

SATISFACTION WITH LIFE: EXAMINING THE IMPACT OF  
CHARACTER STRENGTHS AMONG YOUNG PEOPLE

By

Carmel Laura Proctor

M.A., University of British Columbia, 2002

A THESIS SUBMITTED IN FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY (PH.D.)

in

THE FACULTY OF MEDICINE AND BIOLOGICAL SCIENCES  
SCHOOL OF PSYCHOLOGY  
UNIVERSITY OF LEICESTER

© Carmel Laura Proctor, April 2011

This thesis is copyright material and no quotation from it may be published  
without proper acknowledgment

## LIST OF TABLES

CHAPTER 4: Very Happy Youths: Benefits of Very High Life Satisfaction	
Among Youths	
4.1 Study Rating Scale.....	101
4.2 Descriptive Statistics for Study Variables.....	106
4.3 Pearson Product Correlation Coefficients Between Study Variables.....	107
4.4 Means (and Standard Deviations) of the Three Global Life Satisfaction Groups on School, Interpersonal, and Intrapersonal Variables.....	108
4.5 Mean Difference (Tukey HSD) Between the Three Global Life Satisfaction Groups on School, Interpersonal, and Intrapersonal Variables.....	109
CHAPTER 5: The Rogerian Fully Functioning Individual: An Examination of the Correlates of Life Satisfaction	
5.1 Descriptive Statistics for Study Variables.....	128
5.2 Correlation Matrix.....	129
CHAPTER 6: Strengths Use as a Predictor of Well-Being and Health-Related Quality of Life	
6.1 Descriptive Statistics for Study Variables.....	146
6.2 Pearson Product Correlation Coefficients Between Study Variables.....	147
6.3 Regression of Strengths Use on Subjective Well-Being and Health-Related Quality of Life.....	148
6.4 Regression of Subjective Well-Being on Health-Related Quality of	

Life.....	149
6.5 Stepwise Regression of Character Strengths and Life Satisfaction..	151
6.6 Strengths Endorsement.....	151
6.7 Regression of Strengths Use on Subjective Well-Being – Commonly-Endorsed Strengths.....	152
CHAPTER 7: Testing the Research Procedure and Preliminary Development of the Student Material for the Primary Research Study	
7.1 Case Summaries.....	168
7.2 Correlations.....	169
7.3 Sample Demographics.....	175
7.4 Students’ Life Satisfaction Scale – Mean Scores.....	178
7.5 Rosenberg Self-Esteem Scale – Mean Scores.....	179
7.6 Change in Students’ Life Satisfaction Scale and Rosenberg Self- Esteem Scale Scores.....	180
CHAPTER 8: Strengths Gym: The Impact of a Character Strengths-Based Intervention on the Life Satisfaction and Well-Being of Adolescent Students	
8.1 Descriptive Statistics for Study Variables.....	207
8.2 Pearson Product Correlation Coefficients for Experimental and Control Groups at Baseline and Posttest.....	207

## LIST OF FIGURES

## CHAPTER 2: Youth Life Satisfaction: A Review of the Literature

2.1 Cultural Distribution of Youth Life Satisfaction Literature.....	64
--	----

## CHAPTER 7: Pilot Study: Testing the Research Procedure

7.1 Student Registration Instruction Sheet.....	165
7.2 Experimental Group Exercise Instructions.....	166
7.3 Comparison Group Instructions.....	167
7.5 Change in Life Satisfaction and Self-Esteem Over Time.....	181

## TABLE OF CONTENTS

LIST OF TABLES.....	2
LIST OF FIGURES.....	4
TABLE OF CONTENTS.....	5
ABSTRACT.....	13
CHAPTER 1: Thesis Introduction.....	14
1.1 Background and Aims.....	14
1.2 Thesis Overview.....	15
CHAPTER 2: Youth Life Satisfaction: A Review of the Literature.....	20
2.1 Introduction.....	20
2.1.1 Subjective Well-Being.....	20
2.1.2 Life Satisfaction.....	21
2.2 Understanding Youth Life Satisfaction.....	22
2.2.1 Purpose.....	23
2.2.2 Literature Search Strategies.....	23
2.3 Levels of Life Satisfaction.....	25
2.4 Demographics and Life Satisfaction.....	26
2.5 Social Desirability Effects.....	27
2.6 Personality and Life Satisfaction.....	28
2.7 Physical Health and Life Satisfaction.....	30
2.7.1 Exercise.....	30
2.7.2 Physical Health.....	31
2.7.3 Substance Abuse.....	31
2.8 Productivity and Life Satisfaction.....	33
2.8.1 Employment.....	33

2.8.2 Goals and Motivation.....	33
2.8.3 Achieving Personal Standards.....	35
2.8.4 Hope.....	36
2.8.5 Self-Efficacy.....	36
2.9 Relationships and Life Satisfaction.....	37
2.9.1 Parental Marital Status.....	37
2.9.2 Siblings.....	38
2.9.3 Social Support.....	39
2.9.4 Parenting Style.....	40
2.9.5 Family Functioning.....	41
2.10 The Environment and Life Satisfaction.....	42
2.10.1 Environmental Quality.....	43
2.10.2 Relocation.....	43
2.10.3 Life Events.....	44
2.11 Culture and Life Satisfaction.....	45
2.11.1 Acculturation.....	45
2.11.2 Cross-Cultural Comparisons.....	46
2.11.3 Cultural Values.....	47
2.12 Risk-Taking Behaviour and Life Satisfaction.....	48
2.12.1 Violence.....	48
2.12.2 Victimization.....	48
2.12.3 Sexual Behaviour/Pregnancy.....	49
2.13 Disabilities and Life Satisfaction.....	50
2.13.1 Physical Disabilities.....	50
2.13.2 Mental Disabilities.....	51

2.14 Psychophysiological Problems and Life Satisfaction.....	52
2.14.1 Eating Disorders.....	52
2.14.2 Obesity.....	53
2.15 Psychopathology and Life Satisfaction.....	54
2.15.1 Depression.....	54
2.15.2 Loneliness.....	55
2.15.3 Suicide.....	56
2.15.4 Emotional Disturbance.....	56
2.15.5 Insomnia.....	57
2.16 Extremely High Life Satisfaction.....	58
2.17 Character Strengths and Life Satisfaction.....	59
2.18 Discussion.....	60
2.18.1 Life Satisfaction: More than and Epiphenomenon.....	60
2.18.2 Conditions Fostering Positive Life Satisfaction.....	61
2.18.3 Implications of Positive Life Satisfaction.....	62
2.18.4 Future Directions and Conclusions.....	63
CHAPTER 3: Youth Life Satisfaction Measures: A Review.....	65
3.1 Introduction.....	65
3.1.1 Purpose.....	66
3.1.2 Literature Search Strategies.....	66
3.2 Models of Life Satisfaction.....	68
3.3 Measures of Adolescent Life Satisfaction.....	69
3.3.1 Global Unidimensional Scales.....	69
3.3.1.1 Students' Life Satisfaction Scale.....	69
3.3.1.2 Satisfaction With Life Scale.....	72

3.3.2 General Unidimensional Scales.....	75
3.3.2.1 Perceived Life Satisfaction Scale.....	75
3.3.2.2 Brief Multidimensional Students' Life Satisfaction Scale.....	78
3.3.3 Multidimensional Scales.....	80
3.3.3.1 Extended Satisfaction With Life Scale.....	80
3.3.3.2 Multidimensional Students' Life Satisfaction Scale.....	82
3.3.3.3 Multidimensional Students' Life Satisfaction Scale – Adolescent.....	85
3.3.3.4 Comprehensive Quality of Life Scale.....	87
3.4 Discussion.....	90
3.4.1 Future Directions.....	90
3.5 Conclusion.....	93
<b>CHAPTER 4: Very Happy Youths: Benefits of Very High Life Satisfaction</b>	
Among Youths.....	96
4.1 Introduction.....	96
4.1.1 Study Hypotheses.....	98
4.2 Method.....	99
4.2.1 Participants.....	99
4.2.2 Measures.....	99
4.2.3 Procedure.....	102
4.2.4 Data Analysis.....	104
4.3 Results.....	105
4.4 Discussion.....	111

4.4.1 Conclusion.....	114
CHAPTER 5: The Rogerian Fully Functioning Individual: An Examination of the Correlates of Life Satisfaction.....	116
5.1 Introduction.....	116
5.1.1 Empirical Support from Positive Psychology for Person -Centered Theory.....	119
5.1.2 The Present Study.....	122
5.1.3 Study Hypotheses.....	122
5.2 Method.....	123
5.2.1 Participants.....	123
5.2.2 Measures.....	123
5.2.3 Procedure.....	126
5.2.4 Data Analysis.....	126
5.3 Results.....	128
5.4 Discussion.....	130
5.4.1 Conclusion.....	132
CHAPTER 6: Strengths Use as a Predictor of Well-Being and Health-Related Quality of Life.....	133
6.1 Introduction.....	133
6.2 Method.....	141
6.2.1 Participants.....	141
6.2.2 Measures.....	141
6.2.3 Procedure.....	145
6.2.4 Data Analysis.....	145
6.3 Results.....	146

	10
6.4 Discussion.....	153
6.4.1 Study Limitations.....	153
6.4.2 Study Findings.....	154
6.5 Conclusion.....	158
CHAPTER 7: Testing the Research Procedure and Preliminary Development	
of the Student Materials for the Primary Research Study.....	159
7.1 Introduction.....	159
7.1.2 Overview of Studies.....	159
7.2 Study 1.....	160
7.2.1 Method.....	160
7.2.1.1 Participants.....	160
7.2.1.2 Purpose.....	161
7.2.1.3 Measures.....	161
7.2.1.4 Procedure.....	163
7.2.1.5 Data Analysis.....	164
7.2.2 Results.....	167
7.2.3 Discussion.....	169
7.2.4 Conclusion.....	170
7.3 Study 2.....	171
7.3.1 Method.....	171
7.3.1.1 Participants.....	171
7.3.1.2 Purpose.....	172
7.3.1.3 Measures.....	172
7.3.1.4 Procedure.....	175
7.3.1.5 Data Analysis.....	177

	11
7.3.2 Results.....	178
7.3.3 Discussion.....	183
7.3.4 Conclusion.....	186
CHAPTER 8: Strengths Gym: The Impact of a Character Strengths-Based Intervention of the Life Satisfaction and Well-Being of Adolescent Students.....	188
8.1 Introduction.....	188
8.1.1 School – The Ideal Place for Initiatives.....	189
8.1.2 Positive Psychology Interventions.....	190
8.1.3 The Values-in-Action Strengths Classification.....	191
8.1.4 Building Strengths in Young People.....	192
8.1.5 The Present Study.....	194
8.1.6 Indicators of Well-Being.....	195
8.1.7 Study Hypotheses.....	196
8.2 Method.....	197
8.2.1 Participants.....	197
8.2.2 Measures.....	197
8.2.3 Procedure.....	200
8.2.4 Data Analysis.....	201
8.2.5 The Intervention Programme.....	202
8.3 Results.....	206
8.4 Discussion.....	209
8.4.1 Conclusion.....	213
CHAPTER 9: Thesis Discussion and Conclusion.....	214
9.1 Review of the Thesis.....	214

	12
9.1.1 Strengths and Limitations.....	217
9.1.2 Tensions Between Rogerian and Positive Psychological Approaches.....	220
9.1.3 Criticisms of Positive Psychological Approaches.....	222
9.2 Conclusion.....	224
REFERENCES.....	225
APPENDICES.....	268
Appendix 2.1 – Table 2.1 Youth Life Satisfaction.....	268
Appendix 3.1 – Table 3.1 Youth Life Satisfaction Measures – Sample Characteristics of Reviewed Studies.....	285
Appendix 7.4 – Figure 7.4 Example Student Work Booklet.....	288
Appendix 7.6 – Experimental Group Follow-up Questionnaire: Summation of Results.....	294
Appendix 7.7 Comparison Group Follow-up Questionnaire: Summation of Results.....	296
Appendix 8.1 Strengths Gym – Year 8 Booklet.....	298
Appendix 8.2 Strengths Gym – Year 9 Booklet.....	308

SATISFACTION WITH LIFE: EXAMINING THE IMPACT OF  
CHARACTER STRENGTHS AMONG YOUNG PEOPLE

By

Carmel Laura Proctor

ABSTRACT

Research has shown that the disease model of child development has not led to the prevention of antisocial behaviour or psychological disorders in youth. Recent findings have shown that the positive outcomes of moral education in the building of character strengths can be used as buffers against the development of both psychological and behavioural difficulties. Similarly, youth life satisfaction has been shown to have a buffering affect for adolescents and to be positively related to an array of desirable social and psychological characteristics. Primarily this research sought to examine whether the awareness of character strengths and the exercising of them through strengths-based exercises increases life satisfaction among adolescents. This research also sought to develop student materials for the school curriculum designed to encourage students to exercise and learn about their strengths. Results revealed that awareness of individual character strengths is positively non-significantly related to increased mean life satisfaction. Participation in character strengths-based exercises is significantly related to increased life satisfaction among adolescents. Application of a character strengths-based programme in the school curriculum has an overall positive impact on life satisfaction, positive affect, and self-esteem. Young people with very high levels of life satisfaction have significantly higher mean scores on multiple school, interpersonal, and intrapersonal variables than those with average and very low levels of life satisfaction. Results further indicate that young people with very low levels of life satisfaction would benefit most from interventions aimed at boosting those variables having the most influence on their level of life satisfaction. Generic strengths use is a strong unique predictor of subjective well-being among individuals for whom specific character strengths associated with a life of meaning are commonly-endorsed. Life satisfaction is positively associated with the characteristics identified as representative of the Rogerian fully functioning individual.

## CHAPTER 1: Thesis Introduction

---

### 1.1 Background and Aims

In deciding to pursue a doctoral degree in psychology, I wanted to conduct research in an area of personal interest to me. After completing a master's degree steeped heavily in educational psychology and educational psychology research, I was inspired to discover a means of increasing well-being among young people in the school environment. As my master's degree was primarily an applied psychology degree in measurement and evaluation, I immediately began my search for my topic by considering how best to measure 'well-being' among young people. My search for well-being measures resulted in discovering the work of Scott Huebner, specifically his Students' Life Satisfaction Measure (Huebner, 1991c). This discovery thus pointed me in the direction of the vast life satisfaction literature. I was immediately drawn to the life satisfaction construct due to its existential nature.

As part of my broad based undergraduate psychology degree I had focused a considerable amount of my studies in philosophy. Among the works to have had the most profound impact on me was Aristotle's *Nicomachean Ethics* (c. 330 BCE/1925). Basic satisfaction with one's own existence has roots in Aristotelian philosophy and interest in satisfaction with life had gained considerable recent attention due to the positive psychology movement. In general, the positive psychology literature promotes the exercising of virtues as a means of increasing well-being, and much of this literature focuses on life satisfaction as an indicator of happiness. Among adults it had been demonstrated that building character strengths (i.e., virtues) through strengths-based exercises can increase overall well-being and life satisfaction (see Seligman, Steen, Park, & Peterson, 2005). However, despite broad based claims of

the psychological benefits and increased happiness (i.e., life satisfaction) that can result from character strength awareness and the exercising of individual character strengths in daily life (e.g., Seligman, 2002a), research had not yet demonstrated that character strengths awareness and character strengths exercises would have the same beneficial effect on young people.

Clearly life satisfaction was a positive psychological outcome variable and application of a positive psychological intervention, such as strengths-based exercises, could serve as the means of increasing well-being among young people in the school environment. Keen to develop my research hypothesis from this perspective, I identified P. Alex Linley as someone in the positive psychology field who was conducting research in my area of interest and whose knowledgeable guidance in this field would be invaluable. In turn, John Maltby was identified as a supervisor for my project given his expertise in individual differences, which was well matched with my desire to research life satisfaction, an individual differences construct. Together their guidance has shaped the progression of my doctoral research.

## 1.2 Thesis Overview

Work on the thesis began with a systematic and comprehensive review of the adolescent and youth life satisfaction literature (Chapter 2), which has been published in the *Journal of Happiness Studies* (Proctor, Linley, & Maltby, 2009b). In general, the review process revealed an extensive and broad based literature on adolescent and youth life satisfaction and clearly indicated life satisfaction as an important outcome variable and influential predictor of positive psychological well-being among young people. Indeed, this review indicated areas for future research, which would provide grounding in approaching the primary aim of the thesis. I therefore designed studies

that concentrated on a much smaller number of factors than those considered in the literature, with the aim of adding to the knowledge in the area and building a foundation for the primary research project (i.e., the development and application of strengths-based exercises as a means of increasing life satisfaction among young people in the school environment). Chapter 2 begins by providing a general introduction to the life satisfaction construct and then presents the findings of the review process, followed by a brief discussion of the implications of positive life satisfaction among young people and future directions.

Chapter 3 presents a systematic and comprehensive review of the youth life satisfaction measures literature, which has been published in the *Journal of Positive Psychology* (Proctor, Linley, & Maltby, 2009a). In conducting the adolescent and youth life satisfaction literature search (Chapter 2), a considerable amount of literature pertaining to life satisfaction measures was identified. These articles provided valuable information as to which life satisfaction measures should be utilised in the various studies to be conducted as part of the doctoral research. It was therefore decided that a separate comprehensive review of this literature should be conducted in order to establish that the correct life satisfaction instruments were being utilised. Moreover, it was evident from the results of the first review that a full review of extant adolescent and youth life satisfaction measures literature had not previously been conducted, and thus, the construction of a current full review would greatly add to the literature and aid those wishing to utilise these measures as part of the research being conducted within the positive psychology field.

Chapter 4 presents a study that examines very high life satisfaction among young people, which has been published in *Social Indicators Research* (Proctor, Linley, & Maltby, 2010). Overall, results of the literature review presented in Chapter

2 clearly indicated the vast array of personal, psychological, social, and behavioural benefits associated with high life satisfaction among young people. Moreover, evidence suggests that there are added benefits to those displaying *very high* levels of life satisfaction. Despite this, there is a dearth of research exploring the characteristics of young people with very high life levels of satisfaction and the impact that their level of life satisfaction has on personal, psychological, and social variables. Therefore, this study further investigates the characteristics of young people reporting very high levels of life satisfaction and adds to the existing literature by expanding on the range of variables previously considered. This study also seeks to determine the specific influences of youth characteristics on level of happiness (i.e., life satisfaction), thus enabling consideration of the applicability of positive psychological interventions as a means of boosting those variables.

Chapter 5 presents a study that assesses the relationship between life satisfaction and a set of variables identified as being representative of the various characteristics constituting the Rogerian ‘fully functioning individual’. In general, there is growing recognition in the field that the metatheoretical assumptions of person-centered theory are consistent with and provide grounding for positive psychological research. Moreover, research has demonstrated that people who possess the attributes constituting what Carl Roger’s (1959) defined as being ‘fully functioning’ experience greater life satisfaction and happiness. However, to date examinations of the links between person-centered personality theory and positive psychology have not examined whether positive psychological indicator variable measurement could be used to represent the various characteristics constituting what Roger’s defined as the fully functioning individual. Moreover, of the theoretical and empirical support provided by positive psychological research, there has not been an

investigation of the relationship between these characteristics and life satisfaction and whether or not links between the two related disciplines hold true among young people.

Chapter 6 presents a study that examines generic strengths use and its relationship with subjective well-being (SWB; i.e., life satisfaction and positive affect, less negative affect) and health-related quality of life (HRQOL), which has been published in the *Journal of Happiness Studies* (Proctor, Maltby, & Linley, 2011a). In general, review of the life satisfaction literature (Chapter 2) revealed a dearth of research specifically examining the relationship between life satisfaction and character strengths among young people. However, the literature did reveal a growing body of research devoted to the examination of character strengths as conceptualised by the Values-In-Action (VIA) – Inventory of Strengths (Peterson & Seligman, 2004) classification system, which appeared to overlapped with research examining generic strengths as an independent classification. Overall, throughout the character strengths literature when referring to ‘strengths’, both the VIA conceptualisation and the generic conceptualisation appeared to be used interchangeably. Furthermore, studies examining the impact of character strengths or generic strengths use on SWB and HRQOL among young people were nonexistent. Indeed, broad based claims have been made in the literature on the benefits associated with increased ‘strengths’ use despite a dearth of research to support these claims. Moreover, distinctions are not being made between strengths as virtues (i.e., the VIA classification of character strengths) versus strengths as personality characteristics (i.e., generic strengths not limited by moral virtues). To date, research has not explored possible links between endorsement of VIA character strengths and generic strengths use and their impact on SWB and HRQOL among young people.

Chapter 7 presents two studies conducted as part of the development of the primary research project. The first study (Study 1) tests the application of individualised strengths-based exercises as a means of increasing life satisfaction among young people. As previously noted, the positive psychology literature clearly indicates that the application of a positive psychological intervention, such as strengths-based exercises, could serve as the means of increasing well-being among young people in the school environment. Therefore, this study was the first application of a research procedure designed to test this hypothesis. The second study (Study 2) builds on the findings of Study 1 by testing the application of a broader range of strengths-based exercises, presented in preliminary developed student booklets, as a means of increasing life satisfaction among young people.

Chapter 8 presents the primary research study, which at the time of writing has been accepted (pending revisions) for publication in the *Journal of Positive Psychology* (Proctor, Maltby, Wood, Linley, & Fox Eades, 2011b). This study is the culmination of Study 1 and Study 2 (Chapter 7) and tests the application of the final version of the developed student booklets in the school curriculum as a means of increasing life satisfaction among young people.

Chapter 9 summarises and discusses the major findings along with the strengths and limitations of the research conducted, including methodological and theoretical issues that emerged during the course of the thesis, tensions between Rogerian and positive psychological approaches, and criticisms of positive psychology. I conclude that fundamental to the discovering how we achieve happiness is determining the way in which young people perceive their lives. Developing methods to build life satisfaction in order to buffer against the development of problems is imperative to the positive development of young people.

## 2.1 Introduction

Recently the field of positive psychology has re-illuminated the need for psychology to address areas associated with optimal functioning and happiness. From the time of Aristotle (see Aristotle, c. 330 BCE/1925), the pursuit of happiness and the achievement of the ‘good life’ has been a major concern among philosophers and theologians, and was included as a foundational mission of psychology (Seligman, 2002b; Seligman & Csikszentmihalyi, 2000). Within the field of psychology the study of ‘happiness’ generally falls under investigations of subjective well-being (see Diener, 1984; Diener, 1994; Diener, Suh, Lucas, & Smith, 1999, for reviews).

### *2.1.1 Subjective Well-Being*

The subjective well-being (SWB) construct is a tripartite category of phenomena, which includes: emotional responses (i.e., positive affect (e.g., joy, optimism) and negative affect (e.g., sadness, anger)), domain satisfactions (e.g., work satisfaction, relationship satisfaction), and global judgements of life satisfaction (LS) (Diener et al., 1999). According to multitrait-multimethod analyses conducted by Lucas, Diener, and Suh (1996), pleasant affect, unpleasant affect, and LS are separable constructs, and therefore, can be assessed as separate components (Diener et al., 1999; Pavot & Diener, 2004).

In general, the affective components of SWB have received more attention in the literature than the cognitive components (i.e., LS) (Diener, Emmons, Larsen, & Griffin, 1985; Pavot & Diener, 1993; Pavot, Diener, Colvin, & Sandvik, 1991), despite the fact that each of the three components are considered of equal importance (Gilman, Huebner, & Laughlin, 2000). This imbalance is accounted for in part by the

fact that the affective components are based on emotional responses which, although invariably short lived and fluctuating, are representative of the nature of everyday life (Gilman et al., 2000). Life satisfaction, on the other hand, is based on overall cognitive appraisals of quality of life, and thus, typically not susceptible to change due to short-term emotional reactions to life events. Therefore, LS is considered not only to be a more stable component (Eid & Diener, 2004), but also the key indicator of positive SWB (Diener & Diener, 1995), and consequently the indicator most amenable for inclusion in studies of young peoples' perceptions of their life circumstances (Huebner, 2006). Individuals with positive SWB have consistently been shown to report high levels of LS, as well as, satisfaction across multiple life domains (e.g., marriage, income, physical health), positive emotions, increased mental health, and a longer life (for a review see Lyubomirsky, King, & Diener, 2005).

### *2.1.2 Life Satisfaction*

Life satisfaction is the cognitive assessment of one's life as a whole (Shin & Johnson, 1978). In arriving at overall evaluations of life, individuals typically use their own set of criteria and standards in weighting the different aspects of their lives (Diener et al., 1985; Pavot & Diener, 1993; Shin & Johnson, 1978). Consequently, it is often more meaningful to assess global judgments of LS rather than satisfaction with specific life domains (Diener & Diener, 1995; Pavot & Diener, 1993; Pavot et al., 1991). However, when a more differentiated assessment is required for purposes of focused diagnostic, prevention, and intervention efforts, measures of multidimensional LS may be required (Huebner, 2001). Nevertheless, the LS construct incorporates the full range of satisfaction (i.e., from very low to very high)

and thus measurement of this personal strength is fitting for a positive psychological paradigm interested in optimal well-being and human fulfilment (Huebner, 2004).

In the research literature LS is often used interchangeably, and considered synonymous, with the term 'happiness' (Diener, 1994; Seligman, 2002a); despite that the term 'happiness' is not consistently defined and is associated with many varied meanings, including: hedonic level, joy, positive affect, satisfaction with life, and pleasantness. Moreover, scores on measures of LS are often used to indicate happiness or unhappiness. In general, positive evaluations of LS are linked with happiness and the achievement of the 'good life', whereas negative evaluations of LS are associated with depression and unhappiness. Moreover, healthy psychological states, such as happiness and LS, are often assumed to be the by-products of social and economic resources and success, despite research indicating a bidirectional relationship (Lyubomirsky et al., 2005). Indeed, cross-sectional, longitudinal, and experimental data have all shown that well-being and happiness can precede diverse positive personal, behavioural, psychological, and social outcomes (see Lyubomirsky et al., 2005), just as low LS and unhappiness can predict the onset of depression and psychological disorder up to two years prior to diagnosis (see Lewinsohn, Redner, & Seeley, 1991).

## 2.2 Understanding Youth Life Satisfaction

Life satisfaction is an important construct in positive psychology (Gilman & Huebner, 2003). Measures of LS are sensitive to the entire spectrum of functioning, and thus, provide indicators of both well-being and psychopathology. This contrasts with traditional mental health scales that require respondents to indicate the presence or absence of problems, and rate existing problems according to frequency and

symptoms, with no option of reporting the characteristics or presence of positive feelings or behaviours (Gilman & Huebner, 2003; Kamman, Farry, & Herbison, 1984). Further, as a key indicator of SWB, LS is integral to the science of positive psychology which focuses on identifying strengths and the building of them as buffers against the development of psychopathological problems (Veenhoven, 1988).

### *2.2.1 Purpose*

The purpose of this chapter is to provide a review of the extant research on youth LS, and detail how it relates to other important emotional, social, and behavioural constructs. Moreover, although the majority of research studies conducted in this area have been correlational in nature, providing general positive and negative associations between LS and various variables, this chapter aims to specifically highlight the benefits of positive youth LS and draw attention to its role as a buffer against the negative effects of stress, psychological problems, and disorders. This review will not include a discussion or presentation of models and measures of LS or research on assessment of LS among youth (Chapter 3; see Proctor et al., 2009a, for a review). Furthermore, throughout this review ‘children’ will refer to individuals aged 12 years old and under, ‘adolescent’ will refer to individuals aged 13-19 years old, and ‘youth’ will refer to groups of individuals comprised of both ‘children’ and ‘adolescents’.

### *2.2.2 Literature Search Strategies*

Literature included in this review was established using three search strategies. First, two major psychology databases: PsycINFO and PsycARTICLES, one medical database: PubMed, and one educational database: ERIC, were searched for peer-reviewed published literature in June 2006. Abstracts in each of these databases were searched using the following specific search terms: *life satisfaction, youth, and*

*adolescent*. During each search the terms were paired (i.e., *life satisfaction and youth*, *life satisfaction and adolescent*). The search results from these specific search terms were then screened via the title and abstract for their relevance for inclusion in this review. Non-empirical (i.e., theoretical, literary review) publications, dissertations, and foreign language studies were not included, nor were studies for which the sample age group was greater than 19 years old. Using this strategy, a total of 392 abstracts were obtained for review. From the 392 abstracts reviewed, 122 empirical studies (i.e., English language) were identified. References obtained from the search performed using the first strategy are marked with an asterisk (\*) in Table 2.1 (see Appendix 2.1). It should be noted, however, that it was the initial aim of the first search strategy to collect all empirical studies of adolescent LS. In order to maximise the likelihood of retrieving all relevant studies the search term ‘youth’ was included. As a result, studies were gathered that included both samples of children and samples whose age ranges varied across the threshold between what is typically considered ‘childhood’ and ‘adolescence’. Therefore, all studies whose sample age group was less than 19, that also met all the other inclusion criteria, were retained.

Second, using the ancestry method (see Anderson & Arsenaault, 1998) the 122 identified articles chosen for inclusion had their references screened by title for other relevant publications. These publications were then collected and this process repeated until no further references were derived. This process yielded an additional 15 empirical studies. References obtained from the search performed using the second strategy are marked with a double asterisk (\*\*) in Table 2.1 (see Appendix 2.1).

Finally, references that were known by the author to be directly relevant to the review, but not detected using the other two search strategies, were also included. This process yielded a further 27 empirical studies. References obtained using the

third strategy are marked with a triple asterisk (\*\*\*) in Table 2.1 (see Appendix 2.1). The three strategies employed yielded a total of 164 empirical studies, of which 23 relating to the psychometric properties of LS measures were not included (Chapter 3). Therefore, a total of 141 empirical studies are to be reviewed. Included articles have been grouped under main areas of interest and are discussed in the sections that follow, where possible articles appear within the section matching the study focus groupings presented in Table 2.1 (see Appendix 2.1).

This review begins with a discussion of ‘levels’ of youth LS, the effects of demographics, and social desirability effects. Next, extant findings of youth LS satisfaction are summarised, and areas considered include: personality, physical health, productivity, relationships, environment, culture, risk-taking behaviour, disabilities, psychophysiology, psychopathology, extremely high LS, and character strengths. Finally, a brief discussion of youth LS as being more than an epiphenomenon is presented along with conditions fostering positive LS, the implications of positive LS among youth, and future directions.

### 2.3 Levels of Life Satisfaction

Cross-national data examining happiness among adults has shown that most people report a positive level of LS. For example, Diener and Diener (1996) reported that the mean level of happiness across 43 nations as measured on a scale that went from 0-10, where 0 = most unhappy, 5 = neutral, and 10 = most happy, was 6.33. Based on surveys conducted at the University of Chicago, 3 in 10 people say they are ‘very happy’, 1 in 10 say they are ‘not too happy’, and the remaining 6 out of 10 say they are ‘pretty happy’ (Myers & Diener, 1996). Similar to findings of adult studies, most studies find that children and adolescents report their LS to be in the positive

range. For example, Huebner et al. (2000a) found that 73% of 5,545 students sampled in grades 9-12 reported LS ratings in the 'mostly satisfied' to 'delighted' range. Similar findings of an overall positive level of LS among children and adolescents have been reported across various international studies (e.g., Greenspoon & Saklofske, 1997; Huebner et al., 2000a; Huebner, Funk, & Gilman, 2000b; Kuntsche & Gmel, 2004; Leung & Zhang, 2000; Neto, 2001; Nickerson & Nagle, 2004; Park & Huebner, 2005), as well as, among studies involving special groups (e.g., Brantley, Huebner, & Nagle, 2002; McCullough & Huebner, 2003). However, it is noteworthy that research findings also demonstrate that global LS tends to decline slightly with the onset and progression of adolescence and that these findings are similarly supported by international research, including those from: America (e.g., Suldo & Huebner, 2004b), Israel (e.g., Ullman & Tatar, 2001), South Korea (e.g., Park, 2005), and China (e.g., Chang, McBride-Chang, Stewart, & Au, 2003).

#### 2.4 Demographics and Life Satisfaction

The relationship between demographic variables (i.e., age, gender, race, and socioeconomic status (SES)) and LS are weak and research has shown that these variables contribute only modestly to the prediction of youth LS. Further, these findings are consistently reported throughout the literature among the most frequently used global and domain specific self-report measures of youth LS (see Gilman & Huebner, 2000, for a review), including: the Students' Life Satisfaction Scale (SLSS; Huebner, 1991b; Huebner, 1991c) (e.g., Adelman, Taylor, & Nelson, 1989; Dew & Huebner, 1994; Huebner, 1991a, 1995; Huebner & Alderman, 1993; Huebner & Dew, 1996), the Multidimensional Students' Life Satisfaction Scale (MSLSS; Huebner, 1994b) (e.g., Adelman et al., 1989; Gilman & Huebner, 1997; Gilman et al., 2000;

Huebner, 1994b; Huebner, Laughlin, Ash, & Gilman, 1998), the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson, Huebner, & Valois, 2003) (e.g., Funk, Huebner, & Valois, 2006; Huebner et al., 2000a; Huebner, Valois, Paxton, & Drane, 2005; Seligson, Huebner, & Valois, 2005), and the Perceived Life Satisfaction Scale (PLSS; Adelman et al., 1989) (e.g., Huebner & Dew, 1993b; Huebner & Dew, 1993c)).

Several studies, however, have noted specific relationships between demographic variables and youth LS. For example, Huebner et al. (1998) found that age ( $M = 12.89$ ) was weakly correlated with students' scores on the MSLSS domains. Ash and Huebner (2001) found that SES was positively related to LS (i.e., lower SES students reported lower LS than higher SES students); findings which are consistent with those reported by Neto (1993) using the Satisfaction With Life Scale (SWLS; Diener et al., 1985) with a Portuguese sample, and by Seligson et al. (2003) using the BMSLSS with a American sample, and further with those from adult samples (see Diener, 1984). Similarly, Huebner et al. (2004b) reported a significant difference for race among American students using the BMSLSS, such that Caucasians reported higher LS than African-Americans.

## 2.5 Social Desirability Effects

The relationship between social desirability and self-report measures of SWB (e.g., LS) has traditionally been a matter of concern due to the moderate correlation between them (Diener, 1994). However, social desirability has recently been demonstrated to be a personality characteristic that is an important determinant of well-being (Diener, 1994; Huebner et al., 1998). For example, in two studies of Australian adolescents, Heaven (1989) found a significant correlation between the Lie

subscale of the Eysenck and Eysenck (1975) Junior Eysenck Personality Questionnaire and LS, as measured by the SWLS, which indicated that respondents attempted to look favourable by 'faking good'. However, the correlations between LS and the other personality dimensions measured remained largely unaltered after partialing out the effects of social desirability (Heaven, 1989). Comparatively, a study by Huebner et al. (1998) showed that the relationship between reports of LS and social desirability varied across the domains of the MSLSS, indicating the importance of social desirability as a determinant of LS (Gilman & Barry, 2003; Huebner et al., 1998); results which contradict the notion that a correlation between the total scores of LS and a social desirability measures reflects bias in measures of SWB (see McCrae & Costa, 1983).

## 2.6 Personality and Life Satisfaction

Personality and temperament variables have been demonstrated to account for most of the variance in SWB (Diener, 1996; Emmons & Diener, 1985; Fogle, Huebner, & Laughlin, 2002; Huebner, 1991a). Therefore, the effects of personality and temperament variables on LS and the way in which these variables influence it are of great importance. As discussed by Diener (1996), the genetic and heritable effects of personality, including positive and negative affect and the influences of temperament, are evidenced from infancy and predispose individual levels of SWB (see Costa & McCrae, 1980; DeNeve & Cooper, 1998, for reviews of adult studies). Moreover, these heritable traits remain throughout life and thus have their greatest effect due to their stable long-term impact. Findings from adult studies which have examined the relationships among happiness, extraversion, neuroticism, and self-reported social competence, such as that by Argyle and Lu (1990a), suggest happiness

is positively associated with extraversion and negatively associated with neuroticism, and that self-reported social competence acts as a mediator between temperament variables and happiness. Similar findings have been reported among children and adolescents (e.g., Ash & Huebner, 2001; Casas, Gonzalez, Figuer, & Coenders, 2004; Greenspoon & Saklofske, 2001; Heaven, 1989; Huebner, 1991a; McKnight, Huebner, & Suldo, 2002). For example, Fogle et al. (2002) found LS to be positively correlated with extraversion and social self-efficacy, negatively correlated with neuroticism, and to mediate the relationship between LS and extraversion, but not between LS and neuroticism. Overall results suggested that adolescents' perceptions of their ability to be competent in social settings lead to increased sociability, which in turn related to greater LS. Similarly, Rigby and Huebner (2005) demonstrated that adaptive attributions for good outcomes served to partially mediate the relationship between emotional stability and LS; i.e., adolescents who were higher in emotional stability were more likely to make adaptive attributions for good outcomes, which in turn related to increased LS.

Life satisfaction has also been consistently positively associated with self-esteem. For example, Diener and Diener (1995) explored the discriminate validity of self-esteem and LS among a large cross-national group of 13,118 college students and discovered a positive correlation, not only across the entire sample, but also in most nations. Similarly, moderate positive correlations are found between LS and self-esteem among children and adolescents (e.g., Dew & Huebner, 1994; Huebner, 1991a; Neto, 1993). In accordance with these findings, positive correlations have also been demonstrated between measures of LS and the Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) Adaptive scales (i.e., self-esteem, self-reliance, interpersonal relations, and parental relations), and negative correlations

between LS and the BASC Clinical Scales (i.e., anxiety, depression, and symptoms of psychological disorder). Moreover, these correlations have proved to be consistent across LS measures, including: the MSLSS (e.g., Gilman et al., 2000; Greenspoon & Saklofske, 1997), the SLSS (e.g., Huebner et al., 2000b), and the BMSLSS (e.g., Funk et al., 2006).

## 2.7 Physical Health and Life Satisfaction

### 2.7.1 Exercise

Positive links have been shown to exist between youth LS and exercise. For example, Gilman (2001) found that students who either rated themselves higher in social interest, or as participating in greater numbers of structured extracurricular activities (SEAs), also reported significantly higher global LS than those who reported less social interest, and/or minimal or no participation in SEAs; similar findings have been found among adults (e.g., Argyle & Lu, 1990b). Further, students who reported both low social interest and less participation in SEAs were lower across all satisfaction domains than those students who reported high social interest and greater participation in SEAs (see Gilman, Meyers, & Perez, 2004b; Larson, 2000, for further findings and implications of SEAs for adolescents). In a related study, Vilhjalmsson and Thorlindsson (1992) demonstrated LS to be positively related to strenuous exercise, participation in club and group sport, and to be negatively correlated with anxiety, depression, psychophysiological symptoms, smoking, and alcohol use among Icelandic adolescents. Similar results have been reported among American students by Maton (1990), where LS was found to be positively related to meaningful instrumental activity, and by Valois et al. (2004b) where positive associations were found between LS and various physical exercise behaviours.

Further, these results are consistent with those reported by Holstein et al. (1990) among a nationwide sample of Danish children, where it was found that high intensity exercise was positively associated with increased LS.

### *2.7.2 Physical Health*

Evaluations of LS have become an important part of health outcome evaluations of medical treatment, such as HRQOL evaluations targeted on patient groups suffering with mild physical disorders (Langeveld, Koot, & Passchier, 1999). For example, Langeveld et al. (1996) found that adolescents suffering with headache and migraine reported lower overall HRQOL, including: decreased psychological functioning, increased physical symptoms, lower LS, and less general health (Langeveld et al., 1996). Moreover, changes in headache and migraine activity in adolescents has been shown to be related to parallel changes in the HRQOL sub-domains of LS, health, and psychological functioning (see Langeveld, Koot, & Passchier, 1997). Further, additional studies have shown that increased headache suffering is associated with lower LS and that the experience of stress moderates the effects of headache on psychological functioning and LS in adolescents; i.e., increases in experienced stress is accompanied by poorer psychological functioning and lower global LS (Langeveld et al., 1999). Similar findings have been reported by Zullig et al. (2005b), where negative associations were found between LS and poor self-rated health, poor physical health, poor mental health, and activity limitation among adolescents; similar findings have been reported by Shek (1998). Specifically, findings indicated that as the number of reported poor health days increased, the more LS decreased (Zullig et al., 2005b).

### *2.7.3 Substance Abuse*

Substance abuse is typically considered the use of substances, such as alcohol or drugs, in ways that adversely affect life functioning (Forman, Bry, & Urga, 2006). Out of all the substances used and abused by children and adolescents, alcohol, cigarettes, and marijuana remain the most widespread and prevalent (Forman et al., 2006). In a recent cross-cultural study of smoking behaviour among adolescents throughout Europe and America, it was found that 22.1% of American, 23.6% of Turkish, 57.6% of Polish, and 58.7% of Hungarian adolescents are self-reported smokers (see Piko, Luszczynska, Gibbons, & Tekozel, 2005). Overall, results revealed that LS, academic achievement, future orientedness, and social comparison orientation negatively correlate with smoking among adolescents across cultures (Piko et al., 2005). Similarly, Zullig et al. (2001) examined perceived global LS and selected substance use behaviours among American students and found that use of tobacco (i.e., cigarettes and chewing tobacco), cocaine, alcohol, marijuana, and steroids were all negatively related to self-reported LS (cf. Donohue et al., 2003). Related to these findings are those reported by Kuntsche and Gmel (2004), who examined binge drinking among Swiss adolescents and found that binge drinkers to had lower LS, more depression, and were more often offenders of bullying and hitting. More specifically, results revealed solitary binge drinkers to be the most socially inhibited, depressive, and victims of bullying in comparison to social binge drinkers, who were socially accepted but more often offenders of violence (Kuntsche & Gmel, 2004). Similarly, Newcomb et al. (1986) examined whether alcohol use was a significant antecedent and/or consequence of low LS and found that early alcohol use led directly to an exacerbation of dissatisfaction with life and perceived environment as young adults.

## 2.8 Productivity and Life Satisfaction

### 2.8.1 *Employment*

Research with adult samples has indicated that loss of employment, and/or unemployment, impacts negatively on psychological well-being and can lower levels of self-esteem (Creed, Muller, & Patton, 2003). Similarly, longitudinal research with adolescents has indicated that youths who leave school and do not subsequently become employed report lower levels of self-reported activity, perceived competence, and LS, and increased depressive affect (see Feather & O'Brien, 1986). Further, longitudinal research has also revealed unemployed school-leavers to have increased depression, external LOC, and decreased self-esteem in comparison to employed school-leavers (see Patton & Noller, 1984). In an Australian study, Creed et al. (2003) assessed students on levels of school achievement, well-being (psychological distress, self-esteem, LS), and career decision making self-efficacy (CDMSE). Nine months after leaving school, those employed full-time reported higher CDMSE and LS, more access to latent benefits, and less financial strain than full-time students, full-time students with part-time work, and those in the labour market but not currently employed.

### 2.8.2 *Goals and Motivation*

According to Locke (2002), goal-directed action is the means by which we fulfil needs and attain happiness through the various processes of value application, value pursuit, and value achievement. For example, Linley et al. (2004) found that children's intrinsic values were associated with increased happiness and LS, whereas extrinsic values were associated with lower teacher behaviour ratings; i.e., children with greater extrinsic values were perceived as displaying more negative behaviour than those with greater intrinsic values. These findings are in accordance with past

research demonstrating that when one's life is organised around the pursuit of extrinsic goals, personal well-being is diminished, whereas the reverse is true of a life formed around the pursuit of intrinsic goals (cf. Casas et al., 2004; see Kasser, 2004, for a review). Similarly, conscious goal pursuit (see Deci & Ryan, 2000, for a discussion) has long been linked with increased SWB and happiness (Diener, 1984). For example, past studies of college students have shown perceived goal attainment, goal importance, and goal fulfilment to be positively related to both positive affect and LS (see Emmons, 1986; Emmons & Diener, 1986). Similar results have been reported by Hofer and Chasiotis (2003) among Zambian adolescent males, where a congruence between implicit motives and self-attributed goals increased LS (cf. Hanrahan, 2005). Interestingly results showed that level of education was negatively related to LS for all three motivational domains examined (i.e., achievement, affiliation, and power). These results suggest that contrary to other studies (e.g., see Diener, Suh, & Oishi, 1997), for Zambian adolescents, higher education and exposure to Westernised values may decrease LS as attainment of goals based on these values is difficult given socioeconomic conditions (Hofer & Chasiotis, 2003). In a related study, Piko and Keresztes (2006) explored the relationship between physical exercise and life goals among Hungarian students and found that adolescents who are regularly active prefer less extrinsic values as life goals, whereas less active students prefer extrinsic aspirations as life goals. Further results revealed more active students to report better self-perceived health, greater fitness, lower levels of depression, and higher levels of LS than less active students (Piko & Keresztes, 2006). Comparatively, Lessing (1972) discovered that preadolescent girls with low LS projected their fantasies significantly farther into the future than their satisfied peers,

whereas adolescents with low LS tended to constrict their future outlook in comparison to their more satisfied peers.

### *2.8.3 Achieving Personal Standards*

Cognitive appraisal of personal standards is a characteristic common to both perfectionism, the setting of especially high standards, and LS (Gilman & Ashby, 2003; see Gilman & Ashby, 2006, for a review). Conceptually, perfectionism is seen as having two subtypes: adaptive and maladaptive (Gilman & Ashby, 2003). From the maladaptive perspective, perfectionism is linked with negative mental health and psychological distress as achieving it often impossible and the striving after it leads many to be self-defeated and depressed (e.g., see Accordino, Accordino, & Slaney, 1999; Enns & Cox, 1999; Lombardi, Florentino, & Lombardi, 1998). Conversely, in line with Maslow's (1999) concept of self-actualisation, perfectionism has adaptive positive mental health connotations as well. For example, Gilman and Ashby (2003) found significant positive relationships between the Standards subscale (i.e., personal standards) and significant negative relationships between the Discrepancy subscale (i.e., distress caused by the discrepancy between performance and standards) of a perfectionism measure and all of the MSLSS domains. Overall findings demonstrated that an inability to consistently meet personal standards was negatively related to domain LS, the ability to establish high standards was positively related to global LS, whereas difficulties in maintaining high standards was negatively related to global LS (Gilman & Ashby, 2003). Similarly, Gilman et al. (2005), in their cross-cultural investigation of LS and perfectionism among American and Croatian children, found that both Croatian and American adaptive perfectionists groups reported higher satisfaction scores across the MSLSS domains than either maladaptive perfectionists groups or non-perfectionists groups.

#### *2.8.4 Hope*

Historically, scholarly work has defined hope as ‘the perception that one can reach desired goals’ (Snyder, Rand, & Sigmon, 2002, p. 257). According to modern hope theory, hope incorporates not only the capacity to conceptualise goals, but also the belief that one can find appropriate strategies to reach the desired goals (pathway thinking), and become motivated to use these discovered strategies (agency thinking) in order to achieve them (Lopez et al., 2004). Both pathway and agency thinking components involved in hope are necessary, but neither is sufficient, for successful goal attainment (Lopez et al., 2004; Snyder et al., 2002). Findings from the extant adult research on hope has showed that low hope is related to a number of negative psychological outcomes (Gilman, Dooley, & Florell, 2006). However, few studies have examined hope among children and adolescents aside from samples used during the initial validation of the Children’s Hope Scale (CHS; see Snyder et al., 1997), and that of two studies which aimed to further validate the CHS with middle and high school students (see Valle, Huebner, & Suldo, 2004). Expanding on previous hope work, Gilman et al. (2006) investigated various psychoeducational and psychological indicators of school adjustment and their relationships to adolescent students’ levels of hope and found that both the Pathways and Agency subscales of the CHS were positively correlated to global LS, personal adjustment, grade point average (GPA), and SEAs, but negatively correlated to indicators of psychological distress, and school maladjustment.

#### *2.8.5 Self-Efficacy*

Self-efficacy, the personal belief in what one can do, or is capable of doing, is an important determinant of behaviour and influences whether and how one perseveres against the obstacles and challenges of life (Maddux, 2002). In a study

which investigated whether self-efficacy beliefs measured before the onset of major social change would moderate effects of social change on adolescent LS, future optimism, and educational success, Piquart et al. (2004) assessed East German adolescents before and after the fall of the Berlin wall. Results indicated that those with higher levels of perceived negative social change and lower prior levels of self-efficacy had lower levels of LS and less future optimism after German unification, whereas higher LS and future optimism after German unification was associated with higher pre-unification self-efficacy beliefs (Piquart et al., 2004). Overall, LS was found to be positively related to future optimism, GPA before unification, parental warmth, and self-efficacy, with pre-unification self-efficacy beliefs being found to buffer the effects of perceived negative consequences of German unification on LS and future optimism (Piquart et al., 2004). Similarly, self-efficacy beliefs were found among the most consistent predictors of LS among adolescents from five sociocultural groups living in America (i.e., European, African, Chinese, Mexican, Dominican) (see Bradley & Corwyn, 2004). In addition, results have demonstrated self-efficacy to be related to extremely high LS (e.g., Suldo & Huebner, 2006) and for social self-efficacy to act as a mediator between extroversion and LS (e.g., Fogle et al., 2002).

## 2.9 Relationships and Life Satisfaction

### 2.9.1 Parental Marital Status

A salient factor pertinent to adolescent LS is parental marital status. Research findings on the psychological, emotional, and behavioural effects of divorce on children and adolescents have been mixed (Grossman & Rowat, 1995), and research findings demonstrate that there is substantial variation in how children respond to the

experience (Greene, Anderson, Doyle, & Riedelbach, 2006). On a general level, parental separation, divorce, and remarriage have been shown to be associated with diminished well-being in adolescents (Demo & Acock, 1996), whereas more complex familial variables such as lack of paternal involvement have been shown to exert a greater negative effect (Flouri & Buchanan, 2002; Grossman & Rowat, 1995). For example, Grossman and Rowat (1995) found that perceived poor parental relationship, and not family status, was associated with reduced LS among a group of Canadian adolescents. These results are supportive of similar research, such as that conducted by Heaven et al. (1996) among Australian adolescents, where perceived family functioning was found to be positively associated with LS, self-esteem, and extraversion, and negatively associated with neuroticism and psychoticism. Related to these findings are results reported by Zullig et al. (2005c), where several aspects of family structure were found to be negatively related with LS, including: (1) living with other relatives, non-relatives, and guardians; (2) living with fathers only; and (3) living with mothers and another adult(s).

### *2.9.2 Siblings*

Healthy adolescent adjustment is not only influenced by relationships with parents, but also by the quality of sibling relationships, especially during adolescence when complex socioemotional and cognitive changes are occurring (Oliva & Arranz, 2005). For example, in a study of Spanish adolescents, Oliva and Arranz (2005) found that the sibling adjustment of boys was not related to any of the psychological or familial relationship variables measured (i.e., parental acceptance, parental supervision, intimacy, peer attachment, self-esteem, LS), but for girls positive correlations existed between all the variables measured. In contrast to the exploration of the influence of sibling relationships on adolescent LS, is the consideration of the

differences that exist between only children and children with siblings. Many false beliefs have been noted in the literature about the disadvantages of being an only child, including: that only children are lonely, develop fewer social skills, are poorer at sports, are less happy, less popular with peers, overindulged by parents, forced into adult thinking too early, and overprotected, in comparison to peers with siblings (Veenhoven & Verkuyten, 1989). Not discounting data highlighting the potential benefits of sibling relationships, various empirical studies have contradicted these beliefs. For example, data gathered from a sample of adolescents in the Netherlands has demonstrated that adolescent only children do not differ from peers with siblings on level of LS or pleasant affect, nor do they report lower levels of self-esteem or consider themselves less popular among peers, however they were found to participate less in, and feel less proficient at, sports (Veenhoven & Verkuyten, 1989).

### *2.9.3 Social Support*

The perception of adequate social support from friends and family is an essential element of positive mental health, however research suggests that the need for support from parents and friends can shift across development. For example, among a sample of Canadian students, Burke and Weir (1978; 1979) found that adolescents were more likely to speak to peers about their problems, were more satisfied with the responses provided by their mothers and their peers than their fathers, and felt freer to take problems to their peers than to either their mothers or their fathers. Whereas, Greenberg et al. (1983) found that the effect of perceived quality of attachments to parents was higher than that of attachment to peers and accounted for a higher percentage of the variance in LS (Greenberg et al., 1983); results which contrast and compare with additional studies of American (e.g., Dew & Huebner, 1994; Gilman & Huebner, 1997; Larson & Richards, 1991; Terry &

Huebner, 1995) and Chinese (e.g., Chang et al., 2003; Leung & Leung, 1992; Leung & Zhang, 2000; Man, 1991) youth. These findings contrast those of studies that have found a greater reliance on peers in middle to late adolescence than in early adolescence. For example, Steinberg (1987) reported that adolescents' closeness to parents decreases and emotional autonomy increases with pubertal maturation (cf. Nickerson & Nagle, 2004).

Adolescent LS has also been shown to be independently related to the extent of father, or father figure, involvement (Flouri & Buchanan, 2002; Zimmerman, Salem, & Maton, 1995). Past research has shown that fathers make a unique contribution to the happiness, LS, and psychological distress of their children (see Amato, 1994, for a review). Further, various studies have shown that closeness to, involvement of, and nurturance from fathers is associated with psychological adjustment, reduced antisocial behaviour, intellectual development, social competence, and internal locus of control (LOC) among many other positive outcomes (see Amato, 1994, for a review; Flouri & Buchanan, 2002; Zimmerman et al., 1995). For example, Wenk et al. (1994) demonstrated that for both girls and boys feeling close to their father had a significant positive effect on LS. These results compare to those reported from a national survey of American youth where intrinsic support was found to be not only the most predictive facet of adolescent LS, but also that both perceived maternal and paternal support were equally important in predicting LS of adolescent males and females (cf. Vilhjalmsson, 1994; see Young, Miller, Norton, & Hill, 1995).

#### *2.9.4 Parenting Style*

Correlational research has highlighted the role of familial variables, such as, family structure, parenting style, parental emotional and social support, and family

conflict, as crucial in the attainment of adolescent LS. For instance, Suldo and Huebner (2004b) found that all three dimensions of the authoritative parenting style: social support-involvement, strictness-supervision, and psychological autonomy granting were positively related to LS among adolescents, with perceived parental social support having the strongest correlation. Specifically, an interaction effect was found between LS and parental social support such that the influence of parenting behaviours on adolescent global LS decreased as age increased. In a related study, Ortman (1988) found that adolescents' feelings of social control and responsibility were positively related to LS among a group of students who reported having positive relationships with supportive parents. Studies of adolescents in China have revealed relationships between parenting style and adolescent LS similar found in the West. For example, Leung et al. (2004) found that perceived maternal concern was positively related to academic competence and that both were significant in predicting concurrent and longitudinal LS. More specifically, this study showed that overall satisfaction with family, school, and self significantly decreased as age increased, however satisfaction with friends did not significantly change over time (Leung et al., 2004); similar results have been reported by Park (2005) among South Korean students.

### *2.9.5 Family Functioning*

Extensive literature exists on the negative influence of disruptive family events on adolescent well-being (McFarlane, Bellissimo, & Norman, 1995). For example, in a series of studies, Shek (see 1997a, 1997b, 1997c, 1998b, 2002a, 2002b) has demonstrated negative correlations exist between LS and both parental and child indicators of parent-child conflict and poor family functioning among Chinese adolescents and their parents. Further, the data have generally indicated that increased

parent-adolescent conflict and poor family functioning is related to increased mental health problems, problem behaviour, poorer academic performance, delinquent behaviour, and substance abuse (Shek, 1997a, 1997b, 1997c, 2002a, 2002b). Moreover, Shek (1999a, 1999b, 1999c, 2002c) has demonstrated that positively perceived parental qualities, parental styles, parental characteristics, and dyadic functioning predict positive adolescent LS; findings also suggested that paternal characteristics were more important than maternal characteristics in predicting LS in both males and females (cf. Shek, 2005d).

Similarly, Shek (2003a, 2005b, 2005e) has examined the relationship between perceived parenting behaviour, parental control processes, and parent-child relational qualities, family functioning and adolescent psychological well-being, substance abuse, and delinquent behaviour in a series of studies with Chinese adolescents with economic disadvantage. Results revealed that adolescents with economic disadvantage had relatively lower levels of LS and perceived parenting characteristics more negatively than non-economically disadvantaged adolescents (Shek, 2003a, 2005b). Additional studies revealed that current economic hardship and future economic worry are both related to lower levels of LS, emotional quality of life, self-esteem, and mastery, and increased levels of psychiatric morbidity, substance abuse, and problem behaviour (Shek, 2003b, 2005c). Similarly, economically disadvantaged adolescents have generally been found to not only have lower LS and feel more hopeless, but also to perceive paternal behavioural control, and father-child relational qualities more negatively than adolescents whose families do not receive social assistance (Shek, 2005e).

## 2.10 The Environment and Life Satisfaction

### *2.10.1 Environmental Quality*

Low SES has long been linked with lower well-being among adults, however, the psychological and emotional effects of the quality of the physical environment provided to children from low SES families has been sparse (Homel & Burns, 1989). Homel and Burns (1989) collected data from Australian children and their families from 18 different neighbourhoods and found that children from neighbourhoods with high problem levels, or who live on industrial or commercial streets, or reside in poorly maintained houses, and/or in rented accommodation reported lower overall LS, and less happiness with their families than children from residential neighbourhoods. These results are consistent with those reported by Nickerson and Nagel (2004) where parent and peer alienation was found to be inversely related to living environment satisfaction. Related to these findings are those reported by Wilson et al. (1997) from a longitudinal study of rural adolescents from America's Appalachian region. Results revealed a variety of variables, including: 1) family's SES, community size, marital status; 2) perceived attainment in job and life goals, and self-esteem; and 3) perceived disparity between job aspirations and job opportunities, educational demands and educational aspirations, desired residence and actual residence, and desired children and actual number of children, to be predictors of LS among economically dispossessed Appalachian youth (Wilson et al., 1997); similar results have been found among young Appalachian adults (see Wilson & Peterson, 1988).

### *2.10.2 Relocation*

Family residential relocation is ever increasing as individuals seek better employment and opportunities in different geographical regions. The effects on the psychological well-being of children and adolescents as a result of relocation is evidenced through LS having been demonstrated to be negatively associated to the

number of moves made and positively associated to a child's length of time in residence (see Brown & Orthner, 1990). For many children and adolescents, however, relocation does not necessarily involve moving with their family, but moving into a residential care situation due to environmental difficulties occurring with their own family. Unfortunately though, residential treatment settings are generally viewed negatively and it is often assumed that things get worse for children following such placement. For example, Sastre and Ferriere (2000) examined the LS reports of French adolescents living in residential treatment centres and found that these adolescents had lower LS than matched adolescents living at home with their families. In contrast, Gilman and Handwerk (2001) found among American adolescents that shortly after arrival, self-reports of LS were positive and that after several months improved across a number of domains. Similarly, Gilman and Barry (2003) found decreases in global LS after the first month of arrival into residential treatment, but this was followed by significant increases across the next two months. These findings suggest that adolescents may experience added stress upon first entering a residential treatment facility, but following this their LS increases due to the nature of the treatment and environment provided (Gilman & Barry, 2003; cf. Schiff, Nebe, & Gilman, 2006).

### *2.10.3 Life Events*

Proponents of the view that personality controls most of the variance in SWB, such as Costa and McCrae (1980), suggest that SWB is highly stable over time even though research with adults has shown only moderate stability in SWB scores (Headey & Wearing, 1989). Recently, research has been put forth demonstrating that changes in SWB are the result of major life events and experiences. For example, Headey and Wearing (1989) found that life events during a two year period

significantly effected SWB over and above the effects of personality. In addition to studies of major life events, there is growing interest in the role of minor life events (e.g., daily hassles, everyday stressors) in changes in SWB, and LS particularly. For example, McCullough et al. (2000) found that minor daily events (e.g., fights with friends, doing poorly on an exam, enjoying a hobby, helping other people) contributed unique variance over and above that of major life events (e.g., death of family member, divorce) (see Braithwaite & Devine, 1993; West & Prinz, 1987, for the effects of parental alcoholism); similar results have been found by Ash and Huebner (2001). In a related study, Suldo and Huebner (2004a) found negative correlations between LS and stressful life events, externalising behaviour, and internalising behaviour (see Funk et al., 2006; Huebner & Alderman, 1993; McKnight et al., 2002, for similar findings). Further, results demonstrated that LS scores remained stable and were significant predictors of externalising behaviour one year later; similar results have been reported by Huebner et al. (2000b). Overall, analyses revealed an interaction effect between LS and stressful life events, such that externalising behaviour was predicted by stressful life events only for those with low LS. This interaction provides support that LS acts as a buffer against psychopathological behaviour.

## 2.11 Culture and Life Satisfaction

### *2.11.1 Acculturation*

Several notable studies have focused on the acculturation and psychological adaptation of adolescents of non-European decent living in Western societies for whom LS may differ across social, situational, and personality factors. For example, Bradley and Corwyn (2004) found that the most consistent predictors of LS were

those pertaining to self-efficacy, task-orientation, health, and marital status of parents among five sociocultural groups (European, African, Chinese, Mexican, and Dominican) living in America. In contrast, Leung et al. (2006) found that differences in levels of LS among three immigrant Asian groups (Chinese, Filipino, Vietnamese), and their successful adaptation in Australia, could be explained by migration circumstances (i.e., voluntary or refugee), cultural differences (e.g., emphasis on education), and the ability of the cultural group to support the adolescent (e.g., presence of pre-existing English speaking immigrant community). In Finland, Liebkind and Jasinskaja-Lahti (2000) found that perceived discrimination increased acculturative stress and behavioural symptoms and reduced LS, whereas perceived parental support, acceptance of parental authority, and length of residence increased LS among immigrant adolescents from the former Soviet Union, Turkey, Somalia, and Vietnam. Similar results can be found among additional studies conducted in America (e.g., Phinney & Ong, 2002), Portugal and France (e.g., Neto, 1995, 2001), Norway and Sweden (e.g., Sam, 1994, 1998, 2000; Virta et al., 2004), Israel (e.g., Hofman, Beit-Hallahmi, & Hertz-Lazarowitz, 1982; Ullman & Tatar, 2001), the Netherlands (e.g., Verkuyten, 1986, 1989), and with adults (e.g., Van Selm, Sam, & Van Oudenhoven, 1997).

