

1-1-2014

# Improving Middle School Students' Subjective Well-Being: Efficacy of a Multi-Component Positive Psychology Intervention Targeting Small Groups of Youth and Parents

Rachel Anne Roth

University of South Florida, roth.rachela@gmail.com

Follow this and additional works at: <http://scholarcommons.usf.edu/etd>

 Part of the [Education Commons](#), and the [Psychology Commons](#)

## Scholar Commons Citation

Roth, Rachel Anne, "Improving Middle School Students' Subjective Well-Being: Efficacy of a Multi-Component Positive Psychology Intervention Targeting Small Groups of Youth and Parents" (2014). *Graduate Theses and Dissertations*.  
<http://scholarcommons.usf.edu/etd/5573>

This Dissertation is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact [scholarcommons@usf.edu](mailto:scholarcommons@usf.edu).

Improving Middle School Students' Subjective Well-Being: Efficacy of a Multi-Component  
Positive Psychology Intervention Targeting Small Groups of Youth and Parents

by

Rachel A. Roth

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
Department of Educational and Psychological Studies  
College of Education  
University of South Florida

Major Professor: Shannon Suldo, Ph.D.  
Linda Raffaele-Mendez, Ph.D.  
Sarah Kiefer, Ph.D.  
John Ferron, Ph.D.

Date of Approval:  
October 2, 2014

Keywords: life satisfaction, positive affect, negative affect, psychopathology, adolescents

Copyright © 2014, Rachel A. Roth

## **Acknowledgments**

I would like to thank several individuals for the support and guidance I have received throughout the completion of this dissertation project. First and foremost, thank you to my major professor, Dr. Shannon Suldo, for all that she has taught me throughout my graduate school training. Thanks to her continual teachings, guidance, and feedback I am a much stronger researcher and practitioner than I could have ever imagined. I would also like to thank my committee members, Drs. Linda Raffaele-Mendez, Sarah Kiefer, and John Ferron for their unique perspectives and mentorship throughout this project and beyond. Additionally, I would like to express my sincerest gratitude to my fellow students Bryan Bander, Michael Frank, and Brittany Hearon, who devoted much time and effort in the data collection process and the implementation of the intervention I tested in this project. Furthermore, thank you to my cohort members for providing encouragement and friendship throughout the past four years of graduate school. Last but not least, thank you to my family for their continual and unconditional love and support, which mean the world to me.

## Table of Contents

List of Tables	v
List of Figures	vi
Abstract	vii
Chapter I: Introduction	1
Statement of the Problem	1
Purpose of the Current Study	4
Definition of Key Terms	5
Subjective well-being	5
Gratitude	5
Character strengths	5
Kindness	5
Optimism	6
Hope	6
Savoring	6
Dual-factor model of mental health	6
Positive psychology interventions	7
Booster session	7
Research Questions	7
Hypotheses	8
Importance of the Study to School Psychologists	9
Contributions to the Literature	10
Chapter II: Review of the Literature	12
Positive Psychology Movement	12
Connections between positive psychology and school psychology	14
Key Positive Psychology Constructs	15
Subjective well-being	15
Gratitude	17
Kindness	17
Character strengths	18
Optimism	19
Hope	19
Dual-Factor Model of Mental Health	20
Initial Support for a dual-factor model	21
Continued work on the dual-factor model	22

The dual-factor model among college students	24
Longitudinal associations yielded from a dual-factor model	25
Positive Psychology Interventions	27
Positive psychology interventions with adult samples	28
Gratitude	28
Hope	34
You at your best	38
Acts of kindness	38
Savoring	40
Character strengths	42
Loving kindness meditation	44
Positive psychotherapy	45
Positive psychology interventions with youth samples	48
Gratitude	48
Character strengths	51
Hope	52
Multi-target positive psychology interventions	53
Cognitive Development in Early Adolescence	56
Summary of Positive Psychology Interventions for Youth	58
Role of Family Components Included in Psychological Interventions	59
Family components in psychological interventions targeting	
Psychopathology	59
Family components in psychological interventions	
targeting depression	60
Family components in psychological interventions	
targeting anxiety	66
Family components in preventative interventions	72
Family components in psychological interventions targeting	
Wellness	72
Role of Booster Sessions in Psychological Interventions	74
Booster sessions in the treatment of psychopathology	74
Booster sessions in wellness-promotion interventions	79
Summary of Literature	79
Purpose of the Current Study	81
Chapter III: Method	84
Participants	84
Procedures	85
Recruitment of student participants	85
Student survey administration	87
Intervention implementation	88
Parent component	88
Student component	89
Wellness Promotion Intervention	90
Student Self-Report Measures	93
Demographics form	93

Brief Multidimensional Students' Life Satisfaction Scale	94
Students' Life Satisfaction Scale	94
Positive and Negative Affect Scale for Children	95
Brief Problem Monitor-Youth	96
Ethical Considerations	97
Overview of Analyses	98
Group differences and growth	99
Chapter IV: Results	101
Data Screening	101
Data entry	101
Missing data	101
Variable Creation	102
Treatment Integrity	102
Treatment Acceptability	103
Treatment Dosage	105
Preliminary Analyses	107
Measure reliability	107
Descriptive analyses	108
Correlational analyses	109
Analysis of Group Differences and Growth	112
Life satisfaction	113
Positive affect	114
Negative affect	116
Internalizing problems	119
Externalizing problems	122
Summary of Findings	125
Chapter V: Discussion	126
Group Differences and Growth at Immediate Post-Intervention	126
Life satisfaction	127
Positive affect	128
Negative affect	129
Internalizing problems	130
Externalizing problems	132
Group Differences and Growth across Follow-Up	133
Life satisfaction	133
Positive affect	135
Negative affect	136
Internalizing problems	138
Externalizing problems	139
Implications for School Psychologists	140
Contributions to the Literature	143
Limitations	145
Future Directions	147
Summary	149

References	152
Appendix A: School Handout	174
Appendix B: Parent Consent Form	176
Appendix C: Student Assent Form	179
Appendix D: Treatment Integrity Forms	180
Appendix E: Student Attendance Record	193
Appendix F: Homework Record	195
Appendix G: Intervention Manual	197
Appendix H: Student Demographics Form	311
Appendix I: Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS)	313
Appendix J: Students' Life Satisfaction Scale (SLSS)	314
Appendix K: Positive and Negative Affect Scale for Children (PANAS-C)	315
Appendix L: Institutional Review Board Letter of Approval	316

