I think that life is exciting.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

169. I don't enjoy going to see art exhibits or performances.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

170. I stand up to kids who are acting mean or unfair.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

171. I do not enjoy creating new things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

172. I am always curious about people, places, or things I am not familiar with.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

173. If I like someone in a group, I let them get away with things.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

174. I often feel lucky to have what I have in my life.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

175. Once I make a commitment, I keep it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

176. I am confident that I can overcome difficulties.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

177. I like to tell jokes or funny stories.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

178. When I have responsibilities at school or home, I don't always do them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

179. I usually don't think about different possibilities when I make decisions.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

180. I don't help others if they don't ask.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 161 through 180 of 198 total.

Previous Next

181. I am good at encouraging people in my group to complete our work.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

182. I often tell my friends and family members that I love them.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

183. When I want to learn something, I try to find out everything about it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

184. Rather than just talking about myself, I prefer to let other kids talk about themselves.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

185. I often do things that I shouldn't be doing.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

186. I am very patient.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

187. I often get in arguments with others.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

188. I feel that my life has a purpose.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

189. I am very loyal to my group no matter what.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

190. I am good at helping my friends make up after they have an argument.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

191. I am always cheerful.

Very Much Like Me Mostly Like Me Somewhat Like Me A

Little Like Me Not Like Me At All

192. Even if they are my friends, I ask everybody to follow the same rules.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

193. I am good at making a boring situation fun.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

194. Once I make an exercise or study plan, I stick to it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

195. I often do nice things for others without being asked.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

196. When I have a problem, I have someone who will be there for me.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

197. Even when I have done something nice for others, I don't always tell people about it.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

198. I often lose my temper.

Very Much Like Me Mostly Like Me Somewhat Like Me A Little Like Me Not Like Me At All

Questions 181 through 198 of 198 total.

Previous Next

Appendix O

EXPLORATORY FACTOR ANALYSIS

STEP 1 CHECK THAT ADEQUATE SAMPLE SIZE AND EVIDENCE OF CORRELATIONS SUFFICIENT FOR FACTORS TO EXIST, top box, and how many factors appear to exist scree plot and table above

```
SORT CASES  BY Nationality.
SPLIT FILE SEPARATE BY Nationality.

FACTOR
  /VARIABLES VIA1 VIA2 VIA3 VIA4 VIA5 VIA6 VIA7 VIA8 VIA9 VIA10 VIA11 VIA12 VI
A13 VIA14 VIA15 VIA16
    VIA17 VIA18 VIA19 VIA20 VIA21 VIA22 VIA23 VIA24
  /MISSING LISTWISE
  /ANALYSIS VIA1 VIA2 VIA3 VIA4 VIA5 VIA6 VIA7 VIA8 VIA9 VIA10 VIA11 VIA12 VIA
13 VIA14 VIA15 VIA16
    VIA17 VIA18 VIA19 VIA20 VIA21 VIA22 VIA23 VIA24
  /PRINT INITIAL KMO EXTRACTION ROTATION
  /PLOT EIGEN
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PC
  /CRITERIA ITERATE(25)
  /ROTATION VARIMAX
  /METHOD=CORRELATION.
```

Factor Analysis

Nationality = Australia

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.954
Bartlett's Test of Sphericity	Approx. Chi-Square	6295.380
	df	276
	Sig.	.000

a. Nationality = Australia

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.270	51.125	51.125	12.270	51.125	51.125
2	1.607	6.697	57.822	1.607	6.697	57.822
3	1.143	4.761	62.584	1.143	4.761	62.584
4	1.096	4.567	67.150	1.096	4.567	67.150
5	1.060	4.416	71.567	1.060	4.416	71.567
6	.821	3.419	74.986			
7	.655	2.731	77.717			
8	.600	2.500	80.217			
9	.559	2.331	82.548			
10	.452	1.882	84.430			
11	.421	1.755	86.184			
12	.364	1.518	87.703			
13	.341	1.422	89.125			
14	.319	1.329	90.454			
15	.306	1.276	91.730			
16	.279	1.163	92.892			
17	.270	1.125	94.017			
18	.252	1.049	95.066			
19	.242	1.008	96.074			
20	.223	.930	97.004			
21	.204	.851	97.855			
22	.187	.780	98.635			
23	.178	.744	99.379			
24	.149	.621	100.000			

Nationality = Singapore

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.945
Bartlett's Test of Sphericity	Approx. Chi-Square	5031.662
	df	276
	Sig.	.000

a. Nationality = Singapore

Communalities[a]

	Initial	Extraction
Appreciation of beauty and excellence	1.000	.568
Bravery	1.000	.612
Love	1.000	.701
Prudence	1.000	.732
Teamwork	1.000	.712
Creativity	1.000	.683
Curiosity	1.000	.575
Fairness	1.000	.667
Forgiveness	1.000	.460
Gratitude	1.000	.699
Authenticity	1.000	.635
Hope	1.000	.751
Humour	1.000	.627
Persistence	1.000	.685
Open-mindedness	1.000	.689
Kindness	1.000	.650
Leadership	1.000	.631
Love of learning	1.000	.605
Modesty	1.000	.616
Perspective	1.000	.729
Self-regulation	1.000	.693
Social intelligence	1.000	.684
Spirituality	1.000	.628
Zest	1.000	.761

Extraction Method: Principal Component Analysis.

a. Nationality = Singapore

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.917	49.655	49.655	11.917	49.655	49.655
2	1.383	5.761	55.416	1.383	5.761	55.416
3	1.270	5.292	60.708	1.270	5.292	60.708
4	1.224	5.101	65.808	1.224	5.101	65.808
5	.835	3.480	69.289			
6	.750	3.123	72.412			
7	.652	2.718	75.130			
8	.596	2.483	77.613			
9	.560	2.334	79.947			
10	.519	2.162	82.109			
11	.495	2.060	84.169			
12	.443	1.844	86.013			
13	.421	1.755	87.768			
14	.370	1.542	89.310			
15	.354	1.473	90.784			
16	.335	1.394	92.178			
17	.329	1.371	93.549			
18	.292	1.215	94.764			
19	.279	1.163	95.927			
20	.252	1.049	96.976			
21	.228	.951	97.926			
22	.201	.838	98.765			
23	.156	.649	99.413			
24	.141	.587	100.000			

Total Variance Explained[a]

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.270	51.125	51.125	11.943	49.761	49.761
2	1.607	6.697	57.822	1.198	4.993	54.755
3	1.143	4.761	62.584	.755	3.147	57.902
4	1.096	4.567	67.150	.668	2.785	60.686
5	1.060	4.416	71.567	.617	2.571	63.257
6	.821	3.419	74.986			
7	.655	2.731	77.717			
8	.600	2.500	80.217			
9	.559	2.331	82.548			
10	.452	1.882	84.430			
11	.421	1.755	86.184			
12	.364	1.518	87.703			
13	.341	1.422	89.125			
14	.319	1.329	90.454			
15	.306	1.276	91.730			
16	.279	1.163	92.892			
17	.270	1.125	94.017			
18	.252	1.049	95.066			
19	.242	1.008	96.074			
20	.223	.930	97.004			
21	.204	.851	97.855			
22	.187	.780	98.635			
23	.178	.744	99.379			
24	.149	.621	100.000			

Factor Matrix[a,b]

	Factor				
	1	2	3	4	5
Appreciation of beauty and excellence	.545	-.117		.273	.265
Bravery	.691	-.108		.242	-.101
Love	.689	-.110	-.130	-.156	.261
Prudence	.701	.178	.153	-.212	-.193
Teamwork	.824	.177	-.130		
Creativity	.654	-.329	.163	.161	
Curiosity	.511	-.291	.377	.229	
Fairness	.736	.360			
Forgiveness	.522	.284			.342
Gratitude	.840				.140
Authenticity	.773	.216			
Hope	.814	-.222		-.238	
Humour	.543	-.289	-.403	.153	
Persistence	.838			-.206	-.114
Open-mindedness	.810		.198		-.225
Kindness	.784	.197		.295	.180
Leadership	.664	-.272	-.212		-.162
Love of learning	.707		.430		
Modesty	.403	.457		.301	
Perspective	.836	-.190	-.169		-.188
Self-regulation	.693	.291		-.131	
Social intelligence	.852	.102	-.141		
Spirituality	.430				.251
Zest	.770	-.226	-.140	-.242	.161

Extraction Method: Principal Axis Factoring.

a. Nationality = Australia

b. 5 factors extracted. 8 iterations required.

Pattern Matrix[a,b]

	Factor				
	1	2	3	4	5
Appreciation of beauty and excellence	-.373	.101	.466	.395	.178
Bravery		.455		.292	.209
Love		.221	.647		-.119
Prudence	.907	-.141			
Teamwork	.410	.233	.216	-.115	.246
Creativity		.282		.557	
Curiosity			-.102	.786	
Fairness	.626	-.112	.102		.359
Forgiveness		-.256	.715	-.113	.259
Gratitude	.200	.202	.440		
Authenticity	.556				.250
Hope	.424	.127	.380	.166	-.271
Humour	-.244	.971			
Persistence	.698	.139			
Open-mindedness	.700		-.192	.311	.136
Kindness		.121	.405	.163	.486
Leadership	.164	.730	-.117		
Love of learning	456	-.359	.242	.564	
Modesty	.174				.654
Perspective	.260	.697	-.138	.111	
Self-regulation	.700			-.167	.216
Social intelligence	.445	.346	104		.193
Spirituality		-.120	.523		
Zest	.214	.360	.520		-.260

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

a. Nationality = Australia

b. Rotation converged in 9 iterations.