### *2.11.2 Cross-Cultural Comparisons*

Imperative to the study of children's well-being are cross-cultural comparisons that allow exploration of the generalisability of findings from Western cultures to children and youth from other cultures (Park & Huebner, 2005). For example, Liu et al. (2005) found that Chinese students scored higher on the dimensions of Friends, School, and general LS than American students. Similarly, Park and Huebner (2005) compared the LS reports of Korean and American students and found that Korean

students reported lower LS than their American counterparts; results which are consistent with those reported in adults studies (e.g., Diener & Diener, 1995). The greatest differences were found in the Self and School domains, with Korean students reporting significantly less satisfaction in the Self domain and American's reporting less satisfaction in the School domain (cf. Park, Huebner, Laughlin, Valois, & Gilman, 2004a). In a related study, Tanaka et al. (2005) found that Japanese students report higher numbers of physical and psychiatric symptoms, less happiness, and more stressful life events, and considerably lower levels of LS than Swedish adolescents. These results highlight that specific and important differences in both global and domain specific LS exist among adolescents from different cultures. Furthermore, these findings are consistent with, and can be interpreted in terms of, theories regarding value differences that exist between individualistic and collectivistic cultures (see Oishi, Diener, Lucas, & Suh, 1999; Oishi, Diener, Suh, & Lucas, 1999).

### *2.11.3 Cultural Values*

The values, beliefs, and behaviours of one's cultural group, and the perception and treatment of that cultural group by society at large, can affect the psychological well-being of ethnic minority adolescents. For example, Constantine et al. (2006) examined the relationships between Africentric cultural values, self-esteem, perceived social support satisfaction, and LS among a group of African-American adolescent girls and found LS to be positively related to adherence to Africentric values, and self-esteem, but not to perceived social support satisfaction (cf. Brown, Wallace, & Williams, 2001). Related to these findings, longitudinal examination of the relationship between Chinese cultural belief about adversity and psychological well-being and problem behaviour has revealed that those with lower levels of

endorsement of Chinese cultural beliefs about adversity have lower LS, and higher levels of problem behaviours and substance abuse, than those with positive endorsement (see Shek, 2004, 2005a).

## 2.12 Risk-Taking Behaviour and Life Satisfaction

### 2.12.1 Violence

There is a paucity of research that has examined the relationship between adolescent LS and health-risk behaviours, especially those which may lead to premature morbidity and mortality such as violence and aggression (Valois, Paxton, Zullig, & Huebner, 2006). The results of a study by Valois et al. (2001) have demonstrated that LS is negatively associated with many adolescent risk behaviours, including: physical fighting, fighting requiring medical treatment, carrying a gun, carrying a weapon, and carrying a weapon at school; similar results have been reported by Valois et al. (2006). Negative relationships have also been demonstrated between LS and feeling un-safe while at school, travelling to and from school, being threatened or injured by someone with a weapon, having property stolen or damaged, and riding in a car with an impaired/drinking driver (see Valois et al., 2001). Similarly, MacDonald et al. (2005) reported that students with increased LS were less likely to have carried a weapon in general, or on school property during the past 30 days, or carried a gun or reported engaging in physical fights during the preceding 12 months. Moreover, students in the bottom quartile of LS, but in the top quartile of cigarette smoking and sexual promiscuity, were found to report higher involvement in violent behaviour compared to those reporting higher LS and not participating in such risk-taking behaviours.

### 2.12.2 Victimization

Many young people report that they have been the victims of either physical or emotional violence during a dating relationship (Callahan, Tolman, & Saunders, 2003). Physical and emotional abuse that occurs in an adolescent relationship can have a more harmful effect on psychological well-being than it does during adulthood, due to adolescents' lack of experience and resources in this area. For example, Callahan et al. (2003) found a negative relationship between dating violence and LS for both boys and girls. Further, increases in dating violence were found to contribute to increased posttraumatic stress, anxiety, depression, and dissociation. Similarly, Coker et al. (2000) addressed the impact of severe dating violence (SDV) and forced-sex victimisation and perpetration on adolescent LS. Of 5,414 adolescents sampled, 12% self-reported SDV as a victim or perpetrator in the past 12 months. Overall, results demonstrated that SDV and forced-sex are associated with poor mental and physical health, low LS, and adverse health behaviours such as suicide ideation/attempts in adolescent female victims and male perpetrators (Coker et al., 2000). Related to these findings is the negative effect of peer victimisation through bullying on adolescent LS. The detrimental effect of bullying on mental health has been suggested in various studies in many countries (e.g., Norway, Ireland, Australia, England, Canada) (see Rigby, 2000). For example, Flouri and Buchanan (2002) found among adolescent males living in Great Britain that psychological well-being was independently related to the degree of bullying experienced at school.

### *2.12.3 Sexual Behaviour/Pregnancy*

There is a paucity of research that has examined the potential detrimental effects of youth engaging in sexual risk-taking behaviour, such as, victimisation, substance abuse, and adolescent pregnancy. Acknowledging this, Valois et al. (2002) examined the sexual risk-taking behaviours among 4,758 American adolescents and

found negative relationships between LS and various sexual risk-taking behaviours, including: ever having had sexual intercourse, age of first intercourse, having had 2 or more lifetime intercourse partners, having had 1 or more intercourse partners (past 90 days), using alcohol/drugs at the last act of sexual intercourse, not using a condom at last intercourse, not using contraception at last intercourse, having been forced to have sex, forcing someone to have sex, having been beaten up by a date, and having beaten up a date (in last 12 months). Related to these findings are the numerous and interacting factors which contribute to adolescent pregnancy and parenting which may result from a youth's decision to engage in sexual risk-taking behaviour (Stoiber & McIntyre, 2006). The adolescent pregnancy and parenting literature suggests two broad categories of contributing factors: dispositional and situational characteristics (see Stoiber & McIntyre, 2006). In general, adolescent pregnancy rates are disproportionately higher for those teens most effected by situational factors, such as low SES. Recent research, however, has highlighted the salience of family dynamics, structure, and dysfunction in understanding adolescent pregnancy among ethnic minorities, and has shown that families with poor communication and relationship styles, increased parent-child conflict, low goal orientation, and physical or sexual abuse have more teens who become pregnant (Jaffee, Caspi, Moffitt, Belsky, & Silva, 2001). Assertions which have been supported by research conducted by Guijarro et al. (1999) among pregnant and non-pregnant teens from Ecuador and among additional studies conducted in America (e.g., Schilmoeller, Baranowski, & Higgins, 1991; Stevenson, Maton, & Teti, 1999; Unger & Wandersman, 1988).

## 2.13 Disabilities and Life Satisfaction

### 2.13.1 *Physical Disabilities*

In general results from the adult literature suggest that disabled adults report positive levels of LS, even among those with multiple handicaps and social complications (see Diener & Diener, 1996). Evaluations of LS among children and adolescents with disabilities are sparse, especially those taking into consideration the specific effects of school and environmental variables. In a study of LS among Deaf/Hard-of-Hearing (D/HH) youths, Gilman et al. (2004a) found that both segregated residential and day school D/HH students reported both lower global and domain specific LS than non-D/HH students. Further, residential D/HH youth reported significantly lower LS than D/HH day school youth (though for the residential D/HH group 50% of the total variance was accounted for between the School and Living Environment variables).

### *2.13.2 Mental Disabilities*

Important to the study of LS is determination of what differences exist in the way average and mentally disabled students formulate their judgements of quality of life and if measurement instruments validated in the general population generalise to special groups of individuals. For example, using the MSLSS Brantley et al. (2002) compared the LS reports of students with mild mental disability (MMD) with a matched sample of typically achieving (TA) students and found that MMD students reported lower satisfaction in the Friends domain than did TA students, whereas the opposite was true in the School domain. In addition, MMD students in a self-contained education setting had significantly higher School satisfaction than MMD students in a regular educational setting (Brantley et al., 2002). Further, Huebner et al. (2002) determined that the correspondence between parent and adolescent reports for the non-MMD students were very high and consistent with results found in adult studies (cf. Diener, 1994), but ranged from low to non-significant for the MMD

students (cf. McCullough & Huebner, 2003). Similarly, increasing awareness of the effect of community integration and inclusion for children and adolescents with intellectual disabilities has been growing. Results of an Australian study of community belongingness and LS among intellectually disabled students, for example, has indicated that LS is significantly correlated with levels of activity, friends, and support within the community (see Bramston, Bruggerman, & Pretty, 2002). Further, studies have shown that adolescents with intellectual disability report lower use of community facilities, and feel less belongingness and control over their choices than their matched peers (Bramston et al., 2002; cf. Pretty, Rapley, & Bramston, 2002).

## 2.14 Psychophysiological Problems and Life Satisfaction

### 2.14.1 *Eating Disorders*

The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (American Psychiatric Association, 1994) of the American Psychiatric Association lists two specific eating disorder diagnoses: anorexia nervosa (AN) and bulimia nervosa (BN). More than 90% of AN and BN cases occur in females during late adolescence (mean age of onset of 17) (American Psychiatric Association, 1994). Studies have shown eating disorders to be related to numerous negative psychological, personality, and behavioural factors, such as, neuroticism, perfectionism, negative self-evaluation, depression, and low self-esteem (Halvorsen & Heyerdahl, 2006; Lombardi et al., 1998). Similarly, research has shown adolescent LS to be negatively associated to neuroticism (e.g., Huebner, 1991a), low self-esteem and depression (e.g., Gilman et al., 2000), poor self-concept (e.g., Dew & Huebner, 1994), and maladaptive perfectionism (e.g., Gilman et al., 2005). Concordant with these

findings is the association between LS and AN. For example, a long-term follow up of childhood- and adolescent-onset females sufferers of AN in Norway showed significantly lower LS when compared to a sample of normal females (see Halvorsen & Heyerdahl, 2006). Although found to have similar levels of self-esteem at follow up, former AN patients with no present eating disorder who had achieved normal eating attitudes had lower LS when compared to women in a large population study (Halvorsen & Heyerdahl, 2006).

#### *2.14.2 Obesity*

Dietary habits formed during childhood and adolescence effect those practiced throughout adulthood. Increases in obesity are occurring worldwide and many health experts are considering this growing trend an epidemic. Being overweight or obese during childhood increases the risk of a myriad of health related diseases, and psychological (e.g., depression, negative self image, low self-esteem) and psychosocial (e.g., bullying, fewer friendships, physical and verbal abuse) problems, that may persist into adulthood (Blom-Hoffman, Edwards George, & Franko, 2006). For example, results of a study conducted among Kuwaiti schoolchildren (see Honkala, Hondala, & Al-Sahli, 2006) have demonstrated assessed LS variables (i.e., overall happiness, loneliness, number of close friends) to be associated with more-than-once-a-day consumption of sugar products. Further, significantly more children consuming sugar products more-than-once-a-day where among those who did not feel happy and/or often felt lonely (Honkala et al., 2006). Similarly, Valois et al. (2003) found LS to be negatively related to poor perceptions of body weight, trying to lose weight, dieting to lose weight, vomiting or using laxatives to lose weight, and taking diet pills to lose weight among American adolescents. In contrast, results of a Danish

study found a healthy diet to be significantly associated with positive adolescent LS (see Due, Holstein, Ito, & Groth, 1991).

## 2.15 Psychopathology and Life Satisfaction

As noted by Greenspoon and Saklofske (2001), until the last few decades the absence of psychopathology (PTH) has been considered indicative of positive mental health and SWB. However, great strides in changing this view have occurred alongside the paradigm shifts in psychology that have been brought about by the positive psychology movement. This movement has elucidated the need for psychologists to assess SWB and PTH together through an integrated system. Of particular concern are those individuals who do not fall within the usual (high-SWB/low-PTH and low-SWB/high-PTH) unidimensional model of mental health; i.e., those exhibiting low-SWB/low-PTH and high-SWB/high-PTH. Support for an integrated system has been provided by Greenspoon and Saklofske (2001) who administered a battery of measures assessing SWB (i.e., the five dimensions of LS measured by the MSLSS) and PTH (i.e., interpersonal relations, behaviour, temperament, personality, self-perception) to a sample of Canadian children classified as either high or low in SWB and PTH. Results confirmed a 100%-300% increase above chance classification for low SWB/low PTH and high SWB/high PTH groups, suggesting the potential utility of a dual-factor system; however, further studies are required with adolescent populations in order to assess the applicability of the model across a broader age sample.

### *2.15.1 Depression*

In general, research findings from adult studies have confirmed that depression and LS are strongly negatively correlated to the point that they are near

opposites (Headey, Kelley, & Wearing, 1993). Such findings have also been substantiated through research with children and adolescents where self-reports of LS and depression have been compared (e.g., Funk et al., 2006; Gilman & Huebner, 2006; Greenspoon & Saklofske, 1997). For example, Adelman et al. (1989) found that American students referred for mental health services had lower LS, less perceived control at school, and higher levels of depression in comparison to those attending in regular classrooms; similar results have been reported by Smith et al. (1987).

### *2.15.2 Loneliness*

Despite that loneliness is a universally experienced human emotion, until recently there has been a dearth of psychological research devoted to this area (Asher & Hopmeyer, 1997). Several possible explanations for why children experience loneliness have been put forward, including: deficiencies in the parent-child relationship, inability to form close intimate friendships, poor peer acceptance, peer victimisation, and negative subjective evaluations of parent and/or peer relationships (Asher & Hopmeyer, 1997). Among adolescents, investigations into the correlates of loneliness suggest that personal characteristics are associated with increases in the experience of loneliness. Moore and Schultz (1983), for example, found loneliness to be positively correlated with state anxiety, LOC, depression, public self-consciousness, and social anxiety, and negatively correlated with self-reported attractiveness, likeability, happiness, and LS among American adolescents. Similar results have been reported by Neto (1993) in a sample of Portuguese adolescents where it was found that loneliness, social anxiety, and shyness were all negatively correlated with LS. Related to these findings are those reported by Morojele and Brook (2004) from a sample of South African students, where it was found that

meaninglessness was positively correlated with depression and negatively correlated with knowledge of HIV status and LS.

### *2.15.3 Suicide*

Adult studies have suggested a link between low LS and suicide behaviour, with similar results being found among adolescents (Valois, Zullig, Huebner, & Drane, 2004a). For example, a study by Valois et al. (2004a) revealed negative associations between LS and poor mental health, poor mental/physical health days, serious suicide consideration, planning for suicide, attempted suicide, and suicide attempt requiring medical care among adolescents. In a related study, Thatcher et al. (2002) reported that several independent variables were significantly associated with attempted suicide either directly or indirectly through antecedent and moderating variables. For example, for Caucasian males global LS moderated the relationship between the antecedent variables of threatened or harmed at school and duration of alcohol use and attempted suicide. Additional antecedent variables associated with global LS included: physical fighting, property stolen at school, using pills to lose weight, beating up the person you are dating, age of first alcohol use, use of marijuana at school, and exercise (Thatcher et al., 2002).

### *2.15.4 Emotional Disturbance*

Although measures of positive SWB have been demonstrated to complement information derived from psychopathological evaluations (Cowen, 1991), there is a paucity of research which has investigated their usefulness with children who have been classified with serious emotional and behavioural disorders (Griffin & Huebner, 2000). In a study aimed at providing initial support for the potential utility of LS measures with students identified as seriously emotionally disturbed (SED), Griffin and Huebner (2000) administered the MSLSS to students classified as SED and non-

SED students. Results revealed no significant effect of group membership between SED and non-SED students on their global LS reports. In a similar study, the ability of the SLSS to discriminate between clinically diagnosed students classified as Emotionally Handicapped (EH) and non-EH students was examined by Huebner and Alderman (1993). A group of non-EH students and a group of students classified as Educably Mentally Handicapped (EMH) were combined and compared to the EH group. Results revealed the EH students to have significantly lower LS than both the combined non-EH/EMH group and a group of learning disabled students (Huebner & Alderman, 1993). In addition to these findings, studies have demonstrated that youths suffering with emotional (i.e., poor perceived mental health, dissatisfaction with life, and unhappiness) and behavioural (i.e., interpersonal problems at home and school) problems are less likely to report poor mental health and behavioural problems in comparison to parental or caregiver reports of their mental health (e.g., see Roberts, Alegria, Roberts, & Chen, 2005).

#### *2.15.5 Insomnia*

Adolescents and children who suffer from sleep disorders or lack of sleep due to insomnia have been found to report more psychopathological, psychophysiological, and psychosomatic problems, including: depression, anxiety, headache, stomach-ache, and fatigue, than adolescents with no sleep disturbances (Roberts, Roberts, & Chen, 2002). For example, a study by Roberts et al. (2002) examined the impact of insomnia on somatic, interpersonal, and psychological functioning among American youths and found that baseline insomnia increased the subsequent risk of psychological (i.e., self-esteem, LS, perceived mental health, and depression) dysfunction one year later. Moreover, results demonstrated that those with moderate

levels of insomnia at baseline had an elevated risk of dysfunction one year later and this risk increased with increased levels of insomnia.

### 2.16 Extremely High Life Satisfaction

Recent studies have suggested that there are numerous personal benefits associated with very high levels of LS. For example, Suldo and Huebner (2006) examined whether extremely high LS was associated with adaptive functioning or maladaptive functioning among American high school students, and found that students who reported very high levels of LS benefited from many positive outcomes, including: the highest level of social support from all sources, the least number of internalising and externalising behaviour problems, the lowest levels of neuroticism, significantly higher levels of academic, emotional, and social self-efficacy, the lowest emotional and behavioural problems, and superior interpersonal and cognitive functioning, than those with average and low LS. In a similar study, Gilman and Huebner (2006) found high levels of adolescent LS to be positively related to GPA, SEAs, interpersonal relations, parental relations, self-esteem, and hope, and to be negatively related to poor attitude toward school, poor attitude toward teachers, social stress, anxiety, depression, and external LOC. Further, adolescents reporting high LS had higher scores on all measures than those reporting low LS, and reported significantly higher scores on measures of hope, self-esteem, and (internal) LOC, but lower scores on measures of social stress, anxiety, depression, and (negative) attitudes toward teachers, than those reporting average LS (Gilman & Huebner, 2006). Moreover, none of the adolescents in the high LS group demonstrated clinical levels of psychological symptoms compared to 42% of the low LS group and 7% of the average LS group. These findings contrast with those found among gifted students for

whom it has been suggested that superior intellectual ability leads to increased well-being, however findings have failed to support this hypothesis (see Ash & Huebner, 1998).

### 2.17 Character Strengths and Life Satisfaction

Examinations into the relationships between character strengths (i.e., virtues) and LS are still just beginning, however, findings from initial studies in this area have illuminated particular strengths of character to be associated with increased LS among both adults and children (see Peterson & Seligman, 2004, for a classification of character strengths). For example, in a study designed to further the development and validation of the Values In Action – Inventory of Strengths for Youth (Peterson & Seligman, 2004), Park and Peterson (2006b) found that similar to the findings of adult studies (see Park, Peterson, & Seligman, 2004b) the strengths of hope, love, gratitude, and zest were found to be linked to greater LS among children. Further, examination of the parental strengths of character that predicted the LS of their children revealed that the same strengths of character associated with greater LS among children (i.e., hope, love, gratitude, zest) were the strongest parental predictors. Additionally, results revealed parental self-regulation to be associated with child LS (Park & Peterson, 2006b). Similar findings have been reported by Park and Peterson (2006a) among young children through examination of free parental descriptions of children's personal characteristics and individual qualities. Results revealed three strengths of character to be related to happiness: love, hope, and zest. These findings diverge from previous studies in that the strength of gratitude, which is a strong predictor of LS among youth and adults, was not included. However, examination of descriptions of

children aged seven and over revealed the expected correlation between LS and gratitude (Park & Peterson, 2006a).

## 2.18 Discussion

### *2.18.1 Life Satisfaction: More than an Epiphenomenon*

The field of positive psychology has reawakened empirical investigations into understanding how we achieve happiness and the ‘good life’. This shift away from an almost exclusive emphasis on psychopathology to an increased emphasis on the positive end of the mental health spectrum has enabled researchers to investigate what makes life worth living (Fabricatore & Handal, 2000). Fundamental to the underlying mission of discovering how we achieve happiness is determining the way in which youth perceive their lives. The youth LS literature provides clear evidence to suggest that youth LS is more than just an outcome of various psychological states (e.g., positive affect, self-esteem), it is also an influential predictor of psychological states and psychosocial systems (e.g., depression, physical health) (Gilman et al., 2004a). Support for conceptualisations of LS as more than just an epiphenomenon can be found among recent research that has highlighted its role as a mediator and moderator between the environment and behaviour. For example, Suldo and Huebner (2004b) demonstrated that LS mediates the relationship between the social support-involvement dimension of authoritative parenting and adolescent problem behaviour. Further, support has been provided for the potential mediating role of LS between stressful life events and internalising behaviour (see McKnight et al., 2002). In addition, there is recent evidence to suggest that increased LS buffers against the negative effects of stress and the development of psychological disorder. For example, adolescents with positive LS have been demonstrated to be less likely to

develop later externalising behaviours as a result of stressful life events than adolescents with low LS, suggesting that LS acts as a moderator for (i.e., buffer against) externalising behaviour (Suldo & Huebner, 2004a).

### *2.18.2 Conditions Fostering Positive Life Satisfaction*

Notwithstanding the genetic and heritable effects of personality, such as, positive and negative affect and temperament, there are many environmental, familial, and social conditions which foster positive youth LS. Among these are the fundamentally positive outcomes on LS that emerge as a result of a healthy lifestyle, good physical health, exercise, and participation in sports and social activities. Conversely, non-participation in risk-taking behaviour, including: substance abuse (alcohol, tobacco, and illicit drugs), violence, aggression, and sexual victimisation, is associated with elevated levels of LS. Similarly, environmental quality, such as, living in a safe neighbourhood, residing in a well maintained home, infrequent relocation, good familial and parental relationships, and social support, all engender positive youth LS.

Expanding on past correlational research which has highlighted the many positive conditions that foster positive youth LS, is the exploration of the causal pathways, including cognitive mediators and moderators, that may aid in understanding how personality and the environment influence youth LS (Huebner, Suldo, Smith, & McKnight, 2004a). For example, Ash and Huebner (2001) demonstrated that adolescent LS was mediated by LOC orientation (i.e., frequent negative life events were related to decreased perceptions of control, which was related to lower LS). Similarly, Fogle et al. (2002) demonstrated that social self-efficacy mediates the relationship between extraversion and LS. That is, positive

perceptions of social capabilities (i.e., social self-efficacy) served as the mechanism through which extraversion effected LS (Fogle et al., 2002).

### *2.18.3 Implications of Positive Life Satisfaction*

Recent research has indicated the potential role of LS as a buffer against negative effects of stress and the development of psychopathological behaviour (e.g., Suldo & Huebner, 2004a). Such findings are highly significant to the promotion of positive development in youth. In general the research literature suggests that most youth report a positive level of LS. However, concern must be focused on those who fall below this average and how what we know about the relationships between LS, psychopathology, personality, and the environment can aid in the development of strategies aimed at increasing LS among these youths. For example, a survey of 5,544 American students found that 11% of those sampled fell below the neutral point with 7% indicating a 'terrible' or 'unhappy existence' (see Huebner et al., 2000a). The importance of increasing low LS to normative levels and further maintaining those positive levels of LS among youth cannot be overemphasised. Further, attention needs to be drawn to the fact that those benefiting from rich environmental and social resources do not necessarily display high levels of LS, which may aid in protecting them against the negative effects of stress and the development of psychopathological behaviour. In line with the positive psychology movement, learning how to build strength in order to buffer against the development of problems is imperative to the positive development of young people. Youth LS is one such strength. Incorporation of LS reports in the assessment, evaluation, and implementation of educational and social programmes is essential in order to provide insight into the differential effects and impacts of such services on the quality of life of youths receiving them and help identify where crucial changes should occur in order to for increases in LS to ensue.

#### *2.18.4 Future Directions and Conclusions*

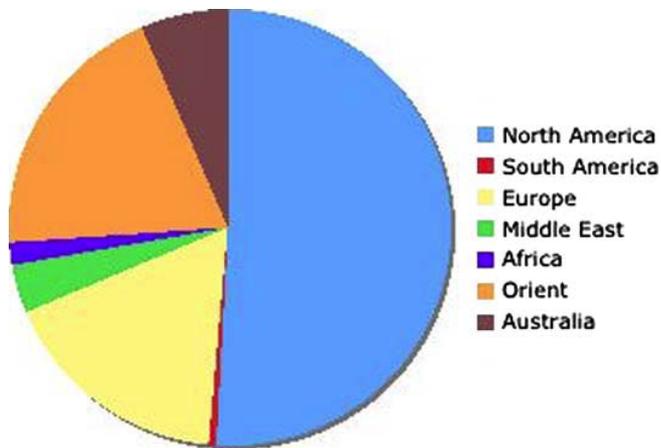
Clearly LS is a key component in the attainment of positive mental health and is a determinant of many life outcomes. Although research into the correlates and consequences of youth LS is not as extensive as that available for adult populations, research findings to date have illuminated potential applications and implications of the findings from the extant research across broad educational, psychological, and social arenas. Additional research is required in order to further discover causal pathways through which personal and environmental factors effect and influence how youths' perceive their lives. However, the implications of the various ways in which understanding levels of youth LS can aid in the evaluation, implementation, and assessment of programmes designed to build strength as opposed to repairing damage, cannot be underscored.

In general, this review has presented the extant findings in the youth LS literature. Overall, the extant literature points to LS as a key indicator of well-being, one that is integrally tied to emotional, behavioural, social, environmental, and psychological outcomes. Specifically, the literature demonstrates the need for research among children and adolescents across cultures. The majority of past research in this area has occurred within America, with most assessment measures being created and validated among American samples (see Figure 2.1). Future research should look to assess the ability of LS measures to transcend across cultures and specific groups. More specifically, further research is required to determine the differences between individualistic and collectivistic cultures and whether additional measures are required in order to overcome these differences. Additionally, there is a dearth of research which has examined LS as it pertains to those from specific populations, such as those with mental or physical disabilities, sufferers of disease or

psychopathological conditions, and/or and those with exceptionally high LS (Chapter 4) and giftedness, for which there may be important domain and global LS differences. Before turning to an examination of some of these issues in the following chapters of the thesis, Chapter 3 provides a review of the extant literature of youth LS measures.

Figure 2.1

*Cultural Distribution of Youth Life Satisfaction Literature*



### 3.1 Introduction

For more than half a century psychology has been a science devoted to the accurate diagnosis and treatment of mental illness. Recently however, the positive psychology movement has brought about paradigm shifts that have caused increased attention away from the negative personal psychological effects of stressors and events that make life miserable, towards positivity and the discovery of what makes life worth living. Exploration of positive characteristics including, happiness, LS, love, morality, altruism, spirituality, and goodness have recently expanded.

Within the framework of positive psychology (Seligman & Csikszentmihalyi, 2000), lies the foundation for understanding and promoting positive youth development (Park, 2004). Positive youth development research focuses on developmental potential rather than deficiencies (Damon, 2004). Currently, numerous research-based programmes exist which are aimed at the developmental potentialities of young people, and continued rigorous applied psychology is needed in this area (Larson, 2000). An important part of this work includes the implementation of self-report measures of subjective quality of life in the assessment and evaluation of educational and social programmes aimed at promoting positive development among young people (Proctor et al., 2009b). As shown in Chapter 2, research demonstrates that LS is a key component in the attainment of positive mental health and is a determinant of many life outcomes (Proctor et al., 2009b). Accordingly, understanding the way in which young people perceive their lives is fundamental to discovering how they achieve happiness. Insight into perceptions of youths' levels of LS has implications for psychological, social, and educational functioning.

### 3.1.1 Purpose

The purpose of this chapter is to review extant measures of youth LS. Several scales have been developed which purport to measure satisfaction among youth, however only a handful specifically provide an indication of overall levels of satisfaction with life. Consistent with the review conducted by Gilman and Huebner (2000), this review will provide an overview of each instrument outlining its normative sample(s), reliability (e.g., internal consistency and test-retest reliability), and validity (e.g., construct, convergent, and discriminant validity). It is the aim of this review to add to the existing literature by including all relevant measures of youth LS as gathered through specified systematic literature search strategies, thereby ensuring that recently developed instruments are not overlooked. Further, this review has been organised so that each instrument is overviewed concisely and presented according to its underlying conceptual model (i.e., unidimensional, multidimensional). Overviews conclude with a brief summary of each measure and various limitations of each scale. Following the measures summaries, a brief discussion of recommended future research directions is presented.

### 3.1.2 Literature Search Strategies

Literature to be included in this review was established using three search strategies. First, two major psychology databases: PsycINFO and PsycARTICLES were searched for peer-reviewed published literature in April 2008. Abstracts in each of these databases were searched with each of the following specific search terms: *life satisfaction, psychometric, adolescent, and youth*. During each search the terms were paired and combined (i.e., *life satisfaction and psychometric; life satisfaction and adolescent; life satisfaction and youth; life satisfaction, psychometric, and adolescent; life satisfaction, psychometric, and youth*); the use of these specific search

terms was based on information obtained from the results of the literature search strategies employed by Proctor et al. (2009b). The search results from these specific search terms were then screened via the title and abstract for their relevance for inclusion in this review. Non-empirical (i.e., theoretical, literature review) publications, dissertations, and foreign language studies were not included. Further, in line with Gilman and Huebner (2000), only studies that unequivocally examined youth LS were included. That is, studies that included scales that measured other similar well-being constructs (e.g., positive affect, see Watson, Clark, & Tellegen, 1988), or restricted the measurement of LS to a specific domain (e.g., school, see Epstein & McPartland, 1977), were not included. Similarly, satisfaction measures designed for those with specific disabilities or medical conditions (e.g., the Pediatric Cancer Quality of Life Inventory, see Varni et al., 1998), or for those over the age of 18 (e.g., the Quality of Life Inventory, see Frisch, Cornell, Villanueva, & Retzlaff, 1992), were also excluded. Finally, only studies specifically reporting the psychometric properties of LS measures were included. Therefore, this review does not include studies which would be included in a general review of the youth LS literature (see Proctor et al., 2009b for a review). Using this strategy, a total of 12 empirical studies (i.e., English language) were identified. References obtained from the search performed using the first strategy are marked with an asterisk (\*) in Table 3.1 (see Appendix 3.1).

Second, using the ancestry method (Anderson & Arseneault, 1998), the 12 identified articles chosen for inclusion had their references screened by title for other relevant publications. These publications were then collected and this process repeated until no further relevant references were derived. This process yielded an additional 18 empirical studies. References obtained from the search performed using

the second strategy are marked with a double asterisk (\*\*) in Table 3.1 (see Appendix 3.1).

Third, references that were known by the author to be directly relevant to the review, but not detected using the other two search strategies, were also included. This process yielded an additional 9 empirical studies. References obtained using the third strategy are marked with a triple asterisk (\*\*\*) in Table 3.1 (see Appendix 3.1). Therefore, the three strategies employed yielded a total of 39 empirical studies for review.

Finally, in order to ensure the literature established from the first three literature search strategies was complete, a search of the Web of Science database using the previous literature search terms and strategies was conducted during July 2008. This search resulted in an additional 8 empirical studies. References obtained using the fourth strategy are marked with a quadruple asterisk (\*\*\*\*) in Table 3.1 (see Appendix 3.1). Therefore, a total of 47 empirical studies are to be reviewed.

### 3.2 Models of Life Satisfaction

Life satisfaction measures are typically derived from three conceptual models or frameworks: unidimensional (i.e., global and general LS) and multidimensional (Huebner, 2004). Measures representative of unidimensional models present an overall total score as indication of individual levels of LS. Whereas, multidimensional measures provide a profile of LS across various domains (i.e., satisfaction scores are calculated for each domain) (Huebner, 2004). The two unidimensional models differ in that for the global model the total score is derived from context-free items that allow individuals to use their own unique criteria on weighting the different aspects of their lives (Pavot & Diener, 1993). In contrast, in the general model the total score is

the sum of LS reports across predetermined domains included by the authors (e.g., satisfaction with relationships, physical well-being, personal development) that are considered crucial to the contribution of overall LS (Gilman & Huebner, 2000; Huebner, 2004). The key difference between unidimensional and multidimensional models and measures of LS, is that under the unidimensional framework the emphasis is on providing a single total LS score, whereas under the multidimensional framework the emphasis is on creating a profile of LS across multiple life domains.

### 3.3 Measures of Adolescent Life Satisfaction

#### 3.3.1 Global Unidimensional Scales

*3.3.1.1 Students' Life Satisfaction Scale.* The Students' Life Satisfaction Scale (SLSS; Huebner, 1991b; Huebner, 1991c) is a 7-item self-report scale which assesses global LS for students aged 8-18. As a global measure of LS, items on the SLSS are context-free (e.g., 'My *life* is better than most kids' vs. 'My *family life* is better than most kids') (Huebner, Suldo, & Valois, 2003b). Students are required to respond to each item using a 6-point Likert scale: 1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Mildly Disagree, 4 = Mildly Agree, 5 = Moderately Agree, and 6 = Strongly Agree. Items are summed for a total score and divided by seven to create a mean score. Using this rating scale total scores range from 7-42, a high score on the SLSS is indicative of high LS and low scores are indicative of low LS.

The initial scale was comprised of 10 items, which was reduced to 7 items as a result of item analysis and reliability estimates, and employed a 4-point Likert scale: 1 = never, 2 = sometimes, 3 = often, and 4 = always (see Huebner, 1991c). The 4-point Likert scale format is used with children, whereas the 6-point Likert scale format is used with adolescent samples. Using the 4-point format total scores range from 7-28.

Administration instructions state that respondents should think about their lives over a period of several weeks and indicate their satisfaction with their overall life based on their agreement or disagreement with the seven statements presented to them. The SLSS may be individually or group administered and completion takes no more than few minutes.

*Samples.* Initial development research samples included 254 children aged 7-14 and 329 children aged 8-14, from a Midwestern American state (Huebner, 1991c). Examination of personality correlates and demographic variables was assessed in a sample of 79 children in grades 5-7 from a Midwestern American state (Huebner, 1991a), and among 222 children in grades 8-12 from a South-eastern American state (Dew & Huebner, 1994).

*Reliability.* Coefficient alphas have been consistently reported across all age groups (i.e., 8-18) for the SLSS ranging from 0.70-0.86. For example, an alpha of 0.82 was reported with initial samples, with one- to two-week test-retest reliability being reported at 0.74 (Huebner, 1991c). Overall, the SLSS has been shown to be a reliable measure of LS for students in elementary (e.g., Terry & Huebner, 1995) ( $r = 0.73$ ), middle (e.g., Huebner, 1991a) ( $r = 0.82$ ), and high (e.g., Dew & Huebner, 1994) ( $r = 0.86$ ) school. Moreover, examination of cross-cultural studies have shown comparability of alpha coefficients between African-American ( $r = 0.75, 0.85$ ) and Caucasian ( $r = 0.79, 0.85$ ) children (Huebner, 1995; Huebner & Dew, 1993a respectively). Additional test-retest reliability estimates have been reported at 0.76 across one- to two-weeks (Terry & Huebner, 1995), 0.64 across four-weeks, (Gilman & Huebner, 1997), and 0.53 across one-year (Huebner et al., 2000b).

*Validity.* Evidence of construct validity has been demonstrated through comparison of SLSS scores with measures of related constructs. For example, positive

correlations have been shown between the SLSS and the Perceived Life Satisfaction Scale (Adelman et al., 1989; Dew & Huebner, 1994) ( $r = 0.58$ ), the Self-Description Questionnaire-II (SDQ-II; Marsh, 1990) ( $r = 0.58$  global,  $r = 0.57$  general, self-concept) (see Gilman & Huebner, 1997), the Piers-Harris Self-Concept Scale (Piers & Harris, 1984) ( $r = 0.53$ ) (see also Huebner, 1994a), the Delighted/Terrible scale (D/T; Andrews & Withey, 1976) ( $r = 0.62$ ), and the Moods Scale of the Dimensions of Temperament Survey – Revised (Windle & Lerner, 1986) ( $r = 0.34$ ) (see Huebner, 1991c).

Evidence of the convergent validity of the SLSS has been provided through significant positive correlations with measures of self-esteem ( $r = 0.65$ ) and extraversion ( $r = 0.23$ ), and significant negative correlations with measures of anxiety ( $r = -0.51$ ), external LOC ( $r = -0.48$ ), neuroticism ( $r = -0.46$ ) (see Huebner, 1991a), depression ( $r = -0.57$ ), loneliness ( $r = -0.38$ ), and teacher ratings of classroom behaviour problems ( $r = -0.35$ ) (see Huebner & Alderman, 1993). Further, evidence of discriminant validity of the SLSS has been provided through non-significant correlations with school grades (Huebner, 1991a), social desirability (Huebner, 1991c), and intelligence (Huebner & Alderman, 1993). Moreover, the SLSS has demonstrated consistent moderate positive correlations ( $r = 0.25$  to  $0.48$ ) with the Adaptive Scales (e.g., self-esteem, interpersonal relations) and moderate negative correlations ( $r = -0.17$  to  $-0.56$ ) with the Clinical Scales (e.g., depression, anxiety, social stress) of the Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) (Huebner et al., 2000b). Moreover, SLSS total scores have been demonstrated to be significantly related to scores on measures of internalising and externalising behaviour one- and two-years later, providing evidence of the predictive validity of the scale (Haranin, Huebner, & Suldo, 2007). Further, the SLSS has

demonstrated ethnic equivalency for internal consistency, factor structure, criterion-related validity, and reliability across two ethnic groups of elementary (Huebner, 1995) and high (Huebner & Dew, 1993a) school students. Finally, factor analyses have supported a one-factor structure for the instrument (see Dew & Huebner, 1994; Gilman & Huebner, 1997; Huebner, 1991c).

Scores on the SLSS have not been found to be related to demographic variables, including: age, grade, gender (Dew & Huebner, 1994; Gilman & Huebner, 1997; Huebner, 1991a, 1991c; Huebner & Alderman, 1993; Huebner, Gilman, & Laughlin, 1999), or ethnicity (Huebner, 1995; Huebner & Dew, 1993a).

*Summary.* Overall, research supports the SLSS as a psychometrically sound brief measure of LS for students aged 8-18. Specifically, the SLSS has demonstrated appropriate internal consistency reliabilities for students in elementary, middle, and high school across both response formats (i.e., 4-point and 6-point). Further, the SLSS has demonstrated moderate temporal stability across one year and preliminary equivalency across two ethnic groups for both children and adolescents. Evidence of the construct validity of the scale has been well supported through appropriate correlations with measures of various related constructs. Factor analyses have supported a one-factor solution for the instrument.

Limitations include: 1) normative data is based on geographically narrow samples; 2) ethnic equivalency has been limited to comparisons across only two groups; and 3) repetitive wording of scale items could be problematic for children.

*3.3.1.2 Satisfaction With Life Scale.* The Satisfaction With Life Scale (SWLS; Diener et al., 1985) is a 5-item self-report measure of global LS. Respondents are required to respond to each item using a 7-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree or Disagree, 5 = Slightly Agree,

6 = Agree, and 7 = Strongly Agree. The scale was originally developed for use with adult populations, but it has subsequently been used extensively with adolescent samples. Scoring consists of summing the items for a total score that ranges from 5-35 and dividing by five to create a mean score. Scores on this scale can be interpreted in terms of absolute and relative LS (Pavot & Diener, 1993). For example, a score of 20 represents the *neutral point* on the scale, whereas scores between 21-25 represent *slightly satisfied*, 26-30 *satisfied*, 31-35 *extremely satisfied*, 15-19 *slightly dissatisfied*, 10-14 *dissatisfied*, and 5-9 *extremely dissatisfied* (Pavot & Diener, 1993).

Administration instructions state that respondents should indicate their satisfaction with their overall life based on their agreement or disagreement with the five statements presented. The SWLS may be individually or group administered and completion takes no more than a few minutes.

*Samples.* Initial development research samples included 176 general undergraduate students, and 163 undergraduate students enrolled in introductory psychology, from the University of Illinois; and, 53 American elderly participants (Diener et al., 1985). Additionally, psychometric properties of a Portuguese version of the scale was assessed among a sample of 217 students aged 14-17 (Neto, 1993).

*Reliability.* Development research studies among adults have demonstrated the SWLS to have strong internal reliability ( $r = 0.87$ ) and moderate temporal stability ( $r = 0.82$ , two-month test-retest reliability) (Diener et al., 1985). Among adolescents, an internal consistency reliability coefficient of 0.78 has been reported (Neto, 1993). Additional studies with adults have shown coefficient alphas in the range of 0.82 to 0.92 (Arrindell, Heesink, & Feij, 1999; Arrindell, Meeuwesen, & Huyse, 1991; Hultell & Gustavsson, 2008; Pavot et al., 1991; Shevlin, Brunsten, & Miles, 1998),

with two-week and one-month test-retest reliabilities averaging 0.84 (Pavot et al., 1991).

*Validity.* Validity was demonstrated among adults through the convergence of the SWLS with other criterion measures for the two samples used during development of the scale, that is, the Fordyce Global Happiness Scale (Fordyce, 1977) ( $r = 0.58, 0.57$ ), the Cantril measure (Cantril, 1965) ( $r = 0.62, 0.66$ ), the Gurin scale (Gurin, Veroff, & Feld, 1960) ( $r = 0.59, 0.47$ ), the D/T scale ( $r = 0.68, 0.62$ ), and the Bradburn - Positive Affect Scale (Bradburn, 1969) ( $r = 0.50, 0.51$ ) (Diener et al., 1985). Further convergent validity among adults was demonstrated through correlations with external criteria, such as a memory measure of LS ( $r = 0.42$ ), peer reports of LS ( $r = 0.54$ ), and other self-reported measures of LS, such as the Life Satisfaction Index - A (Neugarten, Havighurst, & Tobin, 1961) ( $r = 0.81$ ) (Pavot et al., 1991). Construct validity has been provided among young adults through differentiation between LS and health status (see Arrindell et al., 1999). Moreover, positive LS among young adults has been demonstrated to be related to higher levels of self-esteem and trait-euphoria, and lower levels of trait-neuroticism and trait-dysphoria (see Arrindell et al., 1999). Among adolescents, scores on the SWLS were found to correlate negatively with loneliness ( $r = -0.49$ ), social anxiety ( $r = -0.23$ ), and shyness ( $r = -0.29$ ), and positively with self-concept ( $r = 0.51$ ), social acceptance ( $r = 0.38$ ), happiness ( $r = 0.69$ ), and physical attractiveness ( $r = 0.32$ ) (Neto, 1993). Factor analyses have supported a one-factor structure for the instrument (Diener et al., 1985; Lewis, Shevlin, Bunting, & Joseph, 1995; Neto, 1993; Pavot et al., 1991; Pons, Atienza, Balaguer, & Garcia-Merita, 2000; Shevlin & Bunting, 1994); partial support has also been provided for a two-factor second-order model, however further research is required in order to confirm the results (Hultell & Gustavsson, 2008). Factorial

invariance has been provided for a single-factor model for both males and females, however further research is required to determine if it is also factorially invariant across age and ethnicity (Shevlin et al., 1998).

Analysis of the effects of demographic variables on LS as measured by the SWLS among adolescents has revealed a moderate effect by both gender and SES (see Neto, 1993). Among adults scores on the SWLS have not been found to be related to gender, age, or education level; however, significant correlations have been demonstrated with marital status, with higher LS being found among married people (see Arrindell et al., 1991).

*Summary.* Overall, research supports the SWLS as a psychometrically sound brief measure of LS among adult populations and preliminary evidence supports its use with adolescents. Acceptable temporal stability has been provided across a two-month period among adults, however temporal stability estimates among adolescents have not yet been reported. Preliminary research of the construct validity of the SWLS among adolescents has been supportive with appropriate correlations being found with various related variables. Factor analyses conducted with both adult and adolescent samples have supported a one-factor solution for the instrument.

Limitations include: 1) limited normative samples of adolescents; 2) temporal stability among adolescents has not been established; and 3) lack of reported support for the effects of demographic variables on adolescent LS.

### *3.3.2 General Unidimensional Scales*

*3.3.2.1 Perceived Life Satisfaction Scale.* The Perceived Life Satisfaction Scale (PLSS; Adelman et al., 1989; Smith et al., 1987) is a 19-item self-report measure designed to provide an indication of a youth's degree of satisfaction/dissatisfaction with their life across five major domains (i.e.,

material/physical well-being, relationships, environment, personal development/fulfilment, and recreation/entertainment) of quality of life. Individuals respond to items using a 6-point Likert scale: 1 = Not at All, 2 = Not Much, 3 = A Little, 4 = Somewhat, 5 = A Lot, and 6 = Extremely. The 6-point ratings are converted into three indices of dissatisfaction by scoring low ratings (1 and 2) as 2, moderate ratings (3 and 4) as 1, and high ratings (5 and 6) as 0. Thus, dissatisfaction scores can range from 0-38. Respondents are provided with an explanation card designed to assist them in understanding the three ratings. On the card the rating alternatives are presented in large font and graphically represented as circles with varying degrees of shading (Adelman et al., 1989).

*Samples.* Initial development research samples were comprised of three groups of regular classroom students, and one group of students referred to a mental health centre, from California, USA: 221 children aged 9-19; 179 children aged 11-16; 68 children 8-18; and, 47 children aged 7-16 respectively (Adelman et al., 1989). Additionally, a demographic analysis was carried out among 222 children in grades 8-12 from a South-eastern American state (Huebner & Dew, 1993c).

*Reliability.* Internal reliability coefficient estimates have been reported for the PLSS as ranging from 0.74 to 0.80 (Smith et al., 1987), and as high as 0.89 in a sample of students in grades 8-12 (Huebner & Dew, 1993c), with test-retest reliability reported from a random sample of students over an unspecified time period of 0.85 (Adelman et al., 1989).

*Validity.* The validity of the PLSS has been demonstrated through its ability to discriminate between special and regular education students (Smith et al., 1987), as well as, between regular students and those referred for mental health services (Adelman et al., 1989). Construct validity has been provided through differentiation

between the PLSS and various measures of related constructs, such as the SDQ-II ( $r = 0.48$ ), the Nowicki-Strickland Locus of Control Scale-Short Form (LOCS-SF; Nowicki & Strickland, 1973) ( $r = -0.49$ ) (Huebner & Dew, 1993c), and the Children's Depression Inventory (Kovacs, 1981, 1992) ( $r = 0.55$ ) (Adelman et al., 1989). Further, cross-method convergent validity has been demonstrated through the correlation between PLSS scores and independent parent estimates ( $r = 0.42$ ) of their child's LS (Huebner & Dew, 1993c). The dimensionality of the PLSS has been demonstrated through exploratory factor analysis where a four-factor solution was retained as the most interpretable solution (eigenvalues across the four factors: 6.80, 1.78, 1.23, 1.10), suggesting that the PLSS is multidimensional (Huebner & Dew, 1993b). However, further confirmatory factor analysis is required in order to determine the factor structure of the scale and confirm its status as a scale measuring general unidimensional LS.

Scores on the PLSS have not been found to be related to age, grade, gender, or ethnicity, however a moderate age effect and an negative correlation with SES has been reported (see Adelman et al., 1989; Huebner & Dew, 1993b).

*Summary.* Overall, preliminary internal consistency and test-retest reliability estimates support the use of the PLSS with adolescents. Development research samples consisted of older children and adolescents, however the exact applicable age range of this scale is unclear. Both convergent and discriminant validity have been supported for the scale. However, results of factor analyses have left doubt over the unidimensional structure of the scale and suggest that it may be multidimensional. Confirmatory factor analysis is required in order to determine the status of this scale as a general unidimensional measure.

Limitations include: 1) normative data is limited in scope; 2) applicable age range for use has not been provided; 3) research supporting the psychometric properties has not been well established; 4) additional development and cross-cultural research is required in order to establish generalisability; and 5) doubt over the dimensionality of the scale is problematic.

*3.3.2.2 Brief Multidimensional Students' Life Satisfaction Scale.* The Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003) is a 5-item LS measure for use with children and adolescents aged 8-18. Each of the five items of the BMSLSS represents one of the five LS domains of the MSLSS (i.e., family, friends, school, self, and living environment) (Seligson et al., 2003). However, despite that the BMSLSS is based on the conceptual model of the MSLSS, the items are unique to the scale and thus it is not a short form of the MSLSS (Huebner et al., 2004b). Response options are derived from the D/T scale, a 7-point Likert style scale that ranges from: 1 = Terrible, 2 = Unhappy, 3 = Mostly Dissatisfied, 4 = Mixed (equally satisfied and dissatisfied), 5 = Mostly Satisfied, 6 = Pleased, and 7 = Delighted. The total (i.e., general) score is derived from the summation of the five items.

*Samples.* Initial development research samples included 221 children in grades 6-8 and 46 high school students, both from a South-eastern American state (Seligson et al., 2003). Further normative samples have included 518 children in grades 3-5 (Seligson et al., 2005), 146 students in grades 9-12 (Funk et al., 2006), and 5,545 students in grades 9-12 (Huebner et al., 2004b).

*Reliability.* Reliability coefficients for the total score have been reported at 0.68 for elementary (Seligson et al., 2005), 0.75 for middle (Seligson et al., 2003), and 0.75 (Funk et al., 2006) and 0.81 (Zullig et al., 2001) for high school students.

Among college students, an internal consistency reliability coefficient of 0.78 has been reported (Zullig, Huebner, Gilman, Patton, & Murray, 2005a). Two-week test-retest reliability coefficients have been reported at 0.91 among 51 high school students in grades 9-12 (Funk et al., 2006).

*Validity.* Criterion-related validity between the BMSLSS total score and other validated measures of LS have been acceptable; correlations with the MSLSS have been recorded at 0.66 (Seligson et al., 2003), and with the SLSS at 0.74 (Funk et al., 2006), 0.62 (Seligson et al., 2003), and 0.69 (Seligson et al., 2005). Moreover, BMSLSS total scores have been shown to correlate positively with the Adaptive Scales ( $r = 0.45$  to  $0.65$ ) and negatively with the Clinical Scales ( $r = -0.17$  to  $-0.69$ ) of the BASC (Funk et al., 2006). Construct validity has been supported through confirmatory factor analysis, multitrait-multimethod correlation comparisons with the total domain scores of the MSLSS and enhanced by significant correlations with other theoretically related instruments; for example, the Positive and Negative Affect Schedule-Children (Laurent et al., 1999; see Seligson et al., 2003; Seligson et al., 2005). Similarly, among college students BMSLSS total scores have been found to be negatively related to scores on the Health Related Quality of Life Scale (HRQOLS), such that as the number of reported poor HRQOL days increased, levels of LS decreased (see Zullig et al., 2005a). Overall, principal axis factor analyses have supported a one-factor structure for the instrument (see Funk et al., 2006; Seligson et al., 2005; Zullig et al., 2005a).

Scores on the BMSLSS have not been found to be related to demographic variables, such as age, grade, or gender (Funk et al., 2006; Huebner et al., 2000a; Huebner et al., 2004b; Seligson et al., 2003, 2005; Zullig et al., 2005a), however weak

associations have been found with SES (Seligson et al., 2003) and ethnicity (Huebner et al., 2004b).

*Summary.* Overall, research findings support the use of the BMSLSS among youth aged 8-18, particularly in studies where it is beneficial to have a brief but reliable and valid alternative to longer multidimensional measures. Internal consistency reliability estimates have supported its use with elementary, middle, and high school students, and temporal stability has preliminarily been supported among adolescents. Criterion-related validity has been demonstrated through acceptable correlations with other well-being measures. Further, convergent and discriminant validity has been supported through appropriate correlations with theoretically related constructs. The one-factor structure of the BMSLSS has been supported by principal factor analyses.

Limitations include: 1) normative data is based on geographically narrow samples; 2) temporal stability among children has not been established; and 3) additional research is required among adolescents.

### 3.3.3 *Multidimensional Scales*

*3.3.3.1 Extended Satisfaction With Life Scale.* The Extended Satisfaction With Life Scale (ESWLS; Alfonso, Allison, Rader, & Gorman, 1996) is a 50-item self-report scale that measures LS across nine domains (i.e., general, social, sex, school, family, relationship, self, physical, job). Individuals respond to items using a 7-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree or Disagree, 5 = Slightly Agree, 6 = Agree, and 7 = Strongly Agree. Scores from each subscale are calculated as the sum of the ratings from each of the items comprising the subscale. The ESWLS is used across a wide range of populations including adolescent, patient, and adult groups. Respondents of the ESWLS respond

only to the subscales relevant to their lives or to the areas under study. For example, a person who did not go to school or work would not respond to the school or job satisfaction subscales. General administration instructions include asking respondents to agree or disagree with the statements provided. The ESWLS can be individually or group administered and completion takes 20 minutes or less. An alternative 22-item version of the scale, which includes three additional domains (i.e., income, health, safety), has also been proposed (see Gregg & Salisbury, 2004).

*Samples.* The initial development research sample was comprised of 302 undergraduate students from two American universities (Alfonso et al., 1996).

*Reliability.* Internal reliability coefficient estimates from the development research sample were reported as ranging from 0.81 to 0.96, with two-week test-retest reliability reported from a 109 undergraduate student sample as ranging from 0.74 to 0.87 (Alfonso et al., 1996).

*Validity.* Preliminary support has been provided among adults for the convergent validity of the ESWLS through positive correlations with scales measuring conceptually distinct but overlapping constructs, such as self-esteem. For example, positive correlations were found between general ( $r = 0.48$ ) and self-satisfaction ( $r = 0.59$ ) as measured by the ESWLS (Alfonso et al., 1996) and the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). Further, preliminary support has been provided for the discriminant validity of the ESWLS indirectly through the correlations between the subscales of the measure being found to be lower than their respective coefficient alpha reliabilities, and directly through structural equation modelling whereby some of the factors of the scale were found to be correlated but not identical (Alfonso et al., 1996). Factor analyses have suggested seven and nine factors, which considered together provide strong support for the developmentally

hypothesised eight-factor solution accounting for 77% of the variance (Alfonso et al., 1996; Gregg & Salisbury, 2004).

*Summary.* Overall, preliminary results of ESWLS suggest that it has adequate internal reliability and convergent validity among young adults. However, further research is required in order to determine internal consistency reliability estimates and validity among adolescent samples. Further, a specified age range for the scale needs to be determined. Additional factor analyses are required in order to determine the factor structure of the instrument, as preliminary findings have not provided firm support for the hypothesised eight-factor solution. Further research is required in order to determine the usefulness and desirability of including the proposed additional domains of income, health, and safety.

Limitations include: 1) normative samples of adolescents are required; 2) temporal stability among adolescents has not been established; 3) the effects of demographic variables on adolescent LS has not been examined; and 4) further research is required in order to determine the factor structure of the instrument.

*3.3.3.2 Multidimensional Students' Life Satisfaction Scale.* The Multidimensional Students' Life Satisfaction Scale (MSLSS; Huebner, 1994b) is a 40-item self-report scale designed to provide a profile of LS within five specific domains (i.e., family, friends, school, self), as well as, an overall assessment of general LS (Huebner & Gilman, 2002). The MSLSS is applicable for use with students in grades 3-12 (aged 8-18). For elementary school children a 4-point Likert response format is used: 1 = Never, 2 = Sometimes, 3 = Often, and 4 = Almost Always. For middle and high school students a 6-point Likert scale response format is used: 1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Mildly Disagree, 4 = Mildly Agree, 5 = Moderately Agree, and 6 = Strongly Agree. Domains consist of

unequal items, and therefore, the domain and overall scores are made comparable by using domain averages (Huebner, 2001). Throughout the scale, a high score is indicative of high LS and low scores are indicative of low LS.

*Samples.* Initial development research samples included 312 children in grades 3-8 and 413 children in grades 3-5, from a South-eastern American state (Huebner, 1994b). Further normative samples include 314 children in grades 3-8 from Western Canada (Greenspoon & Saklofske, 1997, 1998), 291 children in grades 6-8 (Huebner et al., 1998), 321 adolescents in grades 9-12 (Gilman et al., 2000), and 725 children in grades 3-8 (Huebner, 1998) from a South-eastern American state, and 160 adolescents in grades 9-12 from South Carolina, USA (Huebner et al., 2002).

*Reliability.* Reliability coefficients for the MSLSS total score have been reported at 0.92 for elementary (Huebner, 1994b), 0.91 for middle (Huebner et al., 1998), and 0.91 for high (Gilman et al., 2000) school students. Internal consistency and test-retest alpha coefficients in the range of 0.70 to 0.90 have been reported by various studies of elementary school students (e.g., Greenspoon & Saklofske, 1997; Huebner, 1994b; Huebner et al., 1998). Examinations of ethnic bias have indicated equivalent coefficients for the total score for African-American ( $r = 0.91$ ) and Caucasian ( $r = 0.93$ ) elementary school students, and across the five domains of the scale with the exception of the School domain where Caucasian ( $r = 0.87$ ) students had significantly higher reliability estimates to their African-American (0.77) peers (Huebner, 1998). Cross-national comparisons of American (domain  $r = 0.82$  to  $0.89$ , general  $r = 0.93$ ), Irish (domain  $r = 0.80$  to  $0.90$ , general  $r = 0.93$ ), Chinese (domain  $r = 0.67$  to  $0.87$ , general  $r = 0.89$ ), and South Korean (domain  $r = 0.79$  to  $0.86$ , general  $r = 0.92$ ) students has revealed internal consistency estimates for the scale to be generally consistent across nationalities, with most values being found to exceed 0.70;

with the exception of the Self and Living Environment domains among Chinese adolescents (Gilman et al., 2008).

*Validity.* The dimensionality of the MSLSS has been supported through exploratory (eigenvalues across the five factors: 8.12, 3.40, 2.19, 1.83, 1.08 and 9.68, 3.20, 2.36, 2.40, 1.75, with 42.4% to 49.5% of the total variance accounted for) (Greenspoon & Saklofske, 1997; Huebner, 1994b, respectively) and confirmatory (Goodness of Fit Index: 0.78, Comparative Fit Index: 0.97) (Greenspoon & Saklofske, 1998; Huebner et al., 1998, respectively) factor analyses, which have supported the five-factor model of the instrument. Evidence of the convergent and the discriminant validity of the MSLSS has been provided through multitrait-multimethod correlation matrix analysis whereby significant convergent validity correlations (i.e.,  $r = 0.41$  to  $0.55$  for the domains, and  $r = 0.50$  for the total score) between student and parental reports of LS were found (see Huebner et al., 2002). Further evidence of convergent and discriminant validity has been demonstrated through correlations between the domain scores of the MSLSS and those of the SDQ-II (Huebner, 1994b; Huebner et al., 1998), the BASC (Gilman et al., 2000), and the BASC Self Report of Personality scales (Greenspoon & Saklofske, 1997). Evidence of construct validity has been provided through significant negative correlations between the MSLSS total score and depression ( $r = 0.61$ ) and social stress ( $r = 0.52$ ), as measured by the BASC. Further, domain scores on the MSLSS have been demonstrated to provide additional, unique information over and above that of a global LS measure (i.e., SLSS) in the prediction of later internalising and externalising behaviour, thereby demonstrating the incremental validity of the domain scale scores (see Haranin et al., 2007).

*Summary.* Overall research findings have provided support for the use of the MSLSS with students aged 8-18 and may be used as an indicator of both general and

domain specific LS. Internal consistency reliability estimates have been supported across elementary, middle, and high school students. Temporal stability has been established for the MSLSS among elementary school students; however further research is required in order to assess stability among adolescents. Convergent and discriminant validity has been supported for the MSLSS through appropriate correlations with measures of related constructs. Exploratory and confirmatory factor analyses have supported a five-factor solution for the instrument.

Limitations include: 1) further investigation of the meaningfulness of the domains with various populations is required; and 2) ethnic equivalency has been limited to comparisons across only two groups.

*3.3.3.3 Multidimensional Students' Life Satisfaction Scale – Adolescent.* The Multidimensional Students' Life Satisfaction Scale – Adolescent version (MSLSS-A; Gilligan & Huebner, 2002) is a 53-item self-report scale designed to provide a profile of LS within six specific domains (i.e., family, opposite-sex friends, same-sex friends, school, self, living environment). Individuals respond to items using a 6-point Likert scale: 1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Mildly Disagree, 4 = Mildly Agree, 5 = Moderately Agree, and 6 = Strongly Agree. The MSLSS-A is a modification of the MSLSS designed specifically for use with adolescents and contains an additional domain measuring opposite-sex relationships. Negative items are reverse scored so that a high score on the MSLSS-A indicates high satisfaction and a low score low satisfaction. The total LS score is calculated by summing all items of the individual domains of the MSLSS-A and then dividing by six.

*Samples.* The initial development research sample was comprised of 266 adolescents in grades 9-12 from a South-eastern American state (Gilligan & Huebner, 2002; Gilligan & Huebner, 2007).

*Reliability.* Alpha coefficients for the six domains have been reported as ranging from 0.72 to 0.90 (Gilligan & Huebner, 2002; Gilligan & Huebner, 2007). Two-week test-retest reliability coefficients for the MSLSS-A have been reported as ranging from 0.85 to 0.90 for the domain scores and 0.94 for the total score (Gilligan & Huebner, 2007).

*Validity.* Factor analyses have supported a six-factor structure for the instrument, with 37.31% of the total variance accounted for (Gilligan & Huebner, 2007). Evidence of the convergent validity of the MSLSS-A has been supported through multitrait-multimethod correlation matrix analysis whereby significant convergent validity correlations ( $r = 0.30$  to  $0.37$ ) between student and parental reports of LS were found (Gilligan & Huebner, 2002). Further support for the validity of the MSLSS-A has been demonstrated through correlations between the total LS score and LOC ( $r = -0.55$ ) as measured by the LOCS-SF, self-esteem ( $r = 0.62$ ) as measured by the RSE, and positive ( $r = 0.52$ ) and negative ( $r = -0.35$ ) affect as measured by the Positive and Negative Affect Scale (Watson et al., 1988) (see Gilligan & Huebner, 2007).

*Summary.* Overall, preliminary results suggest that the MSLSS-A has adequate internal reliability and temporal stability. However, further research is required in order support these findings. Further, a specified age range for the scale needs to be determined. Scale development research suggests that the MSLSS-A has adequate convergent validity for research purposes. However, additional research is required in order to expand and support these findings. Initial factor analyses have supported a six-factor solution for the instrument, however findings suggest difficulty with the Self domain, and therefore additional analyses of the factor structure are

necessary. Further development of this scale is necessary, although preliminary results suggest support for the psychometric properties of the scale.

Limitations include: 1) normative data is limited; 2) specific adolescent age range for the scale has not been provided; 3) internal reliability estimates, and internal and external validity are not well established; and 4) factor structure of the instrument has not been fully determined.