## List of Tables

Table 1:	Demographic Characteristics as a Percentage of the Sample	87
Table 2:	Internal Consistency of Measures at Each Time Point ( $N = 42$ )	108
Table 3:	Descriptive Statistics for Key Variables at Pre-Intervention ( $N = 42$ )	109
Table 4:	Descriptive Statistics for Key Variables at Immediate Post-Intervention ( $N = 42$ )	109
Table 5:	Descriptive Statistics for Key Variables at 5-Week Follow-Up ( $N = 42$ )	110
Table 6:	Descriptive Statistics for Key Variables at 7-Week Follow-Up ( $N = 42$ )	110
Table 7:	Correlation Matrix for Variables at Pre-Intervention ( $N = 42$ )	111
Table 8:	Correlation Matrix for Variables at Immediate Post-Intervention ( $N = 42$ )	111
Table 9:	Correlation Matrix for Variables at 5-Week Follow-Up ( $N = 42$ )	112
Table 10:	Correlation Matrix for Variables at 7-Week Follow-Up ( $N = 42$ )	112
Table 11:	Parameter Estimates for Life Satisfaction	115
Table 12:	Parameter Estimates for Positive Affect	117
Table 13:	Parameter Estimates for Negative Affect	119
Table 14:	Parameter Estimates for Internalizing Problems	121
Table 15:	Parameter Estimates for Externalizing Problems	123
Table 16:	Summary of Outcomes Assessed in Piecewise Models	125



## List of Figures

Figure 1: Piecewise Model of Life Satisfaction	116
Figure 2: Piecewise Model of Positive Affect	118
Figure 3: Piecewise Model of Negative Affect	120
Figure 4: Piecewise Model of Internalizing Problems	122
Figure 5: Piecewise Model of Externalizing Problems	124

## Abstract

A dual-factor model of mental health conceptualizes mental health status as a combination of both psychopathology and subjective well-being. Current literature indicates that complete mental health (i.e., low psychopathology, high subjective well-being) is associated with the best academic and social functioning among youth. Thus, the absence of psychopathology alone is not sufficient for student success. While research on interventions for improving subjective well-being, termed positive psychology interventions (PPIs), is increasing, PPIs for youth in particular lag behind similar interventions for adults. Additionally, a majority of youth-focused PPIs have targeted singular constructs (e.g., gratitude, character strengths), have neglected to include relevant stakeholders in youth's lives, and have not examined the impact of booster sessions on maintaining gains in subjective well-being. Research questions answered in the current study pertain to: (a) the impact of a comprehensive, multi-target, multi-component, small-group youth-focused PPI on students' subjective well-being and symptoms of psychopathology, and (b) the extent to which booster sessions can prevent students from experiencing post-intervention declines in subjective well-being and symptoms of psychopathology. To answer these questions, 42 seventh grade students were randomly assigned to either immediately receive the PPI or to a wait-list control group; all participants' subjective well-being and symptoms of psychopathology were analyzed across time. At immediate post-intervention, students who participated in the PPI made significant gains in all components of subjective well-being, and there was a trend for them to report less internalizing and externalizing symptoms of psychopathology relative to students in the wait-list control group. By seven-week follow-up, students who participated in the PPI

exhibited sustained high levels of positive affect, and there was a trend for them to report sustained low levels of negative affect and internalizing symptoms of psychopathology relative to students in the wait-list control group. Thus, findings from the current study support this multi-component PPI as an evidence-based method for making long-lasting improvements in early adolescents' positive affect, a primary indicator of subjective well-being. Implications for school psychologists, contributions to the literature, and future directions are discussed.

## Chapter I: Introduction

### Statement of the Problem

Traditionally, mental health has been conceptualized as one-dimensional, with the presence of psychopathology indicating poor mental health, and a lack of psychopathology indicating positive mental health (Diener, 2000). This deficit-focused perception of mental health status precludes a comprehensive understanding of human functioning, however, by neglecting to account for positive factors. Largely as a result of discontent with the traditional model of mental health, the positive psychology movement emerged in response, emphasizing the presence or absence of both psychopathology and positive indicators of mental health equally (Gable & Haidt, 2005; Huebner et al., 2009). Positive psychology conceptualizes poor mental health as both the presence of psychopathology and the absence of wellness, whereas positive mental health is conceptualized as both minimal psychopathology symptoms and the presence of well-being indicators (Greenspoon & Saklofske, 2001; Huebner et al., 2009). Thus, in order to achieve complete mental health, it is imperative to alleviate psychopathology in conjunction with promoting individuals' well-being (Huebner et al., 2009).

In line with the growing consensus among psychologists that mental health cannot focus solely on the presence or absence of psychopathology to understand mental health functioning, a dual-factor model of mental health has been postulated and tested across a wide-range of youth samples. The dual-factor model posits that individuals can be classified into four separate mental health groups based on levels of psychopathology and indicators of subjective well-being, and has been replicated by several independent research teams (Antaramian, Huebner, Hills, &

Valois, 2010; Eklund, Dowdy, Jones, & Furlong, 2011; Greenspoon & Saklofske, 2001; Renshaw & Cohen, 2014; Suldo & Shaffer, 2008). Moreover, researchers have found that a lack of psychopathology alone does not equate to superior outcomes. Specifically, youth with complete mental health (e.g., low psychopathology, high subjective well-being) exhibit significantly better outcomes relative to youth who also have low levels of psychopathology, but also low levels of subjective well-being, on a host of indicators in the academic, social, and physical health realms (Antaramian et al., 2010; Suldo & Shaffer, 2008). There is also support for the notion that regardless of levels of psychopathology, possessing high levels of subjective well-being is associated with better functioning such as higher levels of hope and gratitude and better interpersonal relations (Eklund et al., 2011; Renshaw & Cohen, 2014). Additionally, high subjective well-being, even when coupled with high levels of psychopathology, may help buffer youth from experiencing as sharp of declines in academic performance that typically accompany high levels of psychopathology (Suldo, Thalji, & Ferron, 2011). Thus, research on the dual-factor model has emphasized the importance of possessing high subjective well-being specifically, as it may serve a protective role when coupled with high levels psychopathology, and when coupled with low levels of psychopathology it may further enhance positive outcomes.

With the recognized importance of having high levels of subjective well-being, positive psychology researchers and practitioners have become interested in strategies for increasing happiness. There is a growing body of literature within the field of positive psychology that has begun to explore interventions (i.e., positive psychology interventions) aimed at accomplishing this goal by targeting positive psychology constructs viewed as malleable, such as gratitude and hope. Among adults, the utility of several positive psychology interventions (PPIs) has been investigated. There is support for interventions targeting gratitude (Emmons & McCullough,

2003; Odou & Vella-Brodrick, 2013; Seligman, Steen, Park, & Peterson, 2005; Senf & Liao, 2013; Sheldon & Lyubomirsky, 2006), hope (Cheavans, Feldman, Gum, Michael, & Snyder, 2006; King, 2001; Odou & Vella-Brodrick, 2013; Sheldon & Lyubomirsky, 2006), kindness (Lyubomirsky, Sheldon, & Schkade, 2005; Otake, Shimai, Tanaka-Matsumi, Otsui, & Frederickson, 2006), savoring (Hurley & Kwon, 2012; Kurtz, 2008), character strengths (Seligman et al., 2005; Senf & Liao, 2013), loving-kindness meditation (Cohn & Fredrickson, 2010; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008), and imagining your best possible self (Seligman et al., 2005) positively impacting at least one component of subjective well-being. Additionally, a comprehensive intervention, positive psychotherapy, which incorporates multiple PPIs into the treatment process, has been associated with increases in well-being (Seligman, Rashid, & Parks, 2006).