In Promax rotations--interpret the pattern matrix

Structure Matrix[a]

	Factor				
	1	2	3	4	5
Appreciation of beauty and excellence	.377	.482	.570	.564	.363
Bravery	.579	.683	.540	.613	.446
Love	.608	.637	.750	.444	.237
Prudence	.783	.501	.545	.469	.372
Teamwork	.783	.708	.731	.487	.571
Creativity	.542	.631	.546	.733	.223
Curiosity	.423	.430	.385	.734	.184
Fairness	.750	.522	.618	.432	.623
Forgiveness	.462	.333	.615	.272	.459
Gratitude	.755	.736	.810	.599	.452
Authenticity	.767	.616	.649	.486	.550
Hope	.787	.716	.780	.656	.173
Humour	.403	.728	.450	.371	.237
Persistence	.858	.712	.708	.604	.326
Open-mindedness	.822	.642	.604	.680	.466
Kindness	.639	.645	.741	.583	.717
Leadership	.592	.755	.524	.501	.216
Love of learning	.692	.479	.638	.743	.264
Modesty	.362	.262	.287	.204	.677
Perspective	.754	.874	.654	.640	.396
Self-regulation	.734	.522	.578	.359	.500
Social intelligence	.812	.767	.726	.529	.538
Spirituality	.369	.321	.495	.337	.211
Zest	.710	.749	.788	.519	.165

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

a. Nationality = Australia

Factor Correlation Matrix[a]

Factor	1	2	3	4	5
1	1.000	.731	.761	.614	.443
2	.731	1.000	.728	.630	.372
3	.761	.728	1.000	.606	.422
4	.614	.630	.606	1.000	.295
5	.443	.372	.422	.295	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

a. Nationality = Australia

Total Variance Explained[a]

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.917	49.655	49.655	11.531	48.047	48.047
2	1.383	5.761	55.416	.970	4.043	52.090
3	1.270	5.292	60.708	.832	3.468	55.558
4	1.224	5.101	65.808	.763	3.178	58.736
5	.835	3.480	69.289			
6	.750	3.123	72.412			
7	.652	2.718	75.130			
8	.596	2.483	77.613			
9	.560	2.334	79.947			
10	.519	2.162	82.109			
11	.495	2.060	84.169			
12	.443	1.844	86.013			
13	.421	1.755	87.768			
14	.370	1.542	89.310			
15	.354	1.473	90.784			
16	.335	1.394	92.178			
17	.329	1.371	93.549			
18	.292	1.215	94.764			
19	.279	1.163	95.927			
20	.252	1.049	96.976			
21	.228	.951	97.926			
22	.201	.838	98.765			
23	.156	.649	99.413			
24	.141	.587	100.000			

Pattern Matrix[a,b]

	Factor			
	1	2	3	4
Appreciation of beauty and excellence	.207	-.255	.318	.456
Bravery	.447			.347
Love			.770	
Prudence	-.166	.924	.131	-.164
Teamwork	.281	.183		.494
Creativity	.797		-.118	
Curiosity	.563		.149	.149
Fairness	.103	.290	-.122	.559
Forgiveness			.335	.362
Gratitude		.115	.556	.217
Authenticity		.685	-.135	.174
Hope	.263	.302	.492	-.152
Humour	.812	-.343		
Persistence	.300	.571		
Open-mindedness	.250	.433	.122	.127
Kindness	.308		.162	.471
Leadership	.722	.214	-.239	
Love of learning	.363		.313	
Modesty	-.103			.669
Perspective	.611	.316		
Self-regulation	-.325	.663	.159	.336
Social intelligence	.189	.395	.280	
Spirituality	-.185		.677	.255
Zest	.736		.363	-.251

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

a. Nationality = Singapore

b. Rotation converged in 10 iterations.

In Promax rotations--interpret the pattern matrix

Structure Matrix[a]

	Factor			
	1	2	3	4
Appreciation of beauty and excellence	.533	.372	.538	.594
Bravery	.694	.590	.498	.656
Love	.530	.501	.767	.348
Prudence	.489	.786	.509	.365
Teamwork	.709	.675	.545	.772
Creativity	.795	.609	.509	.516
Curiosity	.707	.516	.573	.534
Fairness	.579	.630	.419	.739
Forgiveness	.350	.303	.431	.448
Gratitude	.677	.645	.787	.617
Authenticity	.505	.705	.381	.522
Hope	.729	.706	.787	.452
Humour	.626	.302	.408	.394
Persistence	.706	.785	.544	.558
Open-mindedness	.727	.767	.633	.612
Kindness	.686	.569	.593	.721
Leadership	.726	.602	.415	.490
Love of learning	.707	.606	.672	.538
Modesty	.362	.397	.310	.642
Perspective	.819	.734	.632	.515
Self-regulation	.475	.734	.519	.619
Social intelligence	.711	.747	.693	.571
Spirituality	.439	.432	.670	.478
Zest	.797	.555	.718	.369

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

a. Nationality = Singapore

Factor Correlation Matrix[a]

Factor	1	2	3	4
1	1.000	.721	.700	.629
2	.721	1.000	.626	.613
3	.700	.626	1.000	.515
4	.629	.613	.515	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

a. Nationality = Singapore

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SPLIT FILE OFF.

DATASET ACTIVATE DataSet8.

SORT CASES  BY Nationality.
SPLIT FILE LAYERED BY Nationality.


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11 VIA12 VIA13 VIA14
    VIA15 VIA16 VIA17 VIA18 VIA19 VIA20 VIA21 VIA22 VIA23 VIA24
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engths (VIA-Child) (15 Dec 2015)_NO DUPLICATES_NO unknown or 11yo Australia
AGES.sav
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Descriptive Statistics

Nationality		N	Minimum	Maximum	Mean	Std. Deviation
Australia	Appreciation of beauty and excellence	354	1.13	5.00	3.6753	.77086
	Bravery	354	2.00	5.00	3.7887	.66854
	Love	354	1.50	4.30	3.3624	.53344
	Prudence	354	1.00	5.00	3.3252	.68010
	Teamwork	354	1.13	5.00	3.9352	.68192
	Creativity	354	1.88	5.00	3.7496	.70565
	Curiosity	354	1.88	5.00	3.6763	.65284
	Fairness	354	1.00	5.00	3.6215	.64363
	Forgiveness	354	1.43	4.43	3.2860	.62659
	Gratitude	354	1.25	5.00	4.0634	.65573
	Authenticity	354	1.25	5.00	3.6837	.66504
	Hope	354	1.13	5.00	3.7257	.72759
	Humour	354	1.78	5.00	3.9076	.73784
	Persistence	354	1.00	5.00	3.5857	.76401
	Open-mindedness	354	1.00	5.00	3.5248	.69233
	Kindness	354	1.44	4.56	3.6311	.53741
	Leadership	354	1.00	5.00	3.3515	.74526
	Love of learning	354	1.38	5.00	3.4806	.66716
	Modesty	354	1.78	5.00	3.4531	.62452
	Perspective	354	1.75	5.00	3.5662	.65184
	Self-regulation	354	1.11	5.00	3.4151	.67542

Descriptive Statistics

Nationality		N	Minimum	Maximum	Mean	Std. Deviation
	Social intelligence	354	1.38	5.00	3.6245	.66647
	Spirituality	354	1.00	5.00	3.2034	.94496
	Zest	354	1.25	5.00	3.6637	.76076
	Valid N (listwise)	354				
Singapore	Appreciation of beauty and excellence	309	1.00	5.00	3.7837	.68350
	Bravery	309	1.38	5.00	3.4591	.63664
	Love	309	1.20	4.20	2.9903	.56197
	Prudence	309	1.38	5.00	3.1422	.56522
	Teamwork	309	1.50	5.00	3.6106	.64021
	Creativity	309	1.38	5.00	3.4906	.69525
	Curiosity	309	1.38	5.00	3.5297	.62174
	Fairness	309	1.67	5.00	3.5035	.59028
	Forgiveness	309	1.57	4.43	3.3301	.59885
	Gratitude	309	1.25	5.00	3.7175	.65180
	Authenticity	309	1.38	5.00	3.3867	.58075
	Hope	309	1.50	5.00	3.4894	.67958
	Humour	309	1.33	5.00	3.5117	.72371
	Persistence	309	1.00	4.67	3.3810	.59174
	Open-mindedness	309	1.25	5.00	3.4133	.58075
	Kindness	309	1.89	4.67	3.5354	.50866
	Leadership	309	1.25	5.00	3.2371	.70341
	Love of learning	309	1.38	5.00	3.5113	.62908
	Modesty	309	1.78	5.00	3.4858	.54193
	Perspective	309	1.25	5.00	3.2977	.61369
	Self-regulation	309	1.44	4.89	3.3116	.58507
	Social intelligence	309	1.75	5.00	3.4231	.59026
	Spirituality	309	1.38	5.00	3.7522	.76694
	Zest	309	1.13	5.00	3.4237	.73879
	Valid N (listwise)	309				

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GLM VIA1 VIA2 VIA3 VIA4 VIA5 VIA6 VIA7 VIA8 VIA9 VIA10 VIA11 VIA12 VIA13 VI
4 VIA15 VIA16 VIA17
    VIA18 VIA19 VIA20 VIA21 VIA22 VIA23 VIA24 BY Nationality WITH Gender Ag
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  /INTERCEPT=INCLUDE
  /EMMEANS=TABLES(Nationality) WITH(Gender=MEAN Age=MEAN)
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General Linear Model

```
FILTER OFF.
USE ALL.
EXECUTE.
SORT CASES  BY Nationality.
SPLIT FILE SEPARATE BY Nationality


DESCRIPTIVES VARIABLES=PWI AHI
  /STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
```

Descriptives

Nationality = Australia

Descriptive Statistics[a]

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Score for PWI	369	40.00	100.00	80.8333	11.85997	-.754
Score for AHI	367	1.25	5.00	3.1956	.66993	-.120
Valid N (listwise)	367					

Descriptive Statistics[a]

	Skewness	Kurtosis	
	Std. Error	Statistic	Std. Error
Score for PWI	.127	.359	.253
Score for AHI	.127	-.105	.254
Valid N (listwise)			

a. Nationality = Australia

Nationality = Singapore

Descriptive Statistics[a]

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Score for PWI	329	.00	100.00	68.9628	15.37676	-.627
Score for AHI	330	1.13	4.75	2.9075	.64358	.144
Valid N (listwise)	323					

Descriptive Statistics[a]

	Skewness	Kurtosis	
	Std. Error	Statistic	Std. Error
Score for PWI	.134	1.059	.268
Score for AHI	.134	.071	.268
Valid N (listwise)			

Nationality = Australia

Descriptive Statistics[a]