*3.3.3.4 Comprehensive Quality of Life Scale.* The Comprehensive Quality of Life Scale (ComQol; Cummins, McCabe, Romeo, & Gullone, 1994) is a 35-item LS measure that assesses quality of life (QOL) on two dimensions (i.e., objective and subjective) in each of seven domains (i.e., material well-being, health, productivity, intimacy, safety, place in the community, emotional well-being). The scale was originally developed for use with adults (see Cummins, 1997a; Cummins et al., 1994), however an adolescent version has been designed for use with adolescents aged 11-18 (Gullone & Cummins, 1999). The adolescent version of the scale is currently in its fifth revision (see Cummins, 1997c) with a separate form available for individuals with intellectual disability (see Cummins, 1997b). The objective dimension assesses how often adolescents engage in an activity (e.g., ‘On *average*, how many hours of TV do you watch each day?’). The subjective dimension assesses satisfaction with each activity and each is weighted by its importance (e.g., ‘How *satisfied* are you with the things you own?’ and ‘How *important to you* are the things you own?’). Both subjective dimension items are rated on 5-point Likert scales with the satisfaction ratings ranging from: 1 = Terrible, 2 = Mostly Dissatisfied, 3 = Mixed (equally satisfied and dissatisfied), 4 = Mostly Satisfied, and 5 = Delighted, and the importance ratings ranging from: 1 = Not Important At All, 2 = Slightly Important, 3 = Somewhat Important, 4 = Very Important, and 5 = Could Not Be More Important;

in the fifth edition each satisfaction item is responded to on a 7-point D/T scale, however the results using this extended format have not been published. Satisfaction and importance ratings are combined for each domain to arrive at a subjective QOL score. In order to weight scores according to importance, the five items on the satisfaction scale are coded: -4.0, -2.5, 1.0, 2.5, and 4.0, so that each subjective score ranges from 20 (delighted x could not be more important) to -20 (terrible x not important at all). For each of the seven domains there are 7 satisfaction items and 7 importance items, and there are 3 items for each domain of the objective scale (i.e., 21 objective items).

Development of the ComQol was abandoned in 2001 for reasons detailed by Cummins (2002). However, the satisfaction scale was retained and used to form the basis of the Personal Well-being Index - Adult (PWI-A) Scale (International-Wellbeing-Group, 2006), which is currently in its fourth revision. The PWI-A is designed for use with the general adult population, aged at least 18 years. The adolescent version of the scale is currently in its third revision (see Cummins & Lau, 2005c), with separate forms available for pre-school aged children (see Cummins & Lau, 2005b) and individuals with intellectual disability (see Cummins & Lau, 2005a).

*Samples.* The initial development research sample was comprised of 243 university students and 65 staff from an Australian university (Cummins et al., 1994). Psychometric properties of the ComQol for adolescents has been reported from a sample of 264 students aged 12-18 from Melbourne, Australia (Gullone & Cummins, 1999).

*Reliability.* Among adults coefficient alphas have been reported for the satisfaction subscale at 0.73 and the importance subscale 0.65 (Cummins et al., 1994). Internal consistency coefficient alphas based on age and gender groups have been

found to range from 0.78 (females) to 0.83 (males) for the satisfaction scale, and from 0.75 (males, older adolescents) to 0.77 (females) for the importance scale. Subjective QOL scores (i.e., satisfaction x importance) based on age and gender group have been found to range from 0.80 (older adolescents) to 0.83 (females). One-week test-retest reliability coefficients have been reported as 0.73 for the satisfaction scale and 0.74 for the importance scale (Gullone & Cummins, 1999). A total satisfaction score (i.e., all domains) coefficient alpha has been reported at 0.80 (Cummins, 1997c). No reliability data are available for adolescents.

*Validity.* Convergent validity for the ComQol has been demonstrated through negative correlations between satisfaction QOL and anxiety (-0.14 to -0.33), and subjective QOL and fear (-0.14 to -0.32) (Gullone & Cummins, 1999). It has been suggested that content validity for the ComQol is demonstrated by the satisfaction scores for each domain falling within the proposed normative range of 75% ( $\pm 2$ ) to 100% (see Cummins, 1995). Results reported from adolescents has provided support for this, with satisfaction scores for all domains falling in the range of 70% to 80% (see Gullone & Cummins, 1999).

*Summary.* Overall, internal coefficient reliabilities among adult samples are adequate for research purposes. However, preliminary research reporting reliability data has not been conducted among adolescent samples and therefore additional research is required. Preliminary support of convergent validity has been provided for both young adults and adolescents. However, support of construct validity is not well documented and further research is required in order for it to be established and to provide additional support for the convergent and discriminant validity of the scale.

Limitations include: 1) reliability and validity of the scale among adolescents has not been well established; 2) complex structure of the scale makes scoring

difficult; 3) additional normative data among adolescents is required; and 4) cross-cultural comparisons of the scale, which examine psychometric properties and establish the generalisability of the findings, have not been conducted.

### 3.4 Discussion

The positive psychology field has illuminated the need to readdress psychology's neglected historical foundations, which included making the lives of all people better, by encouraging a redirection of some of its focus back to discovering how we achieve happiness. Accordingly, interest in the positive development of youth, and the incorporation of LS assessments in order to better understanding how youths perceive their lives and achieve happiness, has grown. Similarly, development of instruments designed to measure global and domain specific LS have increased. As a result, assessment of self-reported youth LS has provided researchers with useful insights into how youths perceive their lives, and associations between LS and various psychological, social, behavioural, environmental, and educational variables have demonstrated LS to be a key indicator of well-being (Chapter 2; see Proctor et al., 2009b for a review). Nevertheless, continued theoretical and empirical refinement of assessment measures will benefit future youth LS measurement research (Gilman & Huebner, 2000).

#### *3.4.1 Future Directions*

It is clear from the findings of this review that the reported psychometric properties of many of the measures considered are based on normative samples from limited geographical regions. Specifically, for the measures reviewed, the scale development samples were derived from: Midwest and Southwest American states (SLSS), the University of Illinois (SWLS), California and a South-eastern American

state (PLSS), a South-eastern American state (BMLSS), American university students (ESWLS), a South-eastern American state, Canada, and South Carolina USA (MSLSS), a South-eastern American state (MSLSS-A), and Australian university students (ComQol). Additional cross-cultural studies exploring the psychometric properties of LS measures is necessary in order to establish the generalisability of the reported findings. Moreover, preliminary research examining the cross-national differences between individualistic and collectivistic cultures suggests important similarities and differences in response styles between nations, additional research in this area will further illuminate important cultural, educational, and social variables influencing LS reports among youths (Gilman et al., 2008). Additionally, as evidenced by Gilman et al. (2008), in order to make informed and evaluative cross-national recommendations with regards to the applicability and usefulness of youth LS measures it is essential that researchers in this area form efficacious partnerships with researchers from diverse cultures. Such partnerships would undoubtedly result in a much-needed increase in the generation of cross-cultural research in this important and burgeoning area. Further, additional research is required with special populations, such as those with mental or learning disabilities. Recent research has shown that modifications are often required when using LS measures among disabled populations in order to improve internal consistency estimates. For example, Brantley, Huebner, and Nagel (2002) omitted three items from the Living Environment domain and one item from the Self domain of the MSLSS in order to achieve acceptable reliability levels for use with adolescents with mild mental disability. Similarly, Griffin and Huebner (2000) omitted two items from the School domain, two items from the Living Environment domain, and one item from the Family domain of the MSLSS, and one Global item from the SLSS, in order to achieve acceptable reliabilities for use

with youth classified as seriously emotionally disturbed. In contrast, McCullough and Huebner (2003) found that internal consistency coefficients for the MSLSS total and domain scores were acceptable for use with adolescents with learning disabilities without modifications being made to the scale. The variability of these findings further demonstrates the necessity for additional examination of LS measures among diverse special populations.

In accordance with the findings of Gilman and Huebner (2000), internal consistency reliability estimates for the LS scales considered have been demonstrated to be acceptable for research purposes. However, there continues to be a paucity of research in this area providing firm demonstration of the temporal stability of youth LS measures across varying time frames (Gilman & Huebner, 2000). Similarly, additional investigations of the validity of youth LS measures are required in order to further support the conceptual models proposed for many of the scales. For example, the PLSS purports to measure general unidimensional LS. The total score on the scale is based on the summation of heterogeneous items from diverse domains (e.g., material and physical well-being, personal development, recreation). Results of factor analyses have demonstrated an underlying multidimensional structure to the instrument (see Huebner & Dew, 1993b), which suggests there are serious issues to be addressed with regards to the underlying rationale for the scale. Further, validity investigations should consider, and provide account for, the findings which demonstrate that convergent validities are often reported as lower than discriminant validities, and provide rationale for a given correlation being reported as weak, moderate, or strong. Furthermore, investigations of validity should be expanded to include, and provide further support for, the predictive and construct validity of youth LS measures (Gilman & Huebner, 2000). Recent research suggests that global LS

scores can predict future measures of internalising and externalising behaviour up to 2 years later (Haranin et al., 2007). Additional research is required in order to support these findings and to determine the role that LS measures play in the diagnosis and prediction of psychopathology among youth. Moreover, with the exception of the SWLS and the PLSS, the measures reviewed provide no indication of indices of satisfaction for interpretive or clinical use. Clearer designation of satisfaction ratings as being low, moderate, or high would greatly benefit the use of these measures in the assessment, evaluation, and implementation of educational and social programmes. Similarly, investigations of the clinical utility of LS measures are required in order to determine the usefulness of these instruments as outcome measures for well-being enhancement interventions among adolescents and youth. For example, recent research conducted by Froh, Sefick and Emmons (2008) demonstrated that counting daily blessings resulted in enhanced LS, gratitude, optimism, and decreased negative affect among middle school students. Further exploration of the usefulness of measures of LS in the evaluation of well-being intervention programmes among youth is required in order to support these findings and to expand upon the applicability of these measures.

### 3.5 Conclusion

Life satisfaction is a key component in the attainment of positive well-being among young people and is a determinant of many life outcomes (Proctor et al., 2009b). In line with the positive psychology movement, investigations into how youths perceive their lives is fundamental to discovering how youth achieve and maintain positive levels of well-being and happiness. As part of the growing awareness of the importance of subjective evaluations of quality of life, is the

incorporation of measurements of LS among youths. In selecting the appropriate measure for a given situation or research question, the psychometric properties of the measures reviewed in this paper should be considered, along with the scale length, administration time, and age appropriateness of each. Further, measurement selection should take into account the appropriateness of using a unidimensional versus multidimensional measure of LS. Whereas unidimensional measures (e.g., SLSS and SWLS) provide an indication of overall satisfaction with life, multidimensional measures (e.g., MSLSS) provide a profile of LS across various domains. Therefore, a multidimensional measure may be more appropriate, for example, when a more differentiated assessment is required for a focused diagnostic, prevention or intervention effort (Huebner, 2001). Overall, the strengths and limitations of each measure reviewed here should be considered when selecting an appropriate measure for a given situation or research question.

Implementations of assessment of LS among youths is essential in order for researchers and educators to discover those youths suffering with low subjective quality of life, and assess the outcomes of research and educational programmes designed to improve subjective quality of life among young people. Accordingly, adopting a dual-factor model of mental health, in which SWB and psychopathology are assessed together through an integrated system, would also enable identification of those who do not fall within the usual (high-SWB/low-psychopathology and low-SWB/high-psychopathology) unidimensional model of mental health; i.e. those exhibiting low-SWB/low-psychopathology and high-SWB/high-psychopathology. Support for an integrative system has been provided by Greenspoon and Saklofske (2001) and additional recent research (see Suldo & Shaffer, 2008) has demonstrated that youths with complete mental health (i.e., high-SWB/low-psychopathology) have

better reading skills, school attendance, academic self-perceptions, academic-related goals, social support from friends and parents, self-perceived physical health, and fewer social problems than their vulnerable peers (i.e., low-SWB/low-  
psychopathology). Additional research aimed at the development of applicable interventions that will enable educators and mental health professionals to increase LS and SWB among young people is required (Suldo & Shaffer, 2008). Finally, improvements of existing measures, and development of new measures, of LS will greatly aid in the overall aim of promoting positive development among young people.

The next chapter examines a dearth in the literature noted in Chapter 2, that is examination of the characteristics of young people very high levels of LS, and considers how interventions aimed at increasing LS among young people could focus on the specific influences of youth characteristics on level of happiness.

## CHAPTER 4: Very Happy Youths: Benefits of Very High Life Satisfaction Among Youths

---

### 4.1 Introduction

As shown in Chapter 2, LS is a key indicator of a vast array of positive personal, psychological, social, interpersonal, and intrapersonal outcomes. Findings from correlational research have shown LS to be associated with self-esteem (e.g., Huebner, 1991a), health-related quality of life (e.g., Zullig et al., 2005b), hope (e.g., Gilman et al., 2006), self-efficacy (e.g., Bradley & Corwyn, 2004), relationship with parents and peers (e.g., Man, 1991; Nickerson & Nagle, 2004), participation in structured extracurricular activities (SEAs) (e.g., Gilman, 2001), aspirations (e.g., Emmons, 1986), and academic achievement (e.g., Gilman & Huebner, 2006), and negatively correlated with psychopathological problems such as depression and social stress (Gilman & Huebner, 2006). Moreover, recent research suggests that increased LS buffers against the negative effects of stress and the development of psychological disorder. For example, in a longitudinal study of adolescents, Suldo and Huebner (2004a) found that those with positive LS were less likely to develop later externalising behaviours as a result of stressful life events than a group of adolescents with low LS. Further, cross-sectional data has shown LS to mediate the relationship between parental social support and both internal and external adolescent problem behaviour (Suldo & Huebner, 2004b).

In general, the psychological literature has long been dominated by research investigating the characteristics and correlates of very unhappy individuals. Although there has been a surge of new studies examining happy individuals over the course of the last decade, there remains a paucity of research that has specifically sought to

focus on the benefits associated with being very happy. Of the extant research on very happy individuals, the examination of very happy youths is nearly non-existent. With the exception of two notable recent studies conducted by Suldo and Huebner (2006) and Gilman and Huebner (2006), there remains a dearth of research in this area.

Findings reported by Suldo and Huebner (2006) demonstrated that extremely high LS was associated with adaptive functioning among a group of American high school students. Specifically, results indicated that in comparison to students with average LS, those with very high LS had higher levels on all indicators of adaptive psychosocial functioning (Suldo & Huebner, 2006). Moreover, adolescents reporting very high LS had the lowest frequency of internalising and externalising behaviour problems, the lowest levels of neuroticism, the lowest emotional and behavioural problems on five indicators of functioning, and significantly higher academic, emotional, and social self-efficacy levels than those in the average LS and low LS groups (Suldo & Huebner, 2006). Similarly, Gilman and Huebner (2006) demonstrated that extremely high LS was as beneficial for adolescents as it was found to be for adults in Diener and Seligman's (2002) study of 'very happy people'.

Investigating the relationship between a broad range of school-related variables, interpersonal variables and intrapersonal variables, and LS, Gilman and Huebner (2006) found global LS to be positively related to grade point average, SEAs, interpersonal relations, parent relations, self-esteem, hope, attitude toward school, and attitude toward teachers, but negatively related to social stress, anxiety, depression, and external LOC. Adolescents reporting very high LS had higher scores on all measures than those reporting low LS, and reported significantly higher scores on measures of hope, self-esteem, and internal LOC, but lower scores on measures of

social stress, anxiety, depression, and negative attitudes toward teachers, than those reporting average LS (Gilman & Huebner, 2006).

The current study seeks to add to the existing literature through further investigation of the characteristics of adolescents reporting very high levels of LS and by expanding on the previous range of youth characteristics considered. Moreover, the aim of this research is to determine the specific influence of youth characteristics on level of happiness. Similar to Gilman and Huebner (2006), the characteristics to be investigated include school-related variables (i.e., school satisfaction, academic aspirations, academic achievement, attitude to education, participation in SEAs), interpersonal variables (i.e., social stress, parental relations, altruism, peer relations, social acceptance), and intrapersonal variables (i.e., life meaning, gratitude, aspirations, self-esteem, happiness). Furthermore, in accordance with the procedure adopted by Suldo and Huebner (2006), comparisons will be made between the LS reports of adolescents in three groups: very high (top 10%), average (middle 25%), and very low (lowest 10%). Adding to previous work in this area, an examination of positive and negative affect, health-related variables, and views on environmental issues will also be included.

#### *4.1.1 Study Hypotheses*

In accordance with the findings of Gilman and Huebner (2006), it is expected that very high LS will be beneficial for adolescents. Specifically, it is expected that those reporting very high LS will have significantly higher levels of the following positive outcomes than those reporting average levels of LS, which in turn will be significantly higher than those reporting low levels of LS (i.e., High >> Average >> Low):

- a. Positive functioning on measures of school, interpersonal, and intrapersonal measures;
- b. Display higher levels of positive affect;
- c. Report healthier lifestyles;
- d. Participate in greater numbers of extracurricular activities;
- e. Report higher levels of interest in environmental issues; and
- f. Report lower levels of depression, negative affect, and social stress

## 4.2 Method

### 4.2.1 Participants

Participants were 410 adolescents aged 16 to 18 (126 males, 284 females). The mean age of participants was 16.74 years ( $SD = .789$ ).

### 4.2.2 Measures

1. *Students' Life Satisfaction Scale* (SLSS; Huebner, 1991b, 1991c) is a 7-item self-report scale which assesses global LS for students aged 8-18. Students are required to respond to each item using a 6-point Likert scale (Strongly Disagree to Strongly Agree); two items are reverse scored. Items are summed for a total score and divided by seven for a mean score; higher scores denote higher LS. The SLSS has been shown to be a valid and reliable measure of LS for students in elementary (e.g., Terry & Huebner, 1995), middle (e.g., Huebner, 1991a), and high (e.g., Dew & Huebner, 1994) school. Coefficient alphas have consistently been reported across all age groups for this scale in the 0.70-0.80 range (Huebner et al., 2003b).
2. *Positive and Negative Affect Schedule* (PANAS; Watson et al., 1988) is a 20-item self-report measure made up of two subscales each consisting of ten

items: ten positive affects (interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, active) and ten negative affects (distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, afraid). Respondents use a 5-point Likert scale response format (Very Slightly or Not At All to Extremely). Internal consistency reliabilities range from .86 to .90 for positive affect (PA) and from .84 to .87 for negative affect (NA).

3. *Adolescent Health Promotion Scale* (AHP; Chen, Wang, Yang, & Liou, 2003) is a 40-item self-report instrument designed to assess health-promotion behaviours (i.e., healthy lifestyle) among adolescent populations. Respondents use a 5-point Likert scale response format (Never to Always). Factor analyses have revealed a six-factor structure for the instrument: (1) social support; (2) life-appreciation; (3) health-responsibility; (4) stress-management; (5) nutritional behaviours; (6) exercise behaviours. Internal consistency for the scale has been reported at .93 and alpha coefficients for the six subscales range from .75 to .90 (Chen, Wang, & Chang, 2006; Chen et al., 2003). For the purposes of this research items from the social support and life appreciation domains were not included; only physical health promoting behaviour items were retained. Therefore, a total of 25 items were administered with a possible range of scores from 25 to 125; higher scores indicate healthier lifestyle.
4. *Extracurricular Activities*. Participants were asked to indicate (in general) how many extracurricular activities they participated in. Extracurricular activities were defined to respondents as those activities pursued in addition to normal school course work and include participation in sports, drama, music, art, chess, etc.

5. *Environmental Views*. Participants were asked to respond to 4-item scale designed to assess general views and actions regarding the environment. Respondents used a 6-point Likert scale response format (Strongly Disagree to Strongly Agree). Items were: (1) I think we need to protect the environment more; (2) I am interested in environmental issues; (3) I believe recycling is important; and (4) I recycle things instead of putting them in the bin.
6. *Adolescent Rating Scale*. Participants were asked respond to 15 individual items designed to measure: school satisfaction, social stress, parental relations, life meaning, gratitude, aspirations, altruism, self-esteem, happiness, depression, academic aspirations, peer relations, social acceptance, academic achievement, and attitude toward education (see Table 4.1). Respondents used a 6-point Likert scale response format (Strongly Disagree to Strongly Agree).

Table 4.1

*Study Rating Scale*

Number	Item
1.	I enjoy the school I am attending
2.	My friends cause me a lot of stress
3.	I have a good relationship with my parents
4.	My life has meaning
5.	I am grateful for the life I have
6.	I have set goals in life I want to achieve
7.	I enjoy helping others
8.	I feel good about myself
9.	I feel happy most of the time
10.	I often feel sad and upset
11.	I want to go to college/university
12.	I am popular at school
13.	I make friends easily
14.	I am doing well at school
15.	My education is important to me

*Note:* Response options are a 6-point Likert scale: (1) Strongly disagree; (2) Moderately disagree; (3) Mildly disagree; (4) Mildly agree; (5) Moderately agree; (6) Strongly agree. Corresponding variables for each item: (1) School satisfaction; (2) Social stress; (3) Parental relations; (4) Life meaning; (5) Gratitude; (6) Aspirations; (7) Altruism; (8) Self-esteem; (9) Happiness; (10) Depression; (11) Academic aspirations; (12) Peer relations; (13) Social acceptance; (14) Academic achievement; (15) Attitude to education Very High Life Satisfaction Among Adolescents

#### 4.2.3 Procedure

Ethical approval to collect data for this study was secured from the University of Leicester Psychology Research Ethics Committee. The study questionnaire was placed online and the web page advertisement invited anyone aged 16-18 to participate and informed those interested that no identifying information was collected and that all participation was voluntary.

The Internet was used to recruit participants and collect the data (Birnbau, 2004; Seligman et al., 2005). Collecting self-report questionnaire data via the Internet has several advantages to traditional techniques, including increased diversity and sample size, efficiency and accuracy of the data collected, and cost-effectiveness (Gosling, Vazire, Srivastava, & John, 2004; Seligman et al., 2005). However, there are several potential disadvantages, such as possibility of multiple submissions, drop-out, sampling bias, and response bias, upon which criticisms over the quality of Internet-based studies have been founded (Birnbau, 2004). Research conducted by Gosling, Vazire, Srivastava, and John (2004) compared questionnaire data collected via the Internet versus traditional paper-and-pencil methods. Results revealed that: (1) Internet samples are more diverse than traditional samples in many domains; (2) voluntary participants of Internet-based studies are no more psychologically disturbed than traditional participants; (3) Internet researchers can take steps to eliminate repeat responders; and (4) Internet-based findings are consistent with findings based on traditional methods (Gosling et al., 2004).

Several recruitment techniques similar to those suggested by Birnbau (2001) were used to recruit participants. Recruitment began by sending out a bulletin advertising the study to members of the Centre for Applied Positive Psychology web site (<http://www.cappeu.org>). Within the bulletin was a further invitation for the study

web site address to be forwarded on to any other parties who might be able to help with recruitment. In addition, the primary researcher sent out the web site address link to individuals known to her (e.g., local education department, local school principals, secondary school teachers, positive psychology researchers) requesting that they consider proposing participation to applicable students. Also, an advertisement and link for the study was placed on an Internet site providing information to students studying A-Level Psychology within the United Kingdom (<http://www.holah.co.uk>). Finally, an email bulletin was sent out via the University of Leicester, School of Psychology email list serve encouraging anyone aged 16-18 to participate, and an advertisement and link for the study was placed on the School of Psychology's research participant panel web site (<http://www.le.ac.uk/pc/panel/index.html>).

Overall, these recruitment procedures resulted in 499 individuals accessing the questionnaire as posted on the study web page. Of the 499 individuals who began the questionnaire, 86 individuals dropped out (i.e., 50 completed only the SLSS, 15 only the SLSS and PANAS, and 21 only the SLSS, PANAS, and AHP) and 3 individuals were over the age of 18; there were no dropouts that resulted in partial measure completion. As recommended by Birnbaum (2004), those who dropped out were removed before analysis and assignment to groups. Moreover, of those who dropped out, the majority (58%) did so early on, suggesting that those who completed the questionnaire were not impatient or resistant people, but willing participants (Birnbaum, 2004). Therefore, a total of 410 individuals aged 16-18 were retained for data analysis. Among the remaining data records there were no instances of item nonresponse; which as noted by Borgers and Hox (2001) is less common among adolescents than children. As suggested by Birnbaum (2004), a search for identical

records was conducted in order to identify multiple submissions. No identical records were found.

Although identifying information was not collected, the respondent's IP addresses were stored by the online system in the survey results. Examination of the IP address locations for the retained 410 participants revealed that 93% of participants were from locations across the UK. The remaining 7% were from locations in Europe (2%), India (2%), the Middle East (1%), Australia (1%), and the rest of the world (1% - including America, Mexico, Africa, and the Caribbean).

#### *4.2.4 Data Analysis*

In line with previous research (e.g., Gilman & Huebner, 2006), prior to dividing participants into groups, examination of the scoring distribution of all measures was conducted in order to assess for outliers and to test for multivariate normality. All scores were first transformed into  $z$  scores. As recommended by Tabachnick and Fidell (2001), all  $z$  scores fell within the  $\pm 3.29$  range and therefore no scores were excluded from the data. Further, none of the variables included departed significantly from normality, with skewness and kurtosis all within acceptable limits (i.e., values of 2 standard errors) (Tabachnick & Fidell, 2001).

Based on global mean LS scores obtained from the SLSS, participants were ranked and divided into three groups: (1) the very happy (VH) group consisting of adolescents whose global LS score placed them in the top 10% of the entire sample; (2) the very unhappy (VU) group consisting of adolescents whose global LS score placed them in the bottom 10% of the entire sample; (3) the average happiness (AH) group consisting of adolescents whose global LS scores fell into the middle quarter of the distribution of scores for the entire sample (the remaining 55% were not utilised in this analysis).

Correlational analysis was used to examine the relationships between the study variables. Analyses of variance (ANOVA) were used to determine the mean difference between the three groups and each of the study variables. Post hoc analyses (i.e., Tukey's HSD) were conducted in order to determine which differences between the groups and the study variables were significant.

Linear regression analyses were conducted in order to test the hypothesis that the slope of the regression line of each predictor variable was the same in all three groups. Student's *t*-tests were conducted to compute the difference between the slopes of each predictor variable divided by the standard error of the difference between the slopes, on degrees of freedom (Wuensch, 2007). Comparisons were made for all included variables between VH and AH, VH and VU, and AH and VU groups.

### 4.3 Results

The internal consistency reliabilities and descriptive statistics for the study variables are presented in Table 4.2. The intercorrelations between the study variables are presented in a correlation matrix in Table 4.3. Life satisfaction was significantly correlated in the expected direction with each of the study variables.

The VH group consisted of 48 participants whose mean global LS scores were at or above 5.43 on the 6-point SLSS scale ( $M = 5.64$ ,  $SD = 0.19$ ); 5 participants had the maximum score of 6.00. The AH group consisted of 117 participants whose mean global LS scores were at or between 3.86 and 4.43 on the 6-point SLSS scale ( $M = 4.15$ ,  $SD = 0.20$ ). The VU group consisted of 41 participants whose mean global LS scores were at or below 2.71 on the 6-point SLSS scale ( $M = 2.19$ ,  $SD = 0.49$ ); 1 participant had the minimum score of 1.00.

Table 4.2

*Descriptive Statistics for Study Variables*

Variable/measure	Mean (SD)	Alpha $\alpha$
Students' Life Satisfaction Scale	4.10 (1.01)	.89
Structured extracurricular activities	2.24 (2.15)	–
Positive affect	29.82 (8.27)	.89
Negative affect	23.75 (7.85)	.84
Adolescent Health Promotion Scale	68.88 (15.15)	.86
Environmental views	18.42 (4.61)	.87
School satisfaction	4.41 (1.35)	–
Social stress	2.86 (1.42)	–
Parental relations	4.47 (1.49)	–
Life meaning	4.36 (1.49)	–
Gratitude	4.93 (1.24)	–
Aspirations	4.78 (1.38)	–
Altruism	5.12 (1.07)	–
Self-esteem	3.93 (1.45)	–
Happiness	4.10 (1.39)	–
Depression	3.25 (1.46)	–
Academic aspirations	5.35 (1.12)	–
Peer relations	3.84 (1.31)	–
Social acceptance	4.21 (1.35)	–
Academic achievement	4.28 (1.28)	–
Attitude to education	5.18 (1.10)	–

*Note:* Values based on entire sample group,  $N = 410$

Analyses of variance were conducted for each of the school, interpersonal, and intrapersonal variables in order to determine if mean differences between the three global LS groups were significant. Results revealed that all variables were significant to an alpha level of .05 with the exception of environmental views ( $F(2, 203) = 0.45$ ,  $p = .64$ ) and altruism ( $F(2, 203) = 2.43$ ,  $p = .09$ ) (see Table 4.4). Post hoc analyses (Tukey's HSD) were carried out on all variables for each of the three groups in order to isolate significant differences. Table 4.5 reports the mean difference between the three global LS groups on school, interpersonal, and intrapersonal variables. Comparisons are reported between the VH and AH groups, VH and VU groups, and AH and VU groups. Results revealed that adolescents in the VH group reported significantly higher mean scores than adolescents in the VU group on all positive

Table 4.3 *Pearson Product Correlation Coefficients Between Study Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Life Satisfaction	-																			
2. Positive Affect	.53**	-																		
3. Negative Affect	-.44**	-.20**	-																	
4. Healthy Lifestyle	.29**	.41**	-.10*	-																
5. Environmental Views	.10*	.14**	.06	.38**	-															
6. School Satisfaction	.39**	.40**	-.15**	.34**	.26**	-														
7. Social Stress	-.32**	-.23**	.30**	-.02	.04	-.21**	-													
8. Parental Relations	.49**	.32**	-.20**	.32**	.15**	.31**	-.30**	-												
9. Life Meaning	.52**	.45**	-.20**	.41**	.15**	.41**	-.20**	.52**	-											
10. Gratitude	.60**	.43**	-.25**	.36**	.25**	.39**	-.26**	.53**	.65**	-										
11. Aspirations	.30**	.35**	-.06	.33**	.14**	.31**	-.11*	.26**	.53**	.47**	-									
12. Altruism	.12*	.22**	.01	.40**	.37**	.31**	-.04	.23**	.35**	.41**	.42**	-								
13. Self-Esteem	.61**	.52**	-.40**	.41**	.08	.41**	-.23**	.46**	.57**	.57**	.37**	.29**	-							
14. Happiness	.64**	.53**	-.40**	.42**	.08	.47**	-.26**	.46**	.56**	.57**	.38**	.31**	.71**	-						
15. Depression	-.59**	-.38**	.48**	-.11*	.07	-.22**	.36**	-.30**	-.27**	-.30**	-.05	.08	-.43**	-.52**	-					
16. Academic Aspirations	.25**	.22**	-.08	.30**	.27**	.38**	-.07	.25**	.37**	.47**	.42**	.38**	.29**	.30**	.02	-				
17. Peer Relations	.29**	.31**	-.23**	.36**	.12*	.30**	-.15**	.34**	.38**	.36**	.34**	.24**	.47**	.40**	-.21**	.28**	-			
18. Social Acceptance	.24**	.29**	-.15**	.31**	.16**	.28**	-.17**	.28**	.37**	.32**	.30**	.26**	.40**	.37**	-.12*	.26**	.61**	-		
19. Academic Achievement	.39**	.45**	-.22**	.40**	.18**	.49**	-.17**	.36**	.47**	.42**	.35**	.26**	.49**	.43**	-.19**	.39**	.41**	.32**	-	
20. Attitude to Education	.25**	.31**	-.04	.39**	.34**	.44**	-.04	.31**	.42**	.50**	.49**	.42**	.31**	.30**	.02	.66**	.30**	.26**	.48**	-

Note: Correlational analysis conducted on entire sample group,  $N = 410$ ; \*  $p < .05$ ; \*\*  $p < .01$

Table 4.4

*Means (and Standard Deviations) of the Three Global Life Satisfaction Groups on School, Interpersonal, and Intrapersonal Variables*

	Very Happy	Average	Very Unhappy	F	Significance
<i><u>School Variables</u></i>					
SEAs	2.98 (2.69)	2.35 (2.23)	1.61 (1.67)	4.10	.018*
School Satisfaction	5.15 (1.17)	4.48 (1.22)	3.27 (1.64)	23.45	<.001***
Academic Aspirations	5.69 (0.90)	5.48 (0.88)	4.61 (1.67)	12.67	<.001***
Academic Achievement	4.94 (1.06)	4.42 (1.08)	3.29 (1.65)	21.38	<.001***
Attitude to Education	5.40 (1.09)	5.32 (0.97)	4.39 (1.63)	11.29	<.001***
<i><u>Interpersonal Variables</u></i>					
Environmental Views	19.31 (4.98)	18.55 (4.41)	18.83 (5.18)	0.45	.637
Social Stress	2.19 (1.39)	3.00 (1.26)	3.56 (1.72)	11.18	<.001***
Parental Relations	5.48 (1.11)	4.60 (1.22)	3.32 (1.79)	29.25	<.001***
Altruism	5.23 (1.17)	5.13 (0.96)	4.73 (1.51)	2.43	.091
Peer Relations	4.40 (1.32)	3.95 (1.11)	3.63 (1.54)	4.21	.016*
Social Acceptance	4.92 (1.22)	4.25 (1.25)	3.98 (1.62)	6.37	.002**
<i><u>Intrapersonal Variables</u></i>					
Life Meaning	5.44 (1.07)	4.56 (1.19)	2.93 (1.81)	41.59	<.001***
Gratitude	5.67 (0.91)	5.18 (0.82)	3.34 (1.48)	68.36	<.001***
Aspirations	5.33 (1.00)	4.84 (1.26)	3.85 (1.86)	13.77	<.001***
Self-Esteem	5.04 (1.24)	4.22 (1.19)	2.22 (1.47)	58.98	<.001***
Happiness	5.31 (1.03)	4.24 (1.09)	2.39 (1.53)	69.48	<.001***
Depression	2.15 (1.07)	3.09 (1.22)	4.93 (1.21)	62.52	<.001***
Positive Affect	37.04 (6.84)	29.80 (7.12)	21.75 (7.76)	50.05	<.001***
Negative Affect	19.50 (5.83)	22.85 (7.30)	31.07 (8.40)	30.25	<.001***
Healthy Lifestyle	75.00 (17.43)	69.61 (14.52)	62.76 (14.90)	7.07	<.001***

*Note:* SEAs (structured extracurricular activities)

\*  $p = .05$ ; \*\*  $p = .01$ ; \*\*\*  $p = .001$

school, interpersonal, and intrapersonal indicator variables (environmental views and altruism were not included based on the non-significant ANOVA results), and significantly less depression, negative affect, and social stress. Additionally, adolescents in the VH group reported significantly higher positive affect, school satisfaction, parental relations, life meaning, gratitude, self-esteem, happiness, social acceptance, and academic achievement, and significantly less depression, negative affect, and social stress than adolescents in the AH group. Adolescents in the AH group reported significantly higher positive affect, healthy lifestyle, school satisfaction, parental relations, life meaning, gratitude, aspirations, self-esteem,

Table 4.5

*Mean Difference (Tukey HSD) Between the Three Global Life Satisfaction Groups on School, Interpersonal, and Intrapersonal Variables*

Comparisons	VH/AH	<i>p</i>	VH/VU	<i>p</i>	AH/VU	<i>p</i>
<i>School Variables</i>						
SEAs	0.63	.235	1.37	.013*	0.74	.168
School Satisfaction	0.67	.009**	1.88	<.001***	1.21	<.001***
Academic Aspirations	0.21	.501	1.08	<.001***	0.87	<.001***
Academic Achievement	0.52	.035*	1.64	<.001***	1.13	<.001***
Attitude to Education	0.07	.932	1.01	<.001***	0.93	<.001***
<i>Interpersonal Variables</i>						
Social Stress	-0.81	.002**	-1.37	<.001***	-0.56	.070
Parental Relations	0.88	<.001***	2.16	<.001***	1.28	<.001***
Peer Relations	0.45	.098	0.76	.013*	0.31	.354
Social Acceptance	0.67	.010**	0.94	.003**	0.27	.495
<i>Intrapersonal Variables</i>						
Life Meaning	0.88	<.001***	2.51	<.001***	1.63	<.001***
Gratitude	0.49	.014*	2.32	<.001***	1.84	<.001***
Aspirations	0.50	.084	1.48	<.001***	0.98	<.001***
Self-Esteem	0.82	<.001***	2.82	<.001***	2.00	<.001***
Happiness	1.07	<.001***	2.92	<.001***	1.85	<.001***
Depression	-0.95	<.001***	-2.78	<.001***	1.83	<.001***
Positive Affect	7.24	<.001***	15.29	<.001***	8.05	<.001***
Negative Affect	-3.35	.020*	-11.57	<.001***	-8.22	<.001***
Health	5.38	.103	12.24	<.001***	6.86	.038*

Note: VH (Very Happy), VU (Very Unhappy), AH (Average Happy)

\**p* = .05; \*\**p* = .01; \*\*\**p* = .001

happiness, academic aspirations, academic achievement, and attitudes toward education, and significantly less depression and negative affect than adolescents in the VU group. No significant mean differences were found between the VH group and the AH group on participation in SEAs, healthy lifestyle, aspirations, academic aspirations, and attitude toward education. Further, no significant mean differences were found between the AH group and the VU group on participation in SEAs, social stress, peer relations, and social acceptance.

In order to determine if the influence of the included predictor variables was

dependent on level of happiness (i.e., global LS), we tested the hypothesis that the slope of the regression line of each predictor variable was the same in all three groups. For each of the three groups, linear regression analyses were conducted in which the SLSS total score served as the dependent variable and SEAs, school satisfaction, social stress, parental relations, life meaning, gratitude, aspirations, self-esteem, happiness, depression, academic aspirations, peer relations, social acceptance, academic achievement, attitude to education, healthy lifestyle, positive affect, negative affect, and environmental views served as individual independent variables. Student's *t*-tests were conducted in order to compute the difference between the slopes (comparisons were made for: VH and AH; VH and VU; AH and VU) divided by the standard error of the difference between the slopes, on degrees of freedom (Wuensch 2007). Results revealed that there were no significant slope differences for any of the included variables between the VH and the AH groups. However, significant slope differences were revealed between the VH and VU, and the AH and VU groups. Specifically, life meaning ( $t(85) = -2.47, p < .025$ ), gratitude ( $t(85) = -3.71, p < .01$ ), self-esteem ( $t(85) = -2.25, p < .05$ ), and positive affect ( $t(85) = -2.23, p = .05$ ) had a significantly more positive influence on global LS for the VU group than the VH group, whereas the influence of depression ( $t(85) = 1.93, p < .05$ ) and negative affect ( $t(85) = 2.62, p < .025$ ) had a significantly less negative influence on global LS for the VH group than the VU group. Similarly, life meaning ( $t(154) = -2.51, p < .025$ ), gratitude ( $t(154) = -3.21, p < .01$ ), self-esteem ( $t(154) = -1.99, p < .05$ ), attitude to education ( $t(154) = -2.23, p < .05$ ), and positive affect ( $t(154) = -2.74, p < .01$ ) had a significantly more positive influence on global LS for the VU group than for the AH group, whereas the influence of negative affect ( $t(154) = 2.06, p < .05$ ) had a significantly less negative influence on global LS for the AH group than

the VU group.

#### 4.4 Discussion

Results of this study revealed that adolescents with very high levels of LS reported significantly higher mean scores on all measures of school (i.e., SEAs, school satisfaction, academic aspirations, academic achievement, attitude to education), interpersonal (i.e., parental relations, peer relations, social acceptance), and intrapersonal variables (i.e., life meaning, gratitude, aspirations, self-esteem, happiness, positive affect, healthy lifestyle) than adolescents reporting very low levels of LS. Moreover, adolescents with very high levels of LS reported significantly less depression, negative affect, and social stress than adolescents with very low LS. Similarly, adolescent with very high levels of LS reported significantly higher mean scores on nine of fifteen positive indicators of school, interpersonal, and intrapersonal variables, and significantly less depression, negative affect, and social stress than adolescents with average levels of LS. Adolescents with average levels of LS reported significantly higher mean scores on twelve of fifteen positive indicators of school, interpersonal, and intrapersonal variables, and significantly less depression and negative affect than adolescents with very low levels of LS. Overall these findings support the hypothesis that very high levels of LS are beneficial for adolescents. Specifically, as hypothesised, adolescents reporting very high levels of LS had significantly higher levels on all measures of positive functioning on school, interpersonal, and intrapersonal measures, displayed higher levels of positive affect, reported healthier lifestyles, participated in greater numbers of SEAs, and had significantly lower levels of depression, negative affect, and social stress than those reporting very low levels of LS. In general, these findings are also consistent with,

and add support to, those reported by Suldo and Huebner (2006) and Gilman and Huebner (2006). Contrary to expectation however, results revealed that adolescents with very high levels of LS did not have significantly higher levels of participation in SEAs, healthy lifestyle, aspirations, academic aspirations, peer relations, and attitude toward education than adolescents with average levels of LS. Similarly, adolescents with average levels of LS did not have significantly higher levels of participation in SEAs, peer relations, and social acceptance, and significantly less social stress, than adolescents with very low LS. Furthermore, results of this study suggest that very high levels of happiness do not engender altruistic or environmental pro-action. That is, desire to help others or participate in activities that benefit the environment is not dependent on level of happiness.

Overall, the characteristics of youths reporting very high levels of LS are consistent with previous research. Findings of this study further demonstrate that adolescents with very high LS benefit significantly differently from positive characteristics than adolescents with average and very low levels of LS. Moreover, similar to previous research (e.g., Diener & Seligman, 2002; Friedman, Schwartz, & Haaga, 2002; Suldo & Huebner, 2006), there is no evidence to suggest that very happy youths suffer with maladaptive or dysfunctional psychological problems. On the contrary, very happy youths had significantly lower levels of depression, negative affect, and social stress than youths with both average and very low levels of LS. In general, findings of this research substantiate prior research demonstrating that very high LS is associated with an array of social, behavioural, and psychological benefits not found among youths with lower levels of LS.

Results of this study further add to the existing literature by demonstrating that specific predictors are more influential on the level of happiness for the very unhappy.

For example, life meaning, gratitude, self-esteem, and positive affect had a greater positive influence on level of happiness for very unhappy youths than very happy youths. Similarly, life meaning, gratitude, self-esteem, attitude to education, and positive affect had a greater positive influence on level of happiness for very unhappy youths than average youths. The identification of the influence of specific variables on happiness level, suggest that very unhappy youths would benefit greatly from focused interventions or exercises aimed at boosting these factors; however further research is required in order to confirm this. For example, research has demonstrated that simple interventions, such as counting one's own acts of kindness for one week (Otake, Shimai, Tanaka-Matsumi, Otsui, & Frederickson, 2006) or participating in gratitude exercises (Emmons & McCullough, 2003), increases gratefulness, positive affect, and happiness. Moreover, additional research has demonstrated that participating in strengths-based exercises, such as writing down three good things every day and using signature strengths in a new way every day for one week, increase happiness and decrease depressive symptoms for up to six months (Seligman et al., 2005).

Findings of this study further revealed that less variance is accounted for among the very happy youths than among the average happiness and very low happiness groups, suggesting that the very happy may be benefiting from additional unaccounted factors. Thus, future research should seek to extend the findings of this research and that of Suldo and Huebner (2006) and Gilman and Huebner (2006) through further examination of variables associated with very high LS among youths. Further identification of variables associated with very high levels of LS will aid in the isolation of variables having the most influence on the LS of very unhappy youths and therefore inform what interventions may be required to boost their LS up to

normative levels. Moreover, given the inherent benefits associated with increased LS, intervention efforts aimed at increasing LS and the implementation of such interventions can and should take place on a broad scale. Future research would further benefit from the inclusion of multiple raters, such as parents, teachers, and peers, and collection of data through multiple methods in order to further substantiate research findings associated with very high LS among youths. Furthermore, a longitudinal examination of the benefits of very high LS among youths would be advantageous in controlling for the impact of extraneous variables and for tracking any changes over time.

Notwithstanding the contributions to the literature made by this study, several limitations are noteworthy. Firstly, the majority of school, interpersonal, and intrapersonal variables examined were based on single-item measures created for the purposes of this research. Future research seeking to extend the findings of this, and similar, research would benefit from inclusion of psychometrically established measures of these variables. Secondly, the sample size of the individual LS groups was small and consisted mainly of females, and demographic information regarding socio-economic status and ethnicity was not collected. In order to increase the generalisability of these findings, future research would benefit from a larger sample and a more extensive examination of demographic variables. Finally, this study was cross-sectional in nature and future research would greatly benefit from a longitudinal examination of the variables associated with very high LS among youths.

#### *4.4.1 Conclusion*

In general, findings of this study indicate that very high LS is beneficial for adolescents. These results are in accordance with the findings of Gilman and Huebner (2006) and add to the existing literature by demonstrating the association of additional

variables with very high LS among youths. These results also add to the existing literature by demonstrating that specific factors are more influential on the level of happiness for the very unhappy. The identification of the influence of specific variables on happiness level has important implications for interventions as it suggests that very unhappy youths would benefit most from focused exercises aimed at boosting these factors. Findings reported here further suggest that very happy youths may be benefiting from additional unaccounted factors. Further identification of factors associated with very high levels of LS will aid in the isolation of variables having the greatest influence on the LS of very unhappy youths. Overall, these findings have important implications for applications in education, since it appears that facilitating increased LS among youths will be associated with an array of social, behavioural, and psychological benefits.

The next chapter seeks to further add to the existing literature by examining the association between LS and previously unconsidered variables in the literature (Chapter 2). Further, Chapter 5 examines previously unconsidered links between LS and the characteristics of the Rogerian (1959) 'fully functioning individual'.

## CHAPTER 5: The Rogerian Fully Functioning Individual: An Examination of the Correlates of Life Satisfaction

---

### 5.1 Introduction

The study presented in this chapter further examines the correlates of LS among young people (Chapter 2) by considering the relationship between LS and the characteristics of the fully functioning individual described in the person-centered personality theory of Carl Rogers (1959).

It has been noted (e.g., Joseph & Linley, 2004; Patterson & Joseph, 2007) that the metatheoretical assumptions of person-centered theory are consistent with and provide grounding for positive psychological research. Positive psychology's foundations rest in Aristotelian (c. 330 BCE/1925) theory which posits that the primary function of man is the exercising of good character through the conscious choice of action in the pursuit of Eudaimonia (i.e., human flourishing or the 'good life'). Further, according to the Aristotelian model, with the right environmental conditions each individual can learn to realise their potentials and their positive virtues. Thus, as stated by Jørgensen and Nafstad (2004), the 'Aristotelian model then takes into account a teleological aspect: The individual as a being lives a life in which thoughts and ideas about future positive goals also influence the direction of actions here and now' (p. 21). Similarly, Rogers (1959) proposed that man has an inherent tendency toward growth, development, and autonomy, which he referred to as the actualising tendency:

This is the inherent tendency of the organism to develop all its capacities in ways which serve to maintain or enhance the organism. It involves not only the tendency to meet what Maslow (1954) terms "deficiency needs" for air, food, water, and the like, but also more generalised activities. It involves development toward the differentiation of organs and of functions, expansion

in terms of growth, expansion of effectiveness through the use of tools, expansion and enhancement through reproduction. It is development toward autonomy and away from heteronomy, or control by external forces. (p. 196)

According to Rogers individuals engage in an organismic valuing process (OVP), whereby they evaluate experiences with the actualising tendency as a criterion.

Experiences that are perceived as organismically enhancing are valued positively,

whereas those that are perceived as negating organismic enhancement are valued

negatively. From this perspective then, human beings have an innate ability to know

what they need and what is essential for a fulfilling life (Joseph & Linley, 2004). If

this is the case, however, then why do so many individuals suffer with psychological

disorder and distress? The answer lies in the social environment in which an

individual develops. According to Rogers (1959), the OVP can be disturbed in a

social environment characterised by conditional positive regard:

A condition of worth arises when the positive regard of a significant other is conditional, when the individual feels that in some respects he is prized and in others not. Gradually, this same attitude is assimilated into his own self-regard complex, and he values an experience positively or negatively solely because of these conditions of worth which he has taken over from others, not because the experience enhances or fails to enhance his organism. (p. 209)

Therefore, in a social environment characterised by conditional positive regard,

individuals do not self-actualise in a direction consistent with their actualising

tendency, but in a direction consistent with their conditions of worth (Joseph &

Linley, 2004). Psychological disorder and distress develop through the assimilation

(internalisation) of conditions of worth into an individual's own identity. In contrast,

in a social environment characterised by unconditional positive regard ('To perceive

oneself as receiving unconditional positive regard is to perceive that of one's self-

experiences none can be discriminated by the other individual as more or less worthy

of positive regard.' p. 208), individuals self-actualise in a direction consistent with

their actualising tendency toward becoming what Rogers (1959) referred to as a fully functioning person:

It should be evident that the term the “fully functioning person” is synonymous with optimal psychological adjustment, optimal psychological maturity, complete congruence, complete openness to experience, complete extensionality... Since some of these terms sound somewhat static, as though such a person “had arrived”, it should be pointed out that all the characteristics of such a person are *process* characteristics. The fully functioning person would be a person-in-process, a person continually changing. (p. 235)

Thus, ‘the fully functioning person’ is a term that describes the ideal condition where actualisation of the self is congruent with an individual’s organismic experiencing.

Rogers’ view of the meaning of the ‘good life’ was based upon his conception of the fully functioning person. According to Rogers (1961), the good life is a process of movement (not a state of being) in a direction (not a destination) which the total human organism selects. The characteristic qualities of this process of movement experienced by a person becoming more fully functioning involves an increasing openness to experience, increasingly existential living (i.e., to live fully in each moment), an increasing trust in one’s organism (i.e., trust in one’s organismic evaluation as a means of arriving at the most satisfying behaviour in each existential situation), and an increasing experience and acceptance of one’s feelings.

Specifically, Rogers (1959) noted several changes experienced by a person becoming more fully functioning:

1. Being more congruent, open to experience, and less defensive
2. Being more realistic, objective, and extensional in perceptions
3. Having an increased degree of positive self-regard
4. Perceiving the locus of evaluation and the locus of choice as residing within oneself
5. Experiencing more acceptance of others

### *5.1.1 Empirical Support from Positive Psychology for Person-Centered Theory*

The metatheoretical hypotheses that arise from person-centered theory are both theoretically and empirically supported by positive psychological research. For example, support for the OVP has been demonstrated by Sheldon, Arndt, and Houser-Marko (2003). These investigators theorised that in order to demonstrate the existence of an OVP, the existence of a positive tendency to move towards beneficial goals (i.e., intrinsic goals versus extrinsic goals) must first be determined. Results of three studies conducted over periods ranging from 20 minutes to 6 weeks demonstrated that participants tended to move towards intrinsic goals and/or away from extrinsic goals. Overall, findings suggested that people do have some idea (i.e., an OVP) about what goals are most likely to be beneficial for their SWB. Similarly, Govindji and Linley (2007) found that people in touch with their OVP and who are using strengths more experience both greater SWB and psychological well-being (PWB) (i.e., engagement with the existential challenges of life). Overall, findings of this study suggested that people have intrinsic motivation to use their strengths, which results in increased authenticity, vitality, and well-being. Research has also demonstrated that individuals who select more self-concordant goals (i.e., intrinsically motivated goals representative of their implicit interests and values) put more continued effort into them, thus enabling their attainment (Patterson & Joseph, 2007). In line with these findings, Judge, Bono, Erez, and Locke (2005) demonstrated that people with positive self-regard are more likely to have self-concordant goals and as a result have greater LS and happiness. Similarly, Patterson and Joseph (2006) found unconditional positive self-regard to be associated with increased PWB and happiness. Taken together, these results not only provide evidence for the OVP, but also indicate that those who act concordantly with their OVP experience positive psychological growth

and well-being (Patterson & Joseph, 2007). Similarly, evidence demonstrating that conditional regard from significant others leads to the internalisation of conditions of worth, which has negative consequences for PWB, has been provided by Assor, Roth, and Deci (2004). These investigators demonstrated that parents' use of conditional regard as a socialising practice in four life domains (emotion control, prosocial, academic, and sport) was associated with introjected internalisation of behavioural regulations (internal compulsion and pressure to enact desired behaviours), resentment towards parents, perceived parental disapproval, fluctuations in self-esteem, and reduced well-being.

Empirical evidence has also been provided in support of hypothesis that more fully functioning individuals will move in a direction of increasing openness to experience. Rogers considered openness to experience to be the polar opposite of defensiveness (1961). Defensiveness being 'the organism's response to experiences which are perceived or anticipated as threatening, as incongruent with the individual's existing picture of himself, or of himself in relationship to the world' (1961, p. 187). For Rogers openness to experience was a principle outcome of therapeutic change in becoming '...that self which one truly is' (1961, p. 173). In line with Rogers' (1959) hypothesis of therapeutic outcomes and the significance of man's inherent actualising tendency (i.e., tendency towards increased personal growth, development, and autonomy), Knee and Zuckerman (1996) found openness to experience to be positively associated with autonomous functioning. This study examined whether autonomy and control orientations moderate the attributional tendency (i.e., self-serving bias) to take more responsibility for success than failure. Results demonstrated that causality orientations moderate the self-serving bias. Specifically, participants low in control and high in autonomy were less likely to make self-

enhancing attributions when successful and defensive attributions after failure. Thus, these individuals perceive less of a threat to self-esteem and invite opportunities for growth, and therefore are not motivated to exhibit the self-serving bias. These findings provide support for the Rogerian perspective in that autonomous individuals will show greater openness to experience and a more genuine and less defensive perception of experience (Patterson & Joseph, 2007).

Support for the person-centered theory that the self-actualising person moves towards acceptance and experience of others or increasing relatedness with others has been provided by research conducted by Kasser and Ryan (1993; 1996). This research demonstrated that intrinsic aspirations for self-acceptance, affiliation, and community feeling were associated with greater well-being, self-actualisation, and vitality and less distress, with the opposite being true for extrinsic aspirations which showed a greater tendency to be control oriented. In support of these findings, Kasser, Ryan, Zax, and Sameroff (1995) found that adolescents who rated extrinsic aspirations relatively high compared to other values had mothers who were less nurturant (i.e., less democratic and warm and more controlling) and valued their adolescents' extrinsic aspirations. Also important to person-centered theory is the concept of 'congruence'. According to Rogers (1961), congruence is the ability to have a genuine relationship with another without front or façade, openly being the feelings and attitudes of the moment; referred to also as an accurate matching of 'experience and awareness', such as when an infant experiences hunger his awareness matches his experience, and his communication is congruent with his experience. For Rogers (1959), incongruence develops because of distorted perceptions arising from the conditions of worth, which cause the individual to depart from the integration which characterises the infant state. From the positive psychological perspective,

‘congruence’ has been operationally defined as the tripartite construct ‘authenticity’. Moreover, research conducted by Wood, Linley, Maltby, Baliousis, and Joseph (2008) has demonstrated authenticity to be positive associated with SWB, PWB, LS, and self-esteem. Findings which are in keeping with Rogers’ (1959) linking of authenticity (i.e., congruence) and unconditional positive regard.

### *5.1.2 The Present Study*

Overall, positive psychological research providing empirical support for the metatheoretical hypotheses of person-centered theory, not only clearly demonstrates the existence of the characteristics of the ‘fully functioning individual’, but also identifies LS as an important outcome of displaying these characteristics. Indeed, research has demonstrated that people who act concordantly with their OVP experience psychological growth and increased LS and well-being. Therefore, the purpose of this study is to assess the relationship between variables identified as constituting what Rogers (1959) described as being ‘fully functioning’ and LS, and in doing so add to the existing literature by considering the relationship between LS and previously unconsidered variables (Chapter 2). Specifically, indicator variables have been selected, based on research providing support for the metatheoretical hypotheses of person-centered theory, to represent the various characteristics constituting the fully functioning individual construct, in order that the relationship between these variables and LS can be assessed.

### *5.1.3 Study Hypotheses*

Based on the metatheoretical assumptions of person-centered theory it is hypothesised that LS will be significantly positively associated with the following measured indicator variables constituting the characteristics of the fully functioning individual: happiness, authentic living, organismic valuing, intrinsic aspirations,

autonomy, competence, relatedness, and strengths use. Moreover, it is hypothesised that LS will be significantly negatively associated with the following measured indicator variables that should be absent in the fully functioning individual: accepting external influence, self-alienation, and anxiety.

## 5.2 Method

### 5.2.1 Participants

Participants were 307 adolescents aged 16-19 (69 males, 238 females). The mean age of participants was 16.86 years ( $SD = .759$ ).

### 5.2.2 Measures

1. *Satisfaction With Life Scale* (SWLS; Diener et al., 1985) is a 5-item self-report measure of global LS. Respondents are required to respond to each item (e.g., 'I am satisfied with my life') using a 7-point Likert scale (Strongly Disagree to Strongly Agree). Scoring consists of summing the items for a total score; higher scores are indicative of higher global LS.
2. *The Short Depression-Happiness Scale* (SDHS; Joseph, Linley, Harwood, Lewis, & McCollam, 2004) is a 6-item bipolar scale designed to measure depression (e.g., 'I felt dissatisfied with my life') and happiness (e.g., 'I felt happy'). Respondents are required to respond to each item using a 4-point Likert scale (Never to Often). Scoring consists of summing the items for a total score; higher scores are indicative of increased positive thoughts and feelings and decreased negative thoughts and feelings.
3. *Authenticity Scale* (AS; Wood et al., 2008) is a 12-item scale designed to measure dispositional authenticity across three domains: (1) Authentic Living (e.g., 'I think it is better to be yourself, than to be popular'); (2) Accepting

External Influence (e.g., ‘I am strongly influenced by the opinions of others’); and (3) Self-Alienation (e.g., ‘I don’t know who I really feel inside’).

Respondents are required to respond to each item using a 7-point Likert scale (Does Not Describe Me At All to Describes Me Very Well). Subscale scores are calculated for the Authentic Living, Accepting External Influence, and Self-Alienation domains by totalling the four items representative of each subscale.

4. *Organismic Valuing Scale* (OVS; Govindji & Linley, 2007) is a 8-item scale designed to measure organismic valuing. Respondents are required to respond to each item (e.g., ‘The decisions I take are the right ones for me’) using a 7-point Likert scale (Strongly Disagree to Strongly Agree). Scoring consists of summing the items for a total score; higher scores are indicative of greater organismic valuing.
5. *Aspiration Index* (AI; Kasser & Ryan, 1993; Kasser et al., 1995) is a 14-item scale designed to measure aspirations across four value domains: 1) Self-Acceptance (e.g., ‘You will know and accept who you really are’); 2) Affiliation (e.g., ‘You will share your life with someone you love’); 3) Community Feeling (e.g., ‘You will work for the betterment of society’); and 4) Financial Success (e.g., ‘You will have a job that pays well’). Possible future events are rated on two dimensions: 1) the Importance that it will happen in the future; and 2) the Chance it will happen in the future. Respondents are required to rate both the Importance (Not At All to Very Important) and Chances (Very Low to Very High) dimensions on a 5-point Likert scale. Domain scores are obtained by computing the mean of items on a particular domain for each dimension (i.e., importance or chances). The

relative importance and likelihood of intrinsic values is calculated by taking the computed averages of each domain and subtracting Financial Success from the sum of Self-Acceptance, Affiliation, and Community feeling for each dimension.

6. *Basic Psychological Needs Scale* (BPNS; Gagne, 2003) is a 12-item scale designed to measure innate basic psychological needs. The original scale had 21-items, however different studies have worked with 9 or 12 items (3 or 4 items per subscale). Psychological needs are rated across three domains: (1) Competence (e.g., ‘Often, I do not feel very competent’); (2) Autonomy (e.g., ‘I feel like I am free to decide for myself how to live my life’); and (3) Relatedness (e.g., ‘I really like the people I interact with’). Respondents are required to respond to each item using a 7-point Likert scale (Not At All True to Very True). Scoring consists of averaging item responses for each domain to create three subscale scores.
7. *Self-Rating Anxiety Scale* (SAS; Zung, 1971) is a 20-item self-report measure of anxiety. Respondents are required to respond to each item (e.g., ‘I feel more nervous and anxious than usual’) using a 4-point Likert scale (None or A Little Of The Time to Most or All Of The Time). Scoring consists of summing the items for a total score; higher scores are indicative of higher anxiety.
8. *Strengths Use Scale* (SUS; Govindji & Linley, 2007) is a 14-item scale designed to measure individual strengths use. Respondents are required to respond to each item (e.g., ‘I achieve what I want by using my strengths’) using a 7-point Likert scale (Strongly Disagree to Strongly Agree). Scoring consists of summing the items for a total score; higher scores are indicative of greater strengths use.

### 5.2.3 Procedure

Ethical approval to collect data for this study was secured from the University of Leicester Psychology Research Ethics Committee. The study questionnaire was placed online and the web page advertisement invited anyone aged 16-19 to participate and informed those interested that no identifying information was collected and that all participation was voluntary.

The Internet was used to recruit participants and collect the data. An advertisement and link to the study web site was placed on an Internet site providing information to students studying A-Level Psychology within the United Kingdom (<http://www.holah.co.uk>). Collecting self-report questionnaire data via the Internet has several advantages to traditional techniques, including increased diversity and sample size, efficiency and accuracy of the data collected, and cost-effectiveness (Gosling et al., 2004; Seligman et al., 2005). However, there are several potential disadvantages, such as possibility of multiple submissions, drop-out, sampling bias, and response bias, upon which criticisms over the quality of Internet-based studies have been founded (Birnbaum, 2004). Research conducted by Gosling, Vazire, Srivastava, and John (2004) compared questionnaire data collected via the Internet versus traditional paper-and-pencil methods. Results revealed that: (1) Internet samples are more diverse than traditional samples in many domains; (2) voluntary participants of Internet-based studies are no more psychologically disturbed than traditional participants; (3) Internet researchers can take steps to eliminate or identify repeat responders; and (4) Internet-based findings are consistent with findings based on traditional methods (Gosling et al., 2004).

### 5.2.4 Data Analysis

Overall, the recruitment procedure resulted in 553 individuals accessing the questionnaire as posted on the study web page. Of the 553 individuals who began the questionnaire, 48 individuals were over the age of 19, one individual was under the age of 16, and 193 individuals dropped out before completing all the measures. As recommended by Birnbaum (2004), those who dropped out were removed before analysis. Moreover, of those who dropped out, the majority (69%) did so early on, suggesting that those who completed the questionnaire were not impatient or resistant people, but willing participants (Birnbaum, 2004). Therefore, a total of 311 individuals aged 16-19 were retained for data analysis. Among the remaining data records there were no instances of item nonresponse; which as noted by Borgers and Hox (2001) is less common among adolescents than children. As suggested by Birnbaum (2004), a search for identical records was conducted in order to identify multiple submissions. No identical records were found.