The research on the efficacy of PPIs among youth lags behind research with adults, however, there is some support that interventions targeting gratitude (Froh, Kashdan, Ozimkowski, & Miller, 2009; Froh, Sefick, & Emmons, 2008), character strengths (Proctor et al., 2011), and hope (Marques, Lopez, & Pais-Ribeiro, 2011) have a positive impact on at least one component of subjective well-being. Additionally, there are a few examples of comprehensive multi-target PPIs positively impacting subjective well-being (Rashid & Anjum, 2008; Suldo, Savage, & Mercer, 2014). However, the comprehensive PPIs have included only youth, and withheld attention to other key stakeholders such as parents and teachers. Parents are likely an appropriate component to include in positive psychology interventions given research documenting that parents' levels of life satisfaction and gratitude (in mothers) are associated with such positive indicators of well-being in their children, such that happier parents tend to have happier children (Hoy, Suldo, & Raffaele Mendez, 2013). Additionally, while some

preliminary evidence suggests that PPIs may impact subjective well-being in the long-term, to date, no known studies have examined the impact of booster (follow-up) sessions on the maintenance of intervention associated gains. Research is needed to explore the efficacy of comprehensive, multi-component PPIs that include key stakeholders in youths' lives (i.e., parents), as well as booster sessions, in producing long-term improvements in subjective well-being.

### **Purpose of the Current Study**

The purpose of the current study was to empirically examine the efficacy of a comprehensive multi-component youth PPI, which was modified from an existing youth-focused group intervention associated with promise in increasing life satisfaction (Suldo, Savage, & Mercer, 2014), to include both parents and booster session in an effort to enact long-term increases in youth mental health. As previous research has been limited by failing to either include parents in PPIs or attempt to maintain treatment gains by incorporating booster sessions, the current study contributes to the small amount of literature examining comprehensive multi-target PPIs in youth. Specifically, the study examined the differences between the components of subjective well-being (i.e., positive and negative affect, life satisfaction) and psychopathology between middle school students who received a comprehensive manualized PPI targeting several positive psychology constructs (e.g., gratitude, character strengths, savoring, hope, kindness, optimism) with a parent component (e.g., psychoeducation, regular correspondence) and booster sessions, and students assigned to a wait-list control condition. As there is growing interest in maximizing positive functioning by looking through a dual-factor model of mental health lens, this study aligns with calls to cultivate and increase well-being (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000). High levels of subjective well-being are associated with a host of

positive outcomes among children and adolescents, shedding light on the importance of improving well-being in this sample.

### **Definition of Key Terms**

**Subjective well-being.** Subjective well-being, the scientific term for happiness, is a multi-faceted construct comprised of three components: positive affect, negative affect, and life satisfaction (Diener, Oishi, & Lucas, 2009). Positive and negative affect refer to the frequency with which one experiences positive and negative emotions in daily life, respectively, whereas life satisfaction refers to the cognitive global evaluation of one's life on the whole (Diener, 2000; Diener et al., 2009).

**Gratitude.** Gratitude is a multidimensional construct, including both emotional (e.g., evoked in response to feeling grateful for being the recipient of kind acts) and dispositional (e.g., an individual who appreciates positive aspects of life and the world) components (McCullough, Kilpatrick, Emmons, & Larson, 2001; Wood, Froh, & Geraghty, 2010). In the current study, gratitude is more consistent with the dispositional definition above.

**Character strengths.** Character strengths refer to a set of 24 individual positive traits (e.g., kindness, curiosity, humility) classified into six broad categories of virtues (Park, Peterson, & Seligman, 2004). Every individual possesses and exhibits strengths in a unique profile in comparison to others, and has signature strengths (i.e., strengths most frequently exhibited and valued in one's life; Peterson & Seligman, 2004).

**Kindness.** Kindness refers to one particular character strength and is multidimensional in nature, including three components: motivation to act kindly toward others, recognizing kindness in others, and behaving kindly toward others (Otake, Shimai, Tanaka-Matsumi, Otsui, &



Frederickson, 2006). When performing acts of kindness, individuals behave in ways that benefit others at their own expense (Lyubomirsky, Sheldon, & Schkade, 2005; Otake et al., 2006).

**Optimism.** Optimism refers to both a generalized expectancy (e.g., tendency to expect positive outcomes; Boman, Furlong, Shochet, Lilles, & Jones, 2009) and a cognitive explanatory style (e.g., attributing encountering negative experiences to temporary, externally caused, and limited factors, but attributing positive experiences to permanent, universal, and personal factors; Seligman, 1991).

**Hope.** Hope is a positive motivational state involving both a cognitive and behavioral component. The cognitive component refers to individuals' goal-directed thinking, and planning and carrying out paths to achieving set goals refers to the behavioral component (Snyder, Irving, & Anderson, 1991).

**Savoring.** Savoring refers to an inclination to focus on and appreciate past, current, and/or future positive events or experiences through various strategies including behavioral (e.g., smiling), interpersonal (e.g., discussing positive experience with others), and cognitive (e.g., actively making and reflecting on memories of positive experience; Bryant & Veroff, 2003).

**Dual-factor model of mental health.** A dual-factor model of mental health is one in which indicators of both psychopathology and wellness are considered in the conceptualization of mental health status (Greenspoon & Saklofske, 2001). Individuals can be classified into four separate mental health groups: complete mental health (i.e., high subjective well-being, low psychopathology), vulnerable (i.e., low subjective well-being, low psychopathology), symptomatic but content (i.e., high subjective well-being, high psychopathology), and troubled (i.e., low subjective well-being, high psychopathology; Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008).

**Positive psychology interventions.** Positive psychology interventions (PPIs) refer to interventions designed to target positive psychology constructs in order to improve levels of subjective well-being and overall wellness of individuals. PPIs have targeted constructs such as gratitude, character strengths, savoring, and hope (e.g., Emmons & McCullough, King, 2001, Kurtz, 2008; Senf & Liau, 2013) and there are also some examples of comprehensive multi-targeted PPIs (e.g., Rashid & Anjum, 2008; Suldo, Savage, & Mercer, 2014).