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Appreciation of beauty and excellence	354	1.13	5.00	3.6753	.77086	-.426	.130	.112	.259
Bravery	354	2.00	5.00	3.7887	.66854	-.234	.130	-.406	.259
Love	354	1.50	4.30	3.3624	.53344	-.618	.130	-.036	.259
Prudence	354	1.00	5.00	3.3252	.68010	-.461	.130	.598	.259
Teamwork	354	1.13	5.00	3.9352	.68192	-.716	.130	.989	.259
Creativity	354	1.88	5.00	3.7496	.70565	-.254	.130	-.559	.259
Curiosity	354	1.88	5.00	3.6763	.65284	-.095	.130	-.335	.259
Fairness	354	1.00	5.00	3.6215	.64363	-.314	.130	.319	.259
Forgiveness	354	1.43	4.43	3.2860	.62659	-.529	.130	.116	.259
Gratitude	354	1.25	5.00	4.0634	.65573	-.806	.130	.994	.259
Authenticity	354	1.25	5.00	3.6837	.66504	-.542	.130	.554	.259
Hope	354	1.13	5.00	3.7257	.72759	-.431	.130	.165	.259
Humour	354	1.78	5.00	3.9076	.73784	-.600	.130	-.196	.259
Persistence	354	1.00	5.00	3.5857	.76401	-.444	.130	.093	.259
Open-mindedness	354	1.00	5.00	3.5248	.69233	-.380	.130	.334	.259
Kindness	354	1.44	4.56	3.6311	.53741	-.595	.130	.636	.259
Leadership	354	1.00	5.00	3.3515	.74526	-.191	.130	-.100	.259
Love of learning	354	1.38	5.00	3.4806	.66716	-.435	.130	.063	.259
Modesty	354	1.78	5.00	3.4531	.62452	.056	.130	-.345	.259
Perspective	354	1.75	5.00	3.5662	.65184	-.138	.130	-.230	.259
Self-regulation	354	1.11	5.00	3.4151	.67542	-.279	.130	.108	.259
Social intelligence	354	1.38	5.00	3.6245	.66647	-.442	.130	.182	.259
Spirituality	354	1.00	5.00	3.2034	.94496	.138	.130	-.766	.259
Zest	354	1.25	5.00	3.6637	.76076	-.599	.130	.130	.259
Valid N (listwise)	354								

a. Nationality = Australia

Nationality = Singapore

Descriptive Statistics[a]

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Appreciation of beauty and excellence	309	1.00	5.00	3.7837	.68350	-.588	.139	.498	.276
Bravery	309	1.38	5.00	3.4591	.63664	-.077	.139	.166	.276
Love	309	1.20	4.20	2.9903	.56197	-.210	.139	-.332	.276
Prudence	309	1.38	5.00	3.1422	.56522	-.088	.139	.619	.276
Teamwork	309	1.50	5.00	3.6106	.64021	-.354	.139	.550	.276
Creativity	309	1.38	5.00	3.4906	.69525	-.261	.139	.397	.276
Curiosity	309	1.38	5.00	3.5297	.62174	-.129	.139	.236	.276
Fairness	309	1.67	5.00	3.5035	.59028	.259	.139	.027	.276
Forgiveness	309	1.57	4.43	3.3301	.59885	-.373	.139	-.286	.276
Gratitude	309	1.25	5.00	3.7175	.65180	-.285	.139	.215	.276
Authenticity	309	1.38	5.00	3.3867	.58075	-.155	.139	.616	.276
Hope	309	1.50	5.00	3.4894	.67958	-.323	.139	.025	.276
Humour	309	1.33	5.00	3.5117	.72371	-.295	.139	.066	.276
Persistence	309	1.00	4.67	3.3810	.59174	-.384	.139	.518	.276
Open-mindedness	309	1.25	5.00	3.4133	.58075	-.104	.139	.808	.276
Kindness	309	1.89	4.67	3.5354	.50866	-.335	.139	.167	.276
Leadership	309	1.25	5.00	3.2371	.70341	-.196	.139	-.087	.276
Love of learning	309	1.38	5.00	3.5113	.62908	-.408	.139	.509	.276
Modesty	309	1.78	5.00	3.4858	.54193	.142	.139	.235	.276
Perspective	309	1.25	5.00	3.2977	.61369	-.356	.139	1.177	.276
Self-regulation	309	1.44	4.89	3.3116	.58507	-.255	.139	.501	.276
Social intelligence	309	1.75	5.00	3.4231	.59026	-.012	.139	.245	.276
Spirituality	309	1.38	5.00	3.7522	.76694	-.593	.139	-.161	.276
Zest	309	1.13	5.00	3.4237	.73879	-.336	.139	.258	.276
Valid N (listwise)	309								

a. Nationality = Singapore

Estimated Marginal Means

Nationality

Dependent Variable	Nationality	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Appreciation of beauty and excellence	Australia	3.655[a]	.038	3.580	3.730
	Singapore	3.818[a]	.043	3.734	3.902
Bravery	Australia	3.792[a]	.037	3.720	3.864
	Singapore	3.460[a]	.041	3.379	3.541
Love	Australia	3.366[a]	.031	3.305	3.426
	Singapore	2.987[a]	.034	2.919	3.055
Prudence	Australia	3.314[a]	.035	3.245	3.384
	Singapore	3.157[a]	.040	3.079	3.235
Teamwork	Australia	3.948[a]	.037	3.876	4.020
	Singapore	3.605[a]	.041	3.524	3.687
Creativity	Australia	3.744[a]	.039	3.666	3.821
	Singapore	3.487[a]	.044	3.401	3.574
Curiosity	Australia	3.667[a]	.036	3.597	3.737
	Singapore	3.540[a]	.040	3.461	3.618
Fairness	Australia	3.621[a]	.034	3.553	3.688
	Singapore	3.513[a]	.039	3.437	3.589
Forgiveness	Australia	3.282[a]	.034	3.215	3.349
	Singapore	3.325[a]	.038	3.250	3.400
Gratitude	Australia	4.060[a]	.036	3.988	4.131
	Singapore	3.729[a]	.041	3.649	3.809
Authenticity	Australia	3.685[a]	.035	3.617	3.754
	Singapore	3.399[a]	.039	3.322	3.476
Hope	Australia	3.723[a]	.039	3.646	3.801
	Singapore	3.493[a]	.044	3.406	3.580
Humour	Australia	3.909[a]	.041	3.829	3.989
	Singapore	3.505[a]	.046	3.415	3.595
Persistence	Australia	3.575[a]	.039	3.499	3.651
	Singapore	3.397[a]	.043	3.311	3.482
Open-mindedness	Australia	3.519[a]	.036	3.448	3.591
	Singapore	3.425[a]	.041	3.345	3.505
Kindness	Australia	3.620[a]	.028	3.564	3.676
	Singapore	3.555[a]	.032	3.492	3.618
Leadership	Australia	3.368[a]	.041	3.288	3.449
	Singapore	3.207[a]	.046	3.117	3.296
Love of learning	Australia	3.473[a]	.036	3.401	3.544
	Singapore	3.514[a]	.041	3.433	3.594
Modesty	Australia	3.463[a]	.032	3.399	3.526
	Singapore	3.475[a]	.036	3.404	3.546
Perspective	Australia	3.558[a]	.036	3.488	3.628
	Singapore	3.305[a]	.040	3.227	3.384
Self-regulation	Australia	3.397[a]	.035	3.328	3.467
	Singapore	3.340[a]	.040	3.262	3.419

Nationality

Dependent Variable	Nationality	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Social intelligence	Australia	3.617[a]	.036	3.547	3.687
	Singapore	3.437[a]	.040	3.359	3.516
Spirituality	Australia	3.193[a]	.049	3.098	3.289
	Singapore	3.776[a]	.055	3.669	3.883
Zest	Australia	3.662[a]	.042	3.579	3.745
	Singapore	3.411[a]	.047	3.318	3.504

a. Covariates appearing in the model are evaluated at the following values: Gender = .49, Age = 12.

Between-Subjects Factors

		Value Label	N
Nationality	0	Australia	354
	1	Singapore	287

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.124	3.626[b]	24.000	614.000	.000
	Wilks' Lambda	.876	3.626[b]	24.000	614.000	.000
	Hotelling's Trace	.142	3.626[b]	24.000	614.000	.000
	Roy's Largest Root	.142	3.626[b]	24.000	614.000	.000
Gender	Pillai's Trace	.278	9.826[b]	24.000	614.000	.000
	Wilks' Lambda	.722	9.826[b]	24.000	614.000	.000
	Hotelling's Trace	.384	9.826[b]	24.000	614.000	.000
	Roy's Largest Root	.384	9.826[b]	24.000	614.000	.000
Age	Pillai's Trace	.047	1.248[b]	24.000	614.000	.193
	Wilks' Lambda	.953	1.248[b]	24.000	614.000	.193
	Hotelling's Trace	.049	1.248[b]	24.000	614.000	.193
	Roy's Largest Root	.049	1.248[b]	24.000	614.000	.193
Nationality	Pillai's Trace	.340	13.184[b]	24.000	614.000	.000
	Wilks' Lambda	.660	13.184[b]	24.000	614.000	.000
	Hotelling's Trace	.515	13.184[b]	24.000	614.000	.000
	Roy's Largest Root	.515	13.184[b]	24.000	614.000	.000

Multivariate Tests[a]