As recommended by Tabachnick and Fidell (2001), examination of the scoring distribution of all measures was conducted in order to assess for outliers and to test for multivariate normality. All scores were first transformed into  $z$  scores and all those in excess of the  $\pm 3.29$  range were removed. This resulted in four individuals being excluded from the data. Skewness and kurtosis were all within acceptable limits with the value of each variable ranging from  $-.584$  to  $.924$  for skewness and  $-.990$  to  $.843$  for kurtosis. Therefore, none of the variables included were considered to depart significantly from normality (i.e., values of 2 standard errors) (Tabachnick & Fidell, 2001). Therefore, a total of 307 individuals aged 16-19 were retained for data analysis.

Correlation analysis was used to assess the relationships between the study variables.

### 5.3 Results

The internal consistency reliabilities and descriptive statistics for the study variables are presented in Table 5.1.

Table 5.1

*Descriptive Statistics for Study Variables*

Measure	Mean (SD)	Alpha $\alpha$
SWLS	21.89 (6.32)	.83
SDHS	17.54 (3.43)	.80
AS – Authentic Living	21.82 (3.60)	.67
AS – Accepting External Influence	15.93 (5.49)	.82
AS – Self-Alienation	14.01 (5.86)	.85
OVS	39.72 (8.26)	.88
AI – Importance	27.96 (4.29)	-
AI – Chances	23.91 (3.88)	-
BPNS – Autonomy	16.00 (4.17)	.58
BPNS – Competence	18.25 (3.85)	.51
BPNS – Relatedness	21.29 (4.28)	.67
SAS	39.18 (9.29)	.84
SUS	68.19 (15.47)	.94

*Note:*  $N = 307$ ; SWLS (Satisfaction With Life Scale), SDHS (Short Depression-Happiness Scale), AS (Authenticity Scale), OVS (Organismic Valuing Scale), AI (Aspiration Index), BPNS (Basic Psychological Needs Scale), SAS (Self-Rating Anxiety Scale), SUS (Strengths Use Scale)

Zero-order correlations among the variables are reported in a correlation matrix in Table 5.2. Results revealed most of the variables to have significant medium positive or negative correlations. Of the included variables the External Influence subscale of the AS was not significantly correlated with the SWLS, the SDHS, the Importance and Chances dimensions of the AI, or the Relatedness subscale of the BPNS. The Relatedness subscale of the BPNS was not significantly correlated with the Authentic Living subscale of the AS, and the Importance dimension of the AI was not significantly correlated with the Autonomy subscale of the BPNS, the Self-Alienation subscale of the AI, or the SAS (see Table 5.2).

Table 5.2

*Correlation Matrix*

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1.0	.65	.24	-.04 <sup>ns</sup>	-.46	.60	.25	.43	.39	.47	.43	-.40	.46
2		1.0	.20	-.09 <sup>ns</sup>	-.50	.54	.17**	.44	.43	.44	.41	-.54	.46
3			1.0	-.29	-.37	.45	.23	.29	.28	.28	.08 <sup>ns</sup>	-.13**	.36
4				1.0	.34	-.20	.08 <sup>ns</sup>	-.07 <sup>ns</sup>	-.41	-.17**	-.06 <sup>ns</sup>	.20	-.21
5					1.0	-.60	-.10 <sup>ns</sup>	-.35	-.41	-.30	-.29	.46	-.40
6						1.0	.23	.43	.44	.49	.35	-.44	.60
7							1.0	.56	.00 <sup>ns</sup>	.25	.16**	.01 <sup>ns</sup>	.18**
8								1.0	.28	.42	.33	-.24	.45
9									1.0	.41	.30	-.39	.51
10										1.0	.43	-.25	.59
11											1.0	.24	.37
12												1.0	-.35
13													1.0

*Note:* all variables correlated at  $p \leq .001$  unless otherwise indicated; \*\*  $p < .01$ ; \*  $p < .05$ ; ns = not significant; 1 = Satisfaction With Life Scale; 2 = Short Depression-Happiness Scale; 3 = Authenticity Scale-Authentic Living; 4 = Authenticity Scale-External Influence; 5 = Authenticity Scale-Self-Alienation; 6 = Organismic Valuing Scale; 7 = Aspiration Index-Importance; 8 = Aspiration Index-Chances; 9 = Basic Psychological Needs Scale-Autonomy; 10 = Basic Psychological Needs Scale-Competence; 11 = Basic Psychological Needs Scale-Relatedness; 12 = Self-Rating Anxiety Scale; 13 = Strengths Use Scale

Correlations between LS and the other included variables were all small to medium, with the only large correlations (exceeding .50) being found between LS and happiness and organismic valuing (Cohen, 1988) (see Table 5.2).

#### 5.4 Discussion

In this study we set out to assess the relationship between LS and the variables identified as constituting the characteristics of the Rogerian fully functioning individual. Based on the findings of extant positive psychological research in support of the Rogerian metatheoretical model, positive psychological indicator variables were selected to represent the various characteristics constituting the fully functioning individual construct. Correlational analyses was used to test the hypotheses that LS would be significantly positively associated with identified characteristics representative of the fully functioning individual and significantly negatively associated with identified characteristics that should be absent in the fully functioning individual.

Specifically, the following variables were selected as representative of the Rogerian fully functioning individual: happiness, authenticity, organismic valuing, intrinsic aspirations, autonomy, competence, relatedness, and strengths use. Moreover, the following variables were selected as being absent in the Rogerian fully functioning individual: accepting external influence, self-alienation, and anxiety. As hypothesised, results of correlational analysis revealed LS to be significantly positively associated with all of the characteristics identified as being characteristic of the Rogerian fully functioning individual. However, contrary to expectation, LS was significantly negatively associated with only two (i.e., self-alienation and anxiety) out

of the three variables identified as being absent in the Rogerian fully functioning individual; LS was non-significantly associated with accepting external influence.

Research providing empirical support for the metatheoretical hypotheses of Person-Centered Theory indicates LS as an important outcome of being what Carl Roger's (1959) describes as 'fully functioning'. Based on the findings of this research, this study tested the hypothesis that the relationship between LS and the characteristics identified as being representative of the fully functioning construct would be significantly positively associated, and the relationship between LS and the characteristics identified as being absent in the fully functioning construct would be significantly negatively associated. In accordance with this, it was anticipated that the relationship between LS and the characteristics identified as being representative of the fully functioning construct would be strong positive associations. Contrary to this expectation, the relationship between LS and authentic living, intrinsic aspirations, autonomy, competence, relatedness, and strengths use were small to medium, with only the relationship between LS and happiness and organismic valuing constituting a large (i.e., strong) association (Cohen, 1988). Similarly, it was anticipated that the relationship between LS and the characteristics identified as being absent in the fully functioning construct would be strong negative associations. Also contrary to expectation, the relationship between LS and accepting external influence was not significant, and the relationship between LS and self-alienation and anxiety was moderate (i.e., medium) (Cohen, 1988).

Overall, this study provides support for the use of positive psychological indicator variable measurement to represent the various characteristics constituting the fully functioning individual construct. This study adds support to empirical research that has demonstrated LS to be associated with being 'fully functioning' and

contributes to the existing literature by considering variables not previously considered, that is authenticity, organismic valuing, basic psychological needs, and strengths use. However, as this study relied on correlational analysis to measure the association between LS and the variables selected as constituting the Rogerian fully functioning individual, further research would benefit from analysis of causal relationships between these variables. Although hypothesised positive and negative associations were found between the variables as anticipated, the strength of these relationships was not as strong as extant findings from empirical research would suggest. Therefore, the impact of extraneous unconsidered variables cannot be ruled out. Moreover, further research is required in order to establish that the variables selected as representative of the fully functioning individual are sufficient for assessing this construct as defined by Rogers (1959). Further research is also required in which demographic variables are more fully considered and comparisons across ethnicities are analysed.

#### *5.4.1 Conclusion*

Overall, findings of this study suggest that the fully functioning person from the positive psychological perspective is a ‘person-in-process’, a person who is characterised as being in touch with their organismic valuing process and hence experiences increased happiness and LS, who feels competent, autonomous, and relates well with others and they with them. A person who is open and authentic and who uses their strengths and experiences the well-being associated with doing so.

The next chapter continues investigating previous unconsidered links in the literature by examining the relationship between LS and strengths use and their relationship to SWB and HRQOL.

## CHAPTER 6: Strengths Use as a Predictor of Well-Being and Health-Related Quality of Life

---

### 6.1 Introduction

In building foundation for the primary research study (Chapter 8) this study seeks to determine links between strengths as virtues and strengths as personality characteristics, and their relationship to SWB and HRQOL.

Throughout the history of psychology, value-laden topics such as virtue and/or character have remained primarily the interest of philosophers and theologians (Biswas-Diener, 2006). Traditionally, the primary focus of psychology has been on the treatment and diagnosis of psychological illness, with psychologists arguing for a ‘value-free’ profession (Cassell, 2002). However, with the advent of positive psychology, there has been a reawakening of focused research in the area of good character (virtues).

Indeed, from the time of Aristotle, man has concerned himself with uncovering the route to the ‘good life’, a life of happiness and well-being. Aristotle termed the pursuit and achievement of this end, eudaimonia. In *The Nicomachean Ethics* (Aristotle, c. 330 BCE/1925), eudaimonia is defined as virtuous activity, that is, the exercising of good character. Grounded in Aristotelian theory, positive psychology has reformulated and contemporised ancient philosophising and applied it to the modern day human life situation (Jorgensen & Nafstad, 2004). In accordance with Aristotelian theory, from the positive psychological perspective it is through the habituation and exercising of good character that we can achieve the ‘good life’ (Seligman & Csikszentmihalyi, 2000).

Burgeoning interest in empirical examinations of positive topics among research psychologists has led to the development of a theoretical framework and classification system of virtues, the Values-In-Action – Inventory of Strengths (VIA-IS) (Peterson & Seligman, 2004). From this conceptualisation, positive traits reflected in thoughts, feelings, and behaviours are referred to as ‘character strengths’ (Park et al., 2004b). The VIA-IS brings together 24 ubiquitous character strengths, organised under six broad virtues. According to Peterson and Seligman (2004; see also Seligman, 2002a), people possess five ‘signature’ or ‘top five’ character strengths out of 24. The hypothesis behind ‘signature strengths’ is that the use of them is fulfilling and linked to an individual’s sense of self, identity, and authenticity (Peterson & Seligman, 2004), and therefore, arguably their well-being. Signature strengths are determined from scores on the VIA measure, which are ranked from 1 (top) to 24 (bottom); respondents rate each item on a scale that ranges from ‘very much like me’ to ‘not like me at all’. Recent research evaluating the 24 VIA strengths of character across cultures has demonstrated strong similarities in the endorsement (ranking of VIA strengths from 1 to 24) of the included character strengths (in this chapter the terms ‘character strengths’ and ‘signature strengths’ refer to the VIA conceptualisation of strengths). For example, in an Internet study of 117, 676 adults from 54 nations and all 50 American states, Park et al. (2006) found that the most commonly-endorsed VIA strengths (frequently top ranked) included kindness, fairness, honesty, gratitude, and judgment and the lesser-endorsed VIA strengths (frequently bottom ranked) included prudence, modesty, and self-regulation, and that with the exception of religiousness, the profile of character strengths among the American population converged with the profiles of respondents from each of the other 54 nations (cf. Biswas-Diener, 2006; Shimai, Otake, Park, Peterson, &

Seligman, 2006). Moreover, these findings are consistent with research conducted by Park et al. (2004b), which has demonstrated that the most commonly-endorsed VIA strengths are those associated with interpersonal strengths (e.g., emotional feelings and interaction), whereas the lesser-endorsed VIA strengths are those associated with cognition and temperance. In general, research findings to date have supported the use of the VIA strengths classification as a ubiquitous representation of character strengths.

Currently, there is a growing body of research devoted to the examination of character strengths as conceptualised by the VIA character strengths classification system and their interrelationship with various situational, personal, and environmental variables. Prominent among these are recent studies which have found consistent and robust associations between LS and the VIA strengths of hope, zest, gratitude, love, and curiosity, also referred to as ‘strengths of the heart’ (see Park & Peterson, 2006a; Park et al., 2004b; Peterson, Ruch, Beermann, Park, & Seligman, 2007). Throughout the research literature, scores on measures of LS are used as an indication of happiness or unhappiness (Proctor et al., 2009b). Within psychology, the study of ‘happiness’ generally falls under investigations of SWB; the terms LS, happiness, and SWB are often used interchangeably as synonyms. The SWB construct comprises emotional responses (i.e., positive and negative affect) and global judgments of LS. As an overall appraisal of life as a whole, LS is not considered to be susceptible to change due to short-term emotional reactions to life events (such positive and negative affect), and therefore is considered to be the key indicator of positive SWB (Diener & Diener, 1995). The ‘strengths of the heart’ have been consistently linked to happiness and LS, whereas the ‘strengths of the mind’ have not (Park & Peterson, 2006a). Indeed, Park et al. (2004b) found the VIA strengths of

hope, zest, gratitude, love, and curiosity to be consistently and robustly associated with LS, whereas the intellectual VIA strengths of appreciation of beauty, creativity, judgment, and love of learning were only weakly associated. Similarly, Peterson et al. (2007) found that among both American and Swiss adults the VIA strengths most highly linked to LS included hope, zest, love, and curiosity; gratitude was among the most robust predictors of LS in the American sample, whereas perseverance was among the most robust predictors in the Swiss sample. Similarly, the VIA strengths most associated with LS (i.e., hope, zest, gratitude, love, and curiosity) have also been shown to be associated with the three orientations to happiness: pleasure (hedonism), engagement (flow activities (see Csikszentmihalyi, 2002)), and meaning (eudaimonia) (Peterson et al., 2007; Seligman, 2002a). However, as the majority of research to date has been conducted among American samples, it is unclear whether the association between these character strengths and LS remains across populations. Indeed, Peterson et al. (2007) has suggested that the character strengths most associated with LS may vary among different populations. Currently, there remains a paucity of research examining these five VIA strengths, reportedly strongly linked with LS, outside of American populations.

Recent research also suggests that recovery from serious illness and psychological disorder can sometimes be associated with increased endorsement of specific character strengths (see Peterson, Park, & Seligman, 2006). For example, Peterson et al. (2006) found that individuals who had recovered from a serious illness or psychological disorder showed elevated endorsement of character strengths that contributed to increased LS (e.g. appreciation of beauty, forgiveness, gratitude, humour, and kindness), whereas a history of illness was associated with lower levels of LS among those who had not recovered (Peterson et al., 2006). Similarly, Peterson

and Seligman (2003) found that endorsement of the VIA strengths of gratitude, hope, kindness, leadership, love, spirituality, and teamwork increased and remained elevated for 10 months following the September 11, 2001 terrorist attacks in America (cf. Fagin-Jones & Midlarsky, 2007). Moreover, findings of recent research have demonstrated that performing strengths interventions or exercises, such as counting one's own acts of kindness for one week (Otake et al., 2006) or counting blessings and participating in self-guided daily gratitude exercises (Emmons & McCullough, 2003) is associated with higher levels of positive affect and LS. Furthermore, Seligman et al. (2005) have demonstrated that using signature strengths (as measured by the VIA-IS) in a new way each day for 1-week increases happiness and decreases depressive symptoms for 6-months. Overall, results of these research studies add support to general assertions that character strengths and character strength interventions are associated with increased well-being and LS.

From a more generic perspective, 'strengths' are considered positive traits and/or natural capacities or talents which have been refined with knowledge and skill (Clifton & Anderson, 2002); these capacities may include moral virtues, but are not limited by them. To date, there is a dearth of positive psychological research examining more generic aspects of strengths (as personality characteristics and/or individual natural talents) and strengths use, more specifically (in this chapter the terms 'strengths' and 'strengths use' refer to the generic conceptualisation of strengths). Similar to the VIA conceptualisation of character strengths, it is theorised that strengths use is energising and authentic (Clifton & Anderson, 2002; Linley & Harrington, 2006), and that 'when we use our strengths, we feel good about ourselves, we are better able to achieve things, and we are working toward fulfilling our potential' (Linley & Harrington, 2006, p. 41). Linley (2008) offers the following

definition of a generic strength: ‘a strength is a pre-existing capacity for a particular way of behaving, thinking, or feeling that is authentic and energising to the user, and enables optimal functioning, development and performance’ (p. 9). Recent research into strengths use has shown that similar to specific VIA strengths, strengths use is positively associated with well-being. For example, Govindji and Linley (2007) examined the relationship between strengths use and SWB and found that not only is strengths use positively associated with well-being and vitality, but also it is a unique predictor of the variance in SWB (see Govindji & Linley, 2007). In line with these findings, Shogren et al. (2006) examined the association between the positive personality characteristics of hope (as measured using the Children’s Hope Scale (Snyder et al., 1997)), optimism, LOC, and LS in adolescents with and without cognitive disabilities and found that hope and optimism equally predicted LS for students with and without cognitive disabilities. Research also offers support for conceptualisations of personality strengths as buffers against the negative effects of stress and the development of psychological problems. For example, Bromley et al. (2006) found that youths with greater numbers of personality strengths at the mean age of 16 were at a decreased risk of developing psychiatric disorders, educational and occupational problems, interpersonal difficulties, and criminal behaviours at the mean age of 22, than those with fewer personality strengths. Taken together these findings indicate that strengths and strengths use are related to increased SWB and LS, and that strengths may act as a buffer against negative life outcomes.

Based on the findings of previous research, this study has four purposes. Firstly, given that previous research examining strengths and strengths use has largely focused on the VIA classification system conceptualisation of character strengths, is to assess the relationship between strengths use, as measured by a self-report strengths

use measure, and SWB and HRQOL. That is, to determine to what extent strengths use predicts SWB and HRQOL. Research has demonstrated that individuals with positive SWB have consistently been shown to report high levels of LS, as well as, satisfaction across multiple life domains (e.g., marriage, income, physical health), positive emotions, increased mental health, and a longer life (for a review see Lyubomirsky et al., 2005). Indeed, cross-sectional, longitudinal, and experimental data have all shown that well-being and happiness precede diverse positive personal, behavioural, psychological, and social outcomes (Lyubomirsky et al., 2005), just as low LS and/or unhappiness can predict the onset of depression and psychological disorder up to two years prior to diagnosis (see Lewinsohn et al., 1991). Moreover, a number of recent studies have evaluated general health by investigating HRQOL (e.g., Muscari-Tomaioli et al., 2001; Turner-Bowker, Bayliss, Ware, & Kosinski, 2003). Health-related quality of life refers to the impact of general medical conditions or symptoms on functional health and well-being and includes physical, mental, emotional, and social aspects of health (Turner-Bowker, 2003). Secondly, is to further validate previous research which has demonstrated a robust association between the VIA strengths of hope, zest, gratitude, love, and curiosity (the ‘strengths of the heart’) and LS in a UK sample (e.g., Park et al., 2004b; Peterson et al., 2007). That is, to determine the mean level of LS for those individuals for whom the VIA strengths of hope, zest, gratitude, love, and curiosity were among their top five strengths and to what extent these five character strengths predict LS. Research has demonstrated consistent and robust associations between the ‘strengths of the heart’ and LS, however these research findings have primarily been reported among American samples. As noted by Peterson et al. (2007), it is yet unclear that these associations will hold across different populations. Thirdly, is to add to previous research which

has demonstrated that the most commonly-endorsed VIA strengths are those associated with interpersonal strengths (e.g., emotional feelings and interaction), whereas the lesser-endorsed VIA strengths are those associated with cognition and temperance (e.g., Park et al., 2004b), by assessing endorsement among a UK sample. That is, to determine which VIA strengths are most commonly-endorsed and which are lesser-endorsed as signature strengths. Research to date has not explored endorsement of the VIA strengths outside of findings resulting from taking the VIA-IS; endorsement in this study will be based on selection of signature strengths from a definitional list of the 24 VIA strengths. Finally, to determine if there is a relationship between common-endorsement of VIA strengths as signature strengths and the degree to which strengths use predicts SWB and HRQOL. That is, to determine if among the VIA strengths most commonly-endorsed as signature strengths there is a relationship between endorsement (chosen VIA strengths) and the degree to which strengths use predicts SWB and HRQOL. Research to date has not explored possible links between endorsement of strengths as conceptualised by the VIA classification system and strengths use as conceptualised generically and their impact on SWB and HRQOL.

In line with recent research, character strengths examined in this study are those included in the VIA strengths classification system (see Peterson & Seligman, 2004). Further, in accordance with Govindji and Linley (2007), in order to control for overlap between well-being constructs and to demonstrate the effects of strengths use independent of more established constructs, measures of self-esteem and self-efficacy have been included. Both self-esteem (Rosenberg, 1979) and self-efficacy (Bandura, 1997) are positively associated with a variety of indicators of well-being (Lucas et al., 1996).

## 6.2 Method

### 6.2.1 Participants

Participants were 135 undergraduate psychology students (102 females, 33 males) from the University of Leicester, UK. The mean age of participants was 19.24 years ( $SD = 1.34$ , range 18-27). The mean time of completion of the questionnaires was 8.54 minutes ( $SD = 5.66$  minutes, range 2.00-49.00 minutes).

### 6.2.2 Measures

1. *Short Form 8™ Health Survey* (SF-8; Ware, Kosinski, Dewey, & Gandek, 2001) is a 8-item self-report generic multipurpose short-form health survey. The SF-8 Health Survey uses one question to measure each of the eight domains of the Short Form 36 Health Survey (SF-36). Both the SF-8 and the SF-36 measure eight domains commonly represented in widely used health surveys: Physical Functioning (PF); Role limitations due to Physical health problems (RP); Bodily Pain (BP); General Health (GH); energy/fatigue or Vitality (VT); Social Functioning (SF); Role limitations due to Emotional problems (RE); and psychological distress and well-being or Mental Health (MH). Two summary measures are produced, the Physical Component Summary (PCS-8) and Mental Component Summary (MCS-8). Alternate forms reliability for the PCS-8 and MCS-8 summary scales is .88 and .82, respectively (Ware et al., 2001). Test-retest reliability estimates for the eight items range from .59 to .70, and test-retest reliability for the PCS-8 and MCS-8 summary scales is .73 and .74, respectively (Ware et al., 2001). The SF-8 scales and summary measures are scored using norm-based scoring methods based on the 2000 general US population. Scoring of the SF-8 is done via scoring software provided by the publisher QualityMetric Inc.

(<http://www.qualitymetric.com>). Example items include: ‘Overall, how would you rate your health during the past 4 weeks?’ and ‘During the past 4 weeks, how much did your physical health or emotional problems limit your usual social activities with family or friends?’ The SF-8 meets standard criteria for the purposes of evaluating content, construct, and criterion related validity. Overall, the SF-8 is a reliable, valid, and accurate brief measure of HRQOL.

2. *Satisfaction With Life Scale* (SWLS; Diener et al., 1985) is a 5-item self-report measure of global LS. Respondents are required to respond to each item (e.g., ‘I am satisfied with my life’) using a 7-point Likert scale (Strongly Disagree to Strongly Agree); higher scores are indicative of higher global LS. The SWLS has been demonstrated to have strong internal reliability ( $r = .87$ ) and moderate temporal stability ( $r = .82$ , two-month test-retest reliability) (Diener et al., 1985). The SWLS has been shown to correlate with appropriate criterion measures (see Diener et al., 1985; Pavot et al., 1991). Further, the SWLS has been demonstrated to correlate meaningfully and in hypothesised directions with other related measures and constructs (see Neto, 1993). Construct validity has been provided among young adults through differentiation between LS and health status (see Arrindell et al., 1999). Overall, research supports the SWLS as a psychometrically sound brief measure of LS.
3. *The Positive and Negative Affect Schedule* (PANAS; Watson et al., 1988) is a 20-item self-report measure made up of two subscales each consisting of ten items: ten positive affects (PA: interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, and active) and ten negative affects (NA: distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, and afraid). Respondents use a 5-point Likert scale response format (Very

Slightly or Not At All to Extremely) to indicate to what extent they have felt each way during the past week. Intercorrelations and internal consistency reliabilities are all acceptably high, ranging from .86 to .90 for PA and from .84 to .87 for NA, whereas the correlation between the NA and PA scales is invariably low, ranging from -.12 to -.23. The PANAS has been demonstrated to compare favourably with other brief affect measures and to have good external validity through its correlation with measures of related constructs (see Watson et al., 1988). In general, the PANAS is seen as a reliable, valid and efficient means of measuring positive and negative affect.

4. *Strengths Use Scale* (SUS; Govindji & Linley, 2007) is a 14-item self-report scale designed to measure individual strengths use. In developing the scale, 19 items were created to assess generic strengths use, that is, how much people use their strengths ('the things you are able to do well or do best') in a variety of settings. Principal components analysis revealed three components with eigenvalues greater than one. A single component above a marked elbow was found using Cattell's (1966) scree test. Fourteen items comprising this component were analysed using principle components analysis. These items were found to load at .52 to .79 on a single 'strengths use' factor that accounted for 56.2% of the variance. These 14 items were taken forward to constitute the Strengths Use Scale. Sample items include: 'I am able to use my strengths in lots of different ways' and 'Using my strengths is something I am familiar with'. Respondents use a 7-point Likert scale response format (Strongly Disagree to Strongly Agree); higher scores are indicative of greater strengths use. Preliminary research has reported an alpha of .95 for the scale. The SUS has been shown to correlate with appropriate criterion measures,

such as the Rosenberg Self-Esteem Scale ( $r = .56$ ) and the New General Self-Efficacy Scale ( $r = .63$ ), and with other related constructs, such as SWB ( $r = .51$ ) and psychological well-being ( $r = .56$ ). Overall, preliminary results provide support for this scale as being internally consistent and to correlate meaningfully and in hypothesised directions with other related measures and constructs.

5. *Strengths Endorsement* – respondents were presented with a list of the 24 VIA strengths and a brief definition of each (see Park et al., 2004b for an example), and required to choose (endorse) which strengths from the list of 24 they felt were their top five strengths. The following instructions were provided:
 

‘Listed below are 24 universal strengths. From the list choose 5 that you feel describe the real you. Which ones make you who you are?’
6. *Rosenberg Self-Esteem Scale* (RSE; Rosenberg, 1965) is a 10-item self-report measure of self-esteem. Respondents are required to respond to each item (e.g., ‘On the whole I am satisfied with myself’) using a 4-point Likert scale (Strongly Disagree to Strongly Agree); higher scores are indicative of higher self-esteem. Internal coefficient alphas ranging from .80 to .92 have been reported for the scale (e.g., Fleming & Courtney, 1984; Reynolds, 1988; Rosenberg, 1979; Sam, 2000), with a test-retest correlation for the total score having been reported at .82 (see Fleming & Courtney, 1984). Convergent validity for the scale has been demonstrated through negative correlations with psychological constructs associated with low self-regard, such as anxiety ( $r = -.64$ ) and depression ( $r = -.59$ ) (see Fleming & Courtney, 1984). Discriminant validity has been demonstrated through correlations between the RSE and grade point average ( $r = .10$ ), LOC ( $r = .04$ ), and vocabulary ( $r = -.06$ ) (see

Reynolds, 1988). Overall, the RSE is a psychometrically sound brief measure of global self-esteem.

7. *New General Self-Efficacy Scale* (NGSES; Chen, Gully, & Eden, 2001) is a 8-item self-report measure of general self-efficacy. Respondents are required to respond to each item (e.g., ‘I will be able to achieve most of the goals that I have set for myself’) using a 5-point Likert scale (Strongly Disagree to Strongly Agree); higher scores are indicative of higher general self-efficacy. Internal consistency reliabilities for the NGSES have been demonstrated to range from .85 to .90 and temporal stability from .62 to .86 (e.g., Chen et al., 2001; Chen, Gully, & Eden, 2004; Scherbaum, Cohen-Charash, & Kern, 2006). General self-efficacy as measured by the NGSES has been demonstrated to be distinct from self-esteem, providing support for the discriminant validity of the scale (see Chen et al., 2001, 2004). Evidence has also been provided for the content and predictive validity of the scale (see Chen et al., 2001). Moreover, the NGSES has been demonstrated to outperform other measures of general self-efficacy in terms of item discrimination, item information, and the relative efficiency of the test information functions as analysed using Item Response Theory (see Scherbaum et al., 2006).

### *6.2.3 Procedure*

The study was placed on-line via the University of Leicester’s Experimental Participation Requirement system following research ethics board approval.

Participants received one course credit for their participation.

### *6.2.4 Data Analysis*

In line with previous research (e.g., Govindji & Linley, 2007; Sheldon & Elliot, 1993), a composite SWB variable was calculated by standardising the total scores for LS, positive affect, and negative affect, and then subtracting negative affect from the sum of LS and positive affect. Correlational analyses were used to assess the relationships between the study variables. Linear regression analyses were used to test the hypothesis that strengths use is a unique predictor of SWB and HRQOL.

### 6.3 Results

The internal consistency reliabilities and descriptive statistics for the study variables are presented in Table 6.1. The intercorrelations between the study variables are presented in a correlation matrix in Table 6.2. Results revealed that strengths use was positively correlated with SWB, self-esteem, self-efficacy, and HRQOL (i.e., the PCS-8 and MCS-8 of the SF-8). Further, each of the study variables was significantly correlated.

To test the hypothesis that strengths use would act as a unique predictor of SWB and HRQOL, three linear regressions were conducted in which strengths use served as the predictor variable while holding constant self-esteem and self-efficacy.

Table 6.1

*Descriptive Statistics for Study Variables*

Variable/Measure	Mean (SD)	Alpha $\alpha$
Satisfaction with Life Scale	24.84 (5.87)	.88
Rosenberg Self-Esteem scale	28.37 (4.53)	.89
Positive Affect	29.99 (7.66)	.91
Negative Affect	21.70 (7.02)	.86
General Self-Efficacy	29.47 (4.71)	.90
Strengths Use Scale	68.81 (13.66)	.95
Subjective Well-Being (unstandardised)	33.13 (15.33)	–
Physical Component Summary	49.99 (7.44)	–
Mental Component Summary	41.89 (12.09)	–

Table 6.2

*Pearson Product Correlation Coefficients Between Study Variables*

	1	2	3	4	5	6
Rosenberg Self- Esteem Scale	–	.72	.70	.50	.23	.45
Subjective Well-Being		–	.67	.58	.30	.68
General Self-Efficacy			–	.70	.27	.43
Strengths Use Scale				–	.25	.34
Physical Component Summary					–	.23
Mental Component Summary						–

All correlations significant at  $p < 0.01$

Results revealed that strengths use is a unique predictor of SWB,  $\beta = .203$ ,  $t(134) = 2.60$ ,  $p = .010$ , once self-esteem and self-efficacy are accounted for. Specifically, strengths use uniquely accounted for 2.1% of the variance ( $R^2$  change),  $R^2 = .597$ ,  $F(1, 131) = 64.67$ ,  $p = .010$ , in SWB not already accounted for by self-esteem and self-efficacy. Results further revealed that strengths use is not a unique predictor of either the physical,  $\beta = .120$ ,  $t(134) = 1.02$ ,  $p = .308$ , or the mental,  $\beta = .077$ ,  $t(134) = 0.72$ ,  $p = .475$ , components of HRQOL, once self-esteem and self-efficacy are accounted for (see Table 6.3). As a result of these findings, two additional linear regressions were conducted in which SWB served as the predictor variable while holding constant self-esteem and self-efficacy, in order to test if SWB would act as a unique predictor of HRQOL. The rationale for these additional regression analyses is based on the fact that significant small first order correlations were found between SWB and both the physical and mental components of HRQOL (see Table 6.2) and that extant literature strongly suggests a link between SWB and increased health (e.g., Lyubomirsky et al., 2005). Results revealed that SWB is a marginally unique predictor (i.e.,  $p = .05$  to  $.10$  (Motulsky, 1995)) of the physical summary component of HRQOL,  $\beta = .222$ ,  $t(134) = 1.74$ ,  $p = .084$ , and is a unique predictor of the mental summary component of HRQOL,  $\beta = .748$ ,  $t(134) = 7.62$ ,  $p < .001$ , once self-esteem and self-efficacy are

accounted for. Specifically, SWB accounted for 2.1% of the variance ( $R^2$  change),  $R^2 = .096$ ,  $F(1, 131) = 4.66$ ,  $p = .004$ , in the physical summary component and 23.7% of the variance ( $R^2$  change),  $R^2 = .465$ ,  $F(1, 131) = 37.93$ ,  $p < .001$ , in the mental summary component of HRQOL, not already accounted for by self-esteem and self-efficacy (see Table 6.4).

Table 6.3

*Regression of Strengths Use on Subjective Well-Being and Health-Related Quality of Life*

Variable	$R^2$	$R^2$ change	Beta	(SE) beta	Significance	$F$
<u><i>Subjective Well-Being</i></u>						
Self-Efficacy			.196	.045	.039*	
	.576	.576				
Self-Esteem			.482	.038	.010**	
Strengths Use	.597	.021	.203	.013	.010**	64.67**
<u><i>Physical Health</i></u>						
Self-Efficacy			.133	.223	.350	
	.075	.075				
Self-Esteem			.075	.191	.523	
Strengths Use	.083	.007	.120	.064	.308	3.94*
<u><i>Mental Health</i></u>						
Self-Efficacy			.166	.332	.202	
	.227	.227				
Self-Esteem			.296	.285	.006**	
Strengths Use	.231	.003	.077	.095	.475	13.08**

\*  $p < 0.05$ , \*\*  $p < 0.01$

To determine the mean level of LS for those individuals for whom the VIA strengths of hope, zest, gratitude, love, and curiosity were among their top five character strengths a frequency analysis was conducted of all the endorsed top five character strengths. The sample was then divided into character strengths subgroups based on selection of each of the 24 strengths as a signature strength. Within each subgroup an examination of LS total mean scores was conducted. Results revealed that the mean level of LS was in the positive range (i.e., above 20) for each of the five

character strengths subgroups considered: hope ( $M = 27.71$ ,  $SD = 4.45$ ,  $n = 21$ ), zest ( $M = 26.58$ ,  $SD = 4.79$ ,  $n = 19$ ), gratitude ( $M = 24.92$ ,  $SD = 5.31$ ,  $n = 26$ ), love ( $M = 25.23$ ,  $SD = 5.61$ ,  $n = 90$ ), and curiosity ( $M = 22.73$ ,  $SD = 6.30$ ,  $n = 26$ ). It was hypothesised based on previous research findings that the mean level of LS for those individuals for whom the VIA strengths of hope, zest, gratitude, love, and curiosity were among their top five character strengths would be in the ‘satisfied’ (i.e., 26–30) to ‘extremely satisfied’ (i.e., 31–35) range (Pavot & Diener, 1993; see Proctor et al., 2009a for a review). However, results revealed that only hope ( $M = 27.71$ ) and zest ( $M = 26.58$ ) had mean scores within the anticipated range; gratitude ( $M = 24.92$ ), love ( $M = 25.23$ ), and curiosity ( $M = 22.73$ ) each fell within the ‘slightly satisfied’ (i.e., 21–25) range.

Table 6.4

*Regression of Subjective Well-Being on Health-Related Quality of Life*

Variable	$R^2$	$R^2$ change	Beta	(SE) beta	Significance	$F$
<i>Physical Health</i>						
Self-Efficacy			.140	.194	.257	
	.075	.075				
Self-Esteem			-.030	.215	.817	
Subjective Well-Being	.096	.021	.222	.422	.084	4.66*
<i>Mental Health</i>						
Self-efficacy			-.031	.243	.741	
	.227	.227				
Self-Esteem			-.067	.269	.511	
Subjective Well-Being	.465	.237	.748	.528	<.001***	37.93**

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .001$ 

In order to determine if the VIA strengths of hope, zest, gratitude, love, and curiosity are positive predictors of LS a stepwise regression analysis was conducted on the entire sample, where the five variables entered were binary indicating endorsement. Stepwise regression was chosen for this analysis because it is the method used to test explicit hypotheses; that is, stepwise regression is theoretical

whereas standard multiple regression is atheoretical or a shotgun approach (Tabachnick & Fidell, 2001). Moreover, for the purposes of this analysis significance for inclusion was set at  $p = .10$  and removal at  $p = .15$  in order to ensure that marginally significant variables ( $p = .05$  to  $.10$  (Motulsky, 1995)) would not be excluded. More liberal probability levels for entry, rather than the standard  $.05$ , are recommended in stepwise regression in order that important variables are less likely to be excluded from the model (Tabachnick & Fidell, 2001). Results revealed that the VIA strengths of hope and zest were significant positive predictors,  $\beta = .179$ ,  $t(134) = 2.13$ ,  $p = .035$  and  $\beta = .192$ ,  $t(134) = 2.32$ ,  $p = .022$ , respectively, whereas curiosity was a significant negative predictor,  $\beta = -.151$ ,  $t(134) = -1.81$ ,  $p = .073$ , of LS in the model. Specifically, the VIA strengths of hope, zest, and curiosity accounted for 2.2 % of the variance ( $R^2$  change),  $R^2 = .102$ ,  $F(1, 131) = 4.97$ ,  $p = .003$ , in LS scores. In order to control for effects based on the included combination of predictors, a comparison of mean LS scores of individuals who chose the VIA strength of curiosity as a signature strength with those who did not was conducted. Results revealed a significant effect for group,  $t(133) = 2.06$ ,  $p = .041$ , with individuals who did not choose curiosity as a signature strength having significantly higher mean LS than those who did. The VIA strengths of love and gratitude were not significant predictors of LS,  $\beta = .034$ ,  $t(134) = 0.38$ ,  $p = .703$  and  $\beta = .007$ ,  $t(134) = 0.09$ ,  $p = .930$ , respectively and therefore were not included in the model (see Table 6.5)<sup>1</sup>.

To determine what signature strengths are most commonly-endorsed (i.e., top five) and which are lesser-endorsed (i.e., bottom five) for this population a frequency analysis was conducted on the entire sample on all chosen top five character strengths. The five most commonly-endorsed VIA strengths were: love, humour,

---

<sup>1</sup> The same results were found using both forward and backward multiple linear regression analysis.

kindness, social intelligence, and open-mindedness, and the five least-endorsed VIA strengths were: leadership, perseverance, wisdom, spirituality, and self-control (see Table 6.6).

Table 6.5

*Stepwise Regression of Character Strengths and Life Satisfaction*

Variable	$R^2$	$R^2$ change	Beta	(SE) beta	Significance	$F$
<i>Life Satisfaction</i>						
Hope	.102	.022	.179	1.36	.035**	
Zest	.102	.022	.192	1.07	.022**	
Curiosity	.102	.022	-.151	1.25	.073*	4.97**
Love			.034	–	.703	
Gratitude			.007	–	.930	

\* $p < 0.10$ , \*\* $p < 0.05$

Table 6.6

*Strengths Endorsement*

Strength	Total	Percent of sample
Love	90	66.67
Humour	79	58.52
Kindness	49	36.30
Social intelligence	39	28.89
Open-mindedness	38	28.15
Self-control	12	8.89
Spirituality	12	8.89
Wisdom	9	6.67
Perseverance	8	5.93
Leadership	5	3.70

To determine whether among those signature strengths most commonly-endorsed, there is a relationship between endorsement (choice of a specific VIA strength as a signature strength) and the degree to which strengths use predicts SWB (HRQOL was not included in these regression analyses because strengths use was not a unique predictor of HRQOL) five linear regressions were conducted, one among each of the VIA strengths subgroups. In each regression analysis, strengths use served

as the predictor variable while holding constant self-esteem and self-efficacy. Results revealed that strengths use is a unique predictor of SWB among the love ( $\beta = .234$ ,  $t(89) = 2.34$ ,  $p = .022$ ), kindness ( $\beta = .240$ ,  $t(48) = 2.07$ ,  $p = .045$ ), social intelligence ( $\beta = .457$ ,  $t(38) = 3.33$ ,  $p = .002$ ), and open-mindedness ( $\beta = .505$ ,  $t(37) = 3.0$ ,  $p =$

Table 6.7

*Regression of Strengths Use on Subjective Well-Being – Commonly-Endorsed Strengths*

Variable	$R^2$	$R^2$ change	Beta	(SE) beta	Significance	$F$
<u>Love (n = 90)</u>						
Self-Efficacy			.137	.055	.250	
	.527	.527				
Self-Esteem			.484	.049	<.001***	
Strengths Use	.555	.028	.234	.016	.022*	35.81**
<u>Humour (n = 79)</u>						
Self-Efficacy			.126	.058	.353	
	.451	.451				
Self-Esteem			.473	.046	<.001***	
Strengths Use	.476	.024	.210	.014	.065	22.68**
<u>Kindness (n = 49)</u>						
Self-Efficacy			.208	.074	.176	
	.717	.717				
Self-Esteem			.509	.071	<.001***	
Strengths Use	.742	.024	.240	.021	.045*	43.12**
<u>Social Intelligence (n = 39)</u>						
Self-Efficacy			-.007	.108	.968	
	.502	.502				
Self-Esteem			.547	.067	<.001***	
Strengths Use	.622	.120	.457	.030	.002**	19.16**
<u>Open-Mindedness (n = 38)</u>						
Self-Efficacy			-.354	.105	.117	
	.496	.496				
Self-Esteem			.666	.110	<.001***	
Strengths Use	.601	.105	.505	.035	.005**	17.09**

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .001$

.005) VIA strengths subgroups, and a marginally unique predictor (i.e.,  $p = .05-.10$

(Motulsky, 1995)) of SWB among the humour ( $\beta = .210$ ,  $t(78) = 1.87$ ,  $p = .065$ ) VIA

strengths subgroup, once self-esteem and self-efficacy are accounted for. Specifically, strengths use significantly accounted for 2.8% ( $R^2 = .555$ ,  $F(1, 86) = 35.81$ ,  $p < .001$ ), 2.4% ( $R^2 = .742$ ,  $F(1, 45) = 43.15$ ,  $p < .001$ ), 12.0% ( $R^2 = .622$ ,  $F(1, 35) = 19.16$ ,  $p < .001$ ), and 10.5% ( $R^2 = .601$ ,  $F(1, 34) = 17.09$ ,  $p < .001$ ) of the variance ( $R^2$  change) in SWB among the love, kindness, social intelligence, and open-mindedness VIA strengths subgroups, respectively, and marginally significantly accounted for 2.4% ( $R^2 = .476$ ,  $F(1, 75) = 22.68$ ,  $p < .001$ ) of the variance ( $R^2$  change) in SWB among the humour VIA strengths subgroup, not already accounted for by self-esteem and self-efficacy (see Table 6.7).

## 6.4 Discussion

The purpose of this study was to assess the relationship between self-reported strengths use and SWB and HRQOL. In addition, this study sought to further research relating to the association between character strengths and LS, and common-endorsement of strengths in a UK sample. Furthermore, the relationship between endorsement of VIA strengths and strengths use and the degree to which strengths use predicts SWB and HRQOL was explored.

### 6.4.1 Study Limitations

Several primary limitations of this study are noteworthy. First, the sample was relatively small and consisted mainly of females. Second, endorsement of signature strengths in this study was based on individually endorsed strengths (i.e., strengths were chosen from a list containing the 24 VIA strengths and their corresponding definitions) and not on those resulting from taking the VIA-IS. Further, this study was cross-sectional and future research examining the impact of strengths use on well-being and health would greatly benefit from a longitudinal examination of these

variables. Finally, additional research is required in order to confirm the psychometric properties of the strengths use measure in order to support preliminary findings of this study and that of Govindji and Linley (2007).

#### *6.4.2 Study Findings*

Results of this study revealed that strengths use was positively correlated with SWB, self-esteem, self-efficacy, and HRQOL, and that each of the study variables was significantly positively associated with each other. Regression analyses showed that strengths use is a unique predictor of SWB, but that it is not a unique predictor of either the physical or mental summary components of HRQOL, once self-esteem and self-efficacy are accounted for. It was anticipated based on extant research that has demonstrated positive relationships between strengths use and well-being (e.g., Govindji & Linley, 2007), and well-being and health (e.g., Lyubomirsky et al., 2005; Zullig et al., 2005b), that strengths use would be a unique predictor of HRQOL. Indeed, additional regression analyses revealed that SWB is a significant unique predictor of the mental summary component of HRQOL and is a marginally significant unique predictor of the physical summary component of HRQOL. These findings support previous research which suggests that increased positive SWB is associated with increased mental and physical health (see Lyubomirsky et al., 2005 for a review). Moreover, these findings are interesting in light of research which has demonstrated that experiencing simultaneous negative emotion and inhibited self-expression in social interaction (Type D personality) is linked to decreased HRQOL (see Fruyt & Denollet, 2002).

Based on previous research findings supporting the robust association between LS and the ‘strengths of the heart’: hope, zest, gratitude, love, and curiosity (see Park et al., 2004b; Peterson et al., 2007), it was hypothesised that the mean level of LS for

those individuals for whom these VIA strengths were among their chosen signature strengths would be in the 'satisfied' to 'extremely satisfied' range. However, only the VIA strengths of hope and zest were in the anticipated 'satisfied' and 'extremely satisfied' range; gratitude, love, and curiosity each fell within the 'slightly satisfied' range. These findings may be best explained by considering the each of these character strengths' orientation to happiness as discussed by Peterson et al. (2007). Accordingly, the VIA strengths of hope, zest, and curiosity are strongly associated to a life of engagement (flow activities), whereas the VIA strengths of love and gratitude are strongly associated to a life of meaning (eudaimonia), and that each of these character strengths are highly correlated with LS. Results of this study suggest that, among this UK sample, a life of engagement provides only slightly greater happiness than a life of meaning. This is further evidenced by the results of subsequent regression analyses which demonstrated that only the VIA strengths of hope and zest were positive predictors of LS among this UK sample. Results further suggest that engagement in activities related to curiosity have less of an impact on LS among this sample than those reported by Peterson et al. (2007). In fact, results of subsequent regression analysis revealed the VIA strength of curiosity to be a significant negative predictor of LS in the model. Moreover, mean score analysis revealed that those who did not choose the VIA strength of curiosity as a signature strength had significantly higher LS than those who did. Considering the mean age of the sample, one possible explanation for this finding is that children are increasingly being brought up in more constricting environments due to real and potential risks to safety. Various research findings suggest that behavioural inhibition, which can result in insecure attachment in childhood, impacts the expression of curiosity and openness to experience in adulthood (see Siegel, 1999). However, the specific environmental and cultural

conditions (curiosity is activated by person-environment interactions) likely to be influencing the results found here need further examination (Peterson & Seligman, 2004). For example, it may be for this sample that those endorsing curiosity as a signature strength do so as a consequence of unchallenging study programmes which negatively impacts LS, or alternatively perhaps those who endorse curiosity as a virtue are viewed less favourably by others which negatively impacts LS. Future research examining the ‘strengths of the heart’ in different populations should consider specific cultural and generational differences. Additionally, it could be argued that the methodology of self-choice endorsement used for designation of the five signature strengths instead of assignment based on scores from the VIA-IS explains the results. However, the underlying theory presented should not be influenced to such an extent by the instrument used. In fact, it could be argued that self-endorsed signature strengths would predict better than raw VIA-IS scores. Indeed, the most commonly-endorsed and least-endorsed VIA signature strengths, as chosen by participants of this study, were in accordance with those found using the VIA-IS measure. Furthermore, the methodology adopted in this study is comparable to that reported by Biswas-Diener (2006) where identification of VIA strengths and determination of the existence, desirability, and development of character in diverse populations was established via presentation of each virtue to research participants.

For this population, the most commonly-endorsed signature strengths were: love, humour, kindness, social intelligence, and open-mindedness, and the least-endorsed signature strengths were: leadership, perseverance, wisdom, spirituality, and self-control. These findings are in line with previous research which has shown that the most commonly-endorsed character strengths are those associated with interpersonal strengths (e.g., emotional feelings and interaction), and lesser-endorsed

character strengths are those associated with cognition and temperance (e.g., Park et al., 2004b). Moreover these findings suggest that self-selection of signature strengths based on presentation of a list of the 24 VIA strengths and their corresponding definitions is a valid alternate method of assessing strengths endorsement to the VIA-IS measure.

Further, this research sought to examine whether among those signature strengths most commonly-endorsed if there is a relationship between endorsement and the degree to which strengths use predicts SWB. Results of regression analyses showed that strengths use is a unique predictor of SWB among four of the five most commonly-endorsed signature strengths subgroups: love, kindness, social intelligence, and open-mindedness, once self-esteem and self-efficacy are accounted for. Initial regression analyses revealed strengths use as a unique predictor of SWB, accounting for 2.1% of the variance. However, strength use was found to be a stronger unique predictor of SWB when endorsement of specific VIA strengths as signature strengths was considered in the relationship. Specifically, strengths use accounted for 12%, 10.5%, 2.8%, and 2.4% of the variance in SWB among the social intelligence, open-mindedness, love, and kindness VIA strengths subgroups, respectively. These results suggest an important link between strengths use and character strengths, as conceptualised by the VIA classification system, and their impact on SWB. Further, as evidenced by Peterson et al. (2007), these four VIA strengths are strongly associated to a life of meaning (eudaimonia). Overall, these results provide support for both the generic conceptualisation of strengths and the VIA classification system conceptualisation of character strengths and suggest that there are specific benefits to well-being for those who both refine their natural talents through knowledge and skill and cultivate their virtues. Indeed, strengths use was a

greater predictor of SWB among those individuals whose signature strengths were associated with a life of meaning.

## 6.5 Conclusion

In general, findings of this study indicate that individuals who use their strengths experience greater SWB, and that increased SWB is related to both mental and physical HRQOL. These results are in accordance with the findings of Govindji and Linley (2007) and add to the existing literature by demonstrating a link between strengths use, SWB, and endorsement of signature strengths. Findings reported here further suggest that additional research is required to support the generalisability of previous research that has demonstrated consistent and robust positive associations between the character strengths of hope, zest, gratitude, love, and curiosity and LS. Results indicate that among this population only two of the five theorised 'strengths of the heart' are related to increased LS and that one of these strengths is related to reduced LS. Overall, this research has shown that strengths use is a unique predictor of SWB when controlling for self-esteem and self-efficacy, and that strengths use is further able to predict the unique influence of specific character strengths on SWB. These findings extend current knowledge by demonstrating important theoretical and practical links between existing strengths conceptualisations. Further this research has important implications for applications in work and education, since it appears that enabling people to use their strengths more will be associated with increased SWB.

The next chapter begins investigating the primary research project (Chapter 8), the application of strengths-based exercises in the school curriculum to increase LS, by testing the research procedure (Study 1) and developing the student materials (Study 2) for exercising strengths among young people.

## CHAPTER 7: Testing the Research Procedure and Preliminary Development of the Student Materials for the Primary Research Study

---

### 7.1 Introduction

Research has demonstrated the psychological, social, and behavioural benefits of identifying and fostering individual character strengths in young people and the importance of implementing moral education in positive youth development programmes (Park, 2004). Nevertheless, to date the development of character strengths has been overlooked and understudied along with the mechanisms that produce well-being in adolescents and youth (Peterson, 2003). However, similar to studies of youth LS (e.g., Suldo & Huebner, 2004a), extant studies and research literature in this area have shown the benefits of fostering strengths and their ability to buffer against antisocial behaviour, psychological disorder, the negative effect of stress, and other potential developmental risk factors (e.g., Bromley et al., 2006). Further, it is becoming increasingly evident that the disease model and associated risk-based prevention programmes have failed to equip young people with the necessary buffers against serious social and psychopathological problems (Seligman, 2002b). Through the development of the VIA-IS (Peterson & Seligman, 2004), a measurement system is now available that provides a comprehensive means of identifying individual strengths. Seligman (2002a) has proposed that identified individual strengths can be applied to life and employed on a daily basis via strengths-based exercises to increase LS and happiness in general. However, research has not focused on the impact of awareness of character strengths or to what extent participation in strengths-based exercises affects subsequent reports of adolescent LS.

#### *7.1.2 Overview of Studies*

This chapter presents two studies conducted as part of the development of the primary research project (Chapter 8). The first study (Study 1) tests the application of individualised strengths-based exercises as a means of increasing LS among young people. As previously noted, the positive psychology literature clearly indicates that the application of a positive psychological intervention, such as strengths-based exercises, could serve as the means of increasing well-being among young people in the school environment. Therefore, this study was the first application of a research procedure designed to test this hypothesis. The second is a study (Study 2) that builds on the findings of Study 1 by testing the application of a broader range of strengths-based exercises, presented in preliminary developed student booklets, as a means of increasing LS among young people. The culmination of the findings of these two studies is presented in Chapter 8.

## 7.2 Study 1

### 7.2.1 Method

#### *7.2.1.1 Participants*

A convenience sample of 36 adolescent (Year 9) students aged 13-14 (17 male; 19 female) from one secondary school in the Channel Islands were recruited. The mean age of participants was 13.53 ( $SD = 0.51$ ).

Ethical approval to collect data for this study was secured from the University of Leicester Psychology Research Ethics Committee. Upon approval, recruitment of participants began by meeting with the head teacher of the school. Parental consent was sought and obtained for all participants. All students were informed that their

responses would remain confidential, that completion of the survey was completely voluntary, and that they could withdraw at anytime.

#### *7.2.1.2 Purpose*

The primary purpose of this study is to examine the extent to which awareness of individual character strengths in general and strengths-based exercises specifically relate to satisfaction with life for adolescents. This purpose will be addressed by determining and revealing individual levels of: (1) LS as measured by the SLSS (Huebner, 1991b, 1991c); and (2) character strengths, as measured by the VIA-Youth (Peterson & Seligman, 2004). This study will also examine the following questions for this population in relation to the aforementioned purpose: (1) to what extent does awareness of character strengths account for variance in global LS; and (2) to what extent does using character strengths via strengths-based exercises account for variance in global LS.

#### *7.2.1.3 Measures*

1. *The Students' Life Satisfaction Scale* (SLSS; Huebner, 1991b; 1991c) is a 7-item self-report scale which assesses global LS for students aged 8-18. Students are required to respond to each item using a 6-point Likert scale (Strongly Disagree to Strongly Agree). The SLSS has been shown to be a valid and reliable measure of LS for elementary (e.g., Terry & Huebner, 1995) ( $r = .73$ ), middle (e.g., Huebner, 1991a) ( $r = .82$ ), and high (e.g., Dew & Huebner, 1994) ( $r = .86$ ) school students. Coefficient alphas have consistently been reported across all age groups for this scale in the .70-.80 range (Huebner et al., 2003b). In addition, the SLSS has been shown to be correlated with appropriate criterion measures, such as the Perceived Life Satisfaction Scale (Adelman et al., 1989; Dew & Huebner, 1994) ( $r = 0.58$ ), the Piers-Harris

Self-Concept Scale (Piers & Harris, 1984) ( $r = 0.53$ ) (see also Huebner, 1994a), and the Andrews and Withey Life Satisfaction Scale (Andrews & Withey, 1976) ( $r = 0.62$ ) (Huebner, 1991c; Huebner et al., 2003b). Overall, research supports the SLSS as a psychometrically sound brief measure of global LS for students aged 8-18.

2. *The Values-In-Action – Inventory of Strengths-Youth* (VIA-Youth; Peterson & Seligman, 2004) is a 198-item self-report survey which assesses character strengths for young people aged 10-17. Respondents are required to respond to each item using a 5-point Likert scale (Very Much Like Me to Not At All Like Me). The VIA-Youth has been shown to have good internal consistency, with coefficient alphas ranging from .72-.91, and test–retest reliability (Park & Peterson, 2006b). The VIA-Youth has been validated against measures of LS, school grades, popularity, social skills, psychopathology, and through correlations of children’s scores with that of their parent’s on the VIA-IS (see Park & Peterson, 2006b). The VIA-Youth provides a classification of 24 strengths, organised under six broad virtues, which are ubiquitous across cultural, historical, religious, and philosophical traditions: (1) wisdom and knowledge; (2) courage; (3) love and humanity; (4) justice; (5) temperance; and (6) transcendence (Peterson & Park, 2004; Seligman, 2002a). The VIA-Youth is an ipsative measure, and thus comparisons are not made across individuals, but among the individual strengths of each person. The VIA-Youth is available online upon registration at: <http://www.authentichappiness.org>. Participants under the age of 13 may only complete this measure by being registered by a parent or guardian over the age

of 18, children's scores then appear within the parent's test centre section of their profile.

#### *7.2.1.4 Procedure*

Students ( $N = 36$ ) were provided with individualised instruction sheets (see Figure 7.1 for an example) directing them to a study web page where they completed: (1) online assent; (2) basic demographic questions; (3) the SLSS; and (4) the VIA-Youth, ( $t_0$ : baseline scores). Detailed results of the VIA-Youth are presented immediately to participants following completion of the survey online. Following receipt of the results of the VIA-Youth from the VIA Institute, and calculation of scores on the SLSS, participants were assigned to one of two groups: experimental and comparison. Participants of the experimental group were three males (aged 13) and six females (five 13 year olds and one 14 year old) who successfully completed all the required measures ( $n = 9$ ). Participants of the comparison group ( $n = 9$ ) were a random selection of students who completed the only SLSS, who were matched by age and gender to the participants of the experimental group.

Participants of the experimental group were then provided instructions (see Figure 7.2 for an example) on five exercises (one for each of their top five strengths) that they were asked to carry out over the course of two school weeks (i.e., Monday – Friday). Each exercise involved using participants' identified top five strengths in a new way.

Participants were provided 2 days in which to complete each exercise over a 10-day period. Assigned exercises were partially adapted (with permission) from those presented by Peterson (2006) for use with an adolescent sample (C. Peterson, personal communication, August 22, 2007).

Subsequent to the 10-day period provided for the completion of the exercises assigned to the experimental group, both groups were instructed via their individual handouts (e.g., see Figure 7.3) to return to the study web page to complete the SLSS (posttest scores ( $t_1$ )) and a follow-up questionnaire for participants of the experimental group consisting of a series of questions concerning the use of their character strengths and their feelings toward the exercising of these strengths. Reminders for both groups to return to the study web page to complete the SLSS again at two further time points: 1-week after the posttest ( $t_2$ ) and 1-month after the posttest ( $t_3$ ) were also prepared for distribution. However, as none of the 18 participants selected for the experimental or comparison groups completed the SLSS at posttest ( $t_1$ ), no further data was collected.

#### *7.2.1.5 Data Analysis*

The nature of the research objectives undertaken requires a quantitative quasi-experimental research design/analysis. Statistical analyses of SLSS scores gathered at each interval shall be conducted to determine the extent that character strength awareness and character strengths exercises accounts for the variance in LS, and to determine changes in the level of LS from the baseline to the posttest. Analyses of variance (ANOVAs) will indicate the extent that character strength awareness and character strengths exercises increased LS among adolescents and to what extent the change is enduring (controlling for any baseline group differences). A regression analysis will assess the extent that LS at posttest ( $t_1$ ) can be predicted based on baseline ( $t_0$ ) LS and character strengths. Demographic variables and results from follow-up questionnaires will be quantitatively and qualitatively analysed to provide greater insight into the findings.

Figure 7.1

*Student Registration Instruction Sheet*

ID CODE:

GSY001

**INSTRUCTIONS:**

1. GO TO: [www.cp-guernsey.co.uk](http://www.cp-guernsey.co.uk)
2. FOLLOW THE INSTRUCTIONS ON EACH PAGE
3. WHEN YOU GET TO THE REGISTRATION FORM FOLLOW THE INSTRUCTIONS BELOW

**THIS FORM MUST BE COMPLETED CORRECTLY.** See example:

- Enter your First Name
- Enter you ID Code on the top of this sheet
- Enter GSY001@cp-guernsey.co.uk
- Do not check the information box
- Create your own Password
- Confirm your Password
- Choose a "Security Question" from the list
- Answer the Security Question
- Enter your Date of Birth
- Select your Gender
- Choose "Student" from the list
- Choose "Some high school or less"
- Enter your Postal Code (if you do not know it enter GSY GSY)
- Choose "United Kingdom" from the list
- Enter CAP001
- Check box to confirm

4. Click on "Register a child to take this test" located in the line containing "VIA Strength Survey for Children".

*survey center*

The Survey Center is your way to access the questionnaires available on the Values in Action Institute site. Thank you for taking the VIA Inventory of Strengths Survey. We are pleased to be able to offer the VIA Survey for free worldwide. If you would like to make a donation to support our work and to help continue to provide the VIA Survey for free, please click here to make a donation.

VIA Survey Questionnaire	My Score	Result Range	Lead Taken	Options & Details
VIA Signature Strengths Survey Measures 24 Character Strengths	n/a	n/a		Take test
VIA Strength Survey for Children Measures 24 Character Strengths for Children				Register a child to take this test.
Brief Strengths Test Measures 24 Character Strengths	n/a	n/a		Take test

5. Please enter a screen name chosen by you into the "Screen Name" box and re-enter your birth date and select your gender and then click add.

Figure 7.2

*Experimental Group Exercise Instructions*

You have been selected to participate in some exercises.

**GSY007**

**AS A THANK YOU FOR YOUR TIME EVERYONE WHO COMPLETES THE STUDY WILL BE ENTITLED TO A £5.00 GIFT CERTIFICATES FOR HMV. FOLLOW THE DIRECTIONS CAREFULLY!**

**PLEASE CHOOSE ONE EXERCISE TO DO FROM EACH OF THE CHOICES BELOW:**

**Monday February 4<sup>th</sup> – Tuesday February 5<sup>th</sup>:**

- a) Finish an important assignment ahead of time.  
**Or**  
 b) Work on something for an hour or more without interruptions, for example, no TV, no phone calls, no snacks, and no Internet.

**Wednesday February 6<sup>th</sup> – Thursday February 7<sup>th</sup>:**

- a) Think of a time when you did the right thing even though it was not popular with your friends or others. Write it down.  
**Or**  
 b) Think of a time when you stood up for yourself or of a time when you knew you had to face something scary, but you did it anyway because you knew you must. Write it down.

**Friday February 8<sup>th</sup> - Monday February 11<sup>th</sup>:**

- a) Do something today that is kind. For example, help a neighbour or friend.  
**Or**  
 b) Do something nice for a friend or family member without telling them you did it.

**Tuesday February 12<sup>th</sup> - Wednesday February 13<sup>th</sup>:**

- a) For the whole day do not talk about yourself at all.  
**Or**  
 b) Think of something that a friend does much better than you and compliment him or her about it.