**Booster session.** A therapeutic session carried out post-treatment in order to maintain or further enhance gains made through treatment. Booster sessions are recommended for several reasons, including to discuss clients' progress since termination, problem-solve any challenges that arose, develop new goals for the client, and alleviate clients' fears of ending treatment (Beck, 2011).

### **Research Questions**

The current study answered the following research questions:

1. Relative to a wait-list control group, is participation in a manualized positive psychology group counseling intervention with a parent component associated with improvements in middle school students':
  - a. Life satisfaction
  - b. Positive affect
  - c. Negative affect
  - d. Psychopathology?
2. Relative to a wait-list control group, will booster sessions prevent the intervention group students from experiencing post-intervention declines in:
  - a. Life satisfaction

- b. Positive affect
- c. Negative affect
- d. Psychopathology?

### **Hypotheses**

Regarding research question 1, it was hypothesized that mean differences would exist between students who participated in the manualized positive psychology group counseling intervention with a parent component and students in the wait-list control condition across all three components of subjective well-being. Specifically, it was hypothesized that students who participated in the intervention would demonstrate significantly higher levels of life satisfaction and positive affect and significantly lower levels of negative affect at post-intervention.

Additionally, it was hypothesized that students in the intervention group would demonstrate significantly steeper growth in the outcomes than students in the wait-list control group. These hypotheses were based on the literature summarized in the next chapter, which suggests that involving parents in youth-focused interventions is best practice and may positively impact intervention results. Based on some findings in the literature review in the next chapter (i.e., Notter, 2013) and outcomes of interventions based on attribution theory (Graham, Taylor, & Hudley, 2014), it was further hypothesized that students who participated in the intervention would demonstrate secondary decreases in externalizing and internalizing symptoms of psychopathology.

Regarding research question 2, it was hypothesized that booster sessions would prevent the intervention group from experiencing post-intervention declines in life satisfaction, positive affect, and negative affect. Specifically, it was hypothesized that students who participated in the intervention would demonstrate significantly higher levels of life satisfaction and positive affect

and significantly lower levels of negative affect at follow-up relative to students in the wait-list control group. This hypothesis was in line with some of the literature described in the next chapter suggesting that booster sessions focused on the review and rehearsal of skills learned through the intervention result in the maintenance of gains made in treatment (e.g., Baggs & Spence, 1990; Tolan, Gorman-Smith, Henry, & Schoeny, 2009). Additionally, it was hypothesized that at long-term follow-up, students who participated in the intervention would demonstrate significantly lower levels of internalizing and externalizing symptoms of psychopathology relative to students in the wait-list control group, as some research reviewed in the next chapter suggests that booster sessions are associated with the remission of psychopathology symptoms up to one-year after treatment termination (Clarke, Rhode, Lewinsohn, Hops, & Seeley, 1999).

### **Importance of the Study to School Psychologists**

Student wellness should be of concern to school psychologists due to the associations between student well-being and a host of outcomes including academic achievement, social relations, and physical health (Antaramian, Huebner, Hills, and Valois, 2010; Renshaw & Cohen, 2014; Suldo & Shaffer, 2008). Additionally, subjective well-being is a construct that has been deemed reliable, yet susceptible to change when encountering various life experiences (Eid & Diener, 2004). There is a growing body of research among youth samples supporting the efficacy of PPIs in promoting increases in subjective well-being. By empirically investigating the efficacy of a comprehensive, multi-component multi-target PPI in producing increases in subjective well-being among a sample of adolescents, this study aimed to provide school psychologists with a positive psychology program to include in their repertoire of student interventions.

Additionally, since the intervention involved parents in the intervention process, it aligns with best practices of school psychologists to increase home-school collaboration in order to maximize students' success (Esler, Godber, & Christenson, 2008). Findings illustrate the positive benefits of participating in a school-based positive psychology group counseling intervention with parent and booster session components, and empirically validated the intervention for use by school psychologists within the middle school context.

### **Contributions to the Literature**

Prior to the current study, no known studies had investigated the efficacy of a group positive psychology counseling intervention that included a parent component and/or booster sessions among a sample of early adolescents. It was important to determine whether or not a group wellness-promotion intervention that included parents in the intervention process was associated with improvements in middle school students' subjective well-being. Whereas research on psychological interventions for youth depression and anxiety is mixed and inconsistent in regard to the utility of incorporating parent components in the treatment process, preliminary findings supported the inclusion of a parent component in PPIs for youth (Marques, Lopez, & Pais-Ribeiro, 2011). However, this initial research including parents in a youth PPI targeted a singular construct (i.e., hope). No known research had explored the impact of a multi-target comprehensive PPI with an added parent component, highlighting the importance of the current study.

Additionally, the current study was the first to include booster sessions designed to maintain gains made through participation in a positive psychology intervention. Research on the efficacy of booster sessions in psychological interventions targeting youth psychopathology is mixed. However, previous research suggests that booster sessions focused on reviewing and

practicing skills learned in the initial intervention are more likely to be associated with maintenance of gains made in treatment. The current study provided preliminary answers as to whether or not booster sessions are associated with the experience of post-intervention declines in outcomes when included in PPIs. Taken together, this study greatly contributed to the growing body of literature available on PPIs in youth, specifically in relation to school-based PPIs.

## Chapter II: Review of the Literature

The positive psychology movement has garnered significant support within the field in the last decade, particularly after the publication of the millennial issue of the *American Psychologist*, edited by Seligman and Csikszentmihalyi (2000), which drew mass attention to various topics related to positive psychology (Huebner, Gilman, & Furlong, 2009). This chapter provides a review of the positive psychology literature in terms of the aim of positive psychology, definitions of key positive psychology constructs, implications for assessment in terms of use of a dual-factor model of mental health (i.e., subjective well-being and psychopathology), empirical support for positive psychology interventions to increase subjective well-being, and the roles of family components and booster sessions in psychological interventions.

### Positive Psychology Movement

Within the overarching field of psychology, positive psychology scientifically studies the various factors and traits that contribute to the thriving and optimal functioning of individuals (Gable & Haidt, 2005). Positive psychology emerged in response to pathology-focused traditional models of mental health, which have largely sought to remedy and heal human deficits and weaknesses in order to improve human functioning (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000). These traditional models of mental health posit that a lack of mental health problems alone indicates adequate mental health standing (Diener, 2000). Leaders in the positive psychology movement, however, recognize that focusing solely on human deficits paints an incomplete picture of human functioning, and posit that to truly understand and maximize

functioning, it is important to study and promote positive attributes and indicators (Gable & Haidt, 2005; Huebner et al., 2009). Thus, positive psychology conceptualizes mental health in terms of not only the presence or absence of psychopathology, but also the presence or absence of positive indicators of mental health (Greenspoon & Saklofske, 2001; Huebner et al., 2009). Positive psychologists do not suggest that researchers and practitioners should ignore the presence of psychopathology or deemphasize the importance of treating mental health disorders. Rather, they suggest that treatment of psychopathology in tandem with capitalizing on and promoting positive aspects and attributes complement one another to achieve overall positive mental health standing (Huebner et al., 2009). Additionally, positive psychology researchers have found that increasing positive indicators of mental health may prevent development of later externalizing mental health problems, as well as improved academic performance (Howell, 2009; Norrish & Vella-Broderick, 2009; Suldo & Huebner, 2004).