Effect		Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Intercept	Pillai's Trace	.124	87.026	1.000
	Wilks' Lambda	.124	87.026	1.000
	Hotelling's Trace	.124	87.026	1.000
	Roy's Largest Root	.124	87.026	1.000
Gender	Pillai's Trace	.278	235.828	1.000
	Wilks' Lambda	.278	235.828	1.000
	Hotelling's Trace	.278	235.828	1.000
	Roy's Largest Root	.278	235.828	1.000
Age	Pillai's Trace	.047	29.945	.915
	Wilks' Lambda	.047	29.945	.915
	Hotelling's Trace	.047	29.945	.915
	Roy's Largest Root	.047	29.945	.915
Nationality	Pillai's Trace	.340	316.410	1.000
	Wilks' Lambda	.340	316.410	1.000
	Hotelling's Trace	.340	316.410	1.000
	Roy's Largest Root	.340	316.410	1.000

a. Design: Intercept + Gender + Age + Nationality

b. Exact statistic

c. Computed using alpha =

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
Corrected Model	Appreciation of beauty and excellence	48.441[a]	3	16.147	34.191
	Bravery	17.999[b]	3	6.000	13.872
	Love	22.906[c]	3	7.635	25.092
	Prudence	5.798[d]	3	1.933	4.756
	Teamwork	21.978[e]	3	7.326	16.727
	Creativity	11.689[f]	3	3.896	7.785
	Curiosity	3.827[g]	3	1.276	3.100
	Fairness	8.029[h]	3	2.676	7.014
	Forgiveness	3.063[i]	3	1.021	2.727
	Gratitude	20.688[j]	3	6.896	16.101
	Authenticity	15.423[k]	3	5.141	13.046
	Hope	10.662[l]	3	3.554	7.065
	Humour	29.261[m]	3	9.754	18.191
	Persistence	7.965[n]	3	2.655	5.483
	Open-mindedness	1.915[o]	3	.638	1.499
	Kindness	10.631[p]	3	3.544	13.526
	Leadership	3.935[q]	3	1.312	2.444
	Love of learning	.388[r]	3	.129	.302
	Modesty	9.630[s]	3	3.210	9.633
	Perspective	15.354[t]	3	5.118	12.524
	Self-regulation	4.024[u]	3	1.341	3.303
	Social intelligence	7.554[v]	3	2.518	6.169
	Spirituality	51.100[w]	3	17.033	22.262
	Zest	10.225[x]	3	3.408	5.928
Intercept	Appreciation of beauty and excellence	9.453	1	9.453	20.016
	Bravery	8.080	1	8.080	18.681
	Love	6.079	1	6.079	19.979
	Prudence	12.081	1	12.081	29.727
	Teamwork	4.617	1	4.617	10.542
	Creativity	13.540	1	13.540	27.053
	Curiosity	14.746	1	14.746	35.835
	Fairness	7.420	1	7.420	19.444
	Forgiveness	8.124	1	8.124	21.699
	Gratitude	11.557	1	11.557	26.983
	Authenticity	7.628	1	7.628	19.356
	Hope	13.884	1	13.884	27.599
	Humour	8.057	1	8.057	15.027
	Persistence	12.539	1	12.539	25.893

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[Y]
Corrected Model	Appreciation of beauty and excellence	.000	.139	102.572	1.000
	Bravery	.000	.061	41.615	1.000
	Love	.000	.106	75.277	1.000
	Prudence	.003	.022	14.268	.900
	Teamwork	.000	.073	50.181	1.000
	Creativity	.000	.035	23.355	.989
	Curiosity	.026	.014	9.299	.724
	Fairness	.000	.032	21.042	.980
	Forgiveness	.043	.013	8.180	.662
	Gratitude	.000	.070	48.303	1.000
	Authenticity	.000	.058	39.139	1.000
	Hope	.000	.032	21.195	.981
	Humour	.000	.079	54.573	1.000
	Persistence	.001	.025	16.448	.939
	Open-mindedness	.214	.007	4.496	.397
	Kindness	.000	.060	40.578	1.000
	Leadership	.063	.011	7.332	.609
	Love of learning	.824	.001	.905	.109
	Modesty	.000	.043	28.898	.998
	Perspective	.000	.056	37.572	1.000
	Self-regulation	.020	.015	9.909	.754
	Social intelligence	.000	.028	18.508	.963
	Spirituality	.000	.095	66.787	1.000
	Zest	.001	.027	17.784	.956
Intercept	Appreciation of beauty and excellence	.000	.030	20.016	.994
	Bravery	.000	.028	18.681	.991
	Love	.000	.030	19.979	.994
	Prudence	.000	.045	29.727	1.000
	Teamwork	.001	.016	10.542	.900
	Creativity	.000	.041	27.053	.999
	Curiosity	.000	.053	35.835	1.000
	Fairness	.000	.030	19.444	.993
	Forgiveness	.000	.033	21.699	.996
	Gratitude	.000	.041	26.983	.999
	Authenticity	.000	.029	19.356	.993
	Hope	.000	.042	27.599	.999
	Humour	.000	.023	15.027	.972
	Persistence	.000	.039	25.893	.999

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[y]
	Hope				
	Humour				
	Persistence				
	Open-mindedness				
	Kindness				
	Leadership				
	Love of learning				
	Modesty				
	Perspective				
	Self-regulation				
	Social intelligence				
	Spirituality				
	Zest				
Corrected Total	Appreciation of beauty and excellence				
	Bravery				
	Love				
	Prudence				
	Teamwork				
	Creativity				
	Curiosity				
	Fairness				
	Forgiveness				
	Gratitude				
	Authenticity				
	Hope				
	Humour				
	Persistence				
	Open-mindedness				
	Kindness				
	Leadership				
	Love of learning				
	Modesty				
	Perspective				
	Self-regulation				
	Social intelligence				
	Spirituality				
	Zest				

a. R Squared = .139 (Adjusted R Squared = .135)

b. R Squared = .061 (Adjusted R Squared = .057)

c. R Squared = .106 (Adjusted R Squared = .101)

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
	Hope	8732.267	641		
	Humour	9280.622	641		
	Persistence	8147.719	641		
	Open-mindedness	8023.705	641		
	Kindness	8443.531	641		
	Leadership	7309.447	641		
	Love of learning	8085.109	641		
	Modesty	7931.669	641		
	Perspective	7882.410	641		
	Self-regulation	7550.205	641		
	Social intelligence	8284.528	641		
	Spirituality	8186.487	641		
	Zest	8454.743	641		
Corrected Total	Appreciation of beauty and excellence	349.274	640		
	Bravery	293.511	640		
	Love	216.740	640		
	Prudence	264.666	640		
	Teamwork	300.975	640		
	Creativity	330.511	640		
	Curiosity	265.957	640		
	Fairness	251.107	640		
	Forgiveness	241.555	640		
	Gratitude	293.513	640		
	Authenticity	266.441	640		
	Hope	331.115	640		
	Humour	370.807	640		
	Persistence	316.455	640		
	Open-mindedness	273.183	640		
	Kindness	177.520	640		
	Leadership	345.777	640		
	Love of learning	273.266	640		
	Modesty	221.917	640		
	Perspective	275.660	640		
	Self-regulation	262.679	640		
	Social intelligence	267.553	640		
	Spirituality	538.481	640		
	Zest	376.469	640		

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
	Open-mindedness	11.760	1	11.760	27.615
	Kindness	10.393	1	10.393	39.668
	Leadership	3.374	1	3.374	6.287
	Love of learning	12.879	1	12.879	30.064
	Modesty	3.686	1	3.686	11.061
	Perspective	10.120	1	10.120	24.765
	Self-regulation	14.770	1	14.770	36.375
	Social intelligence	11.568	1	11.568	28.342
	Spirituality	12.413	1	12.413	16.224
	Zest	10.913	1	10.913	18.980
Gender	Appreciation of beauty and excellence	46.167	1	46.167	97.757
	Bravery	1.162	1	1.162	2.687
	Love	.916	1	.916	3.012
	Prudence	.248	1	.248	.611
	Teamwork	5.122	1	5.122	11.695
	Creativity	.038	1	.038	.075
	Curiosity	.004	1	.004	.009
	Fairness	6.027	1	6.027	15.795
	Forgiveness	2.879	1	2.879	7.690
	Gratitude	2.481	1	2.481	5.794
	Authenticity	2.597	1	2.597	6.591
	Hope	1.753	1	1.753	3.484
	Humour	3.700	1	3.700	6.901
	Persistence	1.279	1	1.279	2.641
	Open-mindedness	.042	1	.042	.098
	Kindness	9.312	1	9.312	35.544
	Leadership	.265	1	.265	.493
	Love of learning	.103	1	.103	.241
	Modesty	8.460	1	8.460	25.387
	Perspective	3.653	1	3.653	8.939
	Self-regulation	1.735	1	1.735	4.273
	Social intelligence	1.340	1	1.340	3.283
	Spirituality	1.157	1	1.157	1.512
	Zest	.004	1	.004	.006
Age	Appreciation of beauty and excellence	.006	1	.006	.012
	Bravery	.170	1	.170	.392
	Love	.148	1	.148	.486
	Prudence	.313	1	.313	.770

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[y]
	Open-mindedness	.000	.042	27.615	.999
	Kindness	.000	.059	39.668	1.000
	Leadership	.012	.010	6.287	.707
	Love of learning	.000	.045	30.064	1.000
	Modesty	.001	.017	11.061	.913
	Perspective	.000	.037	24.765	.999
	Self-regulation	.000	.054	36.375	1.000
	Social intelligence	.000	.043	28.342	1.000
	Spirituality	.000	.025	16.224	.980
	Zest	.000	.029	18.980	.992
Gender	Appreciation of beauty and excellence	.000	.133	97.757	1.000
	Bravery	.102	.004	2.687	.373
	Love	.083	.005	3.012	.410
	Prudence	.435	.001	.611	.122
	Teamwork	.001	.018	11.695	.927
	Creativity	.784	.000	.075	.059
	Curiosity	.924	.000	.009	.051
	Fairness	.000	.024	15.795	.978
	Forgiveness	.006	.012	7.690	.791
	Gratitude	.016	.009	5.794	.671
	Authenticity	.010	.010	6.591	.727
	Hope	.062	.005	3.484	.462
	Humour	.009	.011	6.901	.746
	Persistence	.105	.004	2.641	.368
	Open-mindedness	.755	.000	.098	.061
	Kindness	.000	.053	35.544	1.000
	Leadership	.483	.001	.493	.108
	Love of learning	.623	.000	.241	.078
	Modesty	.000	.038	25.387	.999
	Perspective	.003	.014	8.939	.847
	Self-regulation	.039	.007	4.273	.541
	Social intelligence	.070	.005	3.283	.440
	Spirituality	.219	.002	1.512	.233
	Zest	.936	.000	.006	.051
Age	Appreciation of beauty and excellence	.913	.000	.012	.051
	Bravery	.531	.001	.392	.096
	Love	.486	.001	.486	.107
	Prudence	.380	.001	.770	.142