**Thursday February 14<sup>th</sup> - Friday February 15<sup>th</sup>: Do both a & b**

- a) Make at least one person smile or laugh today. For example, tell a joke to someone.  
 b) **★ Friday February 15<sup>th</sup> - YOU MUST COMPLETE THIS PART!**

GO TO [www.cp-guernsey.co.uk](http://www.cp-guernsey.co.uk) COMPLETE THE QUESTIONS (THIS WILL TAKE ABOUT 5 MINUTES)

**★ YOU WILL BE ASKED TO GO TO THE WEB PAGE TWO MORE TIMES - FRIDAY FEBRUARY 22<sup>nd</sup> AND FRIDAY MARCH 14<sup>th</sup> (THIS WILL TAKE LESS THAN 5 MINUTES EACH TIME)**

**THANK YOU!**

Figure 7.3

*Comparison Group Instructions***GSY002**

**You have been selected to participate in the second part of the study.**

**AS A THANK YOU FOR YOUR TIME EVERYONE WHO COMPLETES THE STUDY WILL BE ENTITLED TO A £5.00 GIFT CERTIFICATES FOR HMV. FOLLOW THE DIRECTIONS CAREFULLY!**

**Monday February 18<sup>th</sup>**

GO TO [www.cp-guernsey.co.uk](http://www.cp-guernsey.co.uk) COMPLETE THE QUESTIONS (THIS WILL TAKE ABOUT 2 MINUTES)

**Monday February 25<sup>th</sup>**

GO TO [www.cp-guernsey.co.uk](http://www.cp-guernsey.co.uk) COMPLETE THE QUESTIONS (THIS WILL TAKE ABOUT 2 MINUTES)

**★ YOU WILL BE ASKED TO GO TO THE WEB PAGE ONE MORE TIME - FRIDAY MARCH 14<sup>th</sup> (THIS WILL TAKE ABOUT 2 MINUTES)**

**Thank you for your participation!**

### 7.2.2 Results

Due to lack of data, analysis was restricted to examination of mean baseline LS scores. Examination of all 36 participants revealed average LS to be in the positive range ( $M = 29.28$  or  $4.18$  on a 6-point scale). Further, in response to being asked on a 6-point Likert scale their agreement with the statements: ‘I am glad I am who I am’ and ‘My friends are generally kind and helpful’, students showed moderate agreement (i.e.,  $M = 4.97$  and  $M = 5.08$ , respectively).

For the 13 year olds, both males and females had moderate levels of average LS (i.e.,  $M = 28.14$  [4.02] and  $M = 30.50$  [4.35], respectively). However, for the 14

year olds, average female LS scores were in the negative range ( $M = 26.33 [3.76]$ ) whereas average male LS scores were in the positive range ( $M = 31.50 [4.50]$ ) (see Table 7.1).

Table 7.1

*Case Summaries*

	Age	Gender	N	Mean (SD)
	13	Male	7	
SLSS				28.14 (5.79)
Glad				5.00 (1.00)
Friends				4.43 (0.98)
	13	Female	10	
SLSS				30.50 (3.81)
Glad				5.50 (0.53)
Friends				5.60 (0.52)
SLSS	13	Male/Female	17	29.53 (4.71)
	14	Male	10	
SLSS				31.50 (7.63)
Glad				4.70 (1.70)
Friends				4.70 (1.64)
	14	Female	9	
SLSS				26.33 (7.45)
Glad				4.67 (1.66)
Friends				5.44 (1.67)
SLSS	14	Male/Female	19	29.05 (7.78)
	13/14	Male/Female	36	
SLSS				29.28 (6.43)
Glad				4.97 (1.32)
Friends				5.08 (1.34)

*Note:* SLSS (Students' Life Satisfaction Scale, Glad ('I am glad I am who I am'), Friends ('My Friends are generally kind and helpful'))

A correlational analysis was conducted for the nine participants who completed the VIA-Youth, LS was positively correlated with the character strengths:

Humour, Citizenship, Open-Mindedness, Kindness, Love, Leadership, and Perspective (see Table 7.2).

Table 7.2

*Correlations*

VIA Character Strength	Students' Life Satisfaction Scale
VIA-03 (Love)	.619
VIA-05 (Citizenship)	.710
VIA-13 (Humour)	.726
VIA-15 (Open-Mindedness)	.678
VIA-16 (Kindness)	.623
VIA-17 (Leadership)	.603
VIA-20 (Perspective)	.586

*p* < .05 (1-tailed)

### 7.2.3 Discussion

In the first instance, all 36 participants were gathered in the gymnasium of the participating secondary school where they received verbal instruction from the researcher. Each student was provided with an individually created information sheet (see Figure 7.1) designed to guide him or her to the study web page and through the registration process of the VIA-Youth. Students were reminded to pay strict attention to their instructions and take note of their ID codes and the study research code (i.e., CAP001) required in order to receive the data back from the VIA Institute.

Subsequent to these instructions, the students were divided into two groups and taken to two computer labs where they could complete the study questionnaires; one group was accompanied by the researcher and the other by a teacher. Data was successfully collected on all 36 students from the study web page, however only nine participants completed the VIA-Youth. The data file received from the VIA Institute showed that over 30 students successfully registered to take the VIA-Youth, but that

as the survey progressed participation dropped off, possibly due to the high number of items (i.e., 198).

Following receipt of the data file from the VIA-Institute it was decided that the data for the nine participants who had completed the VIA-Youth would be requested to participate in the strengths exercises (i.e., experimental group). A comparison group was randomly created and was comprised of participants matched by age and gender to the nine participants for whom there was full data available. Participants of the experimental group were provided with sheets containing the strengths exercises and instructions on when to log on to the web page to complete the posttest measures (see Figure 7.2). Participants of the comparison group were also provided information sheets instructing them when to log on to the web page to complete the posttest measures (see Figure 7.3). Reminder sheets for both groups were prepared for distribution at 1-week posttest instructing students to return to the web page to complete the SLSS and that a final follow-up would be required at the 1-month time point. However, as none of the 18 students completed the posttest ( $t_1$ ) of the SLSS the study was cancelled.

#### 7.2.4 Conclusion

Based on these results it has been decided that additional studies must incorporate the presence of the researcher with the participating students while they log on to the web page and register to complete the VIA-Youth, or participants should complete a pencil-and-paper version of the scale. Further, a full explanation to all participants is required so that the students understand the length of the VIA-Youth survey and what to expect before allowing participation to begin. The strengths exercises should be participated in under supervision and discussed as a group prior to

handing out the assignment of the exercises to the experimental group, therefore ensuring that all participating students are prepared to work on them during the specified period. Further, the posttest and the 1-week follow-up should take place as a group either in a computer lab or in the classroom as a paper-and-pencil with the researcher present. If possible data from a 1-month follow-up should be collected in the same manner.

In response to the problems in collection of the VIA-Youth data the VIA Institute has offered assurance that they will make changes to their system including the redesign of students access, development of easy to use drop down boxes for registration, and the removal of some items making the survey shorter (D. Pinger, personal communication, February 1, 2008). Further, the VIA Institute has now made available a paper-and-pencil version of the scale for the purposes of small research studies.

The study presented in the next section (Study 2) takes into consideration the noted limitations of this research and builds on the findings by testing the application of a broader range of strengths-based exercises, presented in preliminary created booklets, as a means of increasing LS among young people.

## 7.3 Study 2

### 7.3.1 Method

#### *7.3.1.1 Participants*

A convenience sample of 47 female adolescent (Year 9) students aged 13-15 from one secondary school in the Channel Islands were recruited. The mean age of participants was 13.98 ( $SD = 0.33$ ).

Ethical approval to collect data for this study was secured from the University of Leicester Psychology Research Ethics Committee. Upon approval, recruitment of participants began by meeting with the head teacher of the school. Parental consent was sought and obtained for all participants. Surveys were administered to participating students in the gymnasium of the school with the researcher and head teacher of the year group present at all times. All students were informed that their responses would remain confidential, that completion of the survey was completely voluntary, and that they could withdraw at anytime.

#### *7.3.1.2 Purpose*

The primary purpose of this study is to examine the extent to which awareness of individual character strengths in general and strengths-based exercises specifically relate to satisfaction with life and self-esteem for adolescents. This purpose will be addressed by determining and revealing individual levels of: (1) LS as measured by the SLSS (Huebner, 1991b, 1991c); (2) self-esteem as measured by the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965); and (3) character strengths, as measured by the VIA-Youth (Peterson & Seligman, 2004). This study will also examine the following questions for this population in relation to the aforementioned purpose: (1) to what extent does awareness of character strengths account for variance in global LS and self-esteem; and (2) to what extent does using character strengths via strengths-based exercises account for variance in global LS and self-esteem.

A secondary purpose of this study is to test the use of preliminarily created student materials, from which students can work on their strengths in the school curriculum, with the participating students.

#### *7.3.1.3 Measures*

1. *The Students' Life Satisfaction Scale* (SLSS; Huebner, 1991b; 1991c) is a 7-item self-report scale which assesses global LS for students aged 8-18. Students are required to respond to each item using a 6-point Likert scale (Strongly Disagree to Strongly Agree). The SLSS has been shown to be a valid and reliable measure of LS for elementary (e.g., Terry & Huebner, 1995) ( $r = .73$ ), middle (e.g., Huebner, 1991a) ( $r = .82$ ), and high (e.g., Dew & Huebner, 1994) ( $r = .86$ ) school students. Coefficient alphas have consistently been reported across all age groups for this scale in the .70-.80 range (Huebner et al., 2003b). In addition, the SLSS has been shown to be correlated with appropriate criterion measures, such as the Perceived Life Satisfaction Scale (Adelman et al., 1989; Dew & Huebner, 1994) ( $r = 0.58$ ), the Piers-Harris Self-Concept Scale (Piers & Harris, 1984) ( $r = 0.53$ ) (see also Huebner, 1994a), and the Andrews and Withey Life Satisfaction Scale (Andrews & Withey, 1976) ( $r = 0.62$ ) (Huebner, 1991c; Huebner et al., 2003b). Overall, research supports the SLSS as a psychometrically sound brief measure of global LS for students aged 8-18.
2. *Rosenberg Self-Esteem Scale* (RSE; Rosenberg, 1965) is a 10-item self-report measure of self-esteem. Respondents are required to respond to each item (e.g., 'On the whole I am satisfied with myself') using a 4-point Likert scale (Strongly Disagree to Strongly Agree). Internal coefficient alphas ranging from .80 to .92 have been reported for the scale (e.g., Fleming & Courtney, 1984; Reynolds, 1988; Rosenberg, 1979; Sam, 2000), with a test-retest correlation for the total score having been reported at .82 (see Fleming & Courtney, 1984). Convergent validity for the scale has been demonstrated through negative correlations with psychological constructs associated with

low self-regard, such as anxiety ( $r = -.64$ ) and depression ( $r = -.59$ ) (see Fleming & Courtney, 1984). Discriminant validity has been demonstrated through correlations between the RSE and grade point average ( $r = .10$ ), LOC ( $r = .04$ ), and vocabulary ( $r = -.06$ ) (see Reynolds, 1988). Overall, the RSE is a psychometrically sound brief measure of global self-esteem.

3. *The Values-In-Action – Inventory of Strengths-Youth* (VIA-Youth; Peterson & Seligman, 2004) is a 198-item self-report survey which assesses character strengths for young people aged 10-17. Respondents are required to respond to each item using a 5-point Likert scale (Very Much Like Me to Not At All Like Me). The VIA-Youth has been shown to have good internal consistency, with coefficient alphas ranging from .72-.91, and test–retest reliability (Park & Peterson, 2006b). The VIA-Youth has been validated against measures of LS, school grades, popularity, social skills, psychopathology, and through correlations of children’s scores with that of their parent’s on the VIA-IS (see Park & Peterson, 2006b). The VIA-Youth provides a classification of 24 strengths, organised under six broad virtues, which are ubiquitous across cultural, historical, religious, and philosophical traditions: (1) wisdom and knowledge; (2) courage; (3) love and humanity; (4) justice; (5) temperance; and (6) transcendence (Peterson & Park, 2004; Seligman, 2002a). The VIA-Youth is an ipsative measure, and thus comparisons are not made across individuals, but among the individual strengths of each person. The VIA-Youth is available online upon registration at: <http://www.authentic happiness.org>. Participants under the age of 13 may only complete this measure by being registered by a parent or guardian over the age

of 18, children's scores then appear within the parent's test centre section of their profile.

#### 7.3.1.4 Procedure

Students ( $N = 47$ ) were provided with a battery of paper-and-pencil measures including: (1) student assent; (2) basic demographic questions; (3) the SLSS; (4) the RSE; and (5) the VIA-Youth, ( $t_0$ : baseline scores). Following calculation of scores from all measures, students were provided detailed results of their top five character strengths as measured by the VIA-Youth. Students were non-randomly assigned by their participating school (based on convenience) to one of two groups: experimental or comparison. The experimental group was comprised of 24 females and the comparison group was comprised of 23 females (See Table 7.3).

Table 7.3

#### *Sample Demographics*

	Sample Size	Mean Age	SD	Range
Experimental	24	14.04	.359	13-15
Comparison	23	13.91	.288	13-14

*Note:* Age is based on self-report in years not on birth date

Participants of the experimental group were provided with booklets (see Figure 7.4, Appendix 7.4) containing instructions on exercises for each of the 24 VIA strengths. Each participant was asked to complete the five exercises from the booklet which corresponded to their top five strengths, and that they may complete any others they choose as time permitted, over the course of two school weeks (i.e., under the direction of the researcher, students were provided with four 1-hour classroom sessions over a 2-week period in which to spend working on their strengths). Each exercise involved using participants' identified top five strengths in a new way. Assigned exercises were partially adapted (with permission) from those presented by

Peterson (2006) for use with an adolescent sample (C. Peterson, personal communication, August 22, 2007).

In addition to working on individual strengths (i.e., top five), participants were invited to work on some of the strengths exercises from the booklet as a group. The first classroom session took place in the school library. Participants were invited to complete the strengths exercises based on curiosity, open-mindedness, and love of learning. The second session took place in the school art room. Participants were invited as a group to work on the strengths exercises based on love and kindness, appreciation of beauty, and creativity by creating a piece of art work, card, love letter, poem, or to work on any of their top five strengths exercises from the booklet. Session three took place in the school library. Participants were given the opportunity to explore listening to different types of music and invited to work on the exercises based on gratitude, hope, and modesty and prudence, or to work on any of their top five strengths exercises from the booklet. The final session took place in the school drama theatre. Participants were invited to spend approximately 15 minutes in quiet contemplation or meditation and reflect on their strengths as part of exploring the strength of spirituality. After the 15-minute quiet session, in which participants could meditate or work on their individual strengths, participants were invited to work on the exercises based on the strengths of humour, zest, and/or any of the others they had not explored or completed yet.

Subsequent to the completion of the exercises assigned to the experimental group, both groups completed the SLSS, the RSE (posttest scores ( $t_1$ )), and a follow-up questionnaire. Participants in both groups completed the SLSS and RSE again at one further time point: 1-week after the posttest ( $t_2$ ). Data was unable to be collected for two students who were absent at posttest ( $t_1$ ) and two students who were absent at

the 1-week follow-up ( $t_2$ ). Therefore, averages of their total scores at the other available two time points (i.e., baseline and the 1-week follow-up ( $t_2$ ), or baseline and posttest ( $t_1$ ), respectively) were calculated and used for the missing values at those two data points. Therefore, data is provided for a total of 47 female Year 9 students.

#### *7.3.1.5 Data Analysis*

In line with previous research (e.g., Gilman & Huebner, 2006), examination of the scoring distribution of all measures was conducted in order to assess for outliers and to test for multivariate normality. All scores were first transformed into  $z$  scores. As recommended by Tabachnick and Fidell (2001), all  $z$  scores in excess of the  $\pm 3.29$  range were removed. This resulted in no individuals being excluded from the data.

The nature of the research objectives undertaken, and ethical considerations, requires a quantitative quasi-experimental research design/analysis. Statistical analyses of SLSS and RSE scores gathered at each interval shall be conducted to determine the extent that character strength awareness (comparison group) and character strengths exercises (experimental group) accounts for change in LS and self-esteem ( $t$ -test) from the baseline to the posttest and the 1-week follow-up. This will allow determination of whether change occurs and whether this change is enduring and persistent.

Analyses of covariance (ANCOVA) will indicate the extent that character strength awareness and character strengths exercises increase LS from baseline, controlling for change in self-esteem among adolescents, and to what extent the change is enduring. Demographic variables and results from the follow-up questionnaires will be qualitatively analysed to provide greater insight into the findings.

## 7.3.2 Results

*T*-test analyses were conducted for both the experimental and comparison groups in order to compare the change in LS and self-esteem at each time interval based on character strength awareness and character strengths exercises respectively. Initial, examination of group means revealed both decreases and increases in LS (see Table 7.4) and self-esteem (see Table 7.5) scores, and thus all *t*-test analyses conducted were two-tailed with a 95% confidence interval (see Table 7.6).

Table 7.4

*Students' Life Satisfaction Scale – Mean Scores*

	Time	Mean	SD
Experimental	SLSS Baseline	26.96	8.36
	SLSS Posttest	26.12	8.20
	SLSS 1-Week	26.19	8.36
Comparison	SLSS Baseline	33.65	4.87
	SLSS Posttest	34.41	5.30
	SLSS 1-Week	34.70	4.94

For the experimental group, change in SLSS scores from baseline ( $M = 26.96$ ,  $SD = 8.36$ ) to posttest ( $M = 26.12$ ,  $SD = 8.20$ ), and from baseline ( $M = 26.96$ ,  $SD = 8.36$ ) to the 1-week follow-up ( $M = 26.19$ ,  $SD = 8.32$ ), were not significant,  $t(23) = -.784$ ,  $p = .44$  and  $t(23) = -.686$ ,  $p = .50$ , respectively. For the comparison group, change in SLSS scores from baseline ( $M = 33.65$ ,  $SD = 4.87$ ) to posttest ( $M = 34.41$ ,  $SD = 5.30$ ), and from baseline ( $M = 33.65$ ,  $SD = 4.87$ ) to the 1-week follow-up ( $M = 34.70$ ,  $SD = 4.94$ ), were also not significant,  $t(22) = .874$ ,  $p = .39$  and  $t(22) = 1.053$ ,  $p = .30$ , respectively. Similarly, change in SLSS scores from posttest to the 1-week follow-up were not significant for the experimental or the comparison group,  $t(23) = 0.61$ ,  $p = .95$  and  $t(22) = .338$ ,  $p = .74$ , respectively (see Table 7.6).

For the experimental group, change in RSE scores from baseline ( $M = 25.54$ ,  $SD = 5.22$ ) to posttest ( $M = 25.88$ ,  $SD = 6.15$ ), and from baseline ( $M = 25.54$ ,  $SD =$

Table 7.5

*Rosenberg Self-Esteem Scale – Mean Scores*

	Time	Mean	SD
Experimental	RSE Baseline	25.54	5.22
	RSE Posttest	25.88	6.15
	RSE 1-Week	26.75	4.86
Comparison	RSE Baseline	28.17	4.42
	RSE Posttest	31.00	4.39
	RSE 1-Week	32.04	4.97

5.22) to the 1-week follow-up ( $M = 26.75$ ,  $SD = 4.86$ ), were not significant,  $t(23) = .375$ ,  $p = .71$  and  $t(23) = 1.558$ ,  $p = .13$ , respectively. For the comparison group, change in RSE scores from baseline ( $M = 28.17$ ,  $SD = 4.42$ ) to posttest ( $M = 31.00$ ,  $SD = 4.39$ ), and from baseline ( $M = 28.17$ ,  $SD = 4.42$ ) to the 1-week follow-up ( $M = 32.04$ ,  $SD = 4.97$ ), were significant,  $t(22) = 4.74$ ,  $p < .01$  and  $t(22) = 4.497$ ,  $p < .01$ , respectively. For the experimental group, change in RSE scores from posttest ( $M = 25.88$ ,  $SD = 6.15$ ) to the 1-week follow-up ( $M = 26.75$ ,  $SD = 4.86$ ) were not significant,  $t(23) = 1.283$ ,  $p = .21$ . For the comparison group, change in RSE scores from posttest ( $M = 31.00$ ,  $SD = 4.39$ ) to the 1-week follow-up ( $M = 32.04$ ,  $SD = 4.97$ ) were not significant,  $t(22) = 1.960$ ,  $p = .06$  (see Table 7.6).

An ANCOVA examining change in SLSS scores from baseline to posttest indicated that 18% ( $\eta = .18$ ) of the variance in LS change is accounted for by change in self-esteem from baseline to posttest,  $F(1, 47) = 5.67$ ,  $p = .006$ . A univariate ANOVA examining the effect of group on change in SLSS scores (where self-esteem is not considered) revealed that group is not a significant indicator of change of SLSS scores from baseline to posttest,  $F(1, 47) = 1.33$ ,  $p = .254$ .

An ANCOVA examining change in SLSS scores from baseline to the 1-week follow-up indicated that 26% ( $\eta = .26$ ) of the variance in LS is accounted for by change in self-esteem from baseline to the 1-week follow-up,  $F(1,47) = 8.79$ ,  $p =$

.001. A univariate ANOVA examining the effect of group on change in SLSS scores (where self-esteem is not considered) revealed that group is not a significant indicator of change of SLSS scores from baseline to the 1-week follow-up,  $F(1, 47) = 1.46, p = .234$ .

Table 7.6

*Change in Students' Life Satisfaction Scale and Rosenberg Self-Esteem Scale Scores*

Group	Measure	Time	<i>t</i>	<i>p</i>
Experimental	SLSS	Baseline – Posttest	$t(23) = -.784$	.44
	SLSS	Baseline – 1-Week	$t(23) = -.686$	.50
	SLSS	Posttest – 1-Week	$t(23) = .061$	.95
Comparison	SLSS	Baseline – Posttest	$t(22) = .874$	.39
	SLSS	Baseline – 1-Week	$t(22) = 1.053$	.30
	SLSS	Posttest – 1-Week	$t(22) = .338$	.74
Experimental	RSE	Baseline – Posttest	$t(23) = .375$	.71
	RSE	Baseline – 1-Week	$t(23) = 1.558$	.13
	RSE	Posttest – 1-Week	$t(23) = 1.283$	.21
Comparison	RSE	Baseline – Posttest	$t(22) = 4.741$	.00**
	RSE	Baseline – 1-Week	$t(22) = 4.497$	.00**
	RSE	Posttest – 1-Week	$t(22) = 1.960$	.06

\*\*  $p < .01$

An ANCOVA examining change in SLSS scores from posttest to the 1-week follow-up indicated that neither change in self-esteem ( $F(1,47) = 3.70, p = .061$ ) or group ( $F(1,47) = .01, p = .908$ ) from posttest to the 1-week follow-up were significant indicators of change in LS. A univariate ANOVA examining the effect of group on change in SLSS scores (where self-esteem is not considered) revealed that group is not a significant indicator of change of SLSS scores from posttest to the 1-week follow-up,  $F(1, 47) = .03, p = .869$ .

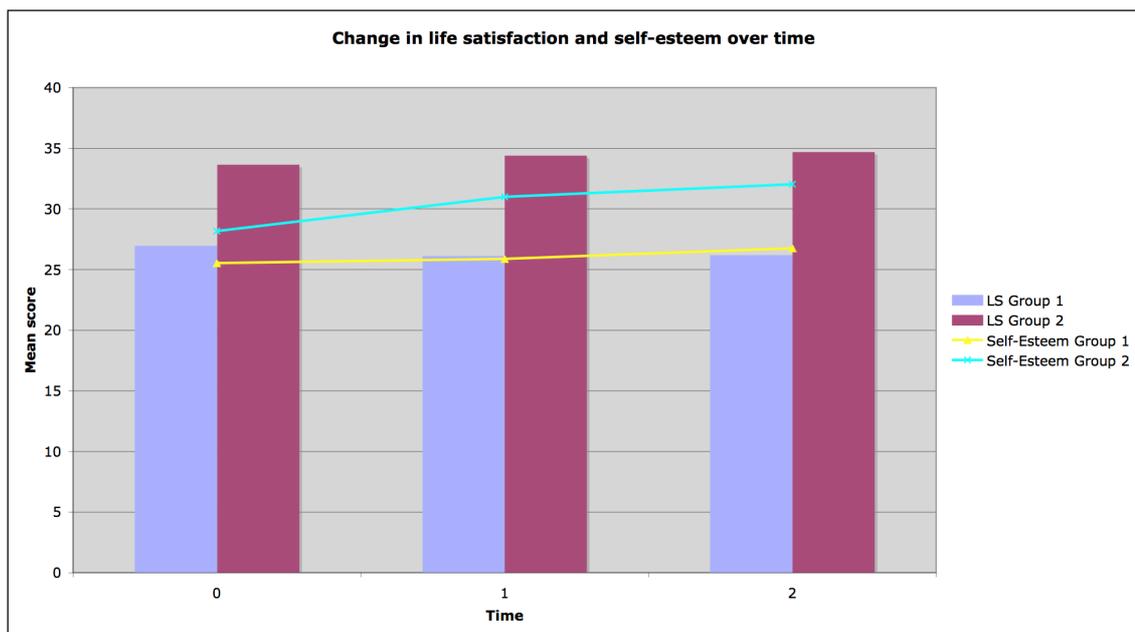
As a result of these findings additional *t*-test analyses were conducted in order to examine differences in baseline, posttest, and 1-week follow-up LS and self-esteem levels, between the experimental and comparison groups, which might be influencing the results. Results revealed that the experimental group had significantly lower LS at baseline,  $t(45) = -3.34, p = .002$ , and significantly lower LS and self-esteem at

posttest,  $t(45) = -4.10, p < .000$  and  $t(45) = -3.28, p = .002$ , respectively, and the 1-week follow-up,  $t(45) = -4.24, p < .000$  and  $t(45) = -3.69, p = .001$ , respectively, than the comparison group. Only baseline differences in self-esteem were found to be marginally non-significant,  $t(45) = -1.86, p = .069$ .

For the experimental group, examination of total mean scores for LS and self-esteem across time revealed that LS slightly decreased from baseline to posttest and from posttest to the 1-week follow-up, whereas self-esteem slightly increased across time. For the comparison group, LS and self-esteem slightly increased from baseline to posttest and from posttest to the 1-week follow-up (see Figure 7.5).

Figure 7.5

*Change in Life Satisfaction and Self-Esteem Over Time*



Note: Group 1 (Experimental), Group 2 (Comparison)

Each group completed a follow-up questionnaire at posttest designed to evaluate the impact that awareness of character strengths alone had in comparison to engaging in strengths-based exercises. Sixty-eight percent of students in the experimental group reported that they completed more than three strengths exercises and 50% of participants in the comparison group reported that they tried using their

strengths after learning about them. For the participants of the experimental group, 41% reported that they enjoyed the strengths exercises 'A Little' and 32% reported they enjoyed them 'Quite a Lot'. Comparatively, 46% of participants in the comparison group reported that they enjoyed using their strengths 'A Little', however many indicated in the open-ended response section that their ability to use their strengths was impaired by not knowing how to use them. Nevertheless, 27% of respondents in the comparison group reported that they used their strengths more than three times after learning about them, and 46% were 'Fairly Certain' they would continue to use them in the future. Sixty-five percent of participants in the experimental group, and 91% of participants in the comparison group, felt that more than three of their top five strengths as measured by the VIA-Youth described the 'real me'. Twenty-two percent of participants in the experimental group, and 41% of participants in the comparison group, felt that learning about their top five strengths made them realise they had qualities that they had never thought about before.

Participants of both the experimental (48%) and comparison (82%) groups reported talking about their top five strengths with friends and family. Similarly, participants of both the experimental (52%) and comparison (73%) groups agreed that the idea of character strengths made sense to them and that they can be learned (30% and 55%, respectively). Thirty percent of participants in both groups felt that they could achieve a better life through choosing to exercise their strengths. Learning about their strengths made 59% of participants in the experimental group, and 62% of participants in the comparison group, feel 'A Little' good. Further, 30% of the participants in the experimental group reported that participating in the strengths exercises was a positive experience. Finally, participants of both groups were asked to report any negative aspects of their participation. Several of the participants of the

experimental group reported that they felt they were chosen because they were depressed or because something was wrong with them. Participants of the comparison group reported that the VIA-Youth was repetitive in nature and that they would have like to learn about their weaknesses. Participants of both groups reported that the VIA-Youth brought back bad memories that they would rather forget (see Appendix 7.6 and Appendix 7.7).

### 7.3.3 Discussion

Overall, mean SLSS score analyses indicated that for both the experimental group and the comparison group change in LS from baseline to posttest, and from baseline to the 1-week follow-up, were not significant. Similarly, change in mean SLSS scores from posttest to the 1-week follow-up was not significant for either group. Therefore, neither character strengths awareness nor character strengths exercises had a significant impact on mean LS level.

Comparatively, mean RSE score analyses indicated that for the experimental group change in self-esteem from baseline to posttest, and from baseline to the 1-week follow-up, were not significant. However, for the comparison group, *t*-test analyses indicated that change in self-esteem from baseline to posttest, and from baseline to the 1-week follow-up, significantly increased. Therefore, for the experimental group character strengths exercises did not have a significant positive impact on self-esteem at either time interval, however for the comparison group, character strengths awareness had a significant positive impact on self-esteem at both time intervals.

Analyses of covariance were conducted at both time intervals in order to determine the extent that character strengths awareness and character strengths

exercises increase LS from baseline (controlling for the change in self-esteem), and to what extent the change is enduring. Results indicated that change in self-esteem accounted for 18% of the variance in LS change from baseline to posttest, and 26% of the variance in LS change from baseline to the 1-week follow-up, whereas group did not account for any significant change. Further, results of univariate ANOVAs indicated that group was not a significant indicator of change in SLSS total scores from baseline to posttest or to the 1-week follow-up, or from posttest to the 1-week follow-up. Therefore, change in LS cannot be accounted for by character strengths awareness or character strengths exercises for this population whether change in self-esteem is accounted for or not.

As a result of these findings additional *t*-test analyses were conducted in order to examine if differences in baseline, posttest, or 1-week follow-up LS or self-esteem levels, between the experimental and comparison group, were affecting the results. Results revealed that the experimental group had significantly lower LS than the comparison group at baseline, posttest, and the 1-week follow-up. Similarly, the experimental group had significantly lower self-esteem at both posttest and the 1-week follow-up than the comparison group. Thus, there were pre-existing and enduring differences between the two groups, which could explain the obtained results. Specifically, results suggest that the sample used in this study was biased. That is, findings suggest that the participating school may have deliberately assigned students who they had previously identified as at risk for low LS and self-esteem to the experimental group in order that they may benefit from the experimental condition. Alternatively, the participating school may have non-deliberately assigned students who they had previously identified as at risk for low LS and self-esteem to the experimental group in order that they may benefit from the experimental condition

because of inadequate knowledge of what is required to obtain unbiased sample results (McMillan, 2000).

Results of the follow-up questionnaires revealed that more than 50% of participants in both groups exercised their strengths after learning about them. Similarly, more than 40% of participants in both groups reported that they enjoyed using their strengths. Encouragingly, 65% of participants in the experimental group and 91% of participants in the comparison group felt that more than three of their top five strengths reflected the real them. Overall, results indicated that the participants of both groups felt they could achieve a better life through exercising their strengths, and more than 50% in both groups reported that learning about their strengths made them feel ('A Little') good. However, many of the participants in the experimental group felt that they had been chosen for a reason, such as that they were depressed; which further adds support that the sample was biased. Further, an overwhelming amount of students (considering the sample size) from both groups (see Appendix 7.6 and Appendix 7.7) reported that taking the VIA-Youth brought back bad memories that they would rather forget. Taking into consideration that a considerable number of students in the experimental group reported that they thought they had been chosen for a reason (see Appendix 7.6), and that participants of both groups reported that they felt the VIA-Youth evoked bad memories, the results must also be considered in light of these findings.

Based on mean score analyses (see Table 7.4 and 7.5) it is evident that the participants of the experimental group had lower overall mean LS and self-esteem scores compared to those of the comparison group, despite differing little in demographic characteristics (see Table 7.3). Moreover, considering the results of *t*-test analyses which indicated significant pre-study and enduring differences in LS and

self-esteem levels, and the responses provided by participants of the experimental group in the open-ended questions of the follow-up questionnaire, these results can be explained by sampling bias and participants' belief that they were chosen to participate in the strengths exercises because they were depressed. Further, the overall lower mean scores in LS and self-esteem of the experimental group remained consistent over time (see Figure 7.5).

#### 7.3.4 Conclusion

The results of this study suggest that future studies examining the impact of strengths-based exercises in the classroom setting, which are relying on a convenience sample, should ensure that whole classes or year groups make up the respective experimental and control groups and that individual students have not been selected by the school for participation in a particular group. Therefore students participating in the strengths exercises will do so with their entire peer group and will not feel that they were individually selected for the research, which will also remove the possibility of sampling bias by the participating school. In addition, the VIA-Youth proved to have many negative aspects to it, including that it was too long and that it appeared to evoke bad memories for many of the students. In order to avoid these caveats in the future, students could be given the opportunity to choose from the VIA-Youth strengths descriptions which of the 24 strengths they think are their top five. Additionally, it is felt that the impact of the strengths exercises on LS and self-esteem would be greatly enhanced by full exploration of all of the 24 strengths as individual lessons. Many of the students reported they enjoyed the strengths exercises, that they were a positive experience, and that they felt they could achieve a better life through exercising their strengths. Moreover, results from the comparison group demonstrated

that even awareness of strengths had a positive effect on LS and self-esteem for this population. Therefore, further development of the student materials to include full exploration of all the 24 strengths over a longer time period (avoiding the caveats identified in this study) would better enable students to learn how to use the strengths they have, acquire new strengths, and identify strengths in others, ultimately leading to increased LS and happiness in general.

The next chapter presents the primary research study, which tests the research procedures and student materials developed during Study 1 and Study 2 in the school curriculum.

CHAPTER 8: Strengths Gym: The Impact of a Character Strengths-Based  
Intervention on the Life Satisfaction and Well-Being of Adolescent  
Students

---

### 8.1 Introduction

Recently researchers of positive psychology have asked: ‘should well-being be taught in school?’ (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009, p. 294). According to Seligman et al. (2009) the answer is an overwhelming yes, primarily because ‘more well-being is synergistic with better learning’ (p. 294). More importantly still, is that increased happiness and well-being (in this chapter the term ‘well-being’ refers to positive subjective experience (see Diener, 1984)) are not only outcomes most people want for themselves, but also what they most want for their children.

Although most people (including young people) report that they are happy, it is not necessarily the case that they are flourishing (Diener & Diener, 1996; Huebner et al., 2000a; Myers & Diener, 1996). According to Keyes (2002) to be ‘flourishing’ is to be filled with positive emotion and to be functioning well psychologically and socially. Indeed, parents want more for their children than just the avoidance of negative behaviours (e.g., drug and alcohol abuse, violence, bullying, depression), they want their children to thrive in all domains of life (Moore & Lippman, 2005). Unfortunately however, rates of depression among adolescents are evidence to the fact that many children are depressed and unhappy. As reported by Lewinsohn, Redner, and Seeley (1991) nearly 20% of youths experience an episode of clinical depression by the end of high school. Similarly, Huebner et al. (2000a) found that the overall satisfaction with life of 11% of 5,544 American students surveyed fell below

the neutral point with 7% indicating a ‘terrible’ or ‘unhappy’ existence. Because healthy psychological states, such as happiness, have been demonstrated to be both the cause and consequence of diverse positive personal, behavioural, psychological, and social outcomes (see Lyubomirsky et al., 2005) it is vital to understand how to lift those who are languishing and unhappy to a more optimal state of functioning (Sin & Lyubomirsky, 2009) while protecting those with positive levels from diminishing.

#### *8.1.1 School – The Ideal Place for Initiatives*

The ideal place for initiatives aimed at increasing the happiness and well-being of children is in school. The majority of children and adolescents spend most of their week-day in school and much of their day-to-day interactions experienced there will have an impact on their well-being (Seligman et al., 2009). Moreover, not only are educators beginning to recognise the benefits of looking at well-being from a positive perspective, but also many schools are already committed to ‘character education’ and address social and emotional aspects to learning within the curriculum with an aim to promoting positive behaviour and effective learning. For example, Britain’s national education strategy includes the Social and Emotional Aspects to Learning (SEAL) programme (SEAL, 2010). Similarly, in the USA many states have standards and policies related to social and emotional learning (e.g., CASEL, 2009); see Greenberg et al. (2003) for a discussion. Indeed, in line with Seligman et al. (2009), the focus is now on determining an efficacious positive psychological model of intervention to increase well-being within the school curriculum through fostering moral virtues (cf. Joseph & Wood, 2010). Unfortunately, despite nationwide efforts to promote well-being among young people through character education programmes, concerns have been raised over their effectiveness and the lack of consensus over what values and virtues should be fostered (Peterson & Seligman, 2004). Moreover,

many of these programmes are prescriptive and focus on informing students what to do and what not to do (Park & Peterson, 2009), instead of fostering good character through practicing and modelling moral behaviour.

### *8.1.2 Positive Psychology Interventions*

A promising approach to increase well-being among adolescents is through positive psychology interventions – that is, intentional activities that aim to cultivate positive feelings, behaviours, or cognitions (Sin & Lyubomirsky, 2009). Recent research has demonstrated that performing positive psychological exercises, such as counting blessings and participating in self-guided daily gratitude exercises (Emmons & McCullough, 2003; Froh et al., 2008) or counting one's own acts of kindness for 1-week (Otake et al., 2006) are associated with higher levels of positive affect and LS. Indeed, Froh et al. (2008) found that adolescents who listed up to five things that they were grateful for daily for 2 weeks had increased well-being, LS, and decreased negative affect at follow-up. Similarly, Geraghty, Wood, and Hyland (2010b) have found that cultivating gratitude through daily gratitude diaries is as successful at reducing worry as standard cognitive techniques (cf. Geraghty, Wood, & Hyland, 2010a). Moreover, Seligman et al. (2005) have demonstrated that writing down three good things that went well each day, and using identified top strengths in a new way each day, for 1-week increases happiness and decreases depressive symptoms for 6-months. Similarly, exploratory investigations into the teaching of well-being in school through the application of positive psychology interventions and theory has led to reliable improvements in students' well-being (see Seligman et al., 2009 for a review). For example, the Positive Psychology Program, which consisted of approximately 20-25 sessions delivered over 1-year and involved character strengths discussion sessions, in-class activities, real-world homework activities, and follow-up

journal reflections, was demonstrated to increase enjoyment and engagement in school and improve social skills among adolescent students (see Seligman et al., 2009).

### *8.1.3 The Values-in-Action Strengths Classification*

Growing interest in positive youth development and the empirical examination of well-being from a positive perspective, specifically the benefits of exercising good character, has resulted in the creation of a theoretical framework and classification system of virtues, the Values-In-Action – Inventory of Strengths (VIA-IS; Peterson & Seligman, 2004). The VIA-IS is a comprehensive classification and measurement system of 24 ubiquitous character strengths (positive traits reflected in thoughts, feelings, and behaviours), organised under six broad virtues, each of which is morally valued in its own right (Park et al., 2004b). According to Peterson and Seligman (2004; see also Seligman, 2002a), people possess five ‘signature’ or ‘top five’ strengths out of 24. These signature strengths are personal traits or characteristics that the person feels they own, celebrate, and frequently exercise. The hypothesis behind signature strengths is that the use of them is fulfilling and linked to an individual’s sense of self, identity, and authenticity (Peterson & Seligman, 2004), and therefore arguably their well-being (Proctor et al., 2011a).

The VIA-IS classification is a multidimensional approach to good character. As individual differences, strengths are not either present or absent, but exist in degrees (Park & Peterson, 2009). Youths aged 10-17 can identify their strengths by taking the Values-In-Action – Inventory of Strengths-Youth (VIA-Youth; Peterson & Seligman, 2004). Scores on the VIA-Youth are rank ordered from 1 (top) to 24 (bottom) in order that signature strengths can be identified relative to an individual’s other strengths, thereby creating an individual strengths profile. Research among

adults has shown that identifying and using your signature strengths in a new way every day is an intervention that has been systematically tested and shown to have lasting effects on happiness (Seligman et al., 2005).

#### *8.1.4 Building Strengths in Young People*

According to recent research among adults, there appears to be inherent benefits to exercising signature strengths in daily life (see Seligman et al., 2005). Indeed, positive psychological interventions and activities (in general) have been shown to significantly enhance well-being and decrease depressive symptoms (see Sin & Lyubomirsky, 2009). In line with these findings, Seligman (2002a) has advocated the building of all (i.e., 24 VIA) strengths among youths: ‘my first piece of advice about building strengths in kids is to reward all displays of any of the strengths. Eventually you will find your child drifting in the direction of a few of them. These are the seed crystals of her signature strengths...’ (p. 245). Similarly, Peterson (2006) has noted that research to date has demonstrated that the consequences and correlates of character strengths are positive in nature and therefore ‘the implication is that we should develop and use as many strengths of character as possible’ (p. 157). Further, as it is not assumed that character strengths ‘are fixed or necessarily grounded in immutable biogenetic characteristics’ (Peterson, 2006, p. 139), it is reasonable to assume that, if not fostered, strengths may be lost over the course of development. Indeed, research has demonstrated that although there is a degree of convergence when comparing the relative prevalence, correlates, and consequences of all strengths among youth and adults, that there are notable differences (see Park & Peterson, 2009 for a review). Identified developmental differences in the acquisition of good character highlights the importance of fostering

strengths in youth in order that they remain throughout development and into adulthood.

When considering the application of a positive psychology intervention within schools, such as a character development programme, on a broad scale it is necessary to consider the pragmatics of providing individualised character education to students based on their unique signature strengths. Further, to require completion of the VIA-Youth in order to implement a character education programme is likely impractical for most schools; the VIA-Youth is a 198-item measure and requires registration with an adult for those under the age of 13. Furthermore, meta-analytic research findings suggest that positive psychology interventions that involve a ‘shotgun’ approach in which individuals regularly practice multiple and different positive activities, may be more effective than engaging in only one activity (e.g., Seligman et al., 2005), and therefore educators are likely to see the most benefit overall to students’ well-being by adopting this shotgun approach (Sin & Lyubomirsky, 2009). Thus, there is rationale for the development of a general character strengths-based intervention programme, based on the entire VIA strengths classification, which enables students to participate in multiple strengths exercises and explore and self-identify with their signature strengths.

Adopting this approach, self-identification with signature strengths seems appropriate given that children naturally possess strengths and therefore should easily identify with those they are strong in (Park & Peterson, 2009). That is, exploration of all 24 VIA strengths through positive psychological exercises enables young people to identify with strengths they already recognise as part of their subjective self-identity. Further, unlike other pedagogical focuses, identification, exploration, and exercising of strengths is intrinsically rewarding because all children have strengths regardless of

how they may compare to others academically. Moreover, applying this type of positive psychology intervention in the curriculum, which inherently involves students working and learning together as part of the same class, has the added benefit of highlighting the individual differences nature of character strengths and their lack of generality (Peterson, 2006); i.e., students learn to recognise and appreciate that everyone has different strengths and weaknesses.

#### *8.1.5 The Present Study*

Overall, research evidence to date indicates that character strengths are linked to well-being and flourishing among children and youth (Park & Peterson, 2009). Indeed, research has demonstrated that certain strengths of character are linked with increased LS, decreased psychopathology, fewer internalising and externalising behaviour problems, and academic achievement (see Park & Peterson, 2009 for a review). Moreover, strengths can clearly be cultivated and strengthened through regular activity and application in life (e.g., Seligman et al., 2005). Therefore, development of positive psychological character strengths-based interventions that can be utilised as part of the school curriculum is a timely concern. The purpose of this preliminary research study was to test the outcomes of one such programme, aptly called ‘Strengths Gym<sup>2</sup>’, on the LS and well-being of adolescent students. This positive psychology intervention programme is based on the entire VIA classification of character strengths and involves students completing age appropriate strengths-based exercises through in-class activities, open discussion, and real-world homework activities where they can apply the concepts and skills in their own lives.

---

<sup>2</sup> This study includes a term (Strengths Gym) that is or is asserted to be a proprietary term or trade mark. Its inclusion does not imply it has acquired for legal purposes a non-proprietary or general significance, nor is any other judgement implied concerning its legal status.

Students are provided with the opportunity to self-identify with their signature strengths at the beginning of each level of the course and to re-evaluate them before moving on to the next level.

#### *8.1.6 Indicators of Well-Being*

For the purposes of this research, LS has been chosen to serve as the key outcome variable. Life satisfaction is the cognitive, global appraisal of life as a whole (Shin & Johnson, 1978), and one of the most well-established indicators of happiness, well-being, and positive functioning (Suldo, Riley, & Shaffer, 2006). Typically, scores on self-report measures of LS are used throughout the research literature to indicate subjective feelings of happiness or unhappiness (Proctor et al., 2009b). In general, positive evaluations of LS are linked with positive functioning, whereas negative evaluations of LS are associated with depression and negative functioning (Chapter 2; see Proctor et al., 2009b for a review). Indeed, throughout the research literature adolescent LS is consistently positively associated with a vast array of personal, psychological, social, interpersonal, and intrapersonal outcomes. In fact, research has shown that youths displaying very high levels of LS (i.e., happiness) benefit from increased adaptive psychosocial functioning, intrapersonal, interpersonal, and social relationships, academic success, and decreased behavioural problems (see Gilman & Huebner, 2006; Proctor et al., 2010; Suldo & Huebner, 2006). Furthermore, LS is positively associated with multiple school-related variables, including school satisfaction, teacher support, and perceived academic achievement, competence, and self-efficacy (see Suldo et al., 2006 for a review). Moreover, research indicates that increased LS buffers against the negative effects of stress and the development of psychological disorder (Suldo & Huebner, 2004a).

Therefore, evaluation of adolescent LS levels is essential in the assessment of educational interventions aimed at increasing well-being among youths.

Traditionally, 'happiness' research has been guided by two principle conceptions of 'wellness', the balance between positive and negative affect and LS. Taken together, positive and negative affect and LS make up the emotional and cognitive components of SWB (Andrews & Withey, 1976; Diener, 1984). Therefore, measures of each of these aspects of well-being are included in this research study (i.e., LS, positive affect, negative affect). Moreover, a self-esteem measure is included here because, not only is self-esteem considered to be an important indicator of adolescent well-being among educators (see Twenge, 2006 for a review), it has also been consistently demonstrated to be positively associated with LS. For example, Diener and Diener (1995) explored the discriminate validity of self-esteem and LS among a large cross-national group of 13,118 college students and discovered a positive correlation, not only across the entire sample, but also in most nations. Similarly, moderate positive correlations are consistently found between LS and self-esteem among children and adolescents (e.g., Dew & Huebner, 1994; Huebner, 1991a; Neto, 1993).

#### *8.1.7 Study Hypotheses*

It is hypothesised that participation in Strengths Gym, a positive psychological curriculum based programme, will be beneficial for adolescents. Specifically, it is hypothesised that adolescent LS will be significantly improved among adolescents who participate in character strengths-based exercises as part of the school curriculum when compared to adolescents who do not participate in character strengths-based exercises as part of the school curriculum. Moreover, it is anticipated that adolescents who participate in the programme will have higher mean scores on positive affect and

self-esteem, and lower mean scores on negative affect at posttest than a comparison group of adolescents who did not participate in the programme.

## 8.2 Method

### 8.2.1 Participants

A convenience sample of 258 students (123 males; 135 females) adolescents from two secondary schools in Great Britain in Years 8 and 9 were recruited. The sample included 151 Year 8 and 107 Year 9 students aged 12-14 ( $M = 13.08$ ,  $SD = 0.67$ ). Data was not collected on ethnicity or SES for individual students, however both school populations were comprised primarily of lower- to middle-income Caucasian students, one located in the Channel Islands and the other in Cheshire, England.

Ethical approval to collect data for this study was secured from the University of Leicester Psychology Research Ethics Committee. Upon approval, recruitment of participants began by meeting with the head teachers of two schools in Great Britain; schools in each of the two locations of the primary researchers were approached.

### 8.2.2 Measures

1. *The Students' Life Satisfaction Scale* (SLSS; Huebner, 1991b; Huebner, 1991c) is a 7-item self-report scale which assesses global LS for students aged 8-18. Students are required to respond to each item (e.g., 'I have a good life') using a 6-point Likert scale (Strongly Disagree to Strongly Agree). Coefficient alphas have consistently been reported across all age groups for this scale in the .70 to .80 range (Huebner, Suldo, & Valois, 2003a), with one- to two-week test-retest reliability being reported at .74 (Huebner, 1991c). Overall, the SLSS has been shown to be a reliable measure of LS for students in

elementary (e.g., Terry & Huebner, 1995) ( $r = .73$ ), middle (e.g., Huebner, 1991a) ( $r = .82$ ), and high (e.g., Dew & Huebner, 1994) ( $r = .86$ ) school (see Proctor et al., 2009a for a review). Evidence of the convergent and divergent validity of the SLSS has been provided through significant positive correlations with measures of self-esteem ( $r = .65$ ) and extraversion ( $r = .23$ ), and significant negative correlations with measures of anxiety ( $r = -.51$ ), external LOC ( $r = -.48$ ), neuroticism ( $r = -.46$ ) (see Huebner, 1991a), depression ( $r = -.57$ ), loneliness ( $r = -.38$ ), and teacher ratings of classroom behaviour problems ( $r = -.35$ ) (see Huebner & Alderman, 1993). Overall, research supports the SLSS as a psychometrically sound brief measure of global LS for students aged 8-18.

2. *The Positive and Negative Affect Schedule* (PANAS; Watson et al., 1988) is a 20-item self-report measure made up of two subscales each consisting of ten items: ten positive affects (e.g., interested, excited) and ten negative affects (e.g., distressed, upset). Respondents use a 5-point Likert scale response format (Very Slightly or Not At All to Extremely) to indicate to what extent they have felt each way during the past week. Intercorrelations and internal consistency reliabilities are all acceptably high, ranging from .86 to .90 for positive affect (PA) and from .84 to .87 for negative affect (NA), whereas the correlation between the PA and NA scales is invariably low, ranging from -.12 to -.23. The PANAS has been demonstrated to compare favourably with other brief affect measures and to have good convergent correlations (.76 to .92) and acceptable divergent correlations (under -.20) with the appropriate factors of these mood scales. Similarly, the PANAS has been demonstrated to have good external validity through its correlation with measures of related constructs

(see Watson et al., 1988). In general, the PANAS is seen as a reliable, valid, and efficient means of measuring positive and negative affect.

In accordance with Joiner, Catanzaro, and Laurent (1996), to make the scale more applicable to adolescents three of the original items were amended and students were invited to ask the administering teacher if they did not know the meaning of any words. The three amended items, with original items in parentheses, are: Strong – Emotionally (Strong); Grouchy (Irritable); and Edgy (Jittery). Internal consistency reliabilities of the amended scale are in keeping with those found among previous research, ranging from .84 to .86 for PA and from .80 to .84 for NA (see Table 1). Moreover, the correlations between PA and NA in the present sample are comparable with those found among adults (e.g., Watson et al., 1988) (see Table 2). Further, these amendments were deemed more appropriate than using the PANAS-Children (Laurent et al., 1999), which was developed for use with young children.

3. *Rosenberg Self-Esteem Scale* (RSE; Rosenberg, 1965) is a 10-item self-report measure of self-esteem developed for use among adolescents. Respondents are required to respond to each item (e.g., ‘On the whole I am satisfied with myself’) using a 4-point Likert scale (Strongly Disagree to Strongly Agree); higher scores reflect higher self-esteem. Internal coefficient alphas ranging from .80 to .92 have been reported for the scale (e.g., Fleming & Courtney, 1984; Reynolds, 1988; Rosenberg, 1979; Sam, 2000), with a test-retest correlation for the total score having been reported at .82 (see Fleming & Courtney, 1984). Convergent validity for the scale has been demonstrated through negative correlations with psychological constructs associated with low self-regard, such as anxiety ( $r = -.64$ ) and depression ( $r = -.59$ ) (see

Fleming & Courtney, 1984). Discriminant validity has been demonstrated through correlations between the RSE and grade point average ( $r = .10$ ), LOC ( $r = .04$ ), and vocabulary ( $r = -.06$ ) (see Reynolds, 1988). Overall, the RSE is a psychometrically sound brief measure of global self-esteem.

### *8.2.3 Procedure*

Two secondary schools in Great Britain agreed to participate and undertook to implement the Strengths Gym programme in the curriculum. Individual class teachers administered measures to students during class time. Students were informed that the school was trialling a new programme and student materials and that the survey data would be used to assess whether or not the programme and materials would form a permanent addition to the curriculum. As implementation and evaluation of the programme as part of the curriculum fell under the discretion of the head teachers, parental consent for individual participants was not provided. However, all students were informed that their responses would remain confidential and that completion of the survey was completely voluntary.

Two hundred and fifty-eight students (123 males; 135 females) completed a paper-and-pencil survey which included: 1) student assent; 2) basic demographics; 3) the SLSS; 4) the PANAS; and 5) the RSE ( $t_0$ : baseline scores). The experimental group consisted of 114 Year 8 and 59 Year 9 students (80 males; 93 females). The comparison group consisted of 37 Year 8 and 48 Year 9 (43 males; 42 females) students. Students in the experimental group were each provided with a Year 8 (see Appendix 8.1) or Year 9 (see Appendix 8.2) work booklet according to which year they were in.

In total 487 paper-and-pencil surveys were administered at baseline. In the Channel Islands, due to the small size of the school, for convenience the experimental

group consisted of Year 8 students (four classes; 89 students) and the comparison group consisted of Year 9 students (three classes; 63 students). In Cheshire, due to limited curricular space, the participating school assigned individual classes in Year 8 (seven classes; 172 students) and Year 9 (six classes; 163 students) to the experimental (four Year 8 classes, 98 students; four Year 9 classes, 110 students) and comparison (three Year 8 classes, 74 students; two Year 9 classes, 53 students) group conditions based on convenience.

Of these 487 surveys, 146 were not completed at posttest. In the Channel Islands half of one Year 8 (15 students) and one Year 9 (32 students) class did not complete the posttest measures due to the teachers failing to distribute the surveys; a further nine Year 8 and one Year 9 were not completed by the students. In Cheshire one Year 8 (27 students) class did not complete the posttest measures due to the teacher failing to distribute the surveys; a further 17 Year 8 and 45 Year 9 were not completed by the students. No explanation for the uncompleted surveys was provided by either of the participating schools<sup>3</sup>. Therefore, a total of 341 surveys were returned for data analysis; overall return rate of 70%.

#### *8.2.4 Data Analysis*

Of the 341 returned surveys, 63 were incomplete, 7 contained identifiable response patterns (e.g., selection of all 1s or 2s), 4 contained inconsistent responding (i.e., no variability), and 9 were later confirmed as outliers. As recommended by Birnbaum (2004), these 83 individuals were removed before analysis. Therefore, a total of 258 students aged 12-14 were retained for data analysis. Among these 258 retained surveys, the midpoint between any items in which two responses were indicated was taken as the scored response. For missing items the scale total score

---

<sup>3</sup> Results of a *t*-test analysis revealed that differential attrition did not occur for the experimental group,  $t(248) = 1.77, p = .08$

was summed and divided by the number of items completed; reverse-scored items were reversed before calculation. Missing ages were assigned based on the majority of the year group (i.e., 13 for Year 8 and 14 for Year 9) and checked against baseline and posttest indications of age where available; in the Channel Islands seven students failed to indicate their age at posttest, in Cheshire six students failed to indicate their age at baseline, six at posttest, and two at both baseline and posttest.

In line with previous research, examination of the scoring distribution of all measures was conducted in order to assess for outliers and to test for multivariate normality. All scores were first transformed into  $z$  scores. As recommended by Tabachnick and Fidell (2001), all  $z$  scores in excess of the  $\pm 3.29$  range were removed. This resulted in 9 individuals being excluded from the data. Skewness and kurtosis were all within acceptable limits with the value of each variable ranging from  $-.745$  to  $.852$  for skewness and  $-.476$  to  $.243$  for kurtosis. Therefore, none of the variables included were considered to depart significantly from normality (i.e., values of 2 standard errors) (Tabachnick & Fidell, 2001).

Correlation analyses were used to assess the relationships between the study variables. Paired sample  $t$ -test analyses were used to determine significant differences between baseline and posttest scores among the study variables for both groups. Analyses of covariance (ANCOVA) were used to determine the significance of group on the dependent variable, while controlling for mean levels of the dependent variable, school, year, age, and gender. The effects of school, year, age, and gender differences were controlled for in all analyses. An alpha level of .05 was used for all statistical tests unless otherwise indicated.

#### *8.2.5 The Intervention Programme*

The Strengths Gym programme was specifically created to test the hypotheses of this preliminary research study. The aim of the programme is to encourage students to build their strengths, learn new strengths, and to recognise strengths in others. The included activities for students are called Strengths Builders and Strengths Challenges. For each lesson there is a definition of the character strength being focused on and two Strengths Builders exercises for students to choose from and a Strengths Challenge, as follow-up activity. The course has three levels for implementation in the British school curriculum: Year 7, Year 8, and Year 9. The exercises in each level are unique, but designed to be equivalent and age appropriate.

The first Strengths Builder option in each lesson is consistent at each level. For example, the first Strengths Builder option in the Year 8 booklet (see Appendix 8.1) is to tell a ‘Strengths in Action Story’ for each strength, whereas the first Strengths Builder option in the Year 9 booklet (see Appendix 8.2) is to ‘Create your own Strengths in Action Story’ for each strength. The second Strengths Builder options and Strength Challenge exercises provided in each lesson throughout and across the three booklet levels are unique to each strength and designed to encourage students to further develop their use and knowledge of the strength. These Strengths Builder and Strength Challenge exercises are comparable to those suggested by Peterson (2006), but have been adapted and created for adolescents. As noted by Peterson (2006), these types of character strengths interventions have been systematically tested (among adults) and demonstrated to have long-term positive effects on happiness.

Each booklet begins with the title ‘Spotting Your Strengths’. Strengths are defined here as ‘your best qualities’. Students are asked: ‘Which strengths do you think describe you best?’ and invited to pick five strengths from the list of 24 (VIA)

strengths and their descriptions listed on the next three pages. Once they have chosen their five strengths they are asked to write them down in the space provided on page

1. The introductory text before the first lesson reads:

Over the course of the next few months we are going to be exercising our strengths, like muscles! You will build your favourite strengths and learn to use others even more. You will become expert ‘strengths spotters’ – spotting strengths in your classmates AND your teachers. (Proctor & Fox Eades, 2009, p. 1)

The first lesson in each booklet is ‘Love of Beauty’ and the description of the strengths is again provided: ‘Love of Beauty means: You notice and love beautiful things, in nature, art, music, or people.’ In the Year 8 booklet (see Appendix 8.1), for example, the following exercises then follow:

Strengths Builders:

1. Strengths in Action Story – Can you remember a time when you or somebody you know truly showed their Love of Beauty? Write or draw or tell a story of Love of Beauty in action.
2. Animal Beauty Contest – Which animals do you consider beautiful? Why? Work with some friends to collect different examples of beautiful animals and then see if you can put them in order of beauty. Which is the most beautiful, which one comes next? Compare your list with another Group.

Strengths Challenge:

Look for beauty on your way to school. Tell a friend or family member what you noticed. (Proctor & Fox Eades, 2009, p. 5)

Each booklet level completes by providing students with the opportunity to list any strengths they found difficult but persisted to learn, space to write about things they

are proud of accomplishing, and an opportunity to re-evaluate their top five strengths now that they have had a chance to learn about all 24 character strengths.

Participating schools were supplied with the student materials at the beginning of the January 2009 term and provided with a 6-month period in which to use the materials. In the Channel Islands, the programme was incorporated into class time during weekly Personal, Social, and Health Education (PSHE) classes. In Cheshire, the programme was implemented during weekly morning tutor period. Teachers of both schools were provided with copies of the appropriate Year 8 or Year 9 student booklet (see Appendix 8.1 and 8.2) for their class and a handout containing information on character strengths, the principles behind the programme, using the programme, and the aims of the Strengths Builder and Strengths Challenge components of the student booklets. The programme was designed to be flexible in order to enable teachers to suit the needs of their individual classes. Strengths Builder and Strengths Challenge exercises can be completed solitarily or collaboratively and may vary in how long they take to complete; some may take only minutes while others may be turned into an hour long lesson, depending on the motivation and interest of the students. Therefore teachers were instructed to use the programme as it had been designed and combine teacher-led lessons, open discussion, and independent student or small group work when completing the exercises contained within the student booklets. Given the length of the programme and the varying nature of the exercises, it was anticipated that teacher's would complete approximately 50% of the 24 included lessons. Moreover, anticipating this level of completion was in keeping with the amount of sessions delivered by other similar programmes (see Seligman et al., 2009). All participants completed the survey battery again ( $t_1$ : posttest scores) at the end of term (i.e., July 2009). Participating teachers completed on average 23.25%

( $M = 5.58$  lessons, range 3-12 lessons [12.50% - 50%],  $SD = 3.51$  lessons [14.63%]) of the 24 lessons included in the programme.

In both participating schools, students attending classes assigned to the comparison condition were not required to participate in an additional activity during PSHE or morning tutor period, but attended their scheduled class as normal. Thus, in the Channel Islands, the Year 9 comparison group attended their scheduled weekly PSHE lessons, and in Cheshire, two Year 8 class and two Year 9 classes attended their scheduled morning tutor period without the inclusion of the Strengths Gym activities.

### 8.3 Results

The internal consistency reliabilities and descriptive statistics for the study variables are presented in Table 8.1. Pearson product zero-order correlations among all the variables for the experimental and comparison groups at baseline and posttest were calculated and are reported in a correlation matrix in Table 8.2.

To test the hypothesis that adolescents participating in the programme would have higher mean scores on positive affect and self-esteem, and lower mean scores on negative affect at posttest than a comparison group of adolescents who did not participate in the programme, a mean score analysis was conducted. Results revealed that adolescents participating in the programme had higher mean positive affect and self-esteem total scores, and lower mean negative affect total scores at posttest than the comparison group (see Table 8.1).