Positive psychology, with its emphasis on the aspects of life that make it worth living (Seligman & Csikszentmihalyi, 2000), has roots in the fields of psychology, philosophy, religion, and education (Huebner et al., 2009). Within the last century, psychologists such as William James, who wrote on what contributes to “healthy mindedness,” have pondered what contributes to healthy functioning (Gable & Haidt, 2005). In the 1950s and 1960s, Carl Rogers and Abraham Maslow, pioneers in the field of humanistic psychology, placed heavy emphasis on human strengths and maximizing potential, particularly compared to the clinical and behaviorist approaches that dominated the landscape of psychology at the time (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000). Additionally, within the last half of the 20<sup>th</sup> century, influential researchers such as Diener, Larson, and Cowen became interested in more health focused topics such as *prevention* of mental health problems, health promotion, positive youth



development, resilience, wellness, developmental assets, and subjective well-being (Gable & Haidt, 2005; Huebner et al., 2009).

**Connections between positive psychology and school psychology.** The positive psychology movement exhibits parallels with the transformation of school psychological service delivery. Both positive and school psychologists increasingly express disdain with the deficit-based model of service delivery, which focuses on taking a reactive approach to remedying problems rather than a proactive and preventative approach (Clonan, Chafouleas, McDougal, & Riley-Tillman, 2004; Seligman & Csikszentmihalyi, 2000). This discontent within school psychology has resulted in advocacy for expansion in the role of school psychologists, as well as a paradigm shift in the manner that school psychological services are delivered (Clonan et al., 2004; Reschly, 2008). Specifically, school psychology has adopted a consultative problem-solving approach, which is applied across multi-tiered levels of prevention and intervention to promote optimal student functioning, including quality of life (Huebner & Hills, 2011; Reschly, 2008). Accordingly, there is a growing need for “emphasis on a positive school psychology that employs empirically sound and prevention-oriented practice aimed at enhancing the academic and social-behavioral competencies of all students” (Clonan et al., 2004, p. 103). This need has been partly addressed through implementing school programming that promotes social and emotional functioning, such as School-Wide Positive Behavior Supports and Social Emotional Learning curricula (Huebner & Hills, 2011).

In sum, while positive psychology is in its infancy, it has been shaped by the long line of psychologists who have displayed interest in positive aspects of human functioning.

Increasingly, researchers and practitioners recognize that treating psychopathology is necessary, but insufficient alone, to promote overall positive mental health. Overall, it appears that the study

of positive psychology is not just a passing trend within psychology, but is here to stay. Additionally, school psychology is adopting a more proactive and preventative approach to maximizing the outcomes of students and schools, akin to positive psychology. There has been a proliferation of research in more recent years focusing on positive indicators of mental health and how to cultivate wellness and optimal functioning in individuals. Following, key positive psychology indicators and constructs implicated in promoting well-being are defined.

### **Key Positive Psychology Constructs**

Some of the primary constructs studied under the umbrella of positive psychology include gratitude, acts of kindness, character strengths, optimistic thinking, and hope. These attitudes and behaviors are considered malleable targets that have been included in interventions for improving levels of wellness. One of the most common indicators of wellness, subjective well-being, is a key outcome studied within positive psychology. Thus, while some constructs have been targeted and viewed as amenable to change (e.g., gratitude, hope), others (e.g., subjective well-being) have been viewed as outcomes of interventions designed to improve wellness.

**Subjective well-being.** Subjective well-being, the scientific term for happiness, is a common positive indicator of mental health. It is multi-faceted, with three hallmark features (Diener, Oishi, & Lucas, 2009). Namely, it is a subjective experience of individuals, it includes both the presence of positive and absence of negative factors, and it includes a global versus narrowly focused assessment of life (Diener et al., 2009). According to Diener et al. (2009), individuals continually appraise events, life circumstances, and themselves; additionally, those who are deemed to have high subjective well-being predominantly positively appraise their life events and circumstances, with the opposite being true for those deemed to have low subjective

well-being. Subjective well-being is divided into three related, but separate, components: life satisfaction, positive affect, and negative affect (Diener, 2000). These three components are correlated with one another because they are all influenced by individuals' evaluations of their life events, activities, and circumstances; however, they also behave differently under some conditions (Diener et al., 2009).

Regarding the components of subjective well-being, life satisfaction refers to a cognitive global evaluation of one's life on the whole (Diener, 2000; Diener et al., 2009), and is considered a chief indicator of mental wellness (Park, 2004). Life satisfaction can also be deconstructed into satisfaction with individual life domains (e.g., self, work, family, friends, love; Diener et al., 2009), which allows for a more nuanced understanding of individuals' perceived quality of life. Positive and negative affect comprise the hedonic component of subjective well-being, with positive affect referring to the experience of positive emotions in daily life, and negative affect referring to experiencing negative emotionality in daily life (Diener et al., 2009). Individuals with higher levels of subjective well-being experience more ongoing positive relative to negative affect (Diener et al., 2009).

Subjective well-being demonstrates stability over time, as well as consistency across various situations (Eid & Diener, 2004), establishing it as a reliable construct. In addition to its reliability, subjective well-being has been shown to be sensitive to change when individuals are faced with either positive or unfavorable life events (Eid & Diener, 2004). Thus, subjective well-being is not only a reliable indicator of mental wellness, but also an outcome that can be influenced by various life experiences. Additionally, research suggests that subjective well-being is a valid construct that correlates with other related constructs (e.g., optimism, self-esteem), yet

is separable (Diener et al., 2009). Factors that may be associated with, possibly predictive of, subjective well-being are discussed next.

**Gratitude.** Gratitude has been conceptualized differently according to various researchers (Wood, Froh, & Geraghty, 2010). One simplistic meaning refers to gratitude as an emotion in response to being appreciative of the kind and helpful acts of others (McCullough, Kilpatrick, Emmons, & Larson, 2001). However, others offer alternative descriptions of gratitude that move beyond mere appreciation of receipt of kind acts. For instance, Wood et al. (2010) conceive gratitude as a more general disposition of appreciating positive aspects of life and the world. Combining the abovementioned aspects of gratitude leads to an understanding of gratitude as multidimensional, involving an underlying outlook of being appreciative of positive aspects in life and engaging in behaviors that convey thankfulness and appreciation, as well as being grateful for individual events and situations (Wood et al., 2010).