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
	Teamwork	1.449	1	1.449	3.307
	Creativity	.155	1	.155	.309
	Curiosity	.330	1	.330	.803
	Fairness	.183	1	.183	.479
	Forgiveness	.008	1	.008	.021
	Gratitude	.006	1	.006	.015
	Authenticity	.158	1	.158	.400
	Hope	.165	1	.165	.328
	Humour	.211	1	.211	.394
	Persistence	.176	1	.176	.364
	Open-mindedness	.082	1	.082	.193
	Kindness	.006	1	.006	.023
	Leadership	1.285	1	1.285	2.395
	Love of learning	.187	1	.187	.436
	Modesty	1.276	1	1.276	3.829
	Perspective	.018	1	.018	.045
	Self-regulation	.700	1	.700	1.724
	Social intelligence	.059	1	.059	.144
	Spirituality	.161	1	.161	.210
	Zest	.008	1	.008	.015
Nationality	Appreciation of beauty and excellence	3.460	1	3.460	7.326
	Bravery	14.381	1	14.381	33.249
	Love	18.706	1	18.706	61.475
	Prudence	3.226	1	3.226	7.938
	Teamwork	15.281	1	15.281	34.889
	Creativity	8.564	1	8.564	17.111
	Curiosity	2.098	1	2.098	5.098
	Fairness	1.523	1	1.523	3.990
	Forgiveness	.237	1	.237	.633
	Gratitude	14.262	1	14.262	33.298
	Authenticity	10.703	1	10.703	27.161
	Hope	6.885	1	6.885	13.687
	Humour	21.257	1	21.257	39.645
	Persistence	4.160	1	4.160	8.591
	Open-mindedness	1.157	1	1.157	2.716
	Kindness	.558	1	.558	2.131
	Leadership	3.414	1	3.414	6.362
	Love of learning	.220	1	.220	.515
	Modesty	.020	1	.020	.060
	Perspective	8.329	1	8.329	20.382

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[y]
	Teamwork	.069	.005	3.307	.443
	Creativity	.578	.000	.309	.086
	Curiosity	.371	.001	.803	.146
	Fairness	.489	.001	.479	.106
	Forgiveness	.886	.000	.021	.052
	Gratitude	.904	.000	.015	.052
	Authenticity	.527	.001	.400	.097
	Hope	.567	.001	.328	.088
	Humour	.531	.001	.394	.096
	Persistence	.547	.001	.364	.092
	Open-mindedness	.661	.000	.193	.072
	Kindness	.881	.000	.023	.053
	Leadership	.122	.004	2.395	.339
	Love of learning	.509	.001	.436	.101
	Modesty	.051	.006	3.829	.498
	Perspective	.832	.000	.045	.055
	Self-regulation	.190	.003	1.724	.259
	Social intelligence	.704	.000	.144	.067
	Spirituality	.647	.000	.210	.074
	Zest	.904	.000	.015	.052
Nationality	Appreciation of beauty and excellence	.007	.011	7.326	.771
	Bravery	.000	.050	33.249	1.000
	Love	.000	.088	61.475	1.000
	Prudence	.005	.012	7.938	.803
	Teamwork	.000	.052	34.889	1.000
	Creativity	.000	.026	17.111	.985
	Curiosity	.024	.008	5.098	.616
	Fairness	.046	.006	3.990	.514
	Forgiveness	.427	.001	.633	.125
	Gratitude	.000	.050	33.298	1.000
	Authenticity	.000	.041	27.161	.999
	Hope	.000	.021	13.687	.959
	Humour	.000	.059	39.645	1.000
	Persistence	.003	.013	8.591	.833
	Open-mindedness	.100	.004	2.716	.377
	Kindness	.145	.003	2.131	.308
	Leadership	.012	.010	6.362	.712
	Love of learning	.473	.001	.515	.111
	Modesty	.807	.000	.060	.057
	Perspective	.000	.031	20.382	.995

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
	Self-regulation	.421	1	.421	1.038
	Social intelligence	4.205	1	4.205	10.303
	Spirituality	44.196	1	44.196	57.763
	Zest	8.204	1	8.204	14.268
Error	Appreciation of beauty and excellence	300.833	637	.472	
	Bravery	275.512	637	.433	
	Love	193.834	637	.304	
	Prudence	258.868	637	.406	
	Teamwork	278.997	637	.438	
	Creativity	318.822	637	.501	
	Curiosity	262.131	637	.412	
	Fairness	243.078	637	.382	
	Forgiveness	238.493	637	.374	
	Gratitude	272.825	637	.428	
	Authenticity	251.018	637	.394	
	Hope	320.453	637	.503	
	Humour	341.546	637	.536	
	Persistence	308.489	637	.484	
	Open-mindedness	271.268	637	.426	
	Kindness	166.888	637	.262	
	Leadership	341.842	637	.537	
	Love of learning	272.879	637	.428	
	Modesty	212.286	637	.333	
	Perspective	260.306	637	.409	
	Self-regulation	258.655	637	.406	
	Social intelligence	259.999	637	.408	
	Spirituality	487.381	637	.765	
	Zest	366.244	637	.575	
Total	Appreciation of beauty and excellence	9258.866	641		
	Bravery	8802.237	641		
	Love	6764.590	641		
	Prudence	7010.227	641		
	Teamwork	9530.510	641		
	Creativity	8772.041	641		
	Curiosity	8618.956	641		
	Fairness	8431.873	641		
	Forgiveness	7227.194	641		
	Gratitude	10101.554	641		
	Authenticity	8375.985	641		

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[y]
	Self-regulation	.309	.002	1.038	.174
	Social intelligence	.001	.016	10.303	.893
	Spirituality	.000	.083	57.763	1.000
	Zest	.000	.022	14.268	.965
Error	Appreciation of beauty and excellence				
	Bravery				
	Love				
	Prudence				
	Teamwork				
	Creativity				
	Curiosity				
	Fairness				
	Forgiveness				
	Gratitude				
	Authenticity				
	Hope				
	Humour				
	Persistence				
	Open-mindedness				
	Kindness				
	Leadership				
	Love of learning				
	Modesty				
	Perspective				
	Self-regulation				
	Social intelligence				
	Spirituality				
	Zest				
Total	Appreciation of beauty and excellence				
	Bravery				
	Love				
	Prudence				
	Teamwork				
	Creativity				
	Curiosity				
	Fairness				
	Forgiveness				
	Gratitude				
	Authenticity				

c. R Squared = .106 (Adjusted R Squared = .101)
d. R Squared = .022 (Adjusted R Squared = .017)
e. R Squared = .073 (Adjusted R Squared = .069)
f. R Squared = .035 (Adjusted R Squared = .031)
g. R Squared = .014 (Adjusted R Squared = .010)
h. R Squared = .032 (Adjusted R Squared = .027)
i. R Squared = .013 (Adjusted R Squared = .008)
j. R Squared = .070 (Adjusted R Squared = .066)
k. R Squared = .058 (Adjusted R Squared = .053)
l. R Squared = .032 (Adjusted R Squared = .028)
m. R Squared = .079 (Adjusted R Squared = .075)
n. R Squared = .025 (Adjusted R Squared = .021)
o. R Squared = .007 (Adjusted R Squared = .002)
p. R Squared = .060 (Adjusted R Squared = .055)
q. R Squared = .011 (Adjusted R Squared = .007)
r. R Squared = .001 (Adjusted R Squared = -.003)
s. R Squared = .043 (Adjusted R Squared = .039)
t. R Squared = .056 (Adjusted R Squared = .051)
u. R Squared = .015 (Adjusted R Squared = .011)
v. R Squared = .028 (Adjusted R Squared = .024)
w. R Squared = .095 (Adjusted R Squared = .091)
x. R Squared = .027 (Adjusted R Squared = .023)
y. Computed using alpha =

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SPLIT FILE OFF.
FILTER OFF.
USE ALL.
EXECUTE.
SPLIT FILE OFF.

GLM PWI AHI BY Nationality WITH Gender Age
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /PRINT=ETASQ
  /CRITERIA=ALPHA(.05)
  /DESIGN=Gender Age Nationality.
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General Linear Model

Between-Subjects Factors

		Value Label	N
Nationality	0	Australia	367
	1	Singapore	299

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.040	13.692[b]	2.000	661.000	.000
	Wilks' Lambda	.960	13.692[b]	2.000	661.000	.000
	Hotelling's Trace	.041	13.692[b]	2.000	661.000	.000
	Roy's Largest Root	.041	13.692[b]	2.000	661.000	.000
Gender	Pillai's Trace	.009	3.078[b]	2.000	661.000	.047
	Wilks' Lambda	.991	3.078[b]	2.000	661.000	.047
	Hotelling's Trace	.009	3.078[b]	2.000	661.000	.047
	Roy's Largest Root	.009	3.078[b]	2.000	661.000	.047
Age	Pillai's Trace	.000	.108[b]	2.000	661.000	.897
	Wilks' Lambda	1.000	.108[b]	2.000	661.000	.897
	Hotelling's Trace	.000	.108[b]	2.000	661.000	.897
	Roy's Largest Root	.000	.108[b]	2.000	661.000	.897
Nationality	Pillai's Trace	.146	56.701[b]	2.000	661.000	.000
	Wilks' Lambda	.854	56.701[b]	2.000	661.000	.000
	Hotelling's Trace	.172	56.701[b]	2.000	661.000	.000
	Roy's Largest Root	.172	56.701[b]	2.000	661.000	.000

Multivariate Tests[a]