To test the hypothesis that adolescent LS would be significantly improved among adolescents who participated in character strengths-based exercises as part of the school curriculum, when compared to adolescents who did not participate in

character strengths-based programme as part of the school curriculum, an ANCOVA was conducted in which mean posttest SLSS total scores served as the dependent variable, group served as the independent variable, and mean baseline SLSS total

Table 8.1

*Descriptive Statistics for Study Variables*

Measure	Baseline		Posttest		Mean Change	<i>t</i>	<i>p</i>
	Mean (SD)	Alpha $\alpha$	Mean (SD)	Alpha $\alpha$			
Experimental Group							
SLSS	32.35 (6.25)	.86	33.12 (5.95)	.84	0.77	-2.05	.042
PA	33.66 (7.31)	.84	34.17 (7.13)	.84	0.51	-1.12	.264
NA	16.96 (5.43)	.81	16.55 (5.05)	.80	-0.41	1.12	.265
RSE	30.00 (5.39)	.88	30.60 (5.47)	.89	0.60	-1.90	.060
Comparison Group							
SLSS	33.28 (5.42)	.79	32.67 (5.53)	.81	-0.61	1.32	.191
PA	33.41 (7.34)	.86	32.76 (7.29)	.86	-0.65	.836	.405
NA	17.48 (5.83)	.84	17.16 (5.68)	.82	-0.32	.511	.611
RSE	29.73 (4.64)	.86	29.79 (5.21)	.88	0.06	-.143	.887

*Note:* Experimental Group  $n = 173$ , Comparison Group  $n = 85$ , SLSS (Students' Life Satisfaction Scale), PA (Positive Affect), NA (Negative Affect), RSE (Rosenberg Self-Esteem)

Table 8.2

*Pearson Product Correlation Coefficients for Experimental and Control Groups at Baseline and Posttest*

	Baseline				Posttest				
	LS	PA	NA	SE	LS	PA	NA	SE	
Experimental	LS	-	.58***	-.46***	.69***	-	.50***	-.50***	.61***
	PA		-	-.18*	.60***		-	-.09	.60***
	NA			-	-.48***			-	-.37***
	SE				-				-
Comparison	LS	-	.41***	-.51***	.52***	-	.42***	-.68***	.66***
	PA			-.03	.39***			-.18	.35**
	NA				-.39***				-.58***
	SE				-				-

*Note:* Experimental Group  $n = 173$ , Comparison Group  $n = 85$ , LS (Life Satisfaction), PA (Positive Affect), NA (Negative Affect), and SE (Self-Esteem).

$p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

scores, school, year, age, and gender served as covariates. Results of the ANCOVA revealed that group is a significant predictor of mean posttest SLSS total scores once mean baseline SLSS total scores, school, year, age, and gender are accounted for,  $F(1, 251) = 5.20, p = .023, r^2 = .47, \text{adjusted } r^2 = .46$ . Specifically, group accounted for 2.0% ( $\eta^2 = .020$ ) of the variance in LS. Sidak post-hoc comparisons of change in LS for the two groups from baseline to posttest indicate that the experimental group ( $M = .831, 95\% \text{ CI } [.111, 1.551]$ ) had a significantly higher change in LS from baseline to posttest than the comparison group ( $M = -.781, 95\% \text{ CI } [-1.822, .259]$ ),  $p = .014$ . No significant effects were found for school, year, age, or gender.

In order to examine if group was a significant predictor of mean posttest PA, NA, and RSE total scores once mean baseline PA, NA, and RSE total scores, school, year, age, and gender are accounted for, three additional ANCOVAs were conducted in which mean posttest scores served as the dependent variable, group served as the independent variable, and mean baseline total scores, school, year, age, and gender served as covariates. Results revealed that group is a marginally significant (Motulsky, 1995) predictor of mean posttest PA total scores (at the  $p < .10$  level) once mean baseline PA total scores, school, year, age, and gender are accounted for,  $F(1, 251) = 3.49, p = .063, r^2 = .38, \text{adjusted } r^2 = .37$ . Specifically, group accounted for 1.4% ( $\eta^2 = .014$ ) of the variance in positive affect. Results further revealed that group is not a significant predictor of mean posttest NA or RSE total scores once mean baseline NA and RSE total scores, school, year, age, and gender are accounted for,  $F(1, 251) = .70, p = .405$  and  $F(1, 251) = 1.91, p = .168$ , respectively. The covariate, school, was significantly related to mean posttest NA total scores  $F(1, 251) = .70, p = .014$ . No significant effects on mean posttest NA total scores were found for year,

age, or gender. No significant effects on mean posttest RSE total scores were found for school, year, age, or gender.

#### 8.4 Discussion

Positive psychological interventions in general, and character strengths-based activities specifically, have been demonstrated to lead to increased happiness and well-being among both adults and youth (Seligman et al., 2009; Seligman et al., 2005; Sin & Lyubomirsky, 2009). The purpose of this preliminary research study was to test the application of a general positive psychology intervention in the school curriculum, which involves exploration of the 24 VIA strengths through character strengths-based exercises, on the LS and well-being of adolescent students.

Results of this study revealed that LS was positively correlated with positive affect and self-esteem, and significantly negatively correlated with negative affect, and that each of the study variables was associated with each other in the expected direction, for both the experimental and comparison groups. In addition, analyses revealed that change in mean LS total scores from baseline to posttest was significant for the experimental group. Moreover, no significant differences in mean total scores from baseline to posttest were found among any of the study variables for the comparison group. Further, group was found to be a significant predictor of posttest LS total scores once mean baseline LS total scores, school, year, age, and gender are accounted for. Moreover, additional analyses revealed that the covariate school is significantly related to mean posttest negative affect total scores.

Similar to the findings reported by Seligman et al. (2005) among adults, this study suggests that character strengths-based exercises have a beneficial effect on adolescent happiness (i.e., LS). In general, results of this study show that regular

participation in character strengths-based exercises has a positive impact on LS among adolescents. Specifically, results of this study supported the hypothesis that adolescent LS would be significantly improved among adolescents who participated in a character strengths-based programme as part of the school curriculum, when compared to adolescents who did not participate in a character strengths-based programme as part of the school curriculum. Indeed, statistical analysis indicated that change in LS from baseline to posttest was significantly higher among the experimental group than that of the comparison group. Moreover, results supported the hypothesis that adolescents who participated in the programme would have higher mean scores on positive affect and self-esteem, and lower mean scores on negative affect at posttest than a comparison group of adolescents who did not participate in the programme. Considering the relationship between these variables and LS it is reasonable to suggest that implementation over a longer period of time may also lead to significant outcomes among these variables, however further research is required in order to confirm this.

In general, although the magnitude of the relationship between group and posttest LS determined by this study in terms of percentage of variance explained (i.e.,  $\eta^2 = .020$ ) has been classified as a small effect (Cohen, 1992; Wuensch, 2009), the findings have a measure of practical significance (Kirk, 1996). Through a simple calculation provided by Rosenthal and Rubin (1982) a general purpose effect size (the binomial effect size display) can be calculated which relates to the effect on improvement rate of an intervention. Based on this calculation the magnitude of the relationship between group and posttest LS is notable, with a correlation statistic of  $r = .14$  after controlling for baseline LS, school, year, age, and gender. Even a small  $r$  of .14 accounting for only 2% of the variance, is associated with an increase in overall

LS of 14% and an experimental group success rate of 57% (Rosenthal & Rubin, 1982). Small increases in happiness of this magnitude are not inconsequential given the occurrence of depression, maladaptive psychosocial functioning, and behavioural difficulties experienced by many during adolescence. Although extant research confirms that the majority of adolescents report average levels of LS (as evidenced by the baseline SLSS scores of the participants of this research) the importance of increasing low LS to normative levels and maintaining and increasing positive levels of LS among those reporting average levels of LS cannot be overemphasised (Chapter 2; see Proctor et al., 2009b for a review). Implementing well-being interventions and programmes in the school curriculum not only increases subjective feelings of happiness among students, but also protects them against the negative effects of stress and the development of psychopathological problems.

Overall, this preliminary research study revealed several noteworthy limitations of the research that need to be addressed prior to a future larger study being conducted. Firstly, although a convenience sample was recruited from two schools, as a result of attrition, the resultant sample size was relatively small. Findings of the current study suggest that increased effects of the programme would result from implementation on a larger scale across more schools; a suggestion further supported by the finding that the covariate school was significantly related to mean posttest negative affect total scores. Secondly, future studies examining the impact of this programme on adolescent LS should take place over the entire school year in order to ensure that teachers have enough time to build all the 24 lessons into the school curriculum and for the programme to have a greater impact. Indeed, meta-analytic research findings have shown that longer interventions are more likely to produce greater gains in well-being as participants have more time to turn the positive

activities in to habits (Sin & Lyubomirsky, 2009). Moreover, as a teacher's manual for this programme has been developed since this preliminary research study was undertaken, future research should assess the outcomes of the programme (i.e., student materials) when used in conjunction with individual lesson plans designed for the teaching of positive psychological theory in general and character strengths specifically (i.e., as presented in the teacher's manual). Further, future research may look to compare the outcome of using the teacher's manual and student booklets alone versus including a teacher training condition. Moreover, in this study participating classroom teachers administered the student surveys at baseline and posttest, future studies should have individuals not delivering the programme administer the surveys.

Thirdly, as the participants were assigned to either the experimental or comparison groups by the participating schools based on convenience, an analysis of potential differences in effectiveness of the three levels of the programme could not be conducted across the three school year groups it was designed for (i.e., Year 7, 8, and 9) and generalisability of the results was not possible. Future research is required in which randomly assigned classes from separate year groups participate in each one of the three levels of the programme in order to determine the relative effectiveness of each level. Moreover, in order to measure the integrity of the programme future studies should ensure the specific duration and intensity of the implementation of the programme. Further, longitudinal studies conducted over a 3-year period are required in order to determine any incremental effect on well-being by progressing through all three levels of the programme. In addition, future research may look to examine the differential effect on adolescent well-being of focusing on signature strengths as determined by the VIA-Youth compared to focusing broadly on all 24 VIA strengths. Finally, this study relied entirely on self-report measures to assess outcome, future

research should include the addition of objective measures of success, such as grade point average.

Preliminary findings of this research suggest that participation in character strengths-based exercises in the school curriculum, even over a short period of time, resulted in significantly increased LS and slightly increased positive affect and self-esteem. In line with Fredrickson's (2001) broaden-and-build theory of positive emotions, these findings suggest that the positive emotions experienced from building and exercising character strengths, and the increased LS that results from it, will serve to form enduring personal resources enabling youths to flourish in many areas of life. Therefore, additional research examining the impact of this intervention will be valuable to future consumers wishing to implement such programmes in the school curriculum.

#### *8.4.1 Conclusion*

In general findings of this study support the hypothesis that implementation of positive psychological theory in the school curriculum through the application of student materials specifically designed to exercise and build strengths will positively impact LS among adolescents. Overall, findings reported here are very encouraging and provide support for conducting a larger longitudinal study of the application of character strengths-based exercises in the school curriculum.

The next chapter provides an overview of the thesis and discusses the methodological and theoretical issues encountered during the course of the doctoral research.

## CHAPTER 9: Thesis Discussion and Conclusion

---

### 9.1 Review of the Thesis

The primary aim of this PhD was to develop and test a means of increasing LS among young people in the school environment. Specifically, the aim was to apply a positive psychological intervention, namely strengths-based exercises, in the school curriculum to increase overall well-being and LS among adolescents. The thesis commenced with systematic and comprehensive review of the adolescent and youth LS literature and the adolescent and youth LS measures literature (Chapter 2 and 3). These two reviews provided the foundation from which I was able to identify several areas of focus for the empirical work of the thesis.

Building on findings reported in the literature indicating the benefits of increased LS (Chapter 2), Chapter 4 examines the characteristics of young people reporting *very* high levels of LS. In general, results of this study substantiate previous research by demonstrating that very high LS is associated with an array of social, behavioural, and psychological benefits not found among young people with lower levels of LS. Specifically, I tested the hypothesis that the slope of the regression line of each predictor variable was the same for those with very high, average, and very low levels of LS. Results revealed that life meaning, gratitude, self-esteem, and positive affect had a significantly more positive influence on LS for the very unhappy than the very happy. Findings suggest that that very unhappy youths would benefit most from focused interventions aimed at boosting those variables having the most influence on their level of LS. These findings have important implications for applications in education, since it appears that facilitating increased LS through focused interventions will be associated with an array of positive outcomes.

In Chapter 5, I sought to further examine the correlates of LS among young people by considering the relationship between LS and the characteristics identified as being representative of the Rogerian fully functioning individual. Recent evidence suggests LS is an important outcome of possessing the attributes constituting what Carl Roger's (1959) defined as being 'fully functioning'. Findings demonstrated LS to be significantly positively associated with all of the characteristics identified as being characteristic of the Rogerian fully functioning individual. While the methodology employed did not enable examination of causal relationships between the variables considered, the findings contribute to the existing literature by considering variables not previously reviewed (Chapter 2) and add support to empirical research that has demonstrated LS to be positively associated with being 'fully functioning'. Moreover, the results provide support for the use of positive psychological indicator variable measurement to represent the various characteristics constituting the fully functioning individual construct and add support to existing theoretical links between positive psychology and person-centered personality theory.

Chapter 6 begins investigating the links between LS and character strengths. Specifically, in building a foundation for the primary research study, I sought to determine links between the VIA conceptualisation of 'strengths' as virtues and the generic conceptualisation of 'strengths' as personality characteristics, and their relationship to SWB and HRQOL among young people. Findings reported in the literature (Chapter 2) suggest that increased positive SWB is associated with increased mental and physical health and that strengths use is associated with overall well-being. Thus, I tested the hypothesis that generic strengths use would act as a unique predictor of SWB and HRQOL and explored whether among the VIA signature strengths most commonly-endorsed if there was a relationship between

endorsement and the degree to which generic strengths use predicts SWB. Results revealed generic strengths use to be a unique predictor of SWB, but not HRQOL. Further, results revealed generic strengths use to be a greater unique predictor of SWB among those individuals whose VIA signature strengths were associated with a life of meaning (i.e., eudaimonia). Overall, results suggest an important link between generic strengths use and character strengths and their impact on SWB. That is, it appears that there are specific benefits to well-being for individuals who both refine their natural talents through knowledge and skill and cultivate their virtues.

In Chapter 7, I began investigating the primary research project by preliminary testing the research procedure (Study 1) and developing the student materials (Study 2). Study 1 tests the application of individualised strengths-based exercises as a means of increasing LS among young people. Unfortunately, due to lack of posttest data, results of Study 1 were restricted to examination of mean baseline LS scores. Overall, findings were consistent with research that has shown that most children and adolescents report their LS to be in the positive range, however these levels tend to decline with the onset and progression of puberty (Chapter 2). Although full statistical analyses could not be conducted, the results were very informative for the preliminary development of the student materials and provided great insight into the types of procedures that need to be adopted when collecting data within the confines of the school system in general and among adolescent students specifically.

Based on the findings of the Study 1, student booklets containing exercises on each of the 24 VIA strengths were created for the purposes of Study 2 (see Appendix 7.4, Figure 7.4). Although sample bias precluded obtaining significant findings, the results of Study 2 were essential for the final development of the student materials (see Appendix 8.1 and 8.2) and in finalising the procedures to be adopted in the

subsequent key research study (Chapter 8). Specifically, the results indicated that students should be given the opportunity to choose their top character strengths from a list of the 24 VIA strengths and their corresponding descriptions and that materials created for use within the school curriculum must be of equal quality to those that students are used to using in order for the materials to be taken seriously as a course addition. Moreover, the materials must include full exploration of the 24 strengths over a longer period of time.

In Chapter 8, I conducted the primary research study by testing the research procedures and student materials developed during Study 1 and Study 2 in the school curriculum. To that end, professional looking student booklets for years 7, 8, and 9 that included full exploration of all the 24 strengths as individual lessons were created; only the Year 8 and 9 booklets were used in this research (see Appendix 8.1 and 8.2). The programme was named ‘Strengths Gym’ and was designed for application in PSHE, making it easy for participating teachers to integrate it into the existing curriculum. In general, findings supported the hypothesis that implementation of positive psychological theory in the school curriculum through the application of student materials specifically designed to exercise and build strengths has a positive impact on LS and well being among adolescents. Overall, results suggest that regular participation in character strengths-based exercises in the school curriculum is associated with increased LS and well-being among young people.

#### *9.1.1 Strengths and Limitations*

Overall, the thesis makes a considerable contribution to the knowledge area. Specifically, the published articles that have resulted from the doctoral research have each made a unique contribution to the knowledge area. In particular, the LS literature review and LS measures literature review provide a systematic and comprehensive

assessment of the current knowledge of adolescent and youth LS and the measures applicable for use among young people. The value of these reviews is evidenced not only by the fact that no other such systematic and comprehensive analyses had been previously conducted, but also by the timely nature of the reviews given the resurgence of interest in LS as a result of the recent positive psychology movement. Moreover, these reviews provided a firm foundation from which to investigate areas where there were notable dearths in the research literature and provided grounding for approaching the primary aim of the thesis.

Other notable strengths of the thesis are evidenced by the size and diversity of samples recruited for the published research studies, the range and complexity of statistical analyses employed, the inclusion of previously unconsidered variables, and the development of student materials. For example, recruitment of participants via the Internet (Chapter 4) resulted in a broad range of participants residing in locations not only across the whole of the UK, but also Europe, India, the Middle East, Australia, America, Canada, Mexico, Africa, and the Caribbean. Moreover, advanced statistical methods (e.g., comparing the slopes of the regression lines of predictor variables) were employed to address important, previously unanswered, questions, such as which variables have the most impact on level of LS among young people (Chapter 4). Moreover, the research included previously unconsidered variables (e.g., environmental views and altruism (Chapter 4); authenticity, organismic valuing, basic psychological needs, and strengths use (Chapter 5)), and investigated previously unconsidered links (e.g., between the VIA conceptualisation of ‘strengths’ as virtues and the generic conceptualisation of ‘strengths’ as personality characteristics (Chapter 6) and LS and the characteristics of the ‘fully functioning individual’ (Chapter 5)) in the literature and their relationship to LS and well-being among young people.

Finally, the research was successful in developing (Chapter 7; see Appendix 7.4, Figure 7.4) and testing (Chapter 8) student materials (see Appendix 8.1 and 8.2) designed to enhance LS through the application of strengths-based exercises in the school curriculum.

Notwithstanding the contributions to the literature and the notable strengths of the research conducted, several limitations are noteworthy. Firstly, the majority of the research was cross-sectional in nature and future research would greatly benefit from longitudinal examinations in order to determine change in LS over time. Secondly, and more importantly, the research conducted relied entirely on self-report questionnaire methodologies. Although the validity of the self-report questionnaire method is often viewed as problematic, it is the most common type of measurement in educational research (McMillan, 2000). Self-report questionnaires are used extensively with students because they provide the best way of obtaining information for a wide range of research questions and personality traits, and they are in a format which students and teachers are used to; i.e., the instruments are designed so that educators without clinical training can understand them and their administration (McMillan, 2000). Moreover, self-report measures are appropriate for use in educational research because they are not typically intended to identify psychopathology, such as in clinical psychology (McMillan, 2000). Indeed, SWB is defined in terms of the internal response of the respondent and is measured from an individual's own perspective, a characteristic which differentiates the field from traditional clinical psychology (in clinical evaluations of mental health, psychologists usually consider measures in addition to SWB in making their evaluation) (Diener et al., 1997). Similarly, LS as a component of SWB is a subjective self-report of an individual's satisfaction with their life, and therefore application of self-report

measures in this research was appropriate.

Nevertheless, it is clear that there is a need for variability in assessment and the application of multimethod approaches in order for more comprehensive evaluation of these constructs. Measures based on diverse methodologies help rule out artifactual explanations of the self-report data (Diener et al., 1997). For example, self-reports could be considered in addition to experience sampling methods that assess subjective feelings of LS in situ, thereby circumventing biases with memory, momentary moods, and situational factors that may effect responding (Diener, 2000; Scollon, Kim-Prieto, & Diener, 2003). Additional methods, such as physiological (e.g., electrophysiological measures), motivational, and cognitive methods, parent, peer, and teacher reports of observed behaviour, memory and reaction time measures, and emotion-sensitive tasks may also be included in a complete assessment (Diener, 2000; Diener et al., 1997; Larsen & Prizmic-Larsen, 2006; Sandvik, Diener, & Seidlitz, 1993). Finally, a fundamental methodological shortcoming of the preliminary research (Chapter 7) and the key research (Chapter 8) studies was lack of random assignment of participants; i.e., a randomised control trial design. Although random assignment in schools is usually not possible on the student level, a two-stage cluster sampling design could be applied in future research; i.e., random assignment of schools, then individual classrooms. Similarly, in order to take into consideration the nested nature of the data it would be beneficial to apply a multilevel model (Peugh, 2010) or stage model design (Rounsaville, Carroll, & Onken, 2001).

### *9.1.2 Tensions Between Rogerian and Positive Psychological Approaches*

Chapter 5 considers links between person-centered personality theory and positive psychology by examining whether positive psychological indicator variable measurement could be used to represent the various characteristics constituting what

Roger's (1959) defined as the fully functioning individual. As noted in Chapter 5, the metatheoretical assumptions of person-centred theory have been shown to be consistent with and provide grounding for positive psychological research (e.g., Joseph & Linley, 2004; Patterson & Joseph, 2007). Indeed, there is growing empirical support in positive psychology for the theoretical assumptions of Rogerian theory (see Chapter 5 for a review). Nevertheless, despite the links between them, there are noteworthy tensions between the two approaches. For example, person-centered theory is a non-directive client led technique, whereas positive psychological techniques (interventions) are directive, that is they involve treatment methods or intentional activities (such as gratitude exercises) that aim to cultivate positive feelings, behaviours, or cognitions (Sin & Lyubomirsky, 2009). Moreover, despite noted similarities, positive psychology has been criticized for failing to acknowledge its humanistic psychology roots, to which person-centered theory is firmly tied. As noted by Wood and Tarrier (2010), positive psychology has often overstated its claims to novelty in studying the positive, when in fact many psychologists have called for an increased focus on positive topics including Gordon Allport (personality psychology), Carl Rogers, Abraham Maslow, and Erich Fromm (humanistic psychology), and Rollo May (existential psychology). Indeed, the term 'positive psychology' was coined by Maslow over four decades ago (Maslow, 1999). Further, in common with other humanistic approaches, Rogerian theory has articulated 'meta-assumptions' (see Rogers, 1959, 1961) about human nature, whereas positive psychology does not have any explicit conceptualisations.

Another noteworthy departure between the two approaches includes conflict between experiential versus scientific (or qualitative versus quantitative) methods. Seligman and Csikszentmihalyi (2000) outline a framework for a 'science' of positive

psychology that is as methodologically rigorous as that of clinical psychology, which historically has been based on the medical model. Indeed, experiential (qualitative) methods have been somewhat devalued by positive psychology (Seligman & Csikszentmihalyi, 2000). Rogers (1960) however saw the value in both the experiential and the scientific method and proposed that the issues between them could be partially resolved through an integrated approach; nevertheless, the majority of research into Rogerian theory has been qualitative in nature and not quantitative. Finally, to date positive psychological interventions have not been well validated (see Wood & Tarrrier, 2010 for a review), whereas in contrast person-centered theory has a long history of documented success. In fact, non-directive counselling based on the work of Rogers (1967) has been shown to be as successful at reducing depression as cognitive behaviour therapy (Ward et al., 2000). To date, it remains unclear as to how positive psychological interventions could be put together to form a ‘therapy’ rather than bolt on techniques to existing approaches.

### *9.1.3 Criticisms of Positive Psychological Approaches*

With the advent of positive psychology came a resurgence of interest in examinations of the positive aspects of life in psychological research (Seligman & Csikszentmihalyi, 2000). Despite this beneficial outcome, positive psychology has attracted considerable criticism. These criticisms pertain in large part to conceptualisations of positive psychology as a ‘movement’ and not to the importance or viability of research into positive functioning (Wood & Tarrrier, 2010). Indeed, positive psychological interventions have been demonstrated to enhance well-being and decrease depressive symptoms and to make viable contribution to clinical treatment methodologies (see Sin & Lyubomirsky, 2009 for a review). Nevertheless, positive psychology has been criticised for several notable shortcomings: (1) for

alienating counselling psychologists who have long used approaches for improving positive functioning in their practice, such as Roger's Person Centred Therapy (Chapter 5); (2) for overly focusing on the positive and neglecting the negative; and (3) for inadequate evaluation of interventions, especially inappropriate use of control groups (see Wood & Tarrier, 2010 for a review).

In conducting the key research study, a positive psychological intervention (i.e., strengths-based exercises) was utilised as a means of increasing LS among young people, which was the primary aim and interest of the doctoral research. As noted in section 9.1.1, and reviewed in the discussion sections of Chapters 7 and 8, several methodological and theoretical issues emerged over the course of the thesis, including use of convenience samples and non-randomised participant groups. In line with the noted criticisms of positive psychological approaches, this aspect of the research 'makes interpretation of the effect of positive interventions difficult and claims for the efficacy of such interventions premature' (Wood & Tarrier, 2010, p. 824). Therefore, the outcomes of applying a positive psychological approach in the primary research study are to be considered in light of the limitations of the research and viewed with caution. Overall, the findings are in accordance with other studies examining the benefits of exercising strengths and the results support research demonstrating that participation in positive psychological interventions has a positive outcome (see Sin & Lyubomirsky, 2009). Nevertheless, in heeding the criticisms that have justly been put forth, it is important to avoid the mistake of overemphasising the outcomes of the research until the developed intervention (i.e., Strengths Gym) can be thoroughly evaluated in practice; including being trialled under more controlled conditions, among a larger randomised sample, across a longer period of time, and the results replicated in additional studies.

## 9.2 Conclusion

Fundamental to the discovering how we achieve happiness is determining the way in which young people perceive their lives. Developing methods to build life satisfaction in order to buffer against the development of problems is imperative to the positive development of young people. This thesis has investigated the life satisfaction construct as it pertains to young people and added considerably to the knowledge area. The various research studies conducted have expanded on extant findings, explored previously unconsidered variables, investigated previously unconsidered links in the literature, and developed and tested an intervention programme aimed at increasing life satisfaction. Overall, the findings of this research have revealed that ensuring basic satisfaction with existence among young people is as important today as it has been throughout history, if not more so.

## REFERENCES

- Accordino, D. B., Accordino, M. P., & Slaney, R. B. (1999). An investigation of perfectionism, mental health, achievement, and achievement motivation in adolescents. *Psychology in the Schools, 37*, 535-545.
- Adelman, H. S., Taylor, L., & Nelson, P. (1989). Minors' dissatisfaction with their life circumstances. *Child Psychiatry and Human Development, 20*, 135-147.
- Alfonso, V. C., Allison, D. B., Rader, D. E., & Gorman, B. S. (1996). The extended satisfaction with life scale: Development and psychometric properties. *Social Indicators Research, 38*, 275-301.
- Amato, P. R. (1994). Father-child relations, mother-child relations, and offspring psychological well-being in early adulthood. *Journal of Marriage and Family, 56*, 1031-1042.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders (4th ed.)*. Washington, DC: Author.
- Anderson, G., & Arsenault, N. (1998). *Fundamentals of educational research*. London: Routledge, Taylor & Francis Group.
- Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: Americans' perceptions of life quality*. New York, NY: Plenum.
- Argyle, M., & Lu, L. (1990a). Happiness and social skills. *Personality and Individual Differences, 11*, 1255-1261.
- Argyle, M., & Lu, L. (1990b). The happiness of extraverts. *Personality and Individual Differences, 11*, 1011-1017.
- Aristotle. (c. 330 BCE/1925). *The Nicomachean Ethics* (D. Ross, Trans.). New York, NY: Oxford.

- Arrindell, W. A., Heesink, J., & Feij, J. A. (1999). The Satisfaction With Life Scale (SWLS): Appraisal with 1700 healthy young adults in The Netherlands. *Personality and Individual Differences, 26*, 815-826.
- Arrindell, W. A., Meeuwesen, L., & Huyse, F. J. (1991). The satisfaction with life scale (SWLS): Psychometric properties in a non-psychiatric medical outpatients sample. *Personality and Individual Differences, 12*, 117-123.
- Ash, C., & Huebner, E. S. (1998). Life satisfaction reports of gifted middle-school children. *School Psychology Quarterly, 13*, 310-321.
- Ash, C., & Huebner, E. S. (2001). Environmental events and life satisfaction reports of adolescents: A test of cognitive mediation. *School Psychology International, 22*, 320-336.
- Asher, S. R., & Hopmeyer, A. (1997). Loneliness in childhood. In G. G. Bear, K. M. Minke & A. Thomas (Eds.), *Children's needs II: Development, problems and alternatives* (pp. 279-292). Bethesda, MD: National Association of School Psychologists.
- Assor, A., Roth, G., & Deci, E. L. (2004). The emotional costs of parents' conditional regard: A self-determination theory analysis. *Journal of Personality, 72*, 47-88.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Birnbaum, M. H. (2001). *Introduction to behavioral research on the Internet*. Upper Saddle River, NJ: Prentice Hall.
- Birnbaum, M. H. (2004). Human research and data collection via the Internet. *Annual Review of Psychology, 55*, 803-832.
- Biswas-Diener, R. (2006). From the Equator to the North Pole: A study of character strengths. *Journal of Happiness Studies, 7*, 293-310.

- Blom-Hoffman, J., Edwards George, J. B., & Franko, D. L. (2006). Childhood overweight. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention and intervention* (pp. 989-1000). Bethesda, MD: National Association of School Psychologists.
- Borgers, N., & Hox, J. (2001). Item nonresponse in questionnaire research with children. *Journal of Official Statistics, 17*, 321-335.
- Bradburn, N. M. (1969). *The structure of psychological well-being*. Chicago: Aldine.
- Bradley, R. H., & Corwyn, R. F. (2004). Life satisfaction among European American, African American, Chinese American, Mexican American, and Dominican American adolescents. *International Journal of Behavioral Development, 28*, 385-400.
- Braithwaite, V., & Devine, C. (1993). Life satisfaction and adjustment of children of alcoholics: The effects of parental drinking, family disorganization and survival roles. *British Journal of Clinical Psychology, 32*, 417-429.
- Bramston, P., Bruggerman, K., & Pretty, G. (2002). Community perspectives and subjective quality of life. *International Journal of Disability, Development and Education, 49*, 385-397.
- Brantley, A., Huebner, E. S., & Nagle, R. J. (2002). Multidimensional life satisfaction reports of adolescents with mild mental disabilities. *Mental Retardation, 40*, 321-329.
- Bromley, E., Johnson, J. G., & Cohen, P. (2006). Personality strengths in adolescence and decreased risk of developing mental health problems in early adulthood. *Comprehensive Psychiatry, 47*, 315-324.
- Brown, A. C., & Orthner, D. K. (1990). Relocation and personal well-being among early adolescents. *Journal of Early Adolescence, 10*, 366-381.

- Brown, T. N., Wallace, J. M., & Williams, D. R. (2001). Race-related correlates of young adults' subjective well-being. *Social Indicators Research, 53*, 97-116.
- Callahan, M. R., Tolman, R. M., & Saunders, D. G. (2003). Adolescent dating violence victimization and psychological well-being. *Journal of Adolescent Research, 18*, 664-681.
- Cantril, H. (1965). *The patterns of human concern*. New Brunswick, NJ: Rutgers University Press.
- Casas, F., Gonzalez, M., Figuer, C., & Coenders, G. (2004). Subjective well-being, values and goal achievement: The case of planned versus by chance searches on the Internet. *Social Indicators Research, 66*, 123-141.
- CASEL. (2009). Collaborative for Academic, Social, and Emotional Learning. *Standards and policies: SEL policy*, Retrieved January 5, 2010 from: <http://www.casel.org/standards/policy.php>.
- Cassell, J. (2002). Perturbing the system: "Hard science," "soft science," and social science, the anxiety and madness of method. *Human Organization, 61*, 177-185.
- Cattell, R. B. (1966). The scree test for number of factors. *Multivariate Behavioral Research, 1*, 245-276.
- Chang, L., McBride-Chang, C., Stewart, S. M., & Au, E. (2003). Life satisfaction, self-concept, and family relations in Chinese adolescents and children. *International Journal of Behavioral Development, 27*, 182-189.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods, 4*, 62-83.

- Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior, 25*, 375-395.
- Chen, M.-Y., Wang, E. K., & Chang, C.-J. (2006). Cross-validation and discriminant validity of Adolescent Health Promotion scale among overweight and nonoverweight adolescents in Taiwan. *Public Health Nursing, 23*, 555-560.
- Chen, M.-Y., Wang, K. E., Yang, R.-J., & Liou, Y.-M. (2003). Adolescent Health Promotion scale: Development and psychometric testing. *Public Health Nursing, 20*, 104-110.
- Clifton, D. O., & Anderson, E. (2002). *StrengthsQuest: Discover and develop your strengths, in academics, career, and beyond*. Washington, DC: The Gallup Organization.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New Jersey: Lawrence Erlbaum.
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.
- Coker, A. L., McKeown, R. E., Sanderson, M., Davis, K. E., Valois, R. F., & Huebner, E. S. (2000). Severe dating violence and quality of life among South Carolina high school students. *American Journal of Preventive Medicine, 19*, 220-227.
- Constantine, M. G., Alleyne, V. L., Wallace, B. C., & Franklin-Jackson, D. C. (2006). Africentric cultural values: Their relation to positive mental health in African American adolescent girls. *Journal of Black Psychology, 32*, 141-154.
- Costa, P. T., Jr., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology, 38*, 668-678.

- Cowen, E. L. (1991). In pursuit of wellness. *American Psychologist*, 46, 404-408.
- Creed, P. A., Muller, J., & Patton, W. (2003). Leaving high school: The influence and consequences for psychological well-being and career-related confidence. *Journal of Adolescence*, 26, 295-311.
- Csikszentmihalyi, M. (2002). *Flow: The classic work on how to achieve happiness*. London: Rider.
- Cummins, R. A. (1995). On the trail of the gold standard for subjective well-being. *Social Indicators Research*, 35, 179-200.
- Cummins, R. A. (1997a). *Manual for the Comprehensive Quality of Life Scale - Adult Version: ComQol-A5 (Fifth Edition)*. Melbourne: School of Psychology Deakin University.
- Cummins, R. A. (1997b). *Manual for the Comprehensive Quality of Life Scale - Intellectual/Cognitive Disability: ComQol-I5 (Fifth Edition)*. Melbourne: School of Psychology Deakin University.
- Cummins, R. A. (1997c). *Manual for the Comprehensive Quality of Life Scale - School Version (Grades 7-12): ComQol-S5 (Fifth Edition)*. Melbourne: School of Psychology Deakin University.
- Cummins, R. A. (2002). Caveats to the Comprehensive Quality of Life Scale. <http://acpol.deakin.edu.au/instruments/index.html>.
- Cummins, R. A., & Lau, A. L. (2005a). *Personal Wellbeing Index - Intellectual Disability (PWI-ID) 3rd Edition*. Melbourne: School of Psychology, Deakin University.
- Cummins, R. A., & Lau, A. L. (2005b). *Personal Wellbeing Index - Pre-School (PWI-PS) 2nd Edition*. Melbourne: School of Psychology, Deakin University.

- Cummins, R. A., & Lau, A. L. (2005c). *Personal Wellbeing Index - School Children (PWI-SC) 3rd Edition*. Melbourne: School of Psychology, Deakin University.
- Cummins, R. A., McCabe, M. P., Romeo, Y., & Gullone, E. (1994). The Comprehensive Quality of Life Scale (ComQol): Instrument development and psychometric evaluation on college staff and students. *Educational and Psychological Measurement, 54*, 372-382.
- Damon, W. (2004). What is positive youth development? *Annals of the American Academy of Political and Social Science, 591*, 13-24.
- Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- Demo, D. H., & Acock, A. C. (1996). Family structure, family process, and adolescent well-being. *Journal of Research on Adolescence, 6*, 457-488.
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin, 124*, 197-229.
- Dew, T., & Huebner, E. S. (1994). Adolescents' perceived quality of life: An exploratory investigation. *Journal of School Psychology, 33*, 185-199.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542-575.
- Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research, 31*, 103-157.
- Diener, E. (1996). Traits can be powerful, but are not enough: Lessons from subjective well-being. *Journal of Research in Personality, 30*, 389-399.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist, 55*, 34-43.

- Diener, E., & Diener, C. (1996). Most people are happy. *Psychological Science, 7*, 181-185.
- Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 68*, 653-663.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*, 71-75.
- Diener, E., & Seligman, M. E. P. (2002). Very happy people. *Psychological Science, 13*, 81-84.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being three decades of progress. *Psychological Bulletin, 125*, 276-302.
- Diener, E., Suh, E. M., & Oishi, S. (1997). Recent findings on subjective well-being. *Indian Journal of Clinical Psychology, 24*, 25-41.
- Donohue, B., Teichner, G., Azrin, N., Weintraub, N., Crum, T. A., Murphy, L., et al. (2003). Initial reliability and validity of the Life Satisfaction Scale for Problem Youth in a sample of drug abusing and conduct disordered youth. *Journal of Child & Family Studies, 12*, 453-464.
- Due, P., Holstein, B. E., Ito, H., & Groth, M. V. (1991). Diet and health behaviour in Danish children aged 11-15 years. *Tandlaegernes Tidsskr, 6*, 232-237.
- Eid, M., & Diener, E. (2004). Global judgments of subjective well-being: Situational variability and long-term stability. *Social Indicators Research, 65*, 245-277.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology, 51*, 1058-1068.
- Emmons, R. A., & Diener, E. (1985). Personality correlates of subjective well-being. *Personality and Social Psychology Bulletin, 11*, 89-97.

- Emmons, R. A., & Diener, E. (1986). A goal-affect analysis of everyday situational choices. *Journal of Research in Personality, 20*, 309-326.
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology, 84*, 377-389.
- Enns, M. W., & Cox, B. J. (1999). Perfectionism and depression symptom severity in major depressive disorder. *Behaviour Research and Therapy, 37*, 783-794.
- Epstein, J. C., & McPartland, J. M. (1977). *The Quality of School Life Scale*. Riverside, CA: Riverside.
- Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck Personality Questionnaire*. London: Hodder & Stoughton Educational.
- Fabricatore, A. N., & Handal, P. J. (2000). Personal spirituality as a moderator of the relationship between stressors and subjective well-being. *Journal of Psychology and Theology, 28*, 221-228.
- Fagin-Jones, S., & Midlarsky, E. (2007). Courageous altruism: Personal and situational correlates of rescue during the Holocaust. *Journal of Positive Psychology, 2*, 136-147.
- Feather, N. T., & O'Brien, G. E. (1986). A longitudinal study of the effects of employment and unemployment on school-leavers. *Journal of Occupational Psychology, 59*, 121-144.
- Fleming, J. S., & Courtney, B. E. (1984). The dimensionality of self-esteem: II. Hierarchical facet model for revised measurement scales. *Journal of Personality and Social Psychology, 46*, 404-421.
- Flouri, E., & Buchanan, A. (2002). Life satisfaction in teenage boys: The moderating role of father involvement and bullying. *Aggressive Behavior, 28*, 126-133.

- Fogle, L. M., Huebner, E. S., & Laughlin, J. E. (2002). The relationship between temperament and life satisfaction in early adolescence: Cognitive and behavioral mediation models. *Journal of Happiness Studies, 3*, 373-392.
- Fordyce, M. W. (1977). Development of a program to increase personal happiness. *Journal of Counseling Psychology, 24*, 511-521.
- Forman, S. G., Bry, B. H., & Urga, P. A. (2006). Substance abuse. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 1011-1023). Bethesda: National Association of School Psychologists.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.
- Friedman, E. T., Schwartz, R. M., & Haaga, D. A. F. (2002). Are the very happy too happy? *Journal of Happiness Studies, 3*, 355-372.
- Frisch, M. B., Cornell, J., Villanueva, M., & Retzlaff, P. J. (1992). Clinical validation of the Quality of Life Inventory. A measure of life satisfaction for use in treatment planning and outcome assessment. *Psychological Assessment, 4*, 92-101.
- Froh, J. J., Sefick, W. J., & Emmons, R. A. (2008). Counting blessings in early adolescents: An experimental study of gratitude and subjective well-being. *Journal of School Psychology, 46*, 213-233.
- Fruyt, F., & Denollet, J. (2002). Type D personality: A five-factor model perspective. *Psychology and Health, 17*, 671-683.

- Funk, B. A., Huebner, E. S., & Valois, R. F. (2006). Reliability and validity of a brief life satisfaction scale with a high school sample. *Journal of Happiness Studies*, 7, 41-54.
- Gagne, M. (2003). The role of autonomy support and autonomy orientation in prosocial engagement. *Motivation and Emotion*, 27, 199-223.
- Geraghty, A. W. A., Wood, A. M., & Hyland, M. E. (2010a). Attrition from self-directed interventions: Investigating the relationship between psychological predictors, intervention content and dropout from a body dissatisfaction intervention. *Social Science and Medicine*, 71, 300-337.
- Geraghty, A. W. A., Wood, A. M., & Hyland, M. E. (2010b). Dissociating the faces of hope: Agency and pathways predict dropout from unguided self-help therapy in opposite directions. *Journal of Research in Personality*, 44, 155-158.
- Gilligan, T. D., & Huebner, E. S. (2002). Multidimensional life satisfaction reports of adolescents: A multitrait-multimethod study. *Personality and Individual Differences*, 32, 1149-1155.
- Gilligan, T. D., & Huebner, E. S. (2007). Initial development and validation of the Multidimensional Students' Life Satisfaction Scale-Adolescent Version. *Applied Research in Quality of Life*, 2, 1-16.
- Gilman, R. (2001). The relationship between life satisfaction, social interest, and frequency of extracurricular activities among adolescent students. *Journal of Youth and Adolescence*, 30, 749-767.
- Gilman, R., & Ashby, J. S. (2003). A first study of perfectionism and multidimensional life satisfaction among adolescents. *Journal of Early Adolescence*, 23, 218-235.

- Gilman, R., & Ashby, J. S. (2006). Perfectionism. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention and intervention* (pp. 303-312). Bethesda, MD: National Association of School Psychologists.
- Gilman, R., Ashby, J. S., Sverko, D., Florell, D., & Varjas, K. (2005). The relationship between perfectionism and multidimensional life satisfaction among Croatian and American youth. *Personality and Individual Differences, 39*, 155-166.
- Gilman, R., & Barry, J. (2003). Life satisfaction and social desirability among adolescents in a residential treatment setting: Changes across time. *Residential Treatment for Children and Youth, 21*, 19-42.
- Gilman, R., Dooley, J., & Florell, D. (2006). Relative levels of hope and their relationship with academic and psychological indicators among adolescents. *Journal of Social and Clinical Psychology, 25*, 166-178.
- Gilman, R., Easterbrooks, S. R., & Frey, M. (2004a). A preliminary study of multidimensional life satisfaction among deaf/hard of hearing youth across environmental settings. *Social Indicators Research, 66*, 143-164.
- Gilman, R., & Handwerk, M. L. (2001). Changes in life satisfaction as a function of stay in a residential setting. *Residential Treatment for Children and Youth, 18*, 47-65.
- Gilman, R., & Huebner, E. S. (1997). Children's reports of their life satisfaction: Convergence across raters, time and response format. *School Psychology International, 18*, 229-243.
- Gilman, R., & Huebner, E. S. (2000). Review of life satisfaction measures for adolescents. *Behaviour Change, 17*, 178-195.

- Gilman, R., & Huebner, E. S. (2003). A review of life satisfaction research with children and adolescents. *School Psychology Quarterly, 18*, 192-205.
- Gilman, R., & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence, 35*, 311-319.
- Gilman, R., Huebner, E. S., & Laughlin, J. E. (2000). A first study of the Multidimensional Students' Life Satisfaction Scale with adolescents. *Social Indicators Research, 52*, 135-160.
- Gilman, R., Huebner, E. S., Tian, L., Park, N., O'Byrne, J., Schiff, M., et al. (2008). Cross-national adolescent multidimensional life satisfaction reports: Analyses of mean scores and response style differences. *Journal of Youth and Adolescence, 37*, 142-154.
- Gilman, R., Meyers, J., & Perez, L. (2004b). Structured extracurricular activities among adolescents: Findings and implications for school psychologists. *Psychology in the Schools, 41*, 31-41.
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about Internet questionnaires. *American Psychologist, 59*, 93-104.
- Govindji, R., & Linley, P. A. (2007). Strengths use, self-concordance and well-being: Implication for Strengths Coaching and Coaching Psychologist. *International Coaching Psychology Review, 2*, 143-153.
- Greenberg, M. T., Siegel, J. M., & Leitch, C. J. (1983). The nature and importance of attachment relationships to parents and peers during adolescence. *Journal of Youth and Adolescence, 12*, 373-386.
- Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredricks, L., Resnik, H., et al. (2003). Enhancing school-based prevention and youth development

- through coordinated social, emotional, and academic learning. *American Psychologist*, *58*, 466-474.
- Greene, S. M., Anderson, E. R., Doyle, E. A., & Riedelbach, H. (2006). Divorce. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention and intervention* (pp. 745-757). Bethesda, MD: National Association of School Psychologists.
- Greenspoon, P. J., & Saklofske, D. H. (1997). Validity and reliability of the Multidimensional Students' Life Satisfaction Scale with Canadian children. *Journal of Psychoeducational Assessment*, *15*, 138-155.
- Greenspoon, P. J., & Saklofske, D. H. (1998). Confirmatory factor analysis of the multidimensional students' life satisfaction scale. *Personality and Individual Differences*, *25*, 965-972.
- Greenspoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective well-being and psychopathology. *Social Indicators Research*, *54*, 81-108.
- Gregg, P. M., & Salisbury, P. S. (2004). Confirming and expanding the usefulness of the Extended Satisfaction With Life Scale (ESWLS). *Social Indicators Research*, *54*, 1-16.
- Griffin, M. D., & Huebner, E. S. (2000). Multidimensional life satisfaction reports of middle school students with serious emotional disturbance. *Journal of Psychoeducational Assessment*, *18*, 111-124.
- Grossman, M., & Rowat, K. M. (1995). Parental relationships, coping strategies, received support and well-being in adolescents of separated or divorced and married parents. *Research in Nursing & Health*, *18*, 249-261.
- Guijarro, S., Naranjo, J., Padilla, M., Gutierrez, R., Lammers, C., & Blum, R. W. (1999). Family risk factors associated with adolescent pregnancy: Study of a

- group of adolescent girls and their families in Ecuador. *Journal of Adolescent Health, 25*, 166-172.
- Gullone, E., & Cummins, R. A. (1999). The Comprehensive Quality of Life Scale: A psychometric evaluation with an adolescent sample. *Behavior Change, 16*, 127-139.
- Gurin, G., Veroff, J., & Feld, S. (1960). *American's view of their mental health*. New York: Basic Books.
- Halvorsen, I., & Heyerdahl, S. (2006). Girls with anorexia nervosa as young adults: Personality, self-esteem, and life satisfaction. *International Journal of Eating Disorders, 39*, 285-293.
- Hanrahan, S. J. (2005). Using psychological skills training from sport psychology to enhance the life satisfaction of adolescent Mexican Orphans. *Athletic Insight: Online Journal of Sport Psychology, 7*, no pagination specified. Retrieved June 14, 2006 from <http://www.athleticinsight.com>.
- Haranin, E. C., Huebner, E. S., & Suldo, S. M. (2007). Predictive and incremental validity of global and domain-based adolescent life satisfaction reports. *Journal of Psychoeducational Assessment, 25*, 127-138.
- Headey, B., Kelley, J., & Wearing, A. (1993). Dimensions of mental health: Life satisfaction, positive affect, anxiety, and depression. *Social Indicators Research, 29*, 63-82.
- Headey, B., & Wearing, A. (1989). Personality, life events, and subjective well-being: Toward a dynamic equilibrium model. *Journal of Personality and Social Psychology, 57*, 731-739.

- Heaven, P., Searight, H. R., Chastain, J., & Skitka, L. J. (1996). The relationship between perceived family health and personality functioning among Australian adolescents. *American Journal of Family Therapy, 24*, 358-366.
- Heaven, P. C. L. (1989). Extraversion, neuroticism and satisfaction with life among adolescents. *Personality and Individual Differences, 10*, 489-492.
- Hofer, J., & Chasiotis, A. (2003). Congruence of life goals and implicit motives as predictors of life satisfaction: Cross-cultural implications of a study of Zambian male adolescents. *Motivation and Emotion, 27*, 251-272.
- Hofman, J. E., Beit-Hallahmi, B., & Hertz-Lazarowitz, R. (1982). Self-concept of Jewish and Arab adolescents in Israel. *Journal of Personality and Social Psychology, 43*, 786-792.
- Holstein, B. E., Ito, H., & Due, P. (1990). Physical exercise among school children. A nation-wide sociomedical study of 1,671 children 11-15 years of age. *Ugeskr Laeger, 152*, 2721-2727.
- Homel, R., & Burns, A. (1989). Environmental quality and the well-being of children. *Social Indicators Research, 21*, 133-158.
- Honkala, S., Hondala, E., & Al-Sahli, N. (2006). Consumption of sugar products and associated life- and school-satisfaction and self-esteem factors among schoolchildren in Kuwait. *Acta Odontologica Scandinavica, 64*, 79-88.
- Huebner, E. S. (1991a). Correlates of life satisfaction in children. *School Psychology Quarterly, 6*, 103-111.
- Huebner, E. S. (1991b). Further validation of the Students' Life Satisfaction Scale: The independence of satisfaction and affect ratings. *Journal of Psychoeducational Assessment, 9*, 363-368.

- Huebner, E. S. (1991c). Initial development of the Students' Life Satisfaction Scale. *School Psychology International, 12*, 231-240.
- Huebner, E. S. (1994a). Conjoint analyses of the Students' Life Satisfaction Scale and the Piers-Harris Self-Concept Scale. *Psychology in the Schools, 31*, 273-277.
- Huebner, E. S. (1994b). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment, 6*, 149-158.
- Huebner, E. S. (1995). The Students' Life Satisfaction Scale: An assessment of psychometric properties with black and white elementary school students. *Social Indicators Research, 34*, 315-323.
- Huebner, E. S. (1998). Cross-racial application of a children's multidimensional life satisfaction scale. *School Psychology International, 19*, 179-188.
- Huebner, E. S. (2001). Manual for the Multidimensional Student's Life Satisfaction Scale.
- Huebner, E. S. (2004). Research on assessment of life satisfaction of children and adolescents. *Social Indicators Research, 66*, 3-33.
- Huebner, E. S. (2006). Life Satisfaction. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 357-368). Bethesda, MD: National Association of School Psychologists.
- Huebner, E. S., & Alderman, G. L. (1993). Convergent and discriminant validation of a children's life satisfaction scale: Its relationship to self- and teacher-reported psychological problems and school functioning. *Social Indicators Research, 30*, 71-82.
- Huebner, E. S., Brantley, A., Nagle, R., & Valois, R. F. (2002). Correspondence between parent and adolescent ratings of life satisfaction for adolescents with

and without mental disabilities. *Journal of Psychoeducational Assessment*, 20, 20-29.

Huebner, E. S., & Dew, T. (1993a). An evaluation of racial bias in a life satisfaction scale. *Psychology in the Schools*, 30, 305-309.

Huebner, E. S., & Dew, T. (1993b). Is life satisfaction multidimensional? The factor structure of the Perceived Life Satisfaction Scale. *Journal of Psychoeducational Assessment*, 11, 345-350.

Huebner, E. S., & Dew, T. (1993c). Validity of the Perceived Life Satisfaction Scale. *School Psychology International*, 14, 355-360.

Huebner, E. S., & Dew, T. (1996). The interrelationships of positive affect, negative affect and life satisfaction, in an adolescent sample. *Social Indicators Research*, 38, 129-137.

Huebner, E. S., Drane, J. W., & Valois, R. F. (2000a). Levels and demographic correlates of adolescent life satisfaction reports. *School Psychology International*, 21, 281-292.

Huebner, E. S., Funk, B. A., & Gilman, R. (2000b). Cross-sectional and longitudinal psychosocial correlates of adolescent life satisfaction reports. *Canadian Journal of School Psychology*, 16, 53-64.

Huebner, E. S., & Gilman, R. (2002). An introduction to the Multidimensional Students Life Satisfaction Scale. *Social Indicators Research*, 60, 115-122.

Huebner, E. S., Gilman, R., & Laughlin, J. E. (1999). A multimethod investigation of the multidimensionality of children's well-being reports: Discriminant validity of life satisfaction and self-esteem. *Social Indicators Research*, 46, 1-22.

- Huebner, E. S., Laughlin, J. E., Ash, C., & Gilman, R. (1998). Further validation of the Multidimensional Students' Life Satisfaction Scale. *Journal of Psychoeducational Assessment, 16*, 118-134.
- Huebner, E. S., Suldo, S. M., Smith, L. C., & McKnight, C. G. (2004a). Life satisfaction in children and youth: Empirical foundations and implications for school psychologists. *Psychology in the Schools, 41*, 81-93.
- Huebner, E. S., Suldo, S. M., & Valois, R. F. (2003a). Psychometric properties of two brief measures of children's life satisfaction: The Students' Life Satisfaction Scale (SLSS) and the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). Paper prepared for the Indicators of Positive Development Conference, Washington, DC.
- Huebner, E. S., Suldo, S. M., & Valois, R. F. (2003b, March). *Psychometric properties of two brief measures of children's life satisfaction: The Students' Life Satisfaction Scale and the Brief Multidimensional Students' Life Satisfaction Scale*. Paper presented at the Child Trends, Indicators of Positive Development Conference, Washington, DC.
- Huebner, E. S., Suldo, S. M., Valois, R. F., Drane, J. W., & Zullig, K. J. (2004b). Brief Multidimensional Students' Life Satisfaction Scale: Sex, race, and grade effects in a high school sample. *Psychological Reports, 94*, 351-356.
- Huebner, E. S., Valois, R. F., Paxton, R. J., & Drane, J. W. (2005). Middle school students' perceptions of quality of life. *Journal of Happiness Studies, 6*, 15-24.
- Hultell, D., & Gustavsson, J. P. (2008). A psychometric evaluation of the Satisfaction With Life Scale in a Swedish nationwide sample of university students. *Personality and Individual Differences, 44*, 1070-1079.

- International-Wellbeing-Group. (2006). *Personal Wellbeing Index: 4th Edition*. Melbourne: Australian Centre on Quality of Life, Deakin University ([http://www.deakin.edu.au/research/acqol/instruments/wellbeing\\_index.htm](http://www.deakin.edu.au/research/acqol/instruments/wellbeing_index.htm)).
- Jaffee, S., Caspi, A., Moffitt, T. E., Belsky, J., & Silva, P. (2001). Why are children born to teen mothers at risk for adverse outcomes in young adulthood? Results from a 20-yr longitudinal study. *Development and Psychopathology, 12*, 377-397.
- Joiner, T. E., Catanzaro, S. J., & Laurent, J. (1996). Tripartite structure of positive and negative affect, depression, and anxiety in child and adolescent psychiatric inpatients. *Journal of Abnormal Psychology, 105*, 401-409.
- Jorgensen, I. S., & Nafstad, H. E. (2004). Positive psychology: Historical, philosophical, and epistemological perspectives. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 15-34). Hoboken, NJ: John Wiley & Sons, Inc.
- Joseph, S., & Linley, P. A. (2004). Positive therapy: A positive psychological theory of therapeutic practice. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 354-368). Hoboken, NJ: Wiley.
- Joseph, S., Linley, P. A., Harwood, J., Lewis, C. A., & McCollam, P. (2004). Rapid assessment of well-being: The Short Depression-Happiness Scale (SDHS). *Psychology and Psychotherapy: Theory, Research and Practice, 77*, 463-478.
- Joseph, S., & Wood, A. M. (2010). Assessment of positive functioning in clinical psychology: Theoretical and practical issues. *Clinical Psychology Review, 30*, 830-838.

- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology, 90*, 257-268.
- Kamman, R., Farry, M., & Herbison, P. (1984). The analysis and measurement of happiness as a sense of well-being. *Social Indicators Research, 15*, 91-116.
- Kasser, T. (2004). The good life or the goods life? Positive psychology and personal well-being in the culture of consumption. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 55-67). Hoboken, NJ: Wiley.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65*, 410-422.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*, 280-287.
- Kasser, T., Ryan, R. M., Zax, M., & Sameroff, A. J. (1995). The relations of maternal and social environments to late adolescents' materialistic and prosocial values. *Developmental Psychology, 31*, 907-914.
- Keyes, C. L. M. (2002). Mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior, 43*, 207-222.
- Kirk, R. E. (1996). Practical significance: A concept whose time has come. *Educational and Psychological Measurement, 56*, 746-759.
- Knee, C. R., & Zuckerman, M. (1996). Causality orientations and the disappearance of the self-serving bias. *Journal of Research in Personality, 30*, 76-87.

- Kovacs, M. (1981). Rating scales to assess depression in school-aged children. *Acta Paedopsychiatrica: International Journal of Child & Adolescent Psychiatry*, 46, 305-315.
- Kovacs, M. (1992). *Children's Depression Inventory: Manual*. New York: Multi-Health Systems.
- Kuntsche, E. N., & Gmel, G. (2004). Emotional wellbeing and violence among social and solitary risky single occasion drinkers in adolescence. *Addiction*, 99, 331-339.
- Langeveld, J. H., Koot, H. M., Loonen, M. C., Hazebroek-Kampschreur, A. A. J. M., & Passchier, J. (1996). A quality of life instrument for adolescents with chronic headache. *Cephalalgia*, 16, 183-196.
- Langeveld, J. H., Koot, H. M., & Passchier, J. (1997). Headache intensity and quality of life in adolescents: How are changes in headache intensity in adolescents related to changes in experienced quality of life? *Headache: The Journal of Head and Face Pain*, 37, 37-42.
- Langeveld, J. H., Koot, H. M., & Passchier, J. (1999). Do experienced stress and trait negative affectivity moderate the relationship between headache and quality of life in adolescents? *Journal of Pediatric Psychology*, 24, 1-11.
- Larsen, R. J., & Prizmic-Larsen, Z. (2006). Measuring emotions: Implications of a multimethod perspective. In M. Eid & E. Diener (Eds.), *Handbook of multimethod measurement in psychology* (pp. 337-351). Washington, DC: American Psychological Association.
- Larson, R. W. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55, 170-183.

- Larson, R. W., & Richards, M. H. (1991). Daily companionship in late childhood and early adolescence: Changing developmental contexts. *Child Development, 62*, 284-300.
- Laurent, J., Cantanzaro, J. S., Thomas, J. E., Rudolph, D. K., Potter, K. I., Lambert, S., et al. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment, 11*, 326-338.
- Lessing, E. E. (1972). Extension of personal future time perspective, age, and life satisfaction of children and adolescents. *Developmental Psychology, 6*, 457-468.
- Leung, C., Pe-Pua, R., & Karnilowicz, W. (2006). Psychological adaptation and autonomy among adolescents in Australia: A comparison of Anglo-Celtic and three Asian groups. *International Journal of Intercultural Relations, 30*, 99-118.
- Leung, C. Y. W., McBride-Chang, C., & Lai, B. P. Y. (2004). Relations among maternal parenting style, academic competence, and life satisfaction in Chinese early adolescents. *Journal of Early Adolescence, 24*, 113-143.
- Leung, J. P., & Leung, K. (1992). Life satisfaction, self-concept, and relationship with parents in adolescence. *Journal of Youth and Adolescence, 21*, 653-665.
- Leung, J. P., & Zhang, L. (2000). Modelling life satisfaction of Chinese adolescents in Hong Kong. *International Journal of Behavioral Development, 24*, 99-104.
- Lewinsohn, P. M., Redner, J. E., & Seeley, J. R. (1991). The relationship between life satisfaction and psychosocial variables: New perspectives. In F. Strack, M. Argyle & N. Schwarz (Eds.), *Subjective well-being: An interdisciplinary perspective* (pp. 141-169). New York, NY: Pergamon Press.

- Lewis, C. A., Shevlin, M. E., Bunting, B. P., & Joseph, S. (1995). Confirmatory factor analysis of the Satisfaction With Life Scale: Replication and methodological refinement. *Perceptual and Motor Skills, 80*, 304-306.
- Liebkind, K., & Jasinskaja-Lahti, I. (2000). Acculturation and psychological well-being among immigrant adolescents in Finland: A comparative study of adolescents from different cultural backgrounds. *Journal of Adolescent Research, 15*, 446-469.
- Linley, P. A. (2008). *Average to A+: Realising strengths in yourself and others*. Coventry: CAPP Press.
- Linley, P. A., Fells, L., McSorley, B., & Kasser, T. (2004). Children's intrinsic and extrinsic values: Sources of internalization and implications for well-being. Unpublished manuscript.
- Linley, P. A., & Harrington, S. (2006). Strengths coaching: A potential-guided approach to coaching psychology. *International Coaching Psychology Review, 1*, 37-46.
- Liu, W., Tian, L., & Gilman, R. (2005). A cross-cultural study on life satisfaction between Chinese and American middle-school students. *Chinese Mental Health Journal, 19*, 319-321.
- Locke, E. A. (2002). Setting goals for life and happiness. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 299-312). New York: Oxford University Press.
- Lombardi, D. N., Florentino, M. C., & Lombardi, A. J. (1998). Perfectionism and abnormal behavior. *The Journal of Individual Psychology, 54*, 61-71.
- Lopez, S. J., Snyder, C. R., Magyar-Moe, J. L., Edwards, L. M., Pedrotti, J. T., Janowski, K., et al. (2004). Strategies for accentuating hope. In P. A. Linley &

- S. Joseph (Eds.), *Positive psychology in practice* (pp. 388-404). Hoboken, NJ: John Wiley & Sons.
- Lucas, R. E., Diener, E., & Suh, E. M. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology, 71*, 616-628.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131*, 803-855.
- MacDonald, J. M., Piquero, A. R., Valois, R. F., & Zullig, K. J. (2005). The relationship between life satisfaction, risk-taking behaviors, and youth violence. *Journal of Interpersonal Violence, 20*, 1495-1518.
- Maddux, J. E. (2002). Self-efficacy: The power of believing you can. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 277-287). New York: Oxford University Press.
- Man, P. (1991). The influence of peers and parents on youth life satisfaction in Hong Kong. *Social Indicators Research, 24*, 347-365.
- Marsh, H. W. (1990). *The Self-Description Questionnaire-II*. San Antonio, TX: Psychological Corporation.
- Maslow, A. (1999). *Toward a psychology of being*. New York: John Wiley & Sons.
- Maslow, A., & Richard, J. L. (1999). *Toward a psychology of being*. New York: John Wiley & Sons.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper.
- Maton, K. I. (1990). Meaningful involvement in instrumental activity and well-being: Studies of older adolescents and at risk urban teen-agers. *American Journal of Community Psychology, 18*, 297-320.
- McCrae, R. R., & Costa, P. T. (1983). Social desirability scales: More substance than style. *Journal of Consulting and Clinical Psychology, 51*, 882-888.