Research on gratitude suggests that it is implicated in individuals' building and maintaining strong and supportive interpersonal relationships (Bono & Froh, 2009). Moreover, gratitude has demonstrated a unique and causal relationship with well-being. For example, over a dozen interventions specifically targeting increasing gratitude have been conducted and resulted in higher levels of well-being (e.g., increases in components of subjective well-being; Wood et al., 2010). Additionally, grateful thoughts, feelings, and expressions are believed to be influenced by environmental factors (e.g., parents, peers, teachers), lending support to the notion that gratitude can be developed and fostered in order to improve overall social and emotional wellness (Bono & Froh, 2009).

**Kindness.** Kindness is a character strength conceptualized as having three components, including motivation to be kind to others, recognizing kindness in others, and engaging in kind

behaviors in daily life (Otake, Shimai, Tanaka-Matsumi, Otsui, & Frederickson, 2006). The latter of these three components, performing acts of kindness, refers to an individual's behaviors that benefit others or make them happy at the expense of the individual's time or effort (Lyubomirsky, Sheldon, & Schkade, 2005; Otake et al., 2006). Research has demonstrated that performing acts of kindness results in short-term boosts in mood, as well as longer-term boosts in subjective well-being (Lyubomirsky et al., 2005). To illustrate, intervention research focused on keeping count of and increasing the amount of kind acts performed weekly resulted in significant improvements in subjective well-being (Lyubomirsky et al., 2005; Otake et al., 2006).

**Character strengths.** Character strengths refer to a set of 24 individual positive traits within six broader classes of virtues (i.e., Wisdom and Knowledge, Courage, Humanity, Justice, Temperance, and Transcendence), which are fulfilling, morally valued, distinct, and transcend cultures (Park, Peterson, & Seligman, 2004). Each individual will possess and exhibit strengths in a unique profile relative to others, and will possess signature strengths, which are personal traits most frequently employed and appreciated in one's daily life (Peterson & Seligman, 2004). This taxonomy of classifying strengths was developed by Peterson and Seligman (2004) and is referred to as the Values-In-Action (VIA) Strengths Classification

Character strengths can buffer individuals from experiencing deleterious effects of stress by preventing various symptoms of psychopathology, and furthermore can help individuals thrive (Park & Peterson, 2009). Research has demonstrated the positive effects of utilizing character strengths on mental health. For example, Seligman, Steen, Park, and Peterson (2005) found that using signature character strengths in new ways produced improvements in overall functioning (i.e., decreases in depressive symptoms, increases in happiness). Other research has shown that introducing and defining character strengths to youth and engaging them in exercises

to build strengths results in increased levels of life satisfaction and well-being (Proctor, Tsukayama, Wood, Maltby, Eades, & Linley, 2011). Thus, cumulating evidence suggests that character strengths can be taught and nurtured in individuals in order to improve overall functioning.

**Optimism.** Optimism has been conceptualized as both a generalized expectancy and a cognitive explanatory style. As a generalized expectancy, optimism refers to the tendency to expect positive outcomes and emphasis of the positive aspects of situations (Boman, Furlong, Shochet, Lilles, & Jones, 2009). As a cognitive explanatory style, optimism refers to attributing the experience of negative events and hardships as temporary, due to external causes, and limited to the immediate incident (Borman et al., 2009; Seligman, 1991). Conversely, optimistically thinking individuals attribute positive aspects of life to permanent, universal, and personal factors (Seligman, 1991).

Both forms of optimism have been associated with prevention and alleviation of harmful symptoms of psychopathology, notably depression, among youth (Boman et al., 2009). Optimistic thinking has also been shown to correlate with better school adjustment and is believed to help build resilience, which helps individuals bounce back from adverse events and situations (Boman et al., 2009; Peterson, 2000). Research suggests that optimistic thinking styles can be taught, resulting in decreased depressive symptoms and improved overall well-being (Gillham, Reivich, Jaycox, & Seligman, 1995).

**Hope.** Hope refers to a positive motivational state that involves goal-directed thoughts and strategies and paths designed to meet goals (Snyder, Irving, & Anderson, 1991). Goals represent the cognitive component of hope theory and are divided into two major types: positive and negative (Snyder, 2002). Positive goals involve envisioning an outcome for the first time,

sustaining a current outcome, or continue to make progress on an already initiated objective (Snyder, 2002). Negative goals involve preventing something unfavorable from happening or delaying the onset of an unwanted occurrence (Snyder, 2002). Goals can range from significant and long-term to commonplace and short-term, and from being very unlikely to be obtained to very likely obtainable (Lopez, Rose, Robinson, Marques, & Pais-Ribeiro, 2009).

Beyond possessing goals, hope theory involves envisioning routes or paths to goal attainment. Compared to low-hope individuals, high-hope individuals have more decisive and confident pathways to achieve their goals, and they are more likely to generate a “plan b,” or plausible alternative routes in cases that the first is unsuccessful (Snyder, 2002). Finally, hope theory involves motivation and action to carry out plans for goal attainment. Toward this end, high-hope individuals often engage in positive self-talk that encourages perseverance in the face of adverse circumstances (Snyder, 2002). Hope research indicates that hope is significantly and positively related to global life satisfaction and positive mental health (Lopez et al., 2009). Furthermore, intervention research demonstrates that levels of hope can be enhanced (Lopez, Bouwkamp, Edwards, & Pedrotti, 2000).

In sum, positive psychology constructs (e.g., gratitude, character strengths, optimism, hope) have been shown to be amenable to change and are increasingly being recognized as fruitful avenues for improving mental health (including subjective well-being) via targeted intervention efforts. The next section discusses the conceptualization of mental health as based on a dual-factor model, which equally emphasizes the important role that both psychopathology and wellness play in mental health.

### **Dual-Factor Model of Mental Health**

Resulting from the growing consensus among psychologists that focusing solely on psychopathology to specify mental health standing is insufficient, and the argument that positive aspects of human functioning should be explored as well, a dual-factor model of mental health is garnering support. While it has typically been assumed that the absence of psychopathology is associated in turn with the presences of well-being, this has not consistently evidenced through research (Greenspoon & Saklofske, 2001). Thus, well-being and psychopathology are not opposite poles on the same spectrum, but rather mental health status is more nuanced, and one can have high (or low) levels of both.