Effect		Partial Eta Squared
Intercept	Pillai's Trace	.040
	Wilks' Lambda	.040
	Hotelling's Trace	.040
	Roy's Largest Root	.040
Gender	Pillai's Trace	.009
	Wilks' Lambda	.009
	Hotelling's Trace	.009
	Roy's Largest Root	.009
Age	Pillai's Trace	.000
	Wilks' Lambda	.000
	Hotelling's Trace	.000
	Roy's Largest Root	.000
Nationality	Pillai's Trace	.146
	Wilks' Lambda	.146
	Hotelling's Trace	.146
	Roy's Largest Root	.146

a. Design: Intercept + Gender + Age + Nationality

b. Exact statistic

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
Corrected Model	Score for PWI	23411.459[a]	3	7803.820	45.094
	Score for AHI	14.891[b]	3	4.964	11.910
Intercept	Score for PWI	4090.849	1	4090.849	23.639
	Score for AHI	7.781	1	7.781	18.669
Gender	Score for PWI	710.278	1	710.278	4.104
	Score for AHI	2.243	1	2.243	5.381
Age	Score for PWI	32.843	1	32.843	.190
	Score for AHI	.005	1	.005	.011
Nationality	Score for PWI	19513.925	1	19513.925	112.759
	Score for AHI	11.074	1	11.074	26.570
Error	Score for PWI	114564.470	662	173.058	
	Score for AHI	275.907	662	.417	
Total	Score for PWI	3937287.50	666		
	Score for AHI	6573.124	666		
Corrected Total	Score for PWI	137975.929	665		
	Score for AHI	290.798	665		

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared
Corrected Model	Score for PWI	.000	.170
	Score for AHI	.000	.051
Intercept	Score for PWI	.000	.034
	Score for AHI	.000	.027
Gender	Score for PWI	.043	.006
	Score for AHI	.021	.008
Age	Score for PWI	.663	.000
	Score for AHI	.916	.000
Nationality	Score for PWI	.000	.146
	Score for AHI	.000	.039
Error	Score for PWI		
	Score for AHI		
Total	Score for PWI		
	Score for AHI		
Corrected Total	Score for PWI		
	Score for AHI		

a. R Squared = .170 (Adjusted R Squared = .166)

b. R Squared = .051 (Adjusted R Squared = .047)