- McCullough, G., & Huebner, E. S. (2003). Life satisfaction reports of adolescents with learning disabilities and normally achieving adolescents. *Journal of Psychoeducational Assessment, 21*, 311-324.
- McCullough, G., Huebner, E. S., & Laughlin, J. E. (2000). Life events, self-concept, and adolescents positive subjective well-being. *Psychology in the Schools, 37*, 281-290.
- McFarlane, A. H., Bellissimo, A., & Norman, G. R. (1995). Family structure, family functioning and adolescent well-being: The transcendent influence of parental style. *Journal of Child Psychology and Psychiatry, 36*, 847-864.
- McKnight, C. G., Huebner, E. S., & Suldo, S. M. (2002). Relationships among stressful life events, temperament, problem behavior, and global life satisfaction in adolescents. *Psychology in the Schools, 39*, 677-687.
- McMillan, J. H. (2000). *Educational research: Fundamentals for the consumer*. New York, NY: Addison Wesley Longman, Inc.
- Moore, D., & Schultz, N. R. (1983). Loneliness at adolescence: Correlates, attributions, and coping. *Journal of Youth and Adolescence, 12*, 95-100.
- Moore, K. A., & Lippman, L. H. (2005). Introduction and conceptual framework. In K. A. Moore & L. H. Lippman (Eds.), *What do children need to flourish: Conceptualizing and measuring indicators of positive development* (pp. 1-10). New York, NY: Springer Science & Business Media.
- Morojele, N. K., & Brook, J. S. (2004). Sociodemographic, sociocultural, and individual predictors of reported feelings of meaninglessness among South African adolescents. *Psychological Reports, 95*, 1271-1278.
- Motulsky, H. (1995). *Intuitive biostatistics*. New York, NY: Oxford University Press, Inc.

- Muscari-Tomaioli, G., Allegri, F., Miali, E., Pomposelli, R., Tubia, P., Targhetta, A., et al. (2001). Observational study of the quality of life in patients with headache, receiving homeopathic treatment. *The British Homeopathic Journal* 90, 189-197.
- Myers, D. G., & Diener, E. (1996). The pursuit of happiness. *Scientific American*, 274, 70-73.
- Neto, F. (1993). The Satisfaction With Life Scale: Psychometrics properties in an adolescent sample. *Journal of Youth and Adolescence*, 22, 125-134.
- Neto, F. (2001). Satisfaction with life among adolescents from immigrant families in Portugal. *Journal of Youth and Adolescence*, 30, 53-67.
- Neugarten, B. L., Havighurst, R. J., & Tobin, S. S. (1961). The measurement of life satisfaction. *Journal of Gerontology*, 16, 134-143.
- Newcomb, M. D., Bentler, P. M., & Collins, C. (1986). Alcohol use and dissatisfaction with self and life: A longitudinal analysis of young adults. *Journal of Drug Issues*, 63, 479-494.
- Nickerson, A. B., & Nagle, R. (2004). The influence of parent and peer attachments on life satisfaction in middle childhood and early adolescence. *Social Indicators Research*, 66, 35-60.
- Nowicki, S., & Strickland, B. R. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology*, 40, 148-154.
- Oishi, S., Diener, E., Lucas, R. E., & Suh, E. M. (1999). Cross-cultural variations in predictors of life satisfaction: Perspectives from needs and values. *Personality and Social Psychology Bulletin*, 25, 980-990.
- Oishi, S., Diener, E., Suh, E. M., & Lucas, R. E. (1999). Value as a moderator in subjective well-being. *Journal of Personality*, 67, 157-184.

- Oliva, A., & Arranz, E. (2005). Sibling relationships during adolescence. *European Journal of Developmental Psychology, 2*, 253-270.
- Ortman, P. E. (1988). Adolescents' perceptions of and feelings about control and responsibility in their lives. *Adolescence, 23*, 913-924.
- Otake, K., Shimai, S., Tanaka-Matsumi, J., Otsui, K., & Frederickson, B. L. (2006). Happy people become happier through kindness: A counting kindnesses intervention. *Journal of Happiness Studies, 7*, 361-375.
- Park, N. (2004). Character strengths and positive youth development. *The Annals of the American Academy of Political and Social Science, 591*, 40-54.
- Park, N. (2005). Life satisfaction among Korean children and youth: A developmental perspective. *School Psychology International, 26*, 209-223.
- Park, N., & Huebner, E. S. (2005). A cross-cultural study of the levels and correlates of life satisfaction among adolescents. *Journal of Cross-Cultural Psychology, 36*, 444-456.
- Park, N., Huebner, E. S., Laughlin, J. E., Valois, R. F., & Gilman, R. (2004a). A cross-cultural comparison of the dimensions of child and adolescent life satisfaction reports. *Social Indicators Research, 66*, 61-79.
- Park, N., & Peterson, C. (2006a). Character strengths and happiness among young children: Content analysis of parental descriptions. *Journal of Happiness Studies, 7*, 323-341.
- Park, N., & Peterson, C. (2006b). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. *Journal of Adolescence, 29*, 891-909.

- Park, N., & Peterson, C. (2009). Strengths of character in schools. In R. Gilman, E. S. Huebner & M. J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 65-76). New York, NY: Routledge.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004b). Strengths of character and well-being. *Journal of Social and Clinical Psychology, 23*, 603-619.
- Park, N., Peterson, C., & Seligman, M. E. P. (2006). Character strengths in fifty-four nations and the fifty US states. *The Journal of Positive Psychology, 1*, 118-129.
- Patterson, T. G., & Joseph, S. (2006). Development of a self-report measure of unconditional positive regard. *Psychology and Psychotherapy: Theory, Research and Practice, 79*, 557-570.
- Patterson, T. G., & Joseph, S. (2007). Person-centered personality theory: Support from self-determination theory and positive psychology. *Journal of Humanistic Psychology, 47*, 117-139.
- Patton, W., & Noller, P. (1984). Unemployment and youth: A longitudinal study. *Australian Journal of Psychology, 36*, 339-413.
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment, 5*, 164-172.
- Pavot, W., & Diener, E. (2004). Findings of subjective well-being: Applications to public policy, clinical interventions, and education. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 679-692). Hoboken, NJ: John Wiley & Sons, Inc.
- Pavot, W., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the Satisfaction With Life Scale: Evidence of cross-method convergence of well-being measures. *Journal of Personality Assessment, 57*, 149-161.

- Peterson, C. (2003). Early intervention from the perspective of positive psychology. *Prevention & Treatment*, 6, no pagination specified. Retrieved April 15, 2006, from <http://search.epnet.com/login.aspx?direct=true&db=pdh&an=pre2635c>.
- Peterson, C. (2006). *A primer in positive psychology*. New York, NY: Oxford University Press.
- Peterson, C., & Park, N. (2004). Classification and measurement of character strengths: Implications for practice. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 433-446). Hoboken, NJ: John Wiley & Sons, Inc.
- Peterson, C., Park, N., & Seligman, M. E. P. (2006). Greater strengths of character and recovery from illness. *Journal of Positive Psychology*, 1, 17-26.
- Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. P. (2007). Strengths of character, orientation to happiness, and life satisfaction. *Journal of Positive Psychology*, 2, 149-156.
- Peterson, C., & Seligman, M. E. P. (2003). Character strengths before and after September 11. *Psychological Science*, 14, 381-384.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A classification and handbook*. Washington, DC: American Psychological Association.
- Peugh, J. L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology*, 48, 85-112.
- Phinney, J. S., & Ong, A. D. (2002). Adolescent-parent disagreements and life satisfaction in families from Vietnamese- and European-American backgrounds. *International Journal of Behavioral Development*, 26, 556-561.

- Piers, E. V., & Harris, D. B. (1984). *Piers-Harris Children's Self-Concept Scale*. Los Angeles, CA: Western Psychological Service.
- Piko, B. F., & Keresztes, N. (2006). Physical activity, psychosocial health, and life goals among youth. *Journal of Community Health, 31*, 136-145.
- Piko, B. F., Luszczynska, A., Gibbons, F. X., & Tekozel, M. (2005). A culture-based study of personal and social influences of adolescent smoking. *European Journal of Public Health, 15*, 393-398.
- Pinquart, M., Silbereisen, R. K., & Juang, L. P. (2004). Moderating effects of adolescents' self-efficacy beliefs on psychological responses to social change. *Journal of Adolescent Research, 19*, 340-359.
- Pons, D., Atienza, F. L., Balaguer, I., & Garcia-Merita, M. L. (2000). Satisfaction With Life Scale: Analysis of factorial invariance for adolescents and elderly persons. *Perceptual and Motor Skills, 91*, 62-68.
- Pretty, G., Rapley, M., & Bramston, P. (2002). Neighbourhood and community experience, and the quality of life of rural adolescents with and without an intellectual disability. *Journal of Intellectual and Developmental Disability, 27*, 106-116.
- Proctor, C. L., & Fox Eades, J. M. (2009). *Strengths Gym: Year 8*. St. Peter Port, Guernsey: Positive Psychology Research Centre.
- Proctor, C. L., Linley, P. A., & Maltby, J. (2009a). Youth life satisfaction measures: A review. *Journal of Positive Psychology, 4*, 128-144.
- Proctor, C. L., Linley, P. A., & Maltby, J. (2009b). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies, 10*, 583-630.

- Proctor, C. L., Linley, P. A., & Maltby, J. (2010). Very happy youths: Benefits of very high life satisfaction among youths. *Social Indicators Research, 98*, 519-532.
- Proctor, C. L., Maltby, J., & Linley, P. A. (2011a). Strengths use as a predictor of well-being and health-related quality of life. *Journal of Happiness Studies, 12*, 153-169.
- Proctor, C. L., Maltby, J., Wood, A. M., Linley, P. A., & Fox Eades, J. M. (2011b). Strengths Gym: The impact of a character strengths-based intervention on the life satisfaction and well-being of adolescents. *Journal of Positive Psychology*, Submitted.
- Reynolds, C. R., & Kamphaus, R. W. (1992). *Manual for the Behavioral Assessment System for Children*. Circle Pines, MN: American Guidance Service, Inc.
- Reynolds, W. M. (1988). Measurement of academic self-concept in college students. *Journal of Personality Assessment, 52*, 223-240.
- Rigby, B. T., & Huebner, E. S. (2005). Do causal attributions mediate the relationship between personality characteristics and life satisfaction in adolescence? *Psychology in the Schools, 42*, 91-99.
- Rigby, K. (2000). Effect of peer victimization in schools and perceived social support on adolescent well-being. *Journal of Adolescence, 23*, 57-68.
- Roberts, R. E., Alegria, M., Roberts, C. R., & Chen, I. G. (2005). Concordance of reports of mental health functioning by adolescents and their caregivers: A comparison of European, African and Latino Americans. *Journal of Nervous and Mental Disease, 193*, 528-534.
- Roberts, R. E., Roberts, C. R., & Chen, I. G. (2002). Impact of insomnia on future functioning of adolescents. *Journal of Psychosomatic Research, 53*, 561-569.

- Rogers, C. R. (1959). A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science: Vol. 3. Formulations of the person and the social context* (pp. 184-256). New York: McGraw-Hill.
- Rogers, C. R. (1960). Persons of science? A philosophical question. *American Psychologist*, *57*, 289-290.
- Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Rogers, C. R. (1967). *On becoming a person: A therapist's view of psychotherapy*. London: Constable.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton: Princeton University Press.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Rosenthal, R., & Rubin, D. B. (1982). A simple, general purpose display of magnitude of experimental effect. *Journal of Educational Psychology*, *74*, 166-169.
- Rounsaville, B. J., Carroll, K. M., & Onken, L. S. (2001). A stage model of behavioral therapies research: Getting started and moving on from Stage 1. *Clinical Psychology: Science and Practice*, *8*, 133-142.
- Sam, D. L. (2000). Psychological adaptation of adolescents with immigrant backgrounds. *Journal of Social Psychology*, *140*, 5-25.
- Sandvik, E., Diener, E., & Seidlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality*, *61*, 317-342.
- Sastre, M. T. M., & Ferriere, G. (2000). Family "decline" and the subjective well-being of adolescents. *Social Indicators Research*, *49*, 69-82.

- Scherbaum, C. A., Cohen-Charash, Y., & Kern, M. J. (2006). Measuring general self-efficacy: A comparison of three measures using item response theory. *Educational and Psychological Measurement, 66*, 1047-1063.
- Schiff, M., Nebe, S., & Gilman, R. (2006). Life satisfaction among Israeli youth in residential treatment care. *British Journal of Social Work, 36*, 1325-1343.
- Schilmoeller, G. L., Baranowski, M. D., & Higgins, B. S. (1991). Long-term support and personal adjustment of adolescent and older mothers. *Adolescence, 26*, 787-797.
- Scollon, C. N., Kim-Prieto, C., & Diener, E. (2003). Experience sampling: Promises and pitfalls, strengths and weaknesses. *Journal of Happiness Studies, 4*, 5-34.
- SEAL. (2010). Social and Emotional Aspects of Learning: Improving behaviour, improving learning. *Department of Education: The national strategies*, Retrieved January 5, 2010 from <http://nationalstrategies.standards.dcsf.gov.uk/primary/publications/banda/seal>
- Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: positive psychology and classroom interventions. *Oxford Review of Education, 35*, 293-311.
- Seligman, M. E. P. (2002a). *Authentic happiness: Using the new possible psychology to realize your potential for lasting fulfillment*. New York: Free Press.
- Seligman, M. E. P. (2002b). Positive psychology, positive prevention, and positive therapy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 3-9). New York: Oxford University Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*, 5-14.

- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist, 60*, 410-421.
- Seligson, J., Huebner, E. S., & Valois, R. F. (2003). Preliminary validation of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). *Social Indicators Research, 61*, 121-145.
- Seligson, J., Huebner, E. S., & Valois, R. F. (2005). An investigation of a brief life satisfaction scale with elementary school children. *Social Indicators Research, 73*, 355-374.
- Shek, D. T. L. (1998). Adolescent positive mental health and psychological symptoms: A longitudinal study in a Chinese context. *Psychologia: An International Journal of Psychology in the Orient, 41*, 217-225.
- Shek, D. T. L. (2003a). A longitudinal study of parenting and adolescent adjustment in Chinese adolescents with economic disadvantage. *International Journal of Adolescent Medicine and Health, 15*, 39-49.
- Shek, D. T. L. (2003b). Economic stress, psychological well-being and problem behavior in Chinese adolescents with economic disadvantage. *Journal of Youth and Adolescence, 32*, 259-266.
- Shek, D. T. L. (2004). Chinese cultural beliefs about adversity: It's relationship to psychological well-being, school adjustment and problem behaviour in Hong Kong adolescents with and without economic disadvantage. *Childhood, 11*, 63-80.
- Shek, D. T. L. (2005a). A longitudinal study of Chinese cultural beliefs about adversity, psychological well-being, delinquency and substance abuse in

- Chinese adolescents with economic disadvantage. *Social Indicators Research*, 71, 385-409.
- Shek, D. T. L. (2005b). A longitudinal study of perceived family functioning and adolescent adjustment in Chinese adolescents with economic disadvantage. *Journal of Family Issues*, 26, 518-543.
- Shek, D. T. L. (2005c). Economic stress, emotional quality of life, and problem behavior in Chinese adolescents with and without economic disadvantage. *Social Indicators Research*, 71, 363-383.
- Shek, D. T. L. (2005d). Paternal and maternal influences on the psychological well-being, substance abuse, and delinquency of Chinese adolescents experiencing economic disadvantage. *Journal of Clinical Psychology*, 63, 219-234.
- Shek, D. T. L. (2005e). Perceived parental control processes, parent-child relational qualities, and psychological well-being in Chinese adolescents with and without economic disadvantage. *Journal of Genetic Psychology*, 166, 171-188.
- Sheldon, K. M., Arndt, J., & Houser-Marko, L. (2003). In search of the Organismic Valuing Process: The human tendency to move towards beneficial goal choices. *Journal of Personality*, 71, 835-869.
- Sheldon, K. M., & Elliot, A. J. (1993). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76, 482-497.
- Shevlin, M. E., Brunsten, V., & Miles, J. N. V. (1998). Satisfaction With Life Scale: Analysis of factorial invariance, mean structures and reliability. *Personality and Individual Differences*, 25, 911-916.

- Shevlin, M. E., & Bunting, B. P. (1994). Confirmatory factor analysis of the Satisfaction With Life Scale. *Perceptual and Motor Skills, 79*, 1316-1318.
- Shimai, S., Otake, K., Park, N., Peterson, C., & Seligman, M. E. P. (2006). Convergence of character strengths in American and Japanese young adults. *Journal of Happiness Studies, 7*, 311-322.
- Shin, D., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research, 5*, 475-492.
- Shogren, K. A., Lopez, S. J., Wehmeyer, M. L., Little, T. D., & Pressgrove, C. (2006). The role of positive psychology constructs in predicting life satisfaction in adolescents with and without cognitive disabilities: An exploratory study. *The Journal of Positive Psychology, 1*, 37-52.
- Siegel, D. J. (1999). *The developing mind: How relationships and the brain interact to shape who we are*. New York, NY: The Guilford Press.
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology, 65*, 467-487.
- Smith, D. C., Adelman, H. S., Nelson, P., Taylor, L., & Phares, V. (1987). Students' perception of control at school and problem behavior and attitudes. *Journal of School Psychology, 25*, 167-176.
- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., et al. (1997). The development and validation of the Children's Hope Scale (CHS). *Journal of Pediatric Psychology, 22*, 399-421.
- Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2002). Hope theory: A member of the positive psychology family. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 257-276). New York: Oxford University Press.

- Steinberg, L. (1987). Impact of puberty on family relations: Effects of pubertal status and pubertal timing. *Developmental Psychology, 23*, 451-460.
- Stevenson, W., Maton, K. I., & Teti, D. M. (1999). Social support, relationship quality, and well-being among pregnant adolescents. *Journal of Adolescence, 22*, 109-121.
- Stoiber, K. C., & McIntyre, H. (2006). Adolescent pregnancy and parenting. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 705-719). Bethesda, MD: National Association of School Psychologists.
- Suldo, S. M., & Huebner, E. S. (2004a). Does life satisfaction moderate the effects of stressful events on psychopathological behavior during adolescence? *School Psychology Quarterly, 19*, 93-105.
- Suldo, S. M., & Huebner, E. S. (2004b). The role of life satisfaction in the relationship between authoritative parenting dimensions and adolescent problem behavior. *Social Indicators Research, 66*, 165-195.
- Suldo, S. M., & Huebner, E. S. (2006). Is extremely high life satisfaction during adolescence advantageous? *Social Indicators Research, 78*, 179-203.
- Suldo, S. M., Riley, K. N., & Shaffer, E. J. (2006). Academic correlates of children and adolescents' life satisfaction. *School Psychology International, 27*, 567-582.
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review, 37*, 52-68.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Needham Heights, MA: Allyn & Bacon.

- Tanaka, H., Mollborg, P., Terashima, S., & Borres, M. P. (2005). Comparison between Japanese and Swedish schoolchildren in regards to physical symptoms and psychiatric complaints. *Acta Paediatrica, 94*, 1661-1666.
- Terry, T., & Huebner, E. S. (1995). The relationship between self-concept and life satisfaction in children. *Social Indicators Research, 35*, 39-52.
- Thatcher, W. G., Reininger, B. M., & Drane, J. W. (2002). Using path analysis to examine adolescent suicide attempts, life satisfaction and health risk behavior. *Journal of School Health, 72*, 71-77.
- Turner-Bowker, D. M., Bayliss, M. S., Ware, J. E., & Kosinski, M. (2003). Usefulness of the SF-8™ Health Survey for comparing the impact of migraine and other conditions. *Quality of Life Research, 12*, 1003-1012.
- Twenge, J. M. (2006). *Generation me*. New York, NY: Free Press.
- Ullman, C., & Tatar, M. (2001). Psychological adjustment among Israeli adolescents immigrants: A report on life satisfaction, self-concept, and self-esteem. *Journal of Youth and Adolescence, 30*, 449-464.
- Unger, D. G., & Wandersman, L. P. (1988). The relation of family and partner support to the adjustment of adolescent mothers. *Child Development, 59*, 1056-1060.
- Valle, M. F., Huebner, E. S., & Suldo, S. M. (2004). Further evaluation of the Children's Hope Scale. *Journal of Psychoeducational Assessment, 22*, 320-337.
- Valois, R. F., Paxton, R. J., Zullig, K. J., & Huebner, E. S. (2006). Life satisfaction and violent behaviors among middle school students. *Journal of Child and Family Studies, 15*, 695-707.

- Valois, R. F., Zullig, K. J., Huebner, E. S., & Drane, J. W. (2001). Relationship between life satisfaction and violent behaviours among adolescents. *American Journal of Health Behavior, 25*, 353-366.
- Valois, R. F., Zullig, K. J., Huebner, E. S., & Drane, J. W. (2003). Dieting behaviors, weight perceptions, and life satisfaction among public high school adolescents. *Eating Disorders: The Journal of Treatment & Prevention, 11*, 271-288.
- Valois, R. F., Zullig, K. J., Huebner, E. S., & Drane, J. W. (2004a). Life satisfaction and suicide among high school adolescents. *Social Indicators Research, 66*, 81-105.
- Valois, R. F., Zullig, K. J., Huebner, E. S., & Drane, J. W. (2004b). Physical activity behaviors and perceived life satisfaction among public high school adolescents. *Journal of School Health, 74*, 59-65.
- Valois, R. F., Zullig, K. J., Huebner, E. S., Kammermann, S. K., & Drane, J. W. (2002). Association between life satisfaction and sexual risk-taking behaviors among adolescents. *Journal of Child & Family Studies, 11*, 427-440.
- Van Selm, K., Sam, D. L., & Van Oudenhoven, J. P. (1997). Life satisfaction and competence of Bosnian refugees in Norway. *Scandinavian Journal of Psychology, 38*, 143-149.
- Varni, J. W., Katz, E. R., Seid, M., Quiggins, D. J. L., Friedman an-Bender, A., & Castro, C. M. (1998). The Pediatric Cancer Quality of Life Inventory (PCQL). I. Instrument development, descriptive, descriptive statistics, and cross-informant variance. *Journal of Behavioral Medicine, 21*, 179-204.
- Veenhoven, R. (1988). The utility of happiness. *Social Indicators Research, 20*, 333-354.

- Veenhoven, R., & Verkuyten, M. (1989). The well-being of only children. *Adolescence, 24*, 155-166.
- Verkuyten, M. (1986). The impact of ethnic and sex differences on happiness among adolescents in the Netherlands. *Journal of Social Psychology, 126*, 259-260.
- Verkuyten, M. (1989). Happiness among adolescents in the Netherlands: Ethnic and sex differences. *Psychological Reports, 65*, 577-578.
- Vilhjalmsson, R. (1994). Effects of social support on self-assessed health in adolescence. *Journal of Youth and Adolescence, 23*, 437-452.
- Vilhjalmsson, R., & Thorlindsson, T. (1992). The integrative and physiological effects of sport participation: A study of adolescents. *Sociological Quarterly, 33*, 637-647.
- Ward, E., King, M., Lloyd, M., Bower, P., Sibbald, B., Farrelly, S., et al. (2000). Randomised controlled trial of non-directive counselling, cognitive-behaviour therapy, and usual general practitioner care for patients with depression. *British Medical Journal, 321*, 1383-1388.
- Ware, J. E., Kosinski, M., Dewey, J. E., & Gandek, B. (2001). *How to score and interpret single-item health status measures: A manual for users of the SF-8™ Health Survey*. Lincoln, RI: QualityMetric Incorporated.
- Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.
- Wenk, D. A., Hardesty, C. L., Morgan, C. S., & Blair, S. L. (1994). The influence of parental involvement on the well-being of sons and daughters. *Journal of Marriage & the Family, 56*, 229-234.

- West, M. O., & Prinz, R. J. (1987). Parental alcoholism and childhood psychopathology. *Psychological Bulletin, 102*, 204-218.
- Wilson, S. M., Henry, C. S., & Peterson, G. W. (1997). Life satisfaction among low-income rural youth from Appalachia. *Journal of Adolescence, 20* 443-459.
- Wilson, S. M., & Peterson, G. W. (1988). Life satisfaction among young adults from rural families. *Family Relations, 37*, 84-91.
- Windle, M., & Lerner, R. M. (1986). Reassessing the dimensions of temperamental individuality across the life span: The Revised Dimensions of Temperament Survey (DOTS-R). *Journal of Adolescent Research, 1*, 213-229.
- Wood, A. M., Linley, P. A., Maltby, J., Baliouis, M., & Joseph, S. (2008). The authentic personality: A theoretical and empirical conceptualization and development of the Authenticity Scale. *Journal of Counseling Psychology, 55*, 385-399.
- Wood, A. M., & Tarrier, N. (2010). Positive Clinical Psychology: A new vision and strategy for integrated research and practice. *Clinical Psychology Review, 30*, 819-829.
- Wuensch, K. L. (2007). *Comparing correlation coefficients, slopes, and intercepts*. Retrieved March 25, 2009, from <http://core.ecu.edu/psyc/wuenschk/docs2030/CompareCorrCoeff.doc>.
- Wuensch, K. L. (2009). *An overview of power analysis*. Retrieved December 28, 2009, from <http://core.ecu.edu/psyc/wuenschk/StatsLessons.htm>.
- Young, M. H., Miller, B. C., Norton, M. C., & Hill, E. J. (1995). The effect of parental supportive behaviors on life satisfaction of adolescent offspring. *Journal of Marriage and Family, 57*, 813-822.

- Zimmerman, M. A., Salem, D. A., & Maton, K. I. (1995). Family structure and psychosocial correlates among urban African-American adolescent males. *Child Development, 66*, 1598-1613.
- Zullig, K. J., Huebner, E. S., Gilman, R., Patton, J. M., & Murray, K. A. (2005a). Validation of the Brief Multidimensional Students' Life Satisfaction Scale among college students. *American Journal of Health Behavior, 29*, 206-214.
- Zullig, K. J., Valois, R. F., Huebner, E. S., & Drane, J. W. (2005b). Adolescent health-related quality of life and perceived satisfaction with life. *Quality of Life Research, 14*, 1573-1584.
- Zullig, K. J., Valois, R. F., Huebner, E. S., & Drane, J. W. (2005c). Associations among family structure, demographics, and adolescent perceived life satisfaction. *Journal of Child & Family Studies, 14*, 195-206.
- Zullig, K. J., Valois, R. F., Huebner, E. S., Oeltmann, J. E., & Drane, J. W. (2001). Relationship between perceived life satisfaction and adolescents' substance abuse. *Journal of Adolescent Health, 29*, 279-288.
- Zung, W. W. K. (1971). A rating instrument for anxiety disorders. *Psychosomatics, 12*, 371-379.

## APPENDICES

## Appendix 2.1

Table 2.1

*Youth Life Satisfaction*

Study	n	Measure	Location	Major Finding(s)	Study Focus
Bradley and Corwyn (2004)*	310	QOL	USA	Marital status, self-efficacy beliefs, and health status, most consistent predictors of LS of five ethnic groups.	Acculturation
Hofman et al. (1982)*	1490	SCS	Israel	Jews higher LS than Arabs.	Acculturation
Leunge et al. (2006)*	426	5-item	Australia	Interaction effect between ethnicity and LS.	Acculturation
Liebkind and Jasinskaja-Lahti (2000)*	588	SWLS	Finland	LS negatively related to perceived discrimination and positively related to parental support and length of residence.	Acculturation
Neto (1995)*	519	SWLS	France	LS negatively related to perceived adaptation problems, social anxiety, marginalisation, and loneliness, and positively related to LOC, good health, religion, and integration.	Acculturation
Neto (2001)*	313	SWLS	Portugal	LS negatively related to stressful experience acculturation, perceived discrimination, and positively related to mastery, gender, self-esteem, and neighbourhood.	Acculturation
Phinney and Ong (2002)*	238	SWLS	USA	Adolescent-parent disagreements negatively related to LS. Ethnic group did not moderate the relationship.	Acculturation
Sam (1998)*	506	SWLS	Norway	LS positively related to living in an ethnically homogeneous neighbourhood.	Acculturation
Sam (2000)*	506	SWLS	Norway	LS positively related	Acculturation

Ullman and Tatar (2001)*	254	SLSS	Israel	to ethnic identity, family values, and social group identity. Immigrant adolescents lower LS than non-immigrants. LS positively related to length of stay.	Acculturation
Verkuyten (1986)*	261	Cantril	Netherlands	No support for distinction between generalised LS and hedonic affect.	Acculturation
Verkuyten (1989)*	3228	Cantril	Netherlands	Adolescents from ethnic minority backgrounds significantly lower LS and happiness scores than Dutch adolescents.	Acculturation
Virta et al. (2004)*	840	SWLS	Turkey Norway Sweden	LS negatively related to perceived discrimination, marginalisation, and positively related to social identity, integration.	Acculturation
Sam (1994)**	568	1-item	Norway	Differences found between the LS of immigrant and Norwegian youths among 13 year-old boys and girls, and 15 year-old girls.	Acculturation
Park and Peterson (2006a)*	680	Parental Descriptions	USA	Lower SES was associated with reduced happiness. Young children and only children were somewhat happier than oldest or middle children. Hope, love, and zest, related to LS/happiness.	Character Strengths
Park and Peterson (2006b)*	2036	SLSS	USA	Strengths of hope, love, gratitude, and zest, associated with greater LS. Parental self-regulation was associated with child LS.	Character Strengths
Liu et al. (2005)*	872	MSLSS	China USA	Chinese students scored higher on the dimensions of Friends, School, and general LS, than American students.	Cross-Cultural Comparison
Park et al.	1657	MSLSS	South	Psychometric	Cross-Cultural

(2004a)*		SLSS	Korea USA	support provided for a Korean version of the MSLSS. Cross-cultural similarity of the five-factor model for students' LS supported.	Comparison
Tanaka et al. (2005)*	1862	16-item	Japan Sweden	Japanese lower LS than Swedish. Japanese less happy, more stress, irritated, nervous, and angry.	Cross-Cultural Comparison
Park and Huebner (2005)**	1059	MSLSS SLSS	South Korea USA	Korean adolescents report lower LS than American adolescents.	Cross-Cultural Comparison
Constantine et al. (2006)*	147	SWLS	USA	Adherence to Africentric cultural values predictive of higher self-esteem and perceived social support, which subsequently was predictive of greater LS.	Cultural Values
Shek (2005a)*	T1: 229 T2: 199	SWLS	China	LS positively related to endorsement of Chinese cultural beliefs about adversity.	Cultural Values
Shek (2004)**	1519	SWLS	China	LS positively related to endorsement of Chinese cultural beliefs for both economically and non-economically disadvantaged.	Cultural Values
McCullough and Huebner (2003)*	160	MSLSS	USA	No differences in LS among LD and NA students. Both overall positive levels of LS.	Disabilities: Learning
Bramston et al. (2002)*	132	SLY	Australia	LS related to level of activity, friends, and support. Disabled lower use of community facilities, social belonging, and empowerment.	Disabilities: Mental
Pretty et al. (2002)**	27	QSLQ	Australia	No significant differences in overall LS between adolescents with and without an intellectual disability determined.	Disabilities: Mental
Brantley et al. (2002)***	160	MSLSS	USA	Disabled lower friendship satisfaction and	Disabilities: Mental

Gilman et al (2004a)*	159	MSLSS	USA	higher school experiences. Higher school satisfaction of self-contained students.	Disabilities: Physical
Shek (2005e)*	3017	SWLS	China	D/HH youth reported lower LS across most domains than hearing peers. Economically disadvantaged adolescents more hopeless, lower LS, mastery, and self-esteem, than without economic disadvantage.	Economic Disadvantage
Wilson et al. (1997)**	322	9-item	USA	LS negatively related to community size, educational demands, closeness to childhood home, number of children, and positively related to marital status, job/life goal attainment, and self-esteem.	Economic Disadvantage
Shek (2003b)*	229	SWLS	China	Increased economic stress related to lower LS.	Economic Stress
Shek (2005c)*	1519	SWLS	China	LS negatively related to perceived economic stress, future economic worry, delinquent behaviour, and substance abuse.	Economic Stress
Roberts et al. (2005)*	4175	1-item	USA	Parent-child concordance on indicators of mental health low. Youths less likely to report low LS than caregivers.	Emotional Disturbance
Griffin and Huebner (2000)***	98	SLSS MSLSS	USA	SED students lower levels of LS than non-SED. SED students formulate LS judgments differently than their non-SED peers.	Emotional Disturbance
Creed et al. (2003)*	T1: 309 T2: 168	1-item	Australia	Full-time employed at T2 highest LS, followed by full-time students with paid work, and those in labour force without full-time	Employment

Feather and O'Brien (1986)**	4931	10-item	Australia	work (significantly lower LS than other groups). LS negatively related to inability to find employment after leaving school, self-reported perceptions of reduced competence, pleasantness, activity and values, and increased stress.	Employment
Hamel and Burns (1989)***	321	CIS	Australia	LS lower in high problem neighbourhoods. Children living in poorly maintained houses had lower LS.	Environmental Quality
Heaven et al. (1996)*	183	SWLS	Australia	LS, extraversion, and self-esteem positively correlated with perceived family functioning and neuroticism, psychoticism negatively correlated.	Family Functioning
Shek (1997a)*	365	SWLS	China	LS negatively related to mother and father adolescent conflict and poor family functioning.	Family Functioning
Shek (1997b)*	429	SWLS	China	LS negatively related to poor family functioning.	Family Functioning
Shek (1997c)*	429	SWLS	China	LS negatively related to parent-adolescent conflict.	Family Functioning
Shek (1998a)*	T1: 429 T2: 378	SWLS	China	Discrepancies in perceptions of family functioning between adolescents and parents negatively related to LS.	Family Functioning
Shek (1998b)*	T1: 429 T2: 378	SWLS	China	LS negatively related to parent-adolescent conflict. Relationship between adolescent-parent conflict and well-being bidirectional.	Family Functioning
Shek (1999a)*	T1: 429 T2: 378	SWLS	China	Individual LS concurrently and longitudinally related to parent and	Family Functioning

Shek (2002a)*	122	SWLS	China	child views of family functioning. LS negatively related to poor family functioning for adolescent girls.	Family Functioning
Shek (2002b)*	1519	SWLS	China	LS negatively related to poor family functioning for both economically and non-economically disadvantaged.	Family Functioning
Shek (2005b)*	T1: 229 T2: 199	SWLS	China	Negative perceptions of family functioning related to lower LS.	Family Functioning
Grossman and Rowat (1995)*	244	LS Index	Canada	Perceived poor parental relationships (but not family status) associated with low LS and sense of future, and high anxiety in adolescents of divorced and married parents.	Family Structure
Zullig et al. (2005c)*	5021	BMSLSS	USA	LS negatively related to living with other relatives, non-relatives or guardians, mother and another adult, and father only.	Family Structure
Ash and Huebner (1998)***	122	MSLSS SLSS	USA	Global LS of gifted students associated more with school experience than non-gifted.	Giftedness
Hanrahan (2005)*	34	SWLS	Mexico	Psychological skills training programme resulted in increases in LS, global self-worth, and physical appearance self-worth.	Goals/Motivation
Hofer and Chasiotis (2003)*	295	SWLS	Africa	Lower education positively related to LS. Congruence between implicit motives and self-attributed goals related to increased LS.	Goals/Motivation
Lessing (1972)*	168	SWLS	USA	Negative relationship between LS and length of cognitive future time perspective for	Goals/Motivation

Gilman et al. (2006)*	341	SLSS	USA	children and positive for adolescents. Youth reporting high (vs. low and average) hope had higher LS, personal adjustment, and less emotional stress.	Hope
Valle et al. (2004)*	S1: 460 S2: 531	SLSS	USA	LS positively related to hope. Support for the psychometric properties of the CHS.	Hope
Roberts et al. (2002)*	T1: 4175 T2: 3136	1-item	USA	Insomnia at baseline increased subsequent risk of psychological dysfunction.	Insomnia
Suldo and Huebner (2004a)*	T1: 1045 T2: 816	SLSS	USA	Adolescents with positive LS less likely to develop later externalising behaviours as a result of stressful life events.	Life Events
Ash and Huebner (2001)*	152	SLSS	USA	LOC attributions mediated the relationships between negative life events and chronic stressors and LS.	Life Events
McCullough et al. (2000)*	92	SLSS	USA	Positive daily events are positively related to LS.	Life Events
McKnight et al. (2002)*	1201	SLSS	USA	LS positively related to extraversion and negatively related to neuroticism and stressful life events. LS partial mediator between stressful life events and internalising behaviour.	Life Events
Huebner et al. (2000a)*	5544	BMSLSS	USA	LS did not differ as a function of gender, grade, or race. The majority reported positive levels of LS.	Life Satisfaction: Levels
Park (2005)*	716	MSLSS SLSS	South Korea	Global and domain LS decreased from childhood to adolescence.	Life Satisfaction: Levels
Huebner et al. (2005)***	2502	BMSLSS	USA	Overall positive levels of LS found. Demographics not related to LS.	Life Satisfaction: Levels
Moore and	99	LS Scale	USA	LS negatively	Loneliness

Schultz (1983)*				related to loneliness.	
Neto (1993)***	217	SWLS	Portugal	Loneliness, social anxiety, shyness, negatively related with LS, self-concept, happiness, physical attractiveness, positively related.	Loneliness
Morojele and Brook (2004)*	103	11-item	Africa	LS negatively related to meaninglessness.	Meaninglessness
Shek (1999c)*	T1: 429 T2: 378	SWLS	China	Paternal qualities more important than maternal in predicting LS in boys, and general psychological health in girls.	Parental Qualities
Shek (2002c)*	229	SWLS	China	Positive perceptions of parental qualities positively related to LS.	Parental Qualities
Shek (2005d)**	T1: 229 T2: 199	SWLS	China	LS positively related to positively perceived parental qualities.	Parental Qualities
Leung et al. (2004)*	346	MSLSS	China	Perceived maternal concern and academic competence predicted LS whereas maternal restrictiveness did not.	Parental Style
Shek (1999b)*	T1: 429 T2: 378	SWLS	China	Parenting styles and specific parenting behaviours bidirectional relationship with LS.	Parental Style
Shek (2003a)*	T1: 229 T2: 199	SWLS	China	Economically disadvantaged lower LS and more negative perceptions of parenting characteristics.	Parental Style
Suldo and Huebner (2004b)*	1201	SLSS	USA	LS positively related to authoritative parenting styles. Parental social support strongest correlate. LS fully mediated relationships between social support and adolescent problem behaviour.	Parental Style
Ortman	16	LS Scale	USA	LS positively related	Perceived

(1988)*				to feelings of control.	Control
Smith et al. (1987)**	188	PLSS	USA	LS positively related to perceived control at school.	Perceived Control
Adelman et al. (1989)***	515	PLSS	USA	LS positively related to perceived control at school and negatively related to depression and age for children referred for mental health services.	Perceived Control
Gilman et al. (2005)*	632	MSLSS	USA Croatia	Adaptive perfectionists significantly higher LS for both groups than maladaptive and non-perfectionists.	Perfectionism
Gilman and Ashby, (2003)***	132	MSLSS	USA	Both perfectionist subtypes significantly higher LS than non-perfectionists.	Perfectionism
Gilman (2001)*	321	MSLSS	USA	High social interest positively related to LS. Higher numbers of SEAs related to higher school satisfaction.	Physical Activity
Maton (1990)*	S1: 152 S2: 92	SWLS	USA	Meaningful instrumental activity positively related to LS.	Physical Activity
Piko and Keresztes (2006)*	1109	SWLS	Hungary	Active students better self-perceived health, greater fitness, lower depression, and higher LS, than less active students.	Physical Activity
Valois et al. (2004b)*	4758	BMSLSS	USA	LS negatively related to not: playing on a sport team run by school or outside of school, doing stretching exercises, exercising for at least 20 min, doing exercises to tone muscles.	Physical Activity
Vilhjalmsson and Thorlindsson (1992)*	1131	1-item	Iceland	LS positively related to strenuous activity, sport participation in clubs and groups.	Physical Activity
Honkala et al. (2006)*	2312	3-item	Kuwait	All LS variables were associated with more-than-once-a-day consumption of	Physical Health

Langeveld et al. (1999)*	64	OLH-Y	Norway	sugar products. Headache negatively related to LS. Effect of headache on LS is greater with increased experience of stress.	Physical Health
Zullig et al. (2005a)*	4914	BMSLSS	USA	LS negatively related to poor self-rated health, poor physical and mental health, and activity limitation.	Physical Health
Langeveld et al. (1997)**	64	OLH-Y	Norway	Headache intensity and frequency negatively related to LS.	Physical Health
Guijarro et al. (1999)*	135	Health Survey	Ecuador	Pregnant adolescents lower LS, lower mother/father-daughter communication, happiness, and more school and economic difficulties than their non-pregnant peers.	Pregnancy/ Motherhood
Schilmoeller et al. (1991)*	19	2-item	USA	LS positively related to perceived family support and quality of interactions within a social network.	Pregnancy/ Motherhood
Stevenson et al. (1999)*	110	SWLS	USA	Bidirectional support with parents related to higher mastery and LS and lower depression and anxiety.	Pregnancy/ Motherhood
Unger and Wandersman (1988)**	87	1-item	USA	Both partner and family support related to increased LS for teenage mothers.	Pregnancy/ Motherhood
Shek (1998c)*	T1: 429 T2: 378	SWLS	China	Lower LS at T1 related to increased psychological symptoms at T2.	Psychopathology
Greenspoon and Saklofske (2001)***	407	MSLSS	Canada	Support for the validity of a Dual-Factor System. Classification of low SWB-low PTH and high SWB-high PTH groups.	Psychopathology
Brown et al. (2001)*	4514	1-item	USA	Negative relationship between LS and worrying often about and perceiving race relations to be	Race Relations

Brown and Orthner (1990)*	720	1-item	USA	getting worse. Negative relationship between recent moves and high number of moves and LS for girls.	Relocation
Gilman and Barry (2003)*	45	MSLSS	USA	Social desirability minimal effect on LS. Satisfaction ratings significantly increased as a function of time.	Residential Treatment
Sastre and Ferriere (2000)*	100	SWLS	France	LS positively related to living at home with family. Females and oldest participants had lower LS. Four factors account for variance in LS: Family Life, Growth, Work, and Self-Affirmation.	Residential Treatment
Schiff et al. (2006)*	103	MSLSS	Israel	LS positively related to care worker-child relationship, quality of relationship with parents, and frequency of parent-child contact.	Residential Treatment
Gilman and Handwerk (2001)**	22	MSLSS	USA	LS significantly increased over time in residential treatment.	Residential Treatment
Valois et al. (2003)*	4758	BMSLSS	USA	LS negatively related to self perceptions of overweight, dieting, taken diet pills, and/or vomited/taken laxatives to lose weight	Risk-Taking Behaviours: Dieting
Halvorsen and Heyerdahl (2006)*	55	1-item	Norway	LS negatively correlated with eating disorder symptoms, psychiatric problems, and self-esteem.	Risk-Taking Behaviours: Dieting/Anorexia Nervosa
Valois et al. (2002)*	4758	BMSLSS	USA	LS negatively related to age first intercourse, two or more lifetime sexual intercourse partners, no contraception at last intercourse, forcing sex/receiving forced	Risk-Taking Behaviours: Sexual

Braithwaite and Devine (1993)*	112	Life 3 Scale	Australia	sex, beating/being beaten by date. Parental alcohol dependency and family disharmony have an additive effect on LS.	Risk-Taking Behaviours: Substance Abuse
Donohue et al. (2003)*	193	LSSPY 1-item	USA	LS related to Social Satisfaction and Satisfaction with External Obligations for drug abusing/conduct disordered youth.	Risk-Taking Behaviours: Substance Abuse
Kuntsche and Gmel (2004)*	3861	1-item	Switzerland	Social and solitary risky single occasion drinkers (RSODs) lower LS than social and solitary non-RSODs. Solitary RSODs lowest LS.	Risk-Taking Behaviours: Substance Abuse
Piko et al. (2005)*	2387	SWLS	Hungary Poland Turkey USA	LS directly/indirectly related to smoking in all countries except USA. High LS, future-orientedness, and social comparison orientation, related to reduced smoking across countries. Negative relationship between LS and hostility.	Risk-Taking Behaviours: Substance Abuse
Zullig et al. (2001)*	5032	BMSLSS	USA	LS negatively related to smoking, chewing tobacco, marijuana and cocaine use, binge drinking, injected drugs, and steroids.	Risk-Taking Behaviours: Substance Abuse
Newcomb et al. (1986)***	T1: 896 T2: 640	9-item	USA	Alcohol use associated with dissatisfaction with perceived environment (i.e., free time, relations with parents, life in general, opposite-sex friends).	Risk-Taking Behaviours: Substance Abuse
Thatcher et al. (2002)*	4565	BMSLSS	USA	Caucasian and African-American males LS significant moderating variable associated with attempted suicide.	Risk-Taking Behaviours: Suicide
Valois et al. (2004a)*	4758	BMSLSS	USA	LS negatively related to poor mental/physical	Risk-Taking Behaviours: Suicide

MacDonald (2005)*	5414	MSLSS	USA	health, suicide consideration, attempt, attempt requiring medical care. Low LS associated with increased violence and risk-taking behaviour.	Risk-Taking Behaviours: Violence
Valois et al. (2001)*	5032	BMSLSS	USA	LS negatively related to physical fighting at school/requiring medical treatment, carrying a weapon/gun, carrying a weapon at school, drink driving, riding with drink driver, property stolen/damaged at school, feeling unsafe at/going to/returning from school, being injured/threatened with a weapon.	Risk-Taking Behaviours: Violence
Callahan et al. (2003)*	190	8-item	USA	Victimisation related to lower LS.	Risk-Taking Behaviours: Violence/ Victimisation
Coker et al. (2000)*	5414	BMSLSS	USA	LS negatively associated with SDV and forced-sex victimisation and perpetration.	Risk-Taking Behaviours: Violence/ Victimisation
Flouri and Buchanan (2002)*	1224	1-item	UK	Low father involvement and peer victimisation significantly related to low LS. Buffering effect of father involvement in that it protected children from extreme victimisation.	Risk-Taking Behaviours: Violence/ Victimisation
Chang et al. (2003)*	189	MSLSS	China	Social self-concept predictor of LS for adolescents, academic test scores predictor of LS of children. Adolescents lower LS and self-concept and higher in emotional detachment than children.	Self-Concept
Dew and	222	SLSS	USA	Family-related self-	Self-Concept

Huebner (1994)*		PLSS		concept greater predictor of LS than peer and academic self-concept. LS associated with SES.	
Leung and Zhang (2000)*	1099	SWLS 1-item	China	Relationship construct has greater influence on LS than the self-concept construct. Parent-child relationship more important than school-child relationship.	Self-Concept
Leung and Leung (1992)***	1156	SWLS	China	Self-concept positively correlated with LS. Perceived relationship with parents best predictor of LS.	Self-Concept
Terry and Huebner (1995)***	183	SLSS	USA	Parental relations strongest predictor of LS for children.	Self-Concept
Pinquart et al. (2004)*	593	9-item	Germany	Higher self-efficacy before German unification associated with higher LS after German unification	Self-Efficacy
Oliva and Arranz (2005)*	513	5-item	Spain	For girls, good relationship with sibling positively related to good relationship with parents, friends, and increased self-esteem.	Siblings
Veenhoven and Verkuyten (1989)*	2511	Cantril	Netherlands	Only children were not found to report lower levels of LS than their peers with siblings.	Siblings
Burke and Weir (1978)*	274	7-item	Canada	Informal help by mothers, fathers, and peers positively related to LS. Mothers help more significant than fathers.	Social Support
Greenberg et al. (1983)*	213	1-item	USA	Perceived quality of relationships with parents and peers significantly related to LS. Quality of attachment to parents more significant than peers.	Social Support
Nickerson and Nagle	303	MSLSS	USA	Parent and peer attachment both	Social Support

(2004)*					significant predictors of LS.	
Vilhjalmsson (1994)*	1200	1-item	Iceland		LS positively related to positive assessment of own health, support from friends and parents, and health related behaviour.	Social Support
Wenk et al. (1994)*	672	10-item	USA		LS positively related to emotional involvement of parents, feeling close to father, love from mother, and desire to imitate mother.	Social Support
Young et al. (1995)*	640	5-item	USA		Parental support positively related to LS. Stronger relationship between perceived maternal support and adolescent LS.	Social Support
Burke and Weir (1979)***	274	7-item	Canada		Domination-Disconfirmation and Distraction negatively related to LS. Emotional and Concrete Support positively related to LS.	Social Support
Man (1991)***	1906	26-item	China		Parent orientation was a better predictor of LS than peer orientation. Low peer orientation related to higher LS.	Social Support
Zimmerman et al. (1995)***	254	SWLS	USA		LS positively related to self-esteem and support from parents and friends. LS negatively related to use of cigarettes, alcohol, marijuana, and depression and anxiety.	Social Support
Huebner and Dew (1996)*	266	SLSS	USA		Support for three-factor structure of well-being; i.e., positive affect, negative affect, and LS.	Subjective Well-Being
Fogle et al. (2002)*	160	SLSS	USA		Social self-efficacy mediated relationship between extraversion and LS, but not between neuroticism and LS.	Temperament
Heaven	S1: 99	SWLS	Australia		Neuroticism and	Temperament

(1989)*	S2: 194			psychoticism negatively correlated with LS and extraversion positively correlated.	
Rigby and Huebner (2005)*	211	SLSS	USA	LS positively related to emotional stability. Causal attributions for good events mediated the relationship between LS and emotional stability.	Temperament
Huebner (1991a)***	79	SLSS	USA	LS positively related to self-esteem, LOC, and extraversion and negatively related to anxiety and neuroticism.	Temperament
Casas et al. (2004)*	968	8-item	Spain	LS positively correlated with non-materialistic values. LS mediator between behavioural intentions and values.	Values
Linley et al. (2004)**	218	SLSS	UK	Intrinsic values associated with increased LS.	Values
Gilman and Huebner (2006)*	485	SLSS	USA	High LS is associated with higher adaptive and interpersonal functioning, lower social stress, and better attitudes towards teachers and less psychological symptoms.	Very High LS
Suldo and Huebner (2006)*	698	SLSS	USA	Positively related to increased social, emotional, and academic, competence/self-efficacy. High LS lowest psychopathology, highest social support, low internalising/externalising behaviour.	Very High LS

\* First literature search strategy

\*\* Second literature search strategy

\*\*\* Third literature search strategy

BMSLSS: Brief Multidimensional Students' Life Satisfaction Scale (Seligson et al. 2003)

Cantril: Cantril's single-item measure of LS (Cantril 1965)

CIS: Child Interview Schedule

Life 3 Scale: Life 3 Scale (Andrews and Withey 1976)

LS Index: Life Satisfaction Index (Wood et al. 1969)

LS Scale: Unknown n-item LS measure  
LSSPY: Life Satisfaction Scale for Problem Youth (Donohue et al. 2003)  
MSLSS: Multidimensional Students' Life Satisfaction Scale (Huebner 1994)  
n-item: Number of LS items of the scale used  
PAHO: Pan American Health Organization/Kellogg survey  
Parental Description: Parents provided open-ended descriptions of their child  
PLSS: Perceived Life Satisfaction Scale (Adelman et al. 1989)  
QLH-Y: Quality of Life Headache—Youth questionnaire  
QOL: Quality of Life questionnaire  
QSLQ: Quality of Student Life Questionnaire  
S1/S2: Sample 1/Sample 2  
SCS: Self Concept Scale  
SLSS: Students' Life Satisfaction Scale (Huebner 1991c)  
SWLS: Satisfaction With Life Scale (Diener et al. 1985)  
T1/T2: Time 1/Time 2

## Appendix 3.1

Table 3.1

*Youth Life Satisfaction Measures – Sample Characteristics of Reviewed Studies*

Scale	Study	Location	N	Gender	Mean Age	Alpha	Mean Score	SD
SLSS	** (Huebner, 1991a)	USA	79	29 F; 50 M	11.54	0.82	19.79	4.61
	** (Huebner, 1991b)	USA	254	125 F; 128 M	10.54	0.86		
	** (Huebner, 1991c)	USA	S1: 254	125 F; 128 M	10.54	0.82	26.08	5.65
			S2: 329			0.74	20.84	4.51
	** (Huebner & Alderman, 1993)	USA	S1: 56	26 F; 30 M	10.20		21.93	4.27
			S2: 53	11 F; 42 M	10.89		20.28	4.29
	* (Huebner & Dew, 1993a)	USA	222	115 F; 107 M (TS)	15.50 (TS)	0.85 (AM)	19.05	4.41
						0.85 (CA)	21.57	3.92
	** (Dew & Huebner, 1994)	USA	222	115 F; 107 M	15.50	0.86	20.26	4.35
	** (Huebner, 1994a)	USA	235	125 F; 110 M	11.72		20.83	4.63
	* (Huebner, 1995)	USA	654	337 F; 315 M (TS)	09.36 (TS)	0.75 (AM)	20.52	4.29
						0.79 (CA)	21.57	4.29
	** (Terry & Huebner, 1995)	USA	183	97 F; 86 M (TS)	09.07 (TS)	0.73 (TS)	19.68 (AM)	4.08
							22.05 (CA)	4.07
	** (Gilman & Huebner, 1997)	USA	S1: 99	60 F; 39 M	12.60	0.84	31.62	7.60
			S2: 73	46 F; 27 M	12.70	0.82		
	** (Huebner et al., 1999)	USA	290	165 F; 125 M	12.90			
	*** (Huebner et al., 2000b)	USA	T1: 321	209 F; 112 M	16.14	0.84	29.40	6.58
			T2: 99	64 F; 35 M		0.79	30.94	6.23
	*** (Haranin et al., 2007)	USA	T1: 1,201	769 F; 432 M	14.62	0.84-0.91*		
			T2: 821	534 F; 287 M	15.19			
			T3: 577	375 F; 202 M	15.76			

SWLS	****(Arrindell et al., 1991)	Netherlands	107	72 F; 35 M		0.87	23.63	7.01
	****(Arrindell et al., 1999)	Netherlands	1,700	887 F; 888 M		0.82	26.18	5.72
	*(Diener et al. 1985)	USA	S1: 176			0.87	23.50	6.43
			S2: 163					
			S3: 53	32 F; 21 M	75.00		25.80	
	****(Hultell & Gustavsson, 2008)	Sweden	2,900	2,447 F; 453 M	28.92	0.88		
	****(Lewis et al., 1995)	Ireland	213	165 F; 48 M	21.60			
	** (Pavot et al., 1991)	USA	S1: 39	23 F; 16 M	74.00	0.83	24.44	6.99
			S2: 136	85 F; 51 M		0.83	24.05	7.82
	****(Pons et al., 2000)	Spain	133	65 F; 68 M	13.00		3.54-4.05	0.74-1.11
			133	68 F; 65 M	78.60		3.30-3.75	0.93-1.23
	*(Neto, 1993)	Portugal	217	118 F; 99 M	14.70	0.78	24.10	5.90
	****(Shevlin & Bunting, 1994)	Ireland	96	49 F; 37 M				
	****(Shevlin et al., 1998)	Britain	258	85 F; 173 M	22.90 F; 20.60	0.92		
PLSS	** (Adelman et al., 1989)	USA	S1: 221	111 F; 110 M	14.50		8.60	5.9
			S2: 179	82 F; 97 M	13.20		7.00	4.10
			S3: 68	44 F; 24 M	12.90		7.80	4.70
			S4: 47	13 F; 34 M	11.10		9.70	6.80
	** (Huebner & Dew, 1993b)	USA	222	115 F; 107 M	15.50	0.77-0.81		
	** (Huebner & Dew, 1993c)	USA	222	115 F; 107 M	15.50	0.89	87.42	15.20
	** (Smith et al., 1987)	USA	S1: 80	53 F; 27 M	13.20		59.50	5.80
			S2: 57	19 F; 38 M	13.30		57.30	6.10
			S3: 51	11 F; 40 M	14.3		59.90	6.70
ESWLS	*** (Alfonso et al., 1996)	USA	302			0.81-0.89	23.30-48.20	4.70-11.00
	*** (Gregg & Salisbury, 2004)	USA	S1: 151					
			S2: 101					
MSLSS	** (Huebner, 1994b)	USA	S1: 312	168 F; 144 M	10.90	0.92	2.65-3.31	0.57-0.64
			S2: 413	201 F 212	08.97	0.92	3.02-3.34	0.56-0.62
	*(Greenspoon & Saklofske, 1997)	Canada	314	173 F; 141 M	11.00	0.90	2.90-3.50	0.47-0.62

	** (Greenspoon & Saklofske, 1998)	Canada	314	173 F; 141 M	11.00	0.90		
	*(Huebner et al., 1998)	USA	291	166 F; 125 M	12.89	0.91	3.94-5.19	0.73-1.20
	*** (Huebner, 1998)	USA	725	377 F; 344 M (TS)	09.90 (TS)	0.91 (AM)		
						0.93 (CA)		
	*(Gilman et al., 2000)	USA	321	209 F; 112 M	16.14	0.91	3.68-5.12	0.65-1.05
	*** (Huebner et al., 2002)	USA	160	47 F; 33 M	15.80 (MMD)		2.73-3.08	0.39-0.64
				47 F; 33 M	16.50		2.53-3.51	0.42-0.64
	*** (Gilman et al., 2008)	USA	308	176 F; 132 M	14.58	0.93	3.70-5.17	0.67-1.14
		Ireland	224	166 F; 58 M	14.80	0.93	3.88-5.31	0.70-1.15
		China	369	185 F; 184 M	14.10	0.89	3.73-4.78	0.62-0.95
		South Korea	437	227 F; 210 M	15.22	0.92	3.35-4.32	0.62-0.95
MSLSS-A	*** (Gilligan & Huebner, 2002)	USA	266	173 F; 93 M	16.20	0.72-0.90	3.91-4.99	0.82-1.06
	*(Gilligan & Huebner, 2007)		266	173 F; 93 M	16.20	0.72-0.90	3.91-4.99	0.82-1.06
BMSLSS	*** (Huebner et al., 2000a)	USA	5544	2883 F; 2661 M (TS)			4.24-5.59	1.39-1.91
							4.19-5.71	1.25-1.75
	*(Seligson et al., 2003)	USA	S1: 221	93 F; 128 M	12.33	0.75	5.26-6.06	1.28-1.48
			S2: 46	24 F; 22 M	15.65			
	*(Huebner et al., 2004)	USA	5,545	2883 F; 2662 M			4.97-5.07	1.11-1.24
	*(Seligson et al., 2005)	USA	518	274 F; 242 M	09.34	0.68	5.52-6.18	1.35-1.48
	*(Funk et al., 2006)	USA	T1: 146	79 F; 67 M	15.95	0.75	4.64-5.75	1.10-1.54
			T2: 51	26 F; 25 M	15.98		5.31-6.08	0.94-1.65
	**** (Zullig et al., 2005)	USA	522	344 F; 178 M		0.78	5.18-5.93	1.02-1.28
ComQol	** (Cummins et al., 1994)	Australia	308	239 F; 69 M		0.73	5.1-5.7	0.87-1.27
	** (Gullone & Cummins, 1999)	Australia	264	117 F; 147 M (TS)	14.92 (TS)	0.78 (F)	7.28-12.06	6.52-7.93
						0.83 (M)	7.38-10.44	5.38-8.56

Key:

S1 = Study 1  
 S2 = Study 2  
 T1 = Time 1  
 T2 = Time 2

■ = Information Not Provided  
 MMD = Mild Mental Disability  
 AM = African American  
 CA = Caucasian

F = Female  
 M = Male  
 TS = Total Sample  
 \* = Note: Alpha range based on both SLSS & MSLSS

Appendix 7.4

Figure 7.4

Example Student Work Booklet

## Girl Time!

HAVE YOU STUCK WITH THE "GIRL TIME" COURSE?

ASK A MEMBER OF STAFF INVOLVED IN THE PROJECT AND GET THEM TO SIGN BELOW IF THEY THINK YOU HAVE BEEN PERSISTENT AND TRIED HARD IN THE COURSE.

*I consider.....*  
*to have put in sufficient efforts in to the "Girl Time" activities to have proved her staying power and persistence.*

*Proudly signed with much respect and admiration,*

Full Name:

*Les Beaucamp Secondary School*

654059

PAGE 2

### Exercising Your Strengths

**TOP FIVE STRENGTHS**

OVER THE NEXT FEW WEEKS WE ARE GOING TO BE EXPLORING OUR STRENGTHS

EACH OF YOU HAS BEEN PROVIDED WITH YOUR TOP 5 THESE ARE YOUR BEST STRENGTHS!

**STRENGTHS EXERCISES**

CHOOSE THE EXERCISES IN THIS BOOKLET THAT MATCH YOUR TOP 5 STRENGTHS

YOU WILL HAVE 4 CLASSROOM LESSONS TO COMPLETE YOUR STRENGTHS EXERCISES

AFTER WORKING ON YOUR TOP 5 COMPLETE AS MANY AS YOU CAN IN THE CLASSROOM TIME PROVIDED

HAVE FUN!

PAGE 3

DATE: \_\_\_\_\_

### Have you ever... Been Brave or Had Integrity???

**BRAVERY**

BRAVERY IS TO DO SOMETHING NECESSARY DESPITE BEING AFRAID. FOR EXAMPLE: STANDING UP FOR SOMETHING/ONE DESPITE WHAT MIGHT HAPPEN TO YOU (LIKE YOU MIGHT GET TEASED).

**INTEGRITY**

INTEGRITY IS KNOWING YOU DID THE RIGHT THING AND BEING TRUE TO YOURSELF. KNOWING YOU ARE MORALLY RIGHT.

I HAVE.....

*I stand up for my sister and my Dad, when my mum is treating them unfairly. Even though she gets very angry with me.*

PAGE 4

DATE: \_\_\_\_\_




---

## Open-Mindedness

---

**I READ THROUGH NEWSPAPERS AND MAGAZINES TO FIND AN ARTICLES ABOUT PEOPLE OR THINGS I DIDN'T THINK WERE FAIR:**

I FOUND AN ARTICLE ABOUT:

I THINK THIS WAS UNFAIR BECAUSE:

PAGE 5

DATE: \_\_\_\_\_



## Have you ever... Been Wise????

HAVE YOU EVER BEEN WISE ENOUGH TO HELP A FRIEND WITH A PROBLEM? I'M SURE YOU HAVE. IN WHAT WAYS DID YOU HELP?

*I helped them decide what they really wanted, helped talk to them, and gave advice about how to solve their problem.*



PAGE 6

DATE: *23rd June*



## Creativity

**I was given a chance to express how I feel and think about myself and/or the world around us by creating a piece of artwork, a poem, or other creative project that represents me.**

**I chose to:**

*Do a card for Sophie  
To tell her what a good friend she is*



PAGE 7

DATE: \_\_\_\_\_



## Social Skills

SOMEONE WITH GOOD SOCIAL SKILLS HAS THE ABILITY TO PERCEIVE THE MOTIVES, FEELINGS AND EMOTIONS OF OTHERS.