**Initial support for a dual-factor model.** Greenspoon and Saklofske (2001) first provided support for an integrated system for assessing mental health among a sample of 407 Canadian elementary school-aged youth in terms of four separate mental health categories based on levels of psychopathology (internalizing symptoms assessed via the Social Stress, Anxiety, and Depression subscales of the Behavior Assessment System for Children [BASC; Reynolds & Kamphaus, 1992], externalizing symptoms assessed via the Hyperactivity, Aggression, and Conduct Problems subscales of the BASC [Reynolds & Kamphaus, 1992]) and subjective well-being, specifically life satisfaction assessed via the Multidimensional Students' Life Satisfaction Scale (MSLSS; Huenber, 1994). The four mental health groups identified were: group 1 (high subjective well-being in conjunction with low psychopathology), group 2 (low subjective well-being in conjunction with high psychopathology), group 3 (low subjective well-being in conjunction with low psychopathology), and group 4 (high subjective well-being in conjunction with high psychopathology). This initial work on the dual-factor model found that students who displayed high psychopathology alongside high levels of life satisfaction had characteristics that would not be necessarily expected among students with clinical levels of psychopathology. For



example, they exhibited high sociability and good interpersonal relationships. Additionally, students who displayed low levels of psychopathology, but also low levels of life satisfaction, exhibited concerns related to low self-esteem and poor interpersonal relationships.

**Continued work on the dual-factor model.** Since the seminal work conducted by Greenspoon and Saklofske (2001), other researchers have explored different groupings of mental health standing. For example, Suldo and Shaffer (2008) found support for the same four quadrants of mental health functioning among a sample of 349 middle school students in the sixth through eighth grade: complete mental health (high subjective well-being coupled with low psychopathology), symptomatic but content (high subjective well-being and high psychopathology), vulnerable (low subjective well-being and low psychopathology), and troubled (low subjective well-being coupled with high psychopathology). In their study, subjective well-being was assessed by levels of life satisfaction (measured by the Students' Life Satisfaction Scale [SLSS; Huebner, 1991]) and both positive and negative affect (measured by the Positive and Negative Affect Scale for Children [PANAS-C; Laurent et al., 1999]). Psychopathology was assessed in terms of both externalizing symptoms (assessed via the Teacher Report Form of the Child Behavior Checklist [TRF; Achenbach & Rescorla, 2001]) and internalizing symptoms (assessed via the Youth Self-Report Form of the Child Behavior Checklist [YSR; Achenbach & Rescorla, 2001]).

Suldo and Shaffer (2008) found that the absence of psychopathology alone does not result in superior outcomes. To illustrate, students in the complete mental health group (whom displayed not only low psychopathology, but high subjective well-being) demonstrated superior functioning relative to students in the vulnerable group (also low psychopathology, but low subjective well-being as well) in terms of academic and social functioning, as well as physical

health. Specifically, regarding academic functioning, youth with complete mental health had higher scores on a standardized test of reading achievement and better school attendance than vulnerable youth. Additionally, youth with complete mental health reported higher academic self-perceptions, valued school more, and had higher levels of motivation and self-regulation of their learning behaviors than vulnerable youth. Regarding social functioning, youth with complete mental health reported fewer social problems and more social support from classmates and parents than vulnerable youth. Finally, in regard to physical health, youth with complete mental health reported better overall health and fewer limitations to participation in family activities due to health concerns. In sum, despite both complete mental health and vulnerable group students possessing low levels of psychopathology, the addition of high subjective well-being was associated with superior outcomes.

Antaramian, Huebner, Hills, and Valois (2010) found further support for a dual-factor model of mental health in youth among a sample of 764 seventh and eighth grade middle school students. Students were classified into the same four categories as described by Suldo and Shaffer (2008) based on their levels of psychopathology (assessed via the Internalizing and Externalizing subscales of the Self-Report Coping Scale [SRCS; Causey & Dubow, 1992]) and subjective well-being (assessed via the SLSS and PANAS-C). Results provided further support for the superior outcomes observed among youth in the complete mental health category relative to their vulnerable peers. Specifically, compared to vulnerable youth, students with complete mental health reported significantly higher behavioral, emotional, and cognitive engagement in school. Additionally, students with complete mental health had significantly higher cumulative grade point averages and social support from family, teachers, and peers. These results are consistent with Suldo and Shaffer's (2008) findings that illuminate the important role that

indicators of student wellness, above and beyond psychopathology, play in understanding student outcomes.

Whereas the aforementioned studies looked at the outcomes associated with complete mental health, a more recent study conducted by Lyons, Huebner, Hills, and Shinkareva (2012) has attempted to discern the determinants, or predictors, of mental health group when classified in accordance with the dual-factor model. A large sample ( $N = 990$ ) of middle and high school students (grades 6 to 12) were again classified into four groups based on self-reported levels of life satisfaction (indexed by the SLSS) and psychopathology (measured by the YSR). Students' group membership was predicted based on personality variables, perceived social support, and stressful life events using logistic regression analyses. The personality variable of neuroticism as well as low perceived parental social support predicted an increase in the odds of experiencing high psychopathology (i.e., troubled, symptomatic but content), whereas the personality variable of extraversion predicted a decrease in the odds of experiencing high psychopathology. These findings suggest that both personality and interpersonal relationship factors contribute to mental health standing. In addition, students with more acute stressful life events were most likely to be in the troubled group. In sum, this study contributed to the literature by specifying some characteristics and factors that can predict membership in various mental health status groupings. While some of these factors may be relatively inflexible (e.g., experiencing stressful life events, personality traits), others may be more amenable to intervention (e.g., parent-child relations).

**The dual-factor model among college students.** There is also support for the dual-factor model's applicability among older adolescents, i.e., college-aged students. Among a sample of 246 undergraduate students 18-25 years old, Eklund, Dowdy, Jones, and Furlong (2011) placed students into four groups based on their scores on life satisfaction (assessed via the

Brief Multidimensional Students' Life Satisfaction Scale [BMSLSS; Seligson, Huebner, & Valois, 2003]) and psychopathology (assessed via the BASC-2; Reynolds & Kamphaus, 2004). Beyond support for the upholding of the dual-factor model in college students, Eklund et al. (2011) found that complete mental health and symptomatic but content students did not differ significantly in their reported levels of hope or gratitude, and that these two groups reported higher mean levels of hope and gratitude than troubled and/or vulnerable students. This study established that mental health status, as determined via a dual-factor model, relates to positive psychology constructs such as gratitude and hope. In addition, it illustrates the benefit of high levels of subjective well-being in relation to positive constructs.

Renshaw and Cohen (2014) also examined the utility of the dual-factor model of mental health in a sample of undergraduate college students ( $N = 1,356$ ) with an average age of 19 years old. This study confirmed the added benefit of high levels of well-being when coupled with low levels of psychopathology. To illustrate, students with complete mental health exhibited superior quality of interpersonal relations and physical health, as well as academic achievement (i.e., grade point average) compared to their peers with high psychopathology and low well-being. In addition, symptomatic but content students also exhibited superior quality of interpersonal relations compared to their peers with low levels of subjective well-being, demonstrating the benefit of possessing high subjective well-being on at least some aspects of social functioning.