[illegible] Database.

```
SORT CASES  BY Nationality.
SPLIT FILE LAYERED BY Nationality.

NONPAR CORR
  /VARIABLES=PWI AHI VIA1 VIA2 VIA3 VIA4 VIA5 VIA6 VIA7 VIA8 VIA9 VIA10 VIA
 VIA12 VIA13 VIA14
    VIA15 VIA16 VIA17 VIA18 VIA19 VIA20 VIA21 VIA22 VIA23 VIA24
  /PRINT=SPEARMAN TWOTAIL NOSIG
  /MISSING=PAIRWISE.
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Nonparametric Correlations

Nonparametric Correlations

Correlations

Nationality				Score for PWI	Score for AHI	Appreciation of beauty and excellence	Bravery	Love	Prudence	Teamwork	Creativity	Curiosity	Fairness	Forgiveness	Gratitude	Authenticity	Hope	Humour	Persistence	Open-mindedness	Kin
Spearman's rho	Australia	Score for PWI	Correlation Coefficient	1.000	.604**	.188**	.204**	.542**	.329**	.425**	.271**	.187**	.259**	.253**	.486**	.371**	.493**	.326**	.450**	.309**	
			Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	369	367	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Score for AHI	Correlation Coefficient	.604**	1.000	.274**	.352**	.577**	.489**	.508**	.444**	.260**	.406**	.340**	.554**	.477**	.679**	.409**	.633**	.496**	
			Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	367	367	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	
		Appreciation of beauty and excellence	Correlation Coefficient	.188**	.274**	1.000	.353**	.403**	.360**	.404**	.489**	.384**	.332**	.324**	.518**	.364**	.428**	.329**	.399**	.417**	
			Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Bravery	Correlation Coefficient	.204**	.352**	.353**	1.000	.413**	.446**	.545**	.483**	.440**	.467**	.280**	.543**	.551**	.496**	.476**	.520**	.578**	
			Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Love	Correlation Coefficient	.542**	.577**	.403**	.413**	1.000	.441**	.586**	.473**	.359**	.446**	.385**	.694**	.537**	.657**	.462**	.573**	.465**	
			Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Prudence	Correlation Coefficient	.329**	.489**	.360**	.446**	.441**	1.000	.557**	.405**	.332**	.584**	.332**	.554**	.625**	.538**	.287**	.686**	.676**	
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Teamwork	Correlation Coefficient	.425**	.508**	.404**	.545**	.586**	.557**	1.000	.456**	.378**	.657**	.486**	.704**	.646**	.610**	.494**	.661**	.663**	
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Creativity	Correlation Coefficient	.271**	.444**	.489**	.483**	.473**	.405**	.456**	1.000	.546**	.333**	.251**	.525**	.413**	.614**	.430**	.543**	.570**	
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Curiosity	Correlation Coefficient	.187**	.260**	.384**	.440**	.359**	.332**	.378**	.546**	1.000	.302**	.186**	.423**	.376**	.473**	.336**	.421**	.463**	
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Fairness	Correlation Coefficient	.259**	.406**	.332**	.467**	.446**	.584**	.657**	.333**	.302**	1.000	.480**	.599**	.690**	.513**	.328**	.588**	.607**	
			Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	
			N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	
		Forgiveness	Correlation Coefficient	.253**	.340**	.324**	.280**	.385**	.332**	.486**	.251**	.186**	.480**	1.000	.435**	.383**	.365**	.165**	.362**	.344**	
			Sig. (2-																		

	tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.002	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Gratitude	Correlation Coefficient	.486**	.554**	.518**	.543**	.694**	.554**	.704**	.525**	.423**	.599**	.435**	1.000	.641**	.700**	.508**	.684**	.636**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Authenticity	Correlation Coefficient	.371**	.477**	.364**	.551**	.537**	.625**	.646**	.413**	.376**	.590**	.383**	.641**	1.000	.560**	.385**	.641**	.614**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Hope	Correlation Coefficient	.493**	.679**	.428**	.496**	.657**	.538**	.610**	.614**	.473**	.513**	.365**	.700**	.560**	1.000	.446**	.706**	.655**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Humour	Correlation Coefficient	.326**	.409**	.329**	.476**	.462**	.287**	.494**	.430**	.336**	.328**	.165**	.508**	.385**	.446**	1.000	.405**	.377**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000	.	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Persistence	Correlation Coefficient	.450**	.633**	.399**	.520**	.573**	.686**	.661**	.543**	.421**	.588**	.362**	.684**	.641**	.706**	.405**	1.000	.591**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Open-mindedness	Correlation Coefficient	.309**	.496**	.417**	.578**	.465**	.676**	.663**	.570**	.463**	.607**	.344**	.636**	.614**	.655**	.377**	.691**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Kindness	Correlation Coefficient	.239**	.355**	.568**	.590**	.483**	.464**	.650**	.473**	.356**	.586**	.522**	.620**	.588**	.496**	.385**	.576**	.590**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Leadership	Correlation Coefficient	.333**	.520**	.349**	.538**	.419**	.417**	.532**	.486**	.326**	.400**	.228**	.496**	.421**	.591**	.509**	.597**	.529**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Love of learning	Correlation Coefficient	.352**	.495**	.422**	.484**	.480**	.486**	.523**	.538**	.587**	.466**	.327**	.551**	.475**	.622**	.219**	.640**	.623**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Modesty	Correlation Coefficient	.022	.040	.231**	.308**	.172**	.284**	.433**	.175**	.162**	.438**	.280**	.309**	.388**	.159**	.217**	.260**	.344**
	Sig. (2-tailed)	.675	.449	.000	.000	.001	.000	.000	.001	.002	.000	.000	.000	.000	.003	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Perspective	Correlation Coefficient	.397**	.586**	.463**	.622**	.530**	.562**	.682**	.592**	.431**	.561**	.333**	.665**	.553**	.683**	.580**	.698**	.668**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354
Self-regulation	Correlation Coefficient	.248**	.478**	.335**	.373**	.401**	.547**	.631**	.403**	.194**	.559**	.408**	.571**	.526**	.520**	.310**	.610**	.573**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354

Social intelligence	Correlation Coefficient	.412**	.542**	.433**	.547**	.585**	.635**	.702**	.524**	.341**	.602**	.462**	.680**	.653**	.645**	.507**	.655**	.666**						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354						
Spirituality	Correlation Coefficient	.163**	.288**	.356**	.308**	.327**	.229**	.261**	.215**	.134*	.251**	.316**	.371**	.229**	.413**	.095	.311**	.302**						
	Sig. (2-tailed)	.002	.000	.000	.000	.000	.000	.000	.000	.012	.000	.000	.000	.000	.000	.074	.000	.000						
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354						
Zest	Correlation Coefficient	.539**	.716**	.415**	.494**	.668**	.517**	.639**	.514**	.392**	.431**	.377**	.694**	.573**	.720**	.521**	.672**	.552**						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	354	353	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354						
[redacted] Score for PWI	Correlation Coefficient	1.000	.497**	.114*	.238**	.378**	.299**	.194**	.245**	.165**	.207**	.162**	.320**	.269**	.390**	.176**	.255**	.234**						
	Sig. (2-tailed)		.000	.047	.000	.000	.000	.001	.000	.004	.000	.005	.000	.000	.000	.002	.000	.000						
	N	329	323	302	302	302	302	302	302	302	302	302	302	302	302	302	302	302						
Score for AHI	Correlation Coefficient	.497**	1.000	.165**	.269**	.466**	.370**	.249**	.329**	.295**	.246**	.129*	.417**	.273**	.512**	.252**	.384**	.366**						
	Sig. (2-tailed)	.000		.004	.000	.000	.000	.000	.000	.000	.000	.024	.000	.000	.000	.000	.000	.000						
	N	323	330	305	305	305	305	305	305	305	305	305	305	305	305	305	305	305						
Appreciation of beauty and excellence	Correlation Coefficient	.114*	.165**	1.000	.401**	.334**	.255**	.508**	.407**	.495**	.439**	.319**	.473**	.287**	.342**	.366**	.326**	.430**						
	Sig. (2-tailed)	.047	.004		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309						
Bravery	Correlation Coefficient	.238**	.269**	.401**	1.000	.377**	.365**	.582**	.576**	.517**	.575**	.309**	.594**	.477**	.542**	.415**	.503**	.533**						
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309						
Love	Correlation Coefficient	.378**	.466**	.334**	.377**	1.000	.418**	.404**	.377**	.337**	.330**	.354**	.621**	.331**	.619**	.304**	.429**	.467**						
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309						
Prudence	Correlation Coefficient	.299**	.370**	.255**	.365**	.418**	1.000	.409**	.385**	.333**	.400**	.179**	.442**	.502**	.509**	.137*	.516**	.551**						
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.002	.000	.000	.000	.016	.000	.000						
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309						
Teamwork	Correlation Coefficient	.194**	.249**	.508**	.582**	.404**	.409**	1.000	.519**	.511**	.631**	.343**	.589**	.480**	.575**	.549**	.431**	.607**						
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309						
Creativity	Correlation Coefficient	.245**	.329**	.407**	.576**	.377**	.385**	.519**	1.000	.601**	.451**	.216**	.476**	.388**	.552**	.445**	.553**	.608**						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000						
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309						
Curiosity	Correlation Coefficient	.165**	.295**	.495**	.517**	.337**	.333**	.511**	.601**	1.000	.397**	.265**	.538**	.331**	.521**	.448**	.466**	.591**						
	Sig. (2-tailed)	.004	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000						
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309						
Fairness	Correlation Coefficient	.207**	.246**	.439**	.575**	.330**	.400**	.631**	.451**	.397**	1.000	.321**	.520**	.532**	.488**	.373**	.509**	.523**						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000						

	tailed)																	
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Forgiveness	Correlation Coefficient	.162**	.129*	.319**	.309**	.354**	.179**	.343**	.218**	.265**	.321**	1.000	.333**	.164**	.259**	.246**	.297**	.305**
	Sig. (2-tailed)	.005	.024	.000	.000	.000	.002	.000	.000	.000	.000	.	.000	.004	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Gratitude	Correlation Coefficient	.320**	.417**	.473**	.594**	.621**	.442**	.589**	.476**	.539**	.520**	.333**	1.000	.498**	.692**	.433**	.496**	.603**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Authenticity	Correlation Coefficient	.269**	.273**	.287**	.477**	.331**	.502**	.480**	.388**	.331**	.532**	.164**	.498**	1.000	.384**	.267**	.524**	.450**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004	.000	.	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Hope	Correlation Coefficient	.390**	.512**	.342**	.542**	.619**	.509**	.575**	.552**	.521**	.488**	.259**	.692**	.384**	1.000	.378**	.546**	.628**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Humour	Correlation Coefficient	.176**	.252**	.366**	.415**	.304**	.137*	.431**	.445**	.448**	.373**	.245**	.433**	.267**	.378**	1.000	.337**	.361**
	Sig. (2-tailed)	.002	.000	.000	.000	.000	.016	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Persistence	Correlation Coefficient	.255**	.364**	.326**	.503**	.429**	.516**	.549**	.553**	.466**	.509**	.297**	.496**	.524**	.546**	.337**	1.000	.589**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Open-mindedness	Correlation Coefficient	.234**	.366**	.430**	.533**	.467**	.551**	.607**	.608**	.591**	.523**	.305**	.603**	.450**	.628**	.361**	.589**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Kindness	Correlation Coefficient	.177**	.253**	.482**	.597**	.437**	.376**	.637**	.538**	.514**	.566**	.383**	.559**	.385**	.494**	.459**	.529**	.584**
	Sig. (2-tailed)	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Leadership	Correlation Coefficient	.199**	.311**	.299**	.487**	.361**	.358**	.529**	.564**	.419**	.454**	.244**	.412**	.351**	.485**	.405**	.605**	.441**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Love of learning	Correlation Coefficient	.229**	.391**	.465**	.441**	.477**	.394**	.485**	.509**	.639**	.379**	.254**	.510**	.389**	.579**	.339**	.582**	.607**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Modesty	Correlation Coefficient	.009	.003	.300**	.391**	.216**	.240**	.492**	.281**	.359**	.409**	.232**	.323**	.320**	.260**	.244**	.341**	.424**
	Sig. (2-tailed)	.882	.964	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Perspective	Correlation Coefficient	.275**	.420**	.377**	.506**	.504**	.511**	.534**	.598**	.528**	.430**	.369**	.561**	.357**	.571**	.469**	.627**	.676**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Self-	Correlation																	

	regulation	Coefficient	.172	.223	.301	.396	.380	.481	.515	.366	.336	.553	.320	.523	.542	.499	.237	.539	.498
		Sig. (2-tailed)	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
	Social	Correlation																	
	intelligence	Coefficient	.260**	.371**	.379**	.569**	.527**	.575**	.565**	.551**	.501**	.492**	.350**	.561**	.477**	.631**	.410**	.523**	.578**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
	Spirituality	Correlation Coefficient	.166**	.234**	.413**	.375**	.463**	.326**	.444**	.337**	.379**	.407**	.302**	.530**	.265**	.501**	.266**	.397**	.470**