I THINK I HAVE GOOD SOCIAL SKILLS BECAUSE (PUT DOWN A FEW REASONS):

- *Because I can tell when my friends and family are upset.*
- *I help people with their problems*
- *I am trustworthy.*
- *I can usually tell what people are really thinking without them having to tell me.*
- *I can understand people.*

<p>PAGE 8</p> <p>DATE: _____</p>  <h2 style="text-align: center;">Justice</h2> <p><b>TEAMWORK</b> I THINK I AM A GOOD TEAM PLAYER BECAUSE: <i>I help in a team and am not lazy</i></p> <p><b>FAIRNESS</b> EVERYONE DESERVES TO BE TREATED FAIRLY NO MATTER WHAT BECAUSE: <i>If they weren't things go wrong and people get upset</i></p> <p><b>LEADERSHIP</b> I THINK I AM A GOOD GROUP OR TEAM LEADER BECAUSE: <i>I can organise people and decide the best things to do in a situation.</i></p>	<p>PAGE 9</p> <p>DATE: _____</p>  <h2 style="text-align: center;">SELF CONTROL</h2> <p>PEOPLE WHO HAVE GOOD SELF CONTROL STICK TO THINGS THAT THEY START AND CONTROL EXCESSES OF ALL TYPES</p> <p><b>WHEN HAVE YOU USED SELF CONTROL?</b> <i>I stick to all my class work even if I don't understand it.</i> <i>I do things for my parents no matter how long they take.</i></p>
--	---

<p>PAGE 10</p> <p>DATE: <i>24th June</i></p>  <h2 style="text-align: center;">Gratitude</h2> <p>PEOPLE WHO ARE GRATEFUL FEEL THANKFUL TO OTHERS FOR KIND GESTURES OR THINGS THEY HAVE DONE FOR THEM.</p> <p><b>WRITE A LETTER OF GRATITUDE TO SOMEONE WHO SOMEONE WHO HAS DONE SOMETHING FOR YOU BUT YOU NEVER THANKED THEM PROPERLY.</b></p> <p><b>SEND THE LETTER TO THEM.</b></p> <p><i>I would Thank My friend Carina As she has always been there for me when I need her, and has never told anyone my secrets. She always cheers me up, when I'm sad. We have the same opinions on things and she busts me.</i></p>	<p>PAGE 11</p> <p>DATE: _____</p>  <h2 style="text-align: center;">Spirituality</h2> <p>SPIRITUALITY INVOLVES HAVING BELIEFS ABOUT A HIGHER PURPOSE AND MEANING FOR EVERYONE AND KNOWING YOUR PLACE WITHIN IT. PEOPLE ACHIEVE SPIRITUALITY IN MANY DIFFERENT WAYS.</p> <p>MANY PEOPLE MEDITATE TO HELP THEM UNDERSTAND THEIR SPIRITUALITY AND TO GIVE THEMSELVES A CHANCE TO THINK ABOUT THE MEANING OF THEIR LIVES.</p> <p><b>SPEND TIME SITTING QUIETLY MEDITATING. HOW DID IT MAKE YOU FEEL?</b> <i>I didn't</i></p> <p>IF YOU DON'T WANT TO MEDITATE WHY NOT TRY AND LOOK UP SPIRITUAL THINGS IN THE LIBRARY, LIKE DIFFERENT RELIGIONS OR SPIRITUAL EXERCISES LIKE YOGA AND MEDITATING.</p> <p><b>WHAT DID YOU FIND OUT?</b> <i>That lots of people use yoga and religion as a way to calm them down. They use religion as advice.</i></p>
--	---

PAGE 12

DATE: 24th June 08

## Have you ever... Been Full of Life and Energy???

WHAT HAVE YOU DONE RECENTLY THAT YOU ENJOYED THAT WAS ENERGETIC?

NOT BECAUSE YOU HAD TO BUT BECAUSE YOU WANTED TO, LIKE RIDING YOUR BIKE OR SWIMMING OR PLAYING A GAME.

I HAVE.....

5-a Side Womens football tournament  
I do this every week on Mondays. I have to do lots of running

PAGE 13

DATE: 17/6/08

## Curiosity

I MADE A VISIT TO THE LIBRARY. I HAD 15 MINUTES TO FIND OUT ABOUT SOMETHING THAT INTERESTED ME THAT I HAD ALWAYS WANTED TO KNOW MORE ABOUT. I THEN EXPLAINED TO THE REST OF THE GROUP WHAT I FOUND OUT ABOUT.

I FOUND AN ARTICLE ABOUT:

Egypt - The pyramids were built about 4,500 years ago, they were built as tombs for the ancient Pharaohs in El Giza, Cairo. About 1000 years later they made underground tombs in Luxor, Egypt is now a tourist based country they get most of their money from tourism I chose Egypt as I also had the chance to listen to four types of here, music that I DON'T NORMALLY LISTEN TO.

THE MUSIC I LIKED BEST WAS:

was the one by Amy Winehouse

PAGE 14

DATE: \_\_\_\_\_

## HOPE

I WAS GIVEN THE CHANCE TO THINK ABOUT MY DREAMS FOR THE FUTURE.

AFTER THINKING ABOUT MY DREAMS I HAVE DECIDED TO SET SOME GOALS FOR MY FUTURE.

MY GOALS ARE:

To do well in my GCSE'S.  
Get a good job.

WHAT PLANS WILL YOU PUT IN PLACE TO REACH THESE GOALS?

Revise for my GCSE'S  
go to 6th form and University.

PAGE 15

DATE: \_\_\_\_\_

## Humour

PEOPLE WHO ARE FUNNY MAKE US LAUGH, THEY FIND THE FUNNY SIDE OF THINGS EVEN WHEN OTHER PEOPLE DON'T.

DO YOU LIKE TO MAKE PEOPLE LAUGH? Yes

WHAT THINGS DO YOU DO THAT YOU THINK ARE FUNNY? DO YOU TELL JOKES? DO YOU LIKE FUNNY MOVIES OR COMEDIANS?

I like funny films / comedies, and comedians

IF YOU KNOW A FUNNY JOKE SHARE IT HERE AND WITH YOUR FRIENDS:

PAGE 16

DATE: \_\_\_\_\_



## MODESTY AND PRUDENCE

PEOPLE WHO ARE MODEST LET THEIR ACCOMPLISHMENTS SPEAK FOR THEMSELVES, THEY DON'T LIKE BEING THE CENTRE OF ATTENTION AND THEY KNOW THEY ARE NOT PERFECT.

**HAVE YOU EVER BEEN MODEST?** *Yes*

PEOPLE WHO ARE PRUDENT ARE ABLE TO PLAN FOR THE FUTURE AND SET GOALS. THEY ARE ABLE TO CONSIDER CONSEQUENCES BEFORE THEY MAKE DECISIONS AND MAKE GOOD CHOICES.

**DO YOU THINK YOU ARE A PRUDENT PERSON? WHY?**

*Because I don't take other peoples opinions of people to tell if I like them or not. I meet them myself and look at all points of them.*

PAGE 17

DATE: \_\_\_\_\_



## Forgiveness

HAVE YOU EVER FORGIVEN SOMEONE FOR SOMETHING THEY HAVE DONE WRONG? *Yes*

WRITE A LETTER OF FORGIVENESS TO SOMEONE; YOU DON'T NEED TO SEND THE LETTER JUST WRITE IT AND READ IT OVER TO YOURSELF

*Dear Sophie*  
*I forgive you for all the times you were horrible to me.*

PAGE 18

DATE: \_\_\_\_\_



## LOVE AND KINDNESS

**LOVE**

WRITE A SHORT NOTE TO SOMEONE YOU LOVE AND LEAVE IT WHERE THEY CAN FIND IT.

I CHOSE TO WRITE TO THIS PERSON OUT OF ALL THOSE I LOVE BECAUSE:

**KINDNESS**

HAVE THERE BEEN ANY TIMES RECENTLY THAT YOU HAVE BEEN KIND ENOUGH TO DO A FAVOUR FOR A FRIEND OR HELP SOMEONE WHO NEEDED IT?

*Help my mum by tidying my 5 year old brother's room, which took 4 hours.*

PAGE 19

DATE: \_\_\_\_\_



## Appreciation of Beauty

BELOW DESCRIBE THE MOST BEAUTIFUL THINGS YOU'VE SEEN AND HOW THEY MADE YOU FEEL.

**THE MOST BEAUTIFUL THINGS I HAVE SEEN:**

*The Pyramids at Giza*  
*I felt amazed at what the ancient egyptians had done, and how long and hard they must have worked.*



PAGE 20

DATE: \_\_\_\_\_

## LOVE OF LEARNING



**I READ THROUGH BOOKS AND MAGAZINES ABOUT PLACES AND THINGS TO SEE OR VISIT THAT INTERESTED ME.**

I MADE A BOOKLET SHOWING SOMETHING THAT INTERESTED ME. MY BOOKLET WAS ABOUT: *egypt*

THIS IS THE PLACE I WAS INTERESTED MOST OR WHERE I'VE ALWAYS WANTED TO SEE. I WANTED TO TELL OTHERS BECAUSE:  
*Egypt, because its amazing how they built the pyramids*

PAGE 21

DATE: \_\_\_\_\_

## Things I am Proud of

IF YOU HAVE DONE SOMETHING THAT MAKES YOU FEEL GOOD ABOUT YOURSELF OR PROUD OVER THE LAST FEW WEEKS NOTE IT DOWN.

THIS COULD BE ANYTHING. AN ACT OF KINDNESS, A HELPFUL ATTITUDE, GOOD SCHOOL WORK, A COMPLIMENT YOU GAVE OR RECEIVED, USING GOOD MANNERS.

USE THESE PAGES TO WRITE ANYTHING DOWN (OR DRAW) ABOUT THE THINGS YOU DO THAT MAKE YOU FEEL GOOD.

*being in charge of ladies football team and scoring against them.*

PAGE 22

DATE: \_\_\_\_\_

## Things I am Proud of

PAGE 23

DATE: \_\_\_\_\_

## PERSISTENCE

Activities I Have Completed!

I <i>most of them</i>	II
III	IV
IV	

## Appendix 7.6

*Experimental Group Follow-up Questionnaire: Summation of Results*

1. How many of the strengths exercises did you complete?
  - a. Zero 9.1%; One 9.1%; Two 13.6%; Three 27.3%; Four 22.7%; Five + 18.2%
2. Did you enjoy the strengths exercises?
  - a. 40.9% A Little; 31.8% Quite A Lot; 18.2% A Lot
3. Do you plan to continue to exercise your strengths on your own?
  - a. 68.2% Not Sure; 9.1% Fairly Sure; 4.5% Certain
  - b. Open-Ended Responses:  
 'Listen to music and talk to people about how I am feeling'  
 'I felt bored and that it was a waste of time. I didn't learn anything'
4. How many of your top five strengths do you feel describe the real you?
  - a. None 8.7%; One 17.39%; Two 21.74%; Three 8.7%; Four 13.04%; Five 30.43%
5. Did learning about your top five strengths make you realise you had qualities you've never thought about before?
  - a. 21.74% Yes; 39.13% Not Sure
6. Did you talk about your top five strengths with your friends or family?
  - a. 47.8% Yes
7. Does the idea of character strengths make sense to you?
  - a. 52.2% Yes; 30.4% Not Sure
8. Do you believe that character strengths can be learned?
  - a. 30.4% Yes; 43.5% Not Sure
9. Do you believe you can achieve a better life through choosing to exercise your character strengths?
  - a. 30.43% Yes; 47.83% Not Sure
10. Did learning about your strengths make you feel good?
  - a. 59.1% A Little; 18.2% Quite A Bit; 4.5% A Lot
  - b. Open-Ended Responses:  
 'I knew what I was good at'  
 'I didn't really understand. But it was good to know what I was good at'  
 'Okay'  
 'Made me believe that what people say about me is true'  
 'It did a bit, but it made me feel depressed because I was chosen to do the exercises'  
 'I did enjoy coming to the class, it sort of made me feel good, but I never really felt that bad so I was ok and it didn't change much'  
 'I felt bored and irritated. I would preferred to be with my mates'

- 'It didn't really do anything to affect me'
- 'Not sure'
- 'I am fine, don't need any help! I'm happy! OK'
- 'They made me realise I'm not completely worthless'
- 'It was good, but it made me think I was depressed'

11. Was participating in the strengths exercises a positive experience?

- a. 30.4% Yes; 43.5% Not Sure
- b. Open-Ended Responses:
  - 'Because they were positive'
  - 'Yes was ok with the calming music'
  - 'I felt the same'
  - 'Same as before, it made me feel depressed a bit'
  - 'Not sure, I am happy'
  - 'I felt that I was getting annoyed and bored'
  - 'I didn't need to take part!'
  - 'I still don't believe I have my top 5 strengths'

12. Please tell us about any negative aspects of taking part

- a. Open-Ended Responses:
  - 'None really'
  - 'I thought I was selected for being depressed'
  - 'It brought back bad memories from the past'
  - 'It's ok'
  - 'None'
  - 'None'
  - 'I thought we could have done some more meditating'
  - 'It made me feel hungry, which makes me feel bad and annoyed. I would have preferred to be in my lessons'
  - 'It made me feel like there was something wrong with me'
  - 'Not sure if there were any'
  - 'It brought back memories that I'd rather keep in the past'
  - 'It was boring'
  - 'I thought I was depressed and chosen for a reason'
  - 'It brought back bad memories that I wanted to forget'

## Appendix 7.7

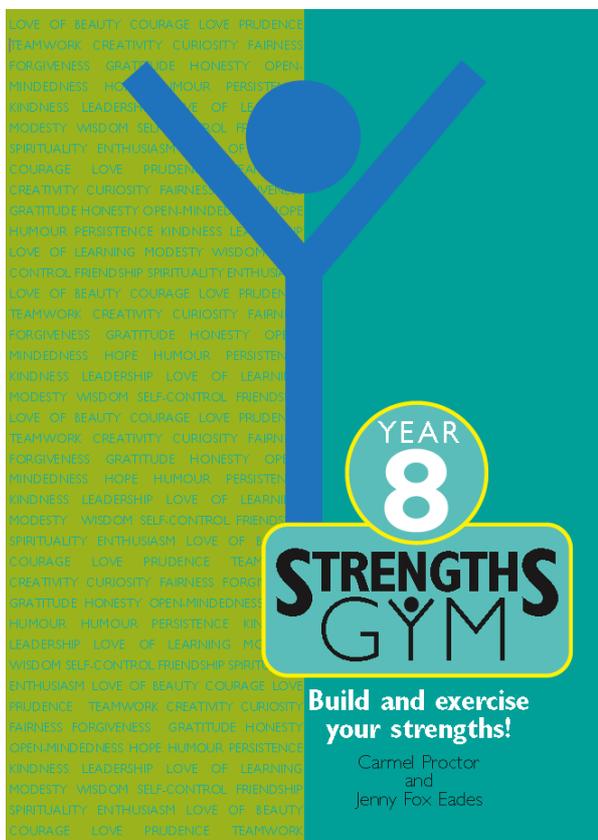
*Comparison Group Follow-up Questionnaire: Summation of Results*

1. Did you try using your strengths after learning about them from the strengths survey?
  - a. 50% Yes
  
2. Did you enjoy using your strengths?
  - a. 45.5% A Little; 4.5% Quite A Lot; 27% A Lot
  - b. Open-Ended Responses:
    - 'I didn't really know how to use them'
    - 'Once I knew my strengths I became more aware of when I was using them'
    - 'I didn't feel I needed to change'
    - 'I felt good about myself'
    - 'I was more aware of my strengths, but did not think of using them before'
    - 'I enjoy making people happy, making them laugh'
    - 'I like being kind to people and I usually forgive people'
    - 'I read through my strengths, but didn't do anything about them'
    - 'I don't really know how'
    - 'Don't know how I'm meant to use them'
    - 'I could not think how to use them'
    - 'I didn't know how to use them'
  
3. How many times did you use your strengths after learning about them?
  - a. Zero 18.2%; One 18.2%; Two 18.2%; Three 13.6%; Four 4.5%; Five + 9.1%
  
4. Do you plan to continue to exercise your strengths?
  - a. 36.4% Not Sure, 45.5% Fairly Certain, 4.5% Certain
  - b. Open-Ended Responses:
    - 'If I can know where to use them'
    - 'I feel I was use my strengths without knowing that I have, so it will come naturally to me'
    - 'I don't want to change'
    - 'I am happy'
    - 'Sometimes I like time to myself'
    - 'I use my strengths without realising until afterwards'
    - 'The strengths I have are needed in life so I will'
    - 'I always use my strengths'
    - 'It depends what I do'
  
5. How many of your top five strengths do you feel describe the real you?
  - a. Two 9.1%; Three 50%; Four 13.6%; Five 27.3%
  
6. Did learning about your top five strengths make you realise you had qualities that you've never thought about before?
  - a. 40.9 % Yes; 23.3% Not Sure

7. Did you talk about your top five strengths with your friends or family?  
a. 81.8 Yes
8. Does the idea of character strengths make sense to you?  
a. 72.72% Yes; 13.64% Not Sure
9. Do you believe that character strengths can be learned?  
a. 54.5% Yes; 27.3% Not Sure
10. Do you believe that you can achieve a better life through choosing to exercise your character strengths?  
a. 30% Yes; 50% Not Sure
11. Did learning about your strengths make you feel good?  
a. 61.9% A Little; 38.1% Quite A Bit  
b. Open-Ended:  
‘I was able to share them so it made me feel good at them’  
‘I felt that the strengths reflected me and the person I try to be’  
‘I am delighted with my personality already’  
‘I am happy’  
‘As I said, I like time to myself, but I do need the company of others’  
‘I felt like they were me and I already feel good about myself even though there are things I would change in my life’  
‘Learning what I’m like was okay’  
‘It makes me feel that I am good at something’  
‘I didn’t understand’
12. Please tell us any negative aspects to taking part  
‘Brought back some bad memories’  
‘Many questions meant the same’  
‘It made me wonder if I had any bad points’  
‘I am happy’  
‘None’  
‘It brought back some bad memories, some of the questions’  
‘Nothing!’  
‘I would like to know my weaknesses’  
‘Loads of the questions were the same, just written differently. And I know my weaknesses’  
‘I would like to learn my weaknesses’  
‘I kept wondering what the bad things were so I could improve them’  
‘It brought back things I want to forget’  
‘It brought back bad memories’  
‘I would like to know my weaknesses’  
‘Loads of the questions were the same’  
‘There were too many of the same questions to answer’

Appendix 8.1

Strengths Gym – Year 8 Booklet



This booklet belongs to \_\_\_\_\_



Build and exercise your strengths!

Carmel Proctor and Jenny Fox Eades

Positive Psychology  
Research Centre,  
Guernsey

Published by  
Positive Psychology Research Centre  
PO Box 544  
St. Peter Port, Guernsey  
Channel Islands, GY1 6HL  
Email: info@pprc.gg  
Website: <http://www.pprc.gg>

First published in Guernsey in 2009

10 9 8 7 6 5 4 3 2 1

© PPRC 2009

© Strengths Gym is a registered trademark of Carmel Proctor and Jenny Fox Eades

ISBN: 978-0-9562282-1-5

British Library Cataloguing-in-Publication Data  
A catalogue record for this book is available from the British Library

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means (electronic, mechanical, photocopying, recording or otherwise), without either the prior written permission of the publisher, or a license permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6-10 Kirby Street, London, EC3N 8TS. This book may not be lent, resold, hired out or otherwise disposed of by way or trade in any form of binding or cover other than that in which it is published, without the prior consent of the Publisher. Requests for permissions should be directed to the Publisher.

Cover design by John White Design Partnership, Guernsey

Typesetting and layout by Anthony Stagg of Jolly Surflover Design, Guernsey

Strengths Cartoons © Center for Applied Positive Psychology (CAPP) 2007

Printed in Guernsey

## Spotting Your Strengths

### What Are Strengths?

Your **strengths** are your **best** qualities.

### Top Five Strengths

Which **strengths** do you think best describe **you**?

On the next three pages is a list of **24 strengths**.

From the list **pick 5** that you feel describe the real you.

Once you have chosen **write the 5** that describe you best:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### Strengths Images

Find an image or picture that shows each one of your strengths.

### Strengths Gym

Over the course of the **next few months** we are going to be exercising our strengths, **like muscles!** You will build your favourite strengths and learn to use others even more. You will become expert '**strengths-spotters**' – spotting strengths in your classmates **AND** your teachers.

**HAVE FUN!**



## Spotting Your Strengths

**Love of Beauty** – You notice and love beautiful things, in nature, art, music, or people.



**Courage** – You do the right thing even if you are scared. You stick up for what is right.



**Love** – You love the people who are important to you and you show that love by what you say and do.



**Prudence** – You make good choices. You think before you act or speak.



**Teamwork** – You work well with others, you always do your fair share – and sometimes more!



**Creativity** – You think a little bit differently. You find new ways to do things and have good ideas.



**Curiosity** – You ask lots of questions. You want to find out, try new things, explore new places, and meet new people.



**Fairness** – You treat everyone the same. You give everyone an equal chance. You keep to the rules.



## Spotting Your Strengths

**Forgiveness** – When people hurt or annoy you, you get over it quickly. You let your anger fade away and are happy to be friends again. You aren't spiteful, you never try to 'get even'.



**Gratitude** – You notice and enjoy the good things in your life. You always say 'thank you' and can usually find something to feel good about.



**Honesty** – You are an open and truthful person. You stand up for what you believe in, you say what you think.



**Hope** – You look forward to the future and work hard to make your dreams come true. You trust that good things will happen.



**Humour** – You see the funny side of life. You like to make people smile or laugh.



**Persistence** – You stick at things until you finish. You like to keep working until you get there.



**Open-Mindedness** – You enjoy meeting people with different ideas and backgrounds. You can see different points of view.



**Kindness** – You do and say things to make other people happy. You are never too busy to do a favour.



## Spotting Your Strengths

**Leadership** – You help other people to get things done. You set a good example. You like organising activities and making things happen.



**Love of Learning** – You love learning new things. You enjoy finding out how to do things, you like discovering things you didn't know before.



**Modesty** – You know your strengths and your weaknesses. You are always happy to learn from other people. When you do well you share success with those who helped you.



**Wisdom** – You understand what is really important in life. Somehow, you always know the right thing to do or say.



**Self-Control** – You are in charge of your thoughts, feelings, and actions. You can keep calm, you can do what you need to do.



**Social Skills** – You know yourself really well and you know how to get on well with other people. You can fit in anywhere.



**Spirituality** – You think about God, love, and the meaning of life. You know your life is important.



**Enthusiasm** – You are eager, full of energy, and raring to go.



## Love of Beauty

### Love of Beauty means:

You notice and love beautiful things, in nature, art, music, or people.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know truly showed their **Love of Beauty**? Write or draw or tell a story of **Love of Beauty** in action.

2. **Animal Beauty Contest** – Which animals do you consider beautiful? Why? Work with some friends to collect **different examples** of beautiful animals and then see if you can put them in **order of beauty**. Which is the most beautiful, which one comes next? Compare your list with another group.

### Strengths Challenge:

Look for beauty on your way to school. Tell a friend or family member what you **noticed**.



Put a sticker on the picture if you complete the Strengths Challenge!

6



## Courage

### Courage means:

You do the right thing even if you are scared. You stick up for what is right.

### Strengths Builders:

1. Strength in **Action Story** - Can you remember a time when you or somebody you know chose not to do something wrong even though their friends were doing it and might have teased them for not going along with it? Write or draw or tell a story of **Courage** in action.

2. Think of **two** people from history who were famous for being courageous. In what way were they **courageous**? Compare your own ideas with a friend. Decide which of the people on your lists was the most courageous. **Why**?

### Strengths Challenge:

Watch the **news** this week or read the **papers** and try to find a story where somebody showed courage. **Share** the story with a friend or family member.



6

Put a sticker on the picture if you complete the Strengths Challenge!

## Love

### Love means:

You love the people who are important to you and you show that love by what you say and do.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know did something out of **Love** for someone else? Write or draw or tell a story of **Love** in action.

2. Write a **love poem** or draw a **love card**. Give it to someone you love.

### Strengths Challenge:

Tell a **family member** or **friend** that you love them.



Put a sticker on the picture if you complete the Strengths Challenge!

7



## Prudence

### Prudence means:

You make good choices. You think before you act or speak.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know set a goal and was able reach it because they planned along the way how to achieve it? Write or draw or tell a story of **Prudence** in action.

2. Make a list of **five examples** of **prudent** behaviour (for example, a prudent person would look after their health by eating right and exercising so they can live a long life). **Compare** your list with a **friend** and try and determine together whether your examples are **good ones** and true examples of prudence.

### Strengths Challenge:

Think of **two** people you know, or from **history**, that you think have displayed the strength of prudence. What is it that makes them a **good example** of a prudent person?



8

Put a sticker on the picture if you complete the Strengths Challenge!

## Teamwork

**Teamwork means:**  
 You work well with others, you always do your fair share – and sometimes more!

- Strengths Builders:**
1. Strengths in **Action Story** – Can you remember a time when you or somebody you know was a really good **Team** player? Write or draw or tell a story of **Teamwork** in action.
  2. Work with a friend or a group of friends to come up with a **list of activities** that you do at school that involve teamwork.

**Strengths Challenge:**  
 Stay after school for an activity that involves teamwork – it might be a **sport**, **music**, or the **debate club**.



Put a sticker on the picture if you complete the Strengths Challenge!

9



## Creativity

**Creativity means:**  
 You think a little bit differently. You find new ways to do things and have good ideas.

- Strengths Builders:**
1. Strength in **Action Story** – Can you remember a time when you or somebody you know used their **Creativity**? Write or draw or tell a story of **Creativity** in action.
  2. Creativity is doing things **differently**. If you were in charge of **designing the school day**, what would you do that was different but still helped everybody to **learn**?

**Strengths Challenge:**  
 Watch a **TV programme** about something **creative**. It might be about:

- ∞ House design
- ∞ Gardening
- ∞ Music or art

Share what you learn with a **friend** or **family member**.




10

Put a sticker on the picture if you complete the Strengths Challenge!

## Curiosity

**Curiosity means:**  
 You ask lots of questions. You want to find out, try new things, explore new places, and meet new people.

- Strengths Builders:**
1. Strength in **Action Story** – Can you remember a time when you or somebody you know was so **Curious** about something that they had to find out more about it? Write or draw or tell a story of **Curiosity** in action.
  2. **Look up** something or someone that you have always been curious about, but never **investigated**.

**Strengths Challenge:**  
 Find out more about the **neighbourhood** or area you **live in**. What was it like a **long time ago**? See if you can find somebody who has lived there long enough to know and ask them to **tell you** all about it.



Put a sticker on the picture if you complete the Strengths Challenge!

11



## Fairness

**Fairness means:**  
 You treat everyone the same. You give everyone an equal chance. You keep to the rules.

- Strengths Builders:**
1. Strength in **Action Story** – Can you remember a time when you or somebody you know made a **Fair** decision or treated someone **Fairly**? Write or draw or tell a story of **Fairness** in action.
  2. **Robin Hood** has been a symbol of fairness in **England** for hundreds of years. Robin Hood fought against the Normans to free the poor Saxons. If Robin Hood **lived today**, who would he **struggle** against and who would he **support**? Who does our society not treat fairly?

**Strengths Challenge:**  
 Admit to a **mistake** you have made – or to something you do **wrong** – and take responsibility for it by putting it right or apologising.




12

Put a sticker on the picture if you complete the Strengths Challenge!

# Forgiveness

### Forgiveness means:

When people hurt or annoy you, you get over it quickly. You let your anger fade away and are happy to be friends again. You aren't spiteful, you never try to 'get even'.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know **Forgave** someone for something that they did wrong? Write or draw or tell a story of **Forgiveness** in action.
2. Make a **list** of things you find hard to forgive. **Compare** your list with a **friend**. Can you think of **one** way you might become more forgiving?

### Strengths Challenge:

This week, when people **annoy** you, try to respond with **forgiveness** not anger. It can be difficult. See how you do.



Put a sticker on the picture if you complete the Strengths Challenge!

13



# Gratitude

### Gratitude means:

You notice and enjoy the good things in your life. You always say 'thank you' and can usually find something to feel good about.

### Strengths Builders:

1. Strengths in **Action Story** – Can you remember a time when you or somebody you know was really **Grateful** about something? Write or draw or tell a story of **Gratitude** in action.
2. Make a **list** of things you feel grateful for. **Compare** your list with a **friend**. Illustrate this list if you want to with images from magazines or your own drawings and turn it into a work of art.

### Strengths Challenge:

**Thank You Post-It Notes** – carry a set of post-it notes in your bag. **Whenever** you can, leave a little 'thank you' note – for a **teacher**, a **cleaner**, a **friend**, or your **mum** or **dad**.



14

Put a sticker on the picture if you complete the Strengths Challenge!

# Honesty

### Honesty means:

You are an open and truthful person. You stand up for what you believe in, you say what you think.

### Strengths Builders:

1. Strengths in **Action Story** – Can you remember a time when you or somebody you know stood up for themselves or somebody else even though it is scary, but they knew they had to because it was the right thing to do? Write or draw or tell a story of **Honesty** in action.
2. What do you think is really **important** in life? What are the things you would **stand up** for? Can you think of something you feel is important enough to stand up for, even against your friends? **Design** a poster to show how important it is.

### Strengths Challenge:

For two days do not say anything about yourself or other people or situations that is not true.



Put a sticker on the picture if you complete the Strengths Challenge!

15



# Hope

### Hope means:

You look forward to the future and work hard to make your dreams come true. You trust that good things will happen.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know believed in something that they wanted to happen, and it happened? What things did they do in order to make what happened more likely? Write or draw or tell a story of **Hope** in action.
2. Play **Eeyore Thoughts** with a friend – Imagine something goes wrong (for example, you forget to hand in your homework). Think of the **three worst** possible things that could result from this. Then think of the **ten most wonderful** things that could result from this (for example, you have to stay behind after school to complete the work and because you are late going home you bump into Johnny Depp or Pamela Anderson on the way).

### Strengths Challenge:

Write down **one** goal you would like to achieve in the next few months or weeks. Mark on a calendar the date when you would like to achieve it by. **Make plans** for how you will reach the goal by the date you have **chosen**.



16

Put a sticker on the picture if you complete the Strengths Challenge!

## Humour

### Humour means:

You see the funny side of life. You like to make people smile or laugh.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know used **Humour** in a situation? Write or draw or tell a story of **Humour** in action.
2. Start a **Joke Book**. Find a funny image to put on the cover and ask everyone you know for their funniest joke. **Write** it down or ask them write it down.

### Strengths Challenge:

Watch a **comedy** on TV and then tell someone about it and try to make them **laugh**.



Put a sticker on the picture if you complete the Strengths Challenge!

17



## Persistence

### Persistence means:

You stick at things until you finish. You like to keep working until you get there.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know was **Persistent** and stuck at something no matter how much they wanted to give up – and finally succeeded? Write or draw or tell a story of **Persistence** in action.
2. With a **friend** or in a **group** learn to play a new card game. Make sure to learn all the rules and keep practising until you can play well. Need **help** finding a good game? Go to: <http://games.yahoo.com/card-games>.

### Strengths Challenge:

Learn a **poem** or the **lyrics** to a song by heart. Tell it to your class if you are feeling brave.



18

Put a sticker on the picture if you complete the Strengths Challenge!

## Open-Mindedness

### Open-Mindedness means:

You enjoy meeting people with different ideas and backgrounds. You can see different points of view.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know was able to be **Open-Minded** in a situation and see things from someone else's point of view? Write or draw or tell a story of **Open-Mindedness** in action.
2. Look in the **newspaper**. Can you find an opinion or idea that you agree with? Can you find one you disagree with? Compare your **views** with a friend.

### Strengths Challenge:

Choose a **topic** that people have strong opinions about, like hunting or abortion. Ask lots of people what they **think** and try to collect as many different opinions as you can. **Make a list!**



Put a sticker on the picture if you complete the Strengths Challenge!

19



## Kindness

### Kindness means:

You do and say things to make other people happy. You are never too busy to do a favour.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know has been **Kind** enough to do a favour for a friend or help someone who needed it? Write or draw or tell a story of **Kindness** in action.
2. With a **friend**, make a list of '**kind acts**' you could do at school or at home. **Share** them out between you, do them and then report back to each other on how you felt.

### Strengths Challenge:

**Volunteer** – When you hear somebody ask for help, put your hand up.



20

Put a sticker on the picture if you complete the Strengths Challenge!

## Leadership

### Leadership means:

You help other people to get things done. You set a good example. You like organising activities and making things happen.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know displayed good **Leadership** skills? Write or draw or tell a story of **Leadership** in action.

2. **Teachers** are good leaders. Design your **ideal teacher**. Make a list of what they would do and what they would be like. You can draw a diagram if it helps!

### Strengths Challenge:

The best **leaders** are often both **modest** and **kind**. Can you find kind and **encouraging** things to say to younger pupils at school, younger friends or siblings, or just to your **classmates**?



Put a sticker on the picture if you complete the Strengths Challenge!

21



## Love of Learning

### Love of Learning means:

You love learning new things. You enjoy finding out how to do things, you like discovering things you didn't know before.

### Strengths Builders:

1. Strength in **Action Story** – Do you or somebody you know **Love to Learn** new things? Write or draw or tell a story of **Love of Learning** in action.

2. Look in a **dictionary** for a word you don't know. Read the definition and make up a **sentence** with the word in it. Say the sentence to a **friend** and see if they can guess what the word means. Ask them to do the same thing and try to guess what their word means. Here are some **uncommon** words to start you off:

- ⇒ Tremulous
- ⇒ Noctiluculent
- ⇒ Flitbertigibbet
- ⇒ Loquacious

### Strengths Challenge:

Think of **one** or more individuals from history who **loved learning** new things. For example, you could research famous **inventors** or **scientists**. Find out what you can about them. Ask your teacher if you can present your findings to the class.



22

Put a sticker on the picture if you complete the Strengths Challenge!

## Modesty

### Modesty means:

You know your strengths and your weaknesses. You are always happy to learn from other people. When you do well you share success with those who helped you.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know used this strength? Do you know somebody who is never proud or boastful, no matter what they achieve? Write or draw or tell a story of **Modesty** in action.

2. **Praising** other people takes **courage** and **modesty**. Make a **card** for a friend or family member with a genuine **compliment** inside or a statement that recognises one of their strengths. Send it to them.

### Strengths Challenge:

**Hidden Actions** – Plan an **action** that will help somebody, your family, or your school, that you can do in secret, without anyone knowing. Do it **without** telling them it was you.



Put a sticker on the picture if you complete the Strengths Challenge!

23



## Wisdom

### Wisdom means:

You understand what is really important in life. Somehow, you always know the right thing to do or say.

### Strengths Builders:

1. Strength in **Action Story** – Have you or somebody you know ever been **Wise** enough to help a friend with a problem? In what ways did you help? Write or draw or tell a story of **Wisdom** in action.

2. Who do you **think** was the **wisest** person that ever lived? Join with a friend or friends who agree with your choice. As a group make a list of the facts you know about this person. **Compare** and discuss your person and list of facts with another group. What things do your lists have in **common**?

### Strengths Challenge:

Find examples of **two** people from **history** that were considered **wise**, such as a religious leader, a famous writer/philosopher, or a politician. Find out an **interesting fact** about each of them. Share what you found out with a friend or family member. Need help? Go to: <http://en.wikipedia.org>.



24

Put a sticker on the picture if you complete the Strengths Challenge!

## Self-Control

### Self-Control means:

You are in charge of your thoughts, feelings, and actions. You can keep calm, you can do what you need to do.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know used **Self-Control** in a difficult situation? Write or draw or tell a story of **Self-Control** in action.
2. Plan a new project, draw up a list of steps you will need to take, and take the first step in class if you can. Stick with your project until it is finished.

### Strengths Challenge:

Watch no TV and play no computerised games at all for **three** days this week. Instead you could:

- ∞ Read a book
- ∞ Do some exercise
- ∞ Play with your little brother or sister
- ∞ Talk to your mum or dad
- ∞ Play a board game with your family



Put a sticker on the picture if you complete the Strengths Challenge!

26



## Social Skills

### Social Skills means:

You know yourself really well and you know how to get on well with other people. You can fit in anywhere.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know showed they had good **Social Skills**? Write or draw or tell a story of **Social Skills** in action.
2. **Group Strengths Poster** – With a group of friends, create a poster that shows at least **five** strengths for each of you. Can you think of a '**group name**' that reflects your strengths?

### Strengths Challenge:

Make a real effort to find a **new friend** and get to know them.



26

Put a sticker on the picture if you complete the Strengths Challenge!

## Spirituality

### Spirituality means:

You think about God, love, and the meaning of life. You know your life is important.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know used their **Spirituality** or beliefs to get them through something that was difficult? Write or draw or tell a story of **Spirituality** in action.
2. Imagine you are **very old**. Make a **list** of all the things you have done in your lifetime (for example, did you travel, get married, have children, move away, go to university, get a great job?). What will people say about you after you die?

### Strengths Challenge:

**Meditation** is said to increase creativity and brings us health benefits, as well as helping us to grow spiritually. Sit quietly, comfortably, and listen to the sound of your breath for five minutes each day this week.

Go to: <http://www.millionmeditators.com> and click on their '**How To Guides**' to find out more about meditation.



Put a sticker on the picture if you complete the Strengths Challenge!

27



## Enthusiasm

### Enthusiasm means:

You are eager, full of energy, and raring to go.

### Strengths Builders:

1. Strength in **Action Story** – Can you remember a time when you or somebody you know was full of life and energy? Write or draw or tell a story of **Enthusiasm** in action.
2. **Give It A Go** – Think of a **book** you love, a **film** you really enjoyed, a **food** you find delicious, or a **song** you think is great. Find somebody in your class and see if you can use your enthusiasm to persuade them to try these things for themselves. If you feel brave, try to persuade your whole class to '**Give It A Go**'.

### Strengths Challenge:

Try to do **one** new activity every day for a week. You could:

- ∞ Eat a **food** you've never eaten before
- ∞ Read a **book** you've never read before
- ∞ Go to an **after-school** club that you've never tried before



28

Put a sticker on the picture if you complete the Strengths Challenge!

## Strengths Builders I Found Hard - But I Kept On Going!

### Persistence means:

Finishing what you started, keeping going no matter what!

I	II
III	IV
V	VI

29



## Things I am Proud of

Have you done anything over the last few months that you are **proud** of?

This could be anything. Being kind to someone, doing good schoolwork, or just saying 'please' and 'thank you'.

In the box, **write or draw** anything about the things you have done that makes you feel good.

30



## Spot the Strengths Difference

### Top Five Strengths

Now that you have completed the course, have you learned that you have different strengths that you thought?

Go back to the list of 24 strengths on pages 2, 3, and 4.

From the list pick five that you feel describe the real you now.

Remember to use your strengths in everything you do.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Keep strengths spotting and don't forget to let others know what strengths you have spotted in them

31



## Strengths Gym!

Have you stuck with the 'Strengths Gym' course?

Ask a member of staff involved in the project and get them to sign below if they think you have been persistent and tried hard in the course.

I consider.....  
to have put in sufficient efforts in to the 'Strengths Gym' activities to have proved staying power and persistence.

Proudly signed with much respect and admiration,

Full Name: \_\_\_\_\_

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

32





[www.strengthsgym.co.uk](http://www.strengthsgym.co.uk)

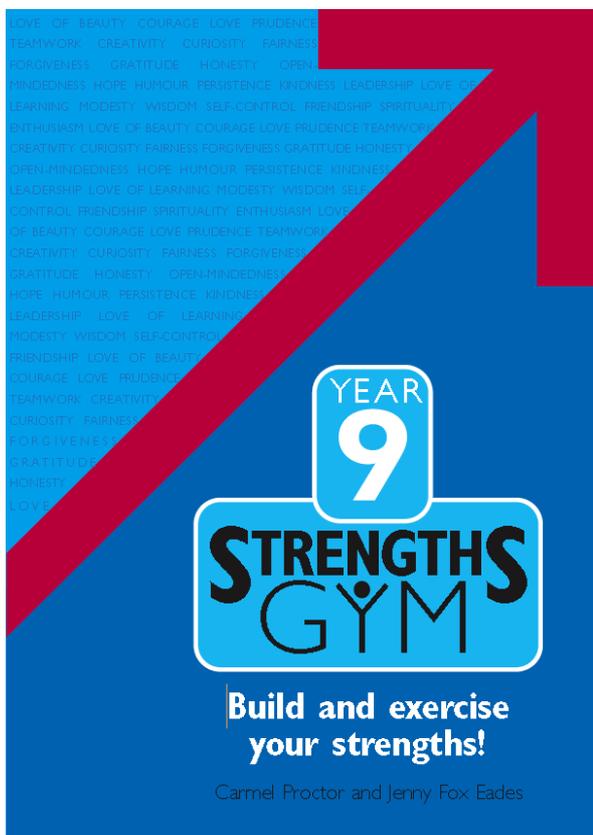


Positive Psychology Research Centre  
[www.pprc.ggl](http://www.pprc.ggl)



Appendix 8.2

Strengths Gym – Year 9 Booklet



This booklet belongs to \_\_\_\_\_



Build and exercise your strengths!

Carmel Proctor and Jenny Fox Eades

Positive Psychology  
Research Centre,  
Guernsey

Published by  
Positive Psychology Research Centre  
PO Box 544  
St. Peter Port, Guernsey  
Channel Islands, GY1 6HL  
Email: info@pprc.gg  
Website: <http://www.pprc.gg>

First published in Guernsey in 2009

10 9 8 7 6 5 4 3 2 1

© PPRC 2009

® Strengths Gym is a registered trademark of Carmel Proctor and Jenny Fox Eades

ISBN: 978-0-9562282-2-2

British Library Cataloguing-in-Publication Data  
A catalogue record for this book is available from the British Library

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means (electronic, mechanical, photocopying, recording or otherwise), without either the prior written permission of the publisher or a license permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6-10 Kirby Street, London, EC1N 8TS. This book may not be lent, resold, hired out or otherwise disposed of by way or trade in any form of binding or cover other than that in which it is published, without the prior consent of the Publisher. Requests for permissions should be directed to the Publisher.

Cover design by John White Design Partnership, Guernsey

Typesetting and layout by Anthony Stagg of Jolly Sunflower Design, Guernsey

Strengths Cartoons © Center for Applied Positive Psychology (CAPP) 2007

Printed in Guernsey

## Spotting Your Strengths

### What Are Strengths?

Your **strengths** are your **best** qualities.

### Top Five Strengths

Which **strengths** do you think best describe **you**?

On the next three pages is a list of **24 strengths**.

From the list **pick 5** that you feel describe the real you.

Once you have chosen **write the 5** that describe you best:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### Strengths Images

Find an image or picture that shows each one of your strengths.

### Strengths Gym

Over the course of the **next few months** we are going to be exercising our strengths, **like muscles!** You will build your favourite strengths and learn to use others even more. You will become expert '**strengths-spotters**' - spotting strengths in your classmates AND your teachers.

**HAVE FUN!**



## Spotting Your Strengths

**Love of Beauty** - You notice and love beautiful things, in nature, art, music, or people.



**Courage** - You do the right thing even if you are scared. You stick up for what is right.



**Love** - You love the people who are important to you and you show that love by what you say and do.



**Prudence** - You make good choices. You think before you act or speak.



**Teamwork** - You work well with others, you always do your fair share - and sometimes more!



**Creativity** - You think a little bit differently. You find new ways to do things and have good ideas.



**Curiosity** - You ask lots of questions. You want to find out, try new things, explore new places, and meet new people.



**Fairness** - You treat everyone the same. You give everyone an equal chance. You keep to the rules.



## Spotting Your Strengths

**Forgiveness** - When people hurt or annoy you, you get over it quickly. You let your anger fade away and are happy to be friends again. You aren't spiteful, you never try to 'get even'.



**Gratitude** - You notice and enjoy the good things in your life. You always say 'thank you' and can usually find something to feel good about.



**Honesty** - You are an open and truthful person. You stand up for what you believe in, you say what you think.



**Hope** - You look forward to the future and work hard to make your dreams come true. You trust that good things will happen.



**Humour** - You see the funny side of life. You like to make people smile or laugh.



**Persistence** - You stick at things until you finish. You like to keep working until you get there.



**Open-Mindedness** - You enjoy meeting people with different ideas and backgrounds. You can see different points of view.



**Kindness** - You do and say things to make other people happy. You are never too busy to do a favour.



## Spotting Your Strengths

**Leadership** - You help other people to get things done. You set a good example. You like organising activities and making things happen.



**Love of Learning** - You love learning new things. You enjoy finding out how to do things, you like discovering things you didn't know before.



**Modesty** - You know your strengths and your weaknesses. You are always happy to learn from other people. When you do well you share success with those who helped you.



**Wisdom** - You understand what is really important in life. Somehow, you always know the right thing to do or say.



**Self-Control** - You are in charge of your thoughts, feelings, and actions. You can keep calm, you can do what you need to do.



**Social Skills** - You know yourself really well and you know how to get on well with other people. You can fit in anywhere.



**Spirituality** - You think about God, love, and the meaning of life. You know your life is important.



**Enthusiasm** - You are eager, full of energy, and raring to go.



## Love of Beauty

### Love of Beauty means:

You notice and love beautiful things, in nature, art, music, or people.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters that display a **Love of Beauty** in a situation. Write or draw or tell your story of **Love of Beauty** in action.

2. **Beauty Map Of The World** – Make a **map** of the most beautiful places in the world or within a country of your choice. **Team up** with some friends to draw a map that points the way to **beauty spots** across the world or within the country of your choice. Compare your map with another group.

### Strengths Challenge:

Find out about two different types of artwork. For example:

- Pottery and Papier Mache
- Watercolour and Oil Painting
- Knitting and Cross-Stitch

Try and make a piece of **artwork** using one of the methods listed above or one you discovered on your own. Or find an example of something you consider to be **beautiful** or an example of **excellence**, such as a scientific invention, car design, or architecture.



Put a sticker on the picture if you complete the Strengths Challenge!

STRENGTHS  
GTM

5

## Courage

### Courage means:

You do the right thing even if you are scared. You stick up for what is right.

### Strengths Builders:

1. **Create your own Strength in Action Story** - Make up a story that contains a character or characters who choose not to do something wrong even though their friends are doing it and might tease them for not going along with it. Write or draw or tell your story of **Courage** in action.

2. Think of something that is outside your **comfort zone**, something that will need courage for you to do. Make a note of it in your journal and tell one person you trust what it is - then do it!

### Strengths Challenge:

**Speak** to someone today that you have wanted to speak to for a long time, but have not had the **courage** to speak to before. Think about how it made you feel to **overcome your fear** of speaking to them.



STRENGTHS  
GTM

6

Put a sticker on the picture if you complete the Strengths Challenge!

## Love

### Love means:

You love the people who are important to you and you show that love by what you say and do.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who did something out of **Love** for someone else. Write or draw or tell your story of **Love** in action.

2. Send someone you love a poem or a love quote. Need help? Go to: <http://www.lovepoemsandquotes.com> for ideas or for existing love poems and quotes.

### Strengths Challenge:

Send your **friends** or **family** an e-card from: <http://www.lovecards.com> or send a text and tell them you love them.



Put a sticker on the picture if you complete the Strengths Challenge!

STRENGTHS  
GTM

7

## Prudence

### Prudence means:

You make good choices. You think before you act or speak.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who set a goal and are able to reach it because they planned along the way how they were going to achieve it. Write or draw or tell your story of **Prudence** in action.

2. Think of an important decision that you must make now, or some point in the **future**, such as whether or not to go to college or university. Make a '**pros**' and '**cons**' list for each of your choices. Could you do this for other things in your life in order to help you make good choices and plan for the future?

### Strengths Challenge:

For the whole day, think before you speak and remember to say 'please' and 'thank you'.



STRENGTHS  
GTM

8

Put a sticker on the picture if you complete the Strengths Challenge!

## Teamwork

### Teamwork means:

You work well with others, you always do your fair share – and sometimes more!

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who use **Teamwork** to accomplish a task. Write or draw or tell your story of **Teamwork** in action.
2. **Strengths-Spotting** – Building good teams means spotting and using the strengths of each team member. In small groups identify each other's strengths and think about how you might use those different strengths to:
  - Play a game
  - Organise a party
  - Solve a maths problem

### Strengths Challenge:

If you see **litter** on the ground pick it up and put it in the bin. It takes **teamwork** to keep the areas around us **clean**.



Put a sticker on the picture if you complete the Strengths Challenge!

9



## Creativity

### Creativity means:

You think a little bit differently. You find new ways to do things and have good ideas.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who used **Creativity** in a situation. Write or draw or tell your story of **Creativity** in action.
2. **Inventors** are creative people. Team up with a friend and **design** and draw plans for a **new invention** that will help you do something that you do every day a little bit easier. If you are brave **share** your invention idea with the class.

### Strengths Challenge:

Design a collage of **pictures, fabric, or photographs** of your choice, or create a collage of pictures from the Internet on a computer. Give your collage to a **friend or family member** when you are finished.



10

Put a sticker on the picture if you complete the Strengths Challenge!

## Curiosity

### Curiosity means:

You ask lots of questions. You want to find out, try new things, explore new places, and meet new people.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who were so **Curious** about something that they had to find out more about it. Write or draw or tell your story of **Curiosity** in action.
2. Start a **Travel Book** – Look up places that **interest** you and that you would like to visit some day. Collect clippings from **magazines** and **newspapers** or the Internet that do articles on these places and paste them into your book.

### Strengths Challenge:

Listen to **music** that you have never listened to before, such as Classical, Country, Jazz, or your parents' favourite music. Listen for long enough (more than **one song!**) to decide whether or not you like it. Think about what you like and do not like about the **new type** of music.



Put a sticker on the picture if you complete the Strengths Challenge!

11



## Fairness

### Fairness means:

You treat everyone the same. You give everyone an equal chance. You keep to the rules.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who are in a situation where they make a **Fair** decision or treat someone **Fairly**. Write or draw or tell your story of **Fairness** in action.
2. **Fairness at School** - Can you think of things that are unfair at school? How would you make them fairer if you were in charge? What **is** fair at school?

### Strengths Challenge:

Find an example of a **person, animal, or group** that has been treated **unfairly**, either now or in history.



12

Put a sticker on the picture if you complete the Strengths Challenge!

## Forgiveness

### Forgiveness means:

When people hurt or annoy you, you get over it quickly. You let your anger fade away and are happy to be friends again. You aren't spiteful, you never try to 'get even'.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who were able to **Forgive** someone for something that they did wrong. Write or draw or tell your story of **Forgiveness** in action.
2. Write a **letter** of forgiveness to someone who has done something wrong to you; **do not send it**, but read it over once each day for a week.

### Strengths Challenge:

Send a make your peace e-card from: <http://www.makeyourpeace.org.uk> to someone that you are in conflict with or who has done something wrong to you as your first steps towards forgiveness. Or be a **peacemaker** at school and help others to forgive each other.



Put a sticker on the picture if you complete the Strengths Challenge!

13



## Gratitude

### Gratitude means:

You notice and enjoy the good things in your life. You always say 'thank you' and can usually find something to feel good about.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who were really **Grateful** about something. Write or draw or tell your story of **Gratitude** in action.
2. **Gratitude Letter** – Write a letter of gratitude to someone who has done something for you, but you never **thanked them properly**. Send the letter to them.

### Strengths Challenge:

What are you grateful for? Record your Top Ten at: <http://www.thegratitudelist.com>.



14

Put a sticker on the picture if you complete the Strengths Challenge!

## Honesty

### Honesty means:

You are an open and truthful person. You stand up for what you believe in, you say what you think.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who stood up for themselves, or of a time when they knew they had to face something scary, but did it anyway because they knew it was the right thing to do. Write or draw or tell your story of **Honesty** in action.
2. Be Honest - Share something about yourself with your friend that is honest but which they don't know. It could be:
  - Something you like or dislike
  - A past experience
  - A skill you haven't told anyone about
  - A goal you haven't said anything about

### Strengths Challenge:

Try not to tell any **lies** this week, even small ones (like giving someone a compliment when you don't mean it). If you do tell one, **admit it** and apologise right away.



Put a sticker on the picture if you complete the Strengths Challenge!

15



## Hope

### Hope means:

You look forward to the future and work hard to make your dreams come true. You trust that good things will happen.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who believed in something that they wanted to happen, and it happened. Include what things they did in order to make what happened more likely. Write or draw or tell your story of **Hope** in action.
2. **Wish List** – Write down one or more goals for the next week, the next month, or the next year on a **calendar**. Think about how you can reach these goals. Make **real plans** that will help you reach them.

### Strengths Challenge:

Spend some time carefully **thinking** about your **future** and what you would like to achieve or who you would like to become. Share your ideas with your **teacher, friends, or family**.



16

Put a sticker on the picture if you complete the Strengths Challenge!

## Humour

### Humour means:

You see the funny side of life. You like to make people smile or laugh.

### Strengths Builders:

1. Create your own Strength in **Action Story** – Make up a story that contains a character or characters who are involved in a really funny situation or event. Write or draw or tell your story of **Humour** in action.

2. Work with a friend and draw a **comic strip** or **small comic book**, or write your own **comedy script**. If you are feeling brave perform your comedy script for the class or share your comic strip or book with the other students.

### Strengths Challenge:

Ask a **teacher** if you can organise a lunchtime comedy club. Invite other students to tell jokes, **perform** funny sketches, etc.



Put a sticker on the picture if you complete the Strengths Challenge!

17



## Persistence

### Persistence means:

You stick at things until you finish. You like to keep working until you get there.

### Strengths Builders:

1. Create your own Strength in **Action Story** – Make up a story that contains a character or characters who are **Persistent** and keep working at something no matter how much they want to give up, until they finally succeed. Write or draw or tell your story of **Persistence** in action.

2. Make a list of **activities** or **tasks** you are required to do at school in which you need to use persistence in order to complete them. Order your list from the hardest to the **easiest**. Compare your list with a **friend**. See if you can start one today.

### Strengths Challenge:

What other strengths might a person who is very persistent, such as a famous inventor, have?



18

Put a sticker on the picture if you complete the Strengths Challenge!

## Open-Mindedness

### Open-Mindedness means:

You enjoy meeting people with different ideas and backgrounds. You can see different points of view.

### Strengths Builders:

1. Create your own Strength in **Action Story** – Make up a story that contains a character or characters who use **Open-Mindedness** in a situation. Write or draw or tell your story of **Open-Mindedness** in action.

2. With a **partner** discuss your **opinions** about whether you should wear school uniforms. Discuss the **issue** from your point of view and from that of your school and parents. What is your point of view? What is the **point of view** of your school, your parents, or the community?

### Strengths Challenge:

If you could rename this **strength**, what name would you choose?



Put a sticker on the picture if you complete the Strengths Challenge!

19



## Kindness

### Kindness means:

You do and say things to make other people happy. You are never too busy to do a favour.

### Strengths Builders:

1. Create your own Strength in **Action Story** – Make up a story that contains a character or characters who are **Kind** to someone else by doing a favour for them or helping them when they needed it. Write or draw or tell your story of **Kindness** in action.

2. Think of some **random acts of Kindness** you could carry out in the week ahead. Write them in your journal and tick them as you do them. If possible make them anonymous.

### Strengths Challenge:

Go to: [http://www.wisdomquotes.com/cat\\_kindness.html](http://www.wisdomquotes.com/cat_kindness.html) and pick a kindness quotation for the week and then write it in your notebook. Why not pick a **new one** for every week!



20

Put a sticker on the picture if you complete the Strengths Challenge!

## Leadership

### Leadership means:

You help other people to get things done. You set a good example. You like organising activities and making things happen.

### Strengths Builders:

1. Create your own Strength in Action Story – Make up a story that contains a character or characters who display good Leadership skills. Write or draw or tell your story of Leadership in action.
2. What makes a good leader? Can you make a list of qualities that makes a leader a good leader?

### Strengths Challenge:

Volunteer to complete or organise a group to complete an unpleasant task and make sure that it gets done.



Put a sticker on the picture if you complete the Strengths Challenge!

21



## Love of Learning

### Love of Learning means:

You love learning new things. You enjoy finding out how to do things, you like discovering things you didn't know before.

### Strengths Builders:

1. Create your own Strength in Action Story – Make up a story that contains a character or characters who Love to Learn. Write or draw or tell your story of Love of Learning in action.
2. Investigate the history of a famous monument; find out why it was built, who built it, and who it was built for? Examples include:

- The Statue of Liberty
- The Eiffel Tower
- Nelson's Column
- The Taj Mahal

### Strengths Challenge:

Find out about a famous inventor. Why was their invention so important? Tell a family member or friend what you find out about this inventor. Examples include:

- Thomas Edison
- Alexander Graham Bell
- Henry Ford



22

Put a sticker on the picture if you complete the Strengths Challenge!

## Modesty

### Modesty means:

You know your strengths and your weaknesses. You are always happy to learn from other people. When you do well you share success with those who helped you.

### Strengths Builders:

1. Create your own Strength in Action Story – Make up a story that contains a character or characters who display the strength of Modesty or who use Modesty in a situation. Write or draw or tell your story of Modesty in action.
2. My Strengths and Weaknesses - Being modest means knowing your strengths and your weaknesses. Can you write a list of your own strengths and weaknesses in your journal?

### Strengths Challenge:

For the whole day do **not** talk about yourself at all.



Put a sticker on the picture if you complete the Strengths Challenge!

23



## Wisdom

### Wisdom means:

You understand what is really important in life. Somehow, you always know the right thing to do or say.

### Strengths Builders:

1. Create your own Strength in Action Story – Make up a story that contains a character or characters who use Wisdom in helping someone else. Write or draw or tell your story of Wisdom in action.
2. Name other qualities or other strengths that you think a person would need to possess in order to be considered wise. Discuss and compare your choices with a friend and see if you can both come up with someone who fits the descriptions you have made.

### Strengths Challenge:

Find examples of one or more people from history who were considered wise – for example a religious leader, a famous writer/philosopher, or a politician. Make a list of the other strengths you think this person or people might have had to do their job well or to hold their position.



24

Put a sticker on the picture if you complete the Strengths Challenge!

## Self-Control

### Self-Control means:

You are in charge of your thoughts, feelings, and actions. You can keep calm, you can do what you need to do.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who use **Self-Control** in a difficult situation. Write or draw or tell your story of **Self-Control** in action.

2. With a **friend** make a list of situations where you can imagine yourself needing to use self-control. See how many different **situations** you can come up with together. Once you have your list discuss what actions you will take in order to remain 'cool' in each of the situations on your **list** should they really occur.

### Strengths Challenge:

For an entire **week** don't gossip or say anything mean about **anyone**.



Put a sticker on the picture if you complete the Strengths Challenge!

26



## Social Skills

### Social Skills means:

You know yourself really well and you know how to get on well with other people. You can fit in anywhere.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who use social skills in a situation. Write or draw or tell your story of **Social Skills** in action.

2. Play **Speakers and Listeners** – Students work in pairs, with one being the **Speaker** and the other the **Listener**. The **Speaker** talks for two minutes about their favourite holiday. The **Listener** needs to listen with their head, with their eyes, and with their face. When the **Speaker** has finished the **Listener** feeds back what they heard. Then the **Speaker** 'marks' how their **Listener** listened.

- If they listened with their **head** (remembered what was said) they get one mark – one mark you are an OK Listener.
- If they listened with their **eyes** (kept looking) they get one mark – two marks you are a Good Listener.
- If they listened with their **face** (reflected the feelings of the speaker) they get one mark – three marks you are a Very Good Listener.

### Strengths Challenge:

Join a group of friends who are already talking and ask what they are talking about and then join in, but stick to the topic already being discussed. Listen first, talk last, and don't take over the conversation. Think about your body language and try and put others at ease by being relaxed.



26

Put a sticker on the picture if you complete the Strengths Challenge!

## Spirituality

### Spirituality means:

You think about God, love, and the meaning of life. You know your life is important.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who use their **Spirituality** or beliefs to get them through something difficult. Write or draw or tell your story of **Spirituality** in action.

2. With a friend, or in a group, talk about God. Can you come up with reasons to believe in God? Can you come up with reasons not to believe in God? **Remember** – respect the views you don't agree with!

### Strengths Challenge:

Go to the **library** or search on the Internet and investigate a **faith** that you know nothing about, such as Buddhism, Shinto, or Taoism. Need help searching? Go to: <http://en.wikipedia.org>. Has what you have found out changed your perception of people of other faiths? What did you **learn**?



Put a sticker on the picture if you complete the Strengths Challenge!

27



## Enthusiasm

### Enthusiasm means:

You are eager, full of energy, and raring to go.

### Strengths Builders:

1. **Create your own Strength in Action Story** – Make up a story that contains a character or characters who are full of life and energy. Write or draw or tell your story of **Enthusiasm** in action.

2. **Passion Pairing** – Decide what your passion or enthusiasm is. Go round the class asking other people 'What's your passion?' and find a **Passion Pair** – someone you share a passion with! Find out how many different passions there are in the class.

### Strengths Challenge:

For one week, keep track of how many hours of **TV** you watch and how many **hours** you spend indoors on the computer or playing computerised games. What do you think about how much time you spend doing **stationary** activities? Could you have done something more exciting with your time, like an **outside activity** or joining a sports **team** or **club**?



28

Put a sticker on the picture if you complete the Strengths Challenge!

## Strengths Builders I Found Hard - But I Kept On Going!

### Persistence means:

Finishing what you started, keeping going no matter what!

I	II
III	IV
V	VI

29



## Things I am Proud of

Have you done anything over the last few months that you are proud of?

This could be anything. Being kind to someone, doing good schoolwork, or just saying 'please' and 'thank you'.

In the box, write or draw anything about the things you have done that makes you feel good.



30

## Spot the Strengths Difference

### Top Five Strengths

Now that you have completed the course, have you learned that you have different strengths that you thought?

Go back to the list of 24 strengths on pages 2, 3, and 4.

From the list pick five that you feel describe the real you now.

Remember to use your strengths in everything you do.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Keep strengths spotting and don't forget to let others know what strengths you have spotted in them

31



## Strengths Gym!

Have you stuck with the 'Strengths Gym' course?

Ask a member of staff involved in the project and get them to sign below if they think you have been persistent and tried hard in the course.

I consider ..... to have put in sufficient efforts in to the 'Strengths Gym' activities to have proved staying power and persistence.

Proudly signed with much respect and admiration,

Full Name: \_\_\_\_\_

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



32



[www.strengthsgym.co.uk](http://www.strengthsgym.co.uk)



**PPRC**

Positive Psychology Research Centre  
[www.pprc.org](http://www.pprc.org)



ISBN 9780195221322

9 780195 221322