		Sig. (2-tailed)	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
	Zest	Correlation Coefficient	.395**	.551**	.389**	.478**	.538**	.363**	.454**	.533**	.542**	.434**	.268**	.564**	.384**	.667**	.536**	.492**	.499**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	302	305	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Regression--Life satisfaction

Variables Entered/Removed[a]

Nationality	Model	Variables Entered	Variables Removed	Method
Australia	1	Zest, Modesty, Spirituality, Curiosity, Forgiveness, Humour, Appreciation of beauty and excellence, Prudence, Leadership, Bravery, Creativity, Love, Self-regulation, Fairness, Love of learning, Authenticity, Kindness, Open-mindedness, Gratitude, Teamwork, Hope, Social intelligence, Persistence, Perspective[b]		Enter

Variables Entered/Removed[a]

Nationality	Model	Variables Entered	Variables Removed	Method
Singapore	1	Zest, Modesty, Forgiveness, Prudence, Spirituality, Appreciation of beauty and excellence, Leadership, Authenticity, Humour, Love, Bravery, Self-regulation, Curiosity, Fairness, Creativity, Kindness, Love of learning, Teamwork, Social intelligence, Persistence, Gratitude, Open-mindedness, Perspective, Hope[b]		Enter

a. Dependent Variable: Score for PWI

b. All requested variables entered.

Model Summary

Nationality	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change ... R Square Change
Australia	1	.657[a]	.432	.390	9.18058	.432
Singapore	1	.537[b]	.288	.226	12.88859	.288

Model Summary

Nationality	Model	Change Statistics			
		F Change	df1	df2	Sig. F Change
Australia	1	10.406	24	329	.000
Singapore	1	4.665	24	277	.000

a. Predictors: (Constant), Zest, Modesty, Spirituality, Curiosity, Forgiveness, Humour, Appreciation of beauty and excellence, Prudence, Leadership, Bravery, Creativity, Love, Self-regulation, Fairness, L of learning, Authenticity, Kindness, Open-mindedness, Gratitude, Teamwork, Hope, Social intelligence, Persistence, Perspective

b. Predictors: (Constant), Zest, Modesty, Forgiveness, Prudence, Spirituality, Appreciation of beauty ar excellence, Leadership, Authenticity, Humour, Love, Bravery, Self-regulation, Curiosity, Fairness, Creativity, Kindness, Love of learning, Teamwork, Social intelligence, Persistence, Gratitude, Open-mindedness, Perspective, Hope

ANOVA[a]

Nationality	Model		Sum of Squares	df	Mean Square	F	Sig.
Australia	1	Regression	21049.477	24	877.062	10.406	.000[b]
		Residual	27729.147	329	84.283		
		Total	48778.624	353			
Singapore	1	Regression	18599.465	24	774.978	4.665	.000[c]
		Residual	46014.054	277	166.116		
		Total	64613.519	301			

a. Dependent Variable: Score for PWI

b. Predictors: (Constant), Zest, Modesty, Spirituality, Curiosity, Forgiveness, Humour, Appreciation of beauty and excellence, Prudence, Leadership, Bravery, Creativity, Love, Self-regulation, Fairness, Love of learning, Authenticity, Kindness, Open-mindedness, Gratitude, Teamwork, Hope, Social intelligence, Persistence, Perspective

c. Predictors: (Constant), Zest, Modesty, Forgiveness, Prudence, Spirituality, Appreciation of beauty ar excellence, Leadership, Authenticity, Humour, Love, Bravery, Self-regulation, Curiosity, Fairness, Creativity, Kindness, Love of learning, Teamwork, Social intelligence, Persistence, Gratitude, Open-mindedness, Perspective, Hope

Coefficients[a]

Nationality	Model		Unstandardized Coefficients		Standardized Coefficients	t
			B	Std. Error	Beta	
Australia	1	(Constant)	50.831	4.657		10.914
		Appreciation of beauty and excellence	-.661	.871	-.043	-.758
		Bravery	-3.951	1.123	-.225	-3.517
		Love	4.115	1.428	.187	2.881
		Prudence	.745	1.185	.043	.629
		Teamwork	2.194	1.362	.127	1.610
		Creativity	-.697	1.058	-.042	-.659
		Curiosity	-2.181	1.063	-.121	-2.051
		Fairness	-1.512	1.315	-.083	-1.150
		Forgiveness	.752	1.043	.040	.721
		Gratitude	2.812	1.420	.157	1.981
		Authenticity	1.663	1.310	.094	1.269
		Hope	1.897	1.315	.117	1.443
		Humour	.886	.943	.056	.939
		Persistence	1.891	1.272	.123	1.486
		Open-mindedness	-.245	1.312	-.014	-.186
		Kindness	-2.059	1.692	-.094	-1.217
		Leadership	-.080	1.056	-.005	-.076
		Love of learning	3.091	1.213	.175	2.548
		Modesty	-1.065	1.022	-.057	-1.042
		Perspective	1.626	1.593	.090	1.021
		Self-regulation	-3.262	1.140	-.187	-2.861
		Social intelligence	-.105	1.501	-.006	-.070
		Spirituality	-1.069	.636	-.086	-1.682
		Zest	3.182	1.162	.206	2.739
Singapore	1	(Constant)	29.410	7.130		4.125
		Appreciation of beauty and excellence	-1.540	1.508	-.071	-1.021
		Bravery	.932	1.797	.041	.519
		Love	4.766	1.991	.182	2.394
		Prudence	3.518	2.074	.136	1.697
		Teamwork	-.020	2.047	-.001	-.010
		Creativity	-.312	1.765	-.015	-.177
		Curiosity	-2.032	1.943	-.087	-1.045
		Fairness	1.432	1.971	.057	.726
		Forgiveness	1.439	1.469	.059	.979
		Gratitude	1.149	2.145	.050	.536
		Authenticity	2.897	1.923	.113	1.506
		Hope	4.030	2.219	.185	1.816

Coefficients[a]

Nationality	Model		Sig.
Australia	1	(Constant)	.000
		Appreciation of beauty and excellence	.449
		Bravery	.000
		Love	.004
		Prudence	.530
		Teamwork	.108
		Creativity	.511
		Curiosity	.041
		Fairness	.251
		Forgiveness	.471
		Gratitude	.048
		Authenticity	.205
		Hope	.150
		Humour	.348
		Persistence	.138
		Open-mindedness	.852
		Kindness	.224
		Leadership	.940
		Love of learning	.011
		Modesty	.298
		Perspective	.308
		Self-regulation	.004
		Social intelligence	.944
		Spirituality	.094
		Zest	.007
Singapore	1	(Constant)	.000
		Appreciation of beauty and excellence	.308
		Bravery	.604
		Love	.017
		Prudence	.091
		Teamwork	.992
		Creativity	.860
		Curiosity	.297
		Fairness	.468
		Forgiveness	.328
		Gratitude	.593
		Authenticity	.133
		Hope	.070

Coefficients[a]

Nationality	Model	Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
	Humour	-.343	1.384	-.017	-.247
	Persistence	.170	2.193	.007	.077
	Open-mindedness	-2.168	2.480	-.085	-.874
	Kindness	-2.394	2.438	-.083	-.982
	Leadership	-.672	1.711	-.032	-.393
	Love of learning	-.104	2.044	-.004	-.051
	Modesty	-.596	1.776	-.022	-.336
	Perspective	2.550	2.415	.106	1.056
	Self-regulation	-1.086	1.986	-.043	-.547
	Social intelligence	-2.394	2.283	-.096	-1.049
	Spirituality	-1.392	1.289	-.073	-1.080
	Zest	5.023	1.814	.251	2.769

Coefficients[a]

Nationality	Model	Sig.
	Humour	.805
	Persistence	.938
	Open-mindedness	.383
	Kindness	.327
	Leadership	.695
	Love of learning	.959
	Modesty	.737
	Perspective	.292
	Self-regulation	.585
	Social intelligence	.295
	Spirituality	.281
	Zest	.006

a. Dependent Variable: Score for PWI

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REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT AHI
  /METHOD=ENTER VIA1 VIA2 VIA3 VIA4 VIA5 VIA6 VIA7 VIA8 VIA9 VIA10 VIA11 VI.
2 VIA13 VIA14 VIA15
    VIA16 VIA17 VIA18 VIA19 VIA20 VIA21 VIA22 VIA23 VIA24.
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Regression--Happiness

Variables Entered/Removed[a]

Nationality	Model	Variables Entered	Variables Removed	Method
Australia	1	Zest, Modesty, Spirituality, Curiosity, Forgiveness, Humour, Appreciation of beauty and excellence, Prudence, Leadership, Bravery, Creativity, Love, Self-regulation, Fairness, Love of learning, Authenticity, Kindness, Open-mindedness, Gratitude, Teamwork, Hope, Social intelligence, Persistence, Perspective[b]		Enter

Variables Entered/Removed[a]

Nationality	Model	Variables Entered	Variables Removed	Method
Singapore	1	Zest, Modesty, Forgiveness, Prudence, Spirituality, Appreciation of beauty and excellence, Leadership, Authenticity, Humour, Love, Curiosity, Fairness, Self-regulation, Bravery, Kindness, Creativity, Love of learning, Teamwork, Social intelligence, Persistence, Open-mindedness, Gratitude, Hope, Perspective[b]		Enter

a. Dependent Variable: Score for AHI

b. All requested variables entered.

Model Summary

Nationality	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change ... R Square Change
Australia	1	.814[a]	.662	.637	.39592	.662
Singapore	1	.674[b]	.454	.408	.48368	.454

Model Summary

Nationality	Model	Change Statistics			
		F Change	df1	df2	Sig. F Change
Australia	1	26.771	24	328	.000
Singapore	1	9.720	24	280	.000

a. Predictors: (Constant), Zest, Modesty, Spirituality, Curiosity, Forgiveness, Humour, Appreciation of beauty and excellence, Prudence, Leadership, Bravery, Creativity, Love, Self-regulation, Fairness, L of learning, Authenticity, Kindness, Open-mindedness, Gratitude, Teamwork, Hope, Social intelligence, Persistence, Perspective

b. Predictors: (Constant), Zest, Modesty, Forgiveness, Prudence, Spirituality, Appreciation of beauty ar excellence, Leadership, Authenticity, Humour, Love, Curiosity, Fairness, Self-regulation, Bravery, Kindness, Creativity, Love of learning, Teamwork, Social intelligence, Persistence, Open-mindednes Gratitude, Hope, Perspective

ANOVA[a]

Nationality	Model		Sum of Squares	df	Mean Square	F	Sig.
Australia	1	Regression	100.718	24	4.197	26.771	.000[b]
		Residual	51.416	328	.157		
		Total	152.135	352			
Singapore	1	Regression	54.577	24	2.274	9.720	.000[c]
		Residual	65.505	280	.234		
		Total	120.083	304			

a. Dependent Variable: Score for AHI

b. Predictors: (Constant), Zest, Modesty, Spirituality, Curiosity, Forgiveness, Humour, Appreciation of beauty and excellence, Prudence, Leadership, Bravery, Creativity, Love, Self-regulation, Fairness, Love of learning, Authenticity, Kindness, Open-mindedness, Gratitude, Teamwork, Hope, Social intelligence, Persistence, Perspective

c. Predictors: (Constant), Zest, Modesty, Forgiveness, Prudence, Spirituality, Appreciation of beauty ar excellence, Leadership, Authenticity, Humour, Love, Curiosity, Fairness, Self-regulation, Bravery, Kindness, Creativity, Love of learning, Teamwork, Social intelligence, Persistence, Open-mindednes Gratitude, Hope, Perspective

Coefficients[a]

Nationality	Model		Unstandardized Coefficients		Standardized Coefficients	t
			B	Std. Error	Beta	
Australia	1	(Constant)	.626	.201		3.107
		Appreciation of beauty and excellence	-.069	.038	-.081	-1.824
		Bravery	-.103	.048	-.105	-2.130
		Love	.153	.062	.124	2.476
		Prudence	.038	.051	.039	.742
		Teamwork	-.063	.059	-.066	-1.075
		Creativity	.017	.046	.019	.382
		Curiosity	-.125	.046	-.124	-2.719
		Fairness	-.059	.057	-.058	-1.042
		Forgiveness	.107	.045	.102	2.373
		Gratitude	-.110	.061	-.110	-1.796
		Authenticity	.117	.057	.119	2.072
		Hope	.186	.057	.206	3.277
		Humour	.081	.041	.091	1.994
		Persistence	.077	.055	.089	1.402
		Open-mindedness	.004	.057	.004	.068
		Kindness	-.126	.073	-.103	-1.732
		Leadership	.024	.046	.028	.533
		Love of learning	.170	.052	.173	3.251
		Modesty	-.087	.044	-.082	-1.965
		Perspective	.205	.069	.204	2.990
		Self-regulation	.089	.049	.092	1.805
		Social intelligence	-.057	.065	-.058	-.878
		Spirituality	-.002	.027	-.003	-.066
		Zest	.288	.050	.332	5.732
Singapore	1	(Constant)	1.282	.265		4.836
		Appreciation of beauty and excellence	-.081	.056	-.088	-1.446
		Bravery	-.066	.067	-.067	-.979
		Love	.145	.075	.129	1.928
		Prudence	.074	.077	.066	.955
		Teamwork	-.068	.076	-.069	-.897
		Creativity	-.023	.065	-.025	-.347
		Curiosity	-.041	.069	-.041	-.597
		Fairness	.067	.073	.062	.910
		Forgiveness	-.046	.055	-.043	-.826
		Gratitude	.126	.079	.131	1.587
		Authenticity	.017	.072	.015	.232
		Hope	.186	.081	.202	2.280

Coefficients[a]

Nationality	Model		Sig.
Australia	1	(Constant)	.002
		Appreciation of beauty and excellence	.069
		Bravery	.034
		Love	.014
		Prudence	.459
		Teamwork	.283
		Creativity	.703
		Curiosity	.007
		Fairness	.298
		Forgiveness	.018
		Gratitude	.073
		Authenticity	.039
		Hope	.001
		Humour	.047
		Persistence	.162
		Open-mindedness	.946
		Kindness	.084
		Leadership	.595
		Love of learning	.001
		Modesty	.050
		Perspective	.003
		Self-regulation	.072
		Social intelligence	.381
		Spirituality	.948
		Zest	.000
Singapore	1	(Constant)	.000
		Appreciation of beauty and excellence	.149
		Bravery	.329
		Love	.055
		Prudence	.340
		Teamwork	.371
		Creativity	.729
		Curiosity	.551
		Fairness	.363
		Forgiveness	.409
		Gratitude	.114
		Authenticity	.817
		Hope	.023

Coefficients[a]

Nationality	Model	Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
	Humour	-.026	.053	-.029	-.483
	Persistence	.079	.082	.075	.968
	Open-mindedness	-.017	.092	-.016	-.189
	Kindness	-.131	.088	-.105	-1.488
	Leadership	-.031	.063	-.034	-.484
	Love of learning	.108	.075	.108	1.433
	Modesty	-.067	.066	-.057	-1.006
	Perspective	.184	.090	.181	2.041
	Self-regulation	-.102	.075	-.095	-1.366
	Social intelligence	-.022	.085	-.021	-.255
	Spirituality	-.042	.048	-.052	-.878
	Zest	.286	.068	.339	4.214

Coefficients[a]

Nationality	Model	Sig.
	Humour	.629
	Persistence	.334
	Open-mindedness	.850
	Kindness	.138
	Leadership	.629
	Love of learning	.153
	Modesty	.315
	Perspective	.042
	Self-regulation	.173
	Social intelligence	.799
	Spirituality	.381
	Zest	.000

a. Dependent Variable: Score for AHI