**Longitudinal associations yielded from the dual-factor model.** The associations between mental health status yielded from the dual-factor model and outcomes have also been studied longitudinally. Suldo, Thalji, and Ferron (2011) examined how membership in mental health groupings related to changes in educational functioning one year later for 300 students in seventh through ninth grades, a one-year follow-up of their sample reported in Suldo and Shaffer

(2008). Findings indicated that troubled students' grade point averages declined at a significantly greater rate than their peers with complete mental health or a vulnerable status. In addition, symptomatic but content students did not demonstrate a steeper decline in their grades than students without high psychopathology, which may indicate that higher levels of subjective well-being serves as a buffer from experiencing a backslide in academic performance when students experience psychopathology. Finally, while vulnerable youth in this study did not experience sharper declines in grade point average compared to their complete mental health peers, students initially classified as having complete mental health had the highest average attendance, grade point averages, and performed the best on a standardized test of math achievement one year later. In sum, Suldo et al. (2011) found support that the combination of low psychopathology and high subjective well-being is related to longer-term superior functioning as compared with other mental health status categories.

Other recent research has indicated that mental health group is not absolute, but open to changing across time and thus malleable. A sample of 730 seventh and eighth grade middle school students were classified into four separate mental health categories, and then reclassified again five month later, according to their levels of subjective well-being (measured by the SLSS and PANAS-C) and psychopathology (measured by the Internalizing and Externalizing subscales of the SRCS [Causey & Dubow, 1992]) (Kelly, Hills, Huebner, & McQuillin, 2012). Results indicated that students classified as complete mental health had the highest stability, with 85% of students continuing to be classified within the same group. A little less than half of the students originally classified as symptomatic but content and troubled remained in the same mental health category five months later. With regard to students initially identified as vulnerable, only 29% of students remaining in this group at both time points; 46% moved to the complete mental health

group. Results also revealed that greater family support for learning and positive student-teacher relationships predicted being more likely to remain in the complete mental health group.

Moreover, students initially classified as vulnerable were more likely to move into the complete mental health group when they perceived more support for learning from parents and peers, and better student-teacher relationships. In sum, this study found that mental health standing, while somewhat stable, is also fluid. Additionally, more perceived social support is linked to better mental health status in terms of both low psychopathology and high subjective well-being.

To conclude, the dual-factor model of mental health posits that individuals can be classified into four separable mental health groups based on levels of psychopathology and indicators of subjective well-being. Multiple, independent research groups have upheld this model. Additionally, research on the dual-factor model has demonstrated superior outcomes associated with complete mental health, underscoring the value of subjective well-being in promoting optimal student functioning. Mental health standing also appears to be relatively fluid, and has been influenced by factors, which may be intervened upon, such as perceived social support. Cross-sectional research suggests positive psychology constructs such as gratitude and hope also link to mental health status. Overall, research that has been conducted to date on the dual-factor model provides compelling support for optimizing mental health, namely subjective well-being, as a target separable from psychopathology. The next section reviews research on interventions designed to improve indicators of subjective well-being.

### **Positive Psychology Interventions**

Within recent years and particularly in the last decade, researchers and practitioners have become interested in interventions specifically designed to improve individuals' wellness and positive functioning. As overviewed above, several positive psychology constructs (e.g.,

gratitude, acts of kindness, character strengths, optimistic thinking, hope) are considered malleable and have thus been the focus of interventions designed to improve wellness (i.e., subjective well-being). Interventions intended to improve overall functioning and subjective well-being by targeting positive psychology constructs have been dubbed positive psychology interventions (PPIs) in the literature. Several examples of such PPIs are described below, organized by study participants (i.e., adults, youth) and intervention targets (e.g., gratitude, character strengths, hope).

**Positive psychology interventions with adult samples.** Studies providing support for the utility of PPIs among adults have targeted a wide range of constructs including gratitude, acts of kindness, savoring, character strengths, hope, loving kindness meditation, and positive psychotherapy.

*Gratitude.* Emmons and McCullough (2003) conducted two separate studies with undergraduate students that investigated gratitude in relation to well-being. The first study's purpose was to determine the impact of having a grateful outlook on well-being. Specifically, 192 students were randomly assigned to one of three experimental conditions in which they were either asked to list up to five things in their lives that they were grateful for, viewed as hassles, or viewed as neutral events. Participants were asked to reflect on and list life events, things they were grateful for, or things they viewed as hassles once weekly for 10 weeks. In addition, participants completed an affect scale and two items assessing overall well-being each week. The affect scale, created by the researchers, consisted of 30 commonly occurring affect terms (e.g., irritable, sad, stressed, happy, joyful, calm) on a scale from 1 (*not at all*) to 5 (*extremely*). Overall well-being was assessed via two researcher created items that asked participants to rate how they felt about their life as a whole on a scale from -3 (*terrible*) to +3 (*delighted*) and to rate

their expectations for the upcoming week on a scale from -3 (*pessimistic, expect the worst*) to +3 (*optimistic, expect the best*). At post-intervention, participants assigned to the gratitude condition had higher mean scores on both well-being items than participants assigned to both the hassles and neutral events conditions (which did not differ significantly from each other). The gratitude condition did not significantly influence either positive or negative affect. The results of this study suggest that an intervention targeting grateful thinking differentially impacts components of subjective well-being (i.e., more positively impacts overall global satisfaction with life than affect).

The second study by Emmons and McCullough (2003), conducted with 157 college-aged students, sought to determine if gratitude was a mediator between the intervention and positive affect. Participants were randomly assigned to one of three experimental conditions in which they were either asked to list up to five things in their lives that they were grateful for, viewed as hassles, or that placed them at an advantage relative to others (i.e., social comparison condition). Participants were asked to make their reflections once daily for 16 days. Results from regression analyses supported the notion that gratitude mediated ( $\beta = .85$ ) the positive impact of the intervention on positive affect. Taken together, the results from both of the studies conducted by Emmons and McCullough (2003) suggest interventions targeting gratitude may positively impact both major components of subjective well-being.

Other researchers have explored the utility of various PPIs in comparison to a control condition. For example, Seligman, Steen, Park, and Peterson (2005) examined the efficacy of three separate PPIs. A total of 411 participants between 35 and 54 years old were randomly assigned to one of six experimental conditions including a placebo control condition and two separate gratitude-based interventions as well as three other conditions discussed in a later



section (i.e., you at your best, using signature strengths in new ways, identifying signature strengths). The placebo control condition required participants to write about their early memories each night for a week. The first of the two gratitude-based interventions (i.e., gratitude visit) involved participants writing and delivering a letter expressing gratitude to a person whom was particularly kind to them and never properly thanked. The second gratitude intervention (i.e., three good things) involved writing down and describing three things that went well each day every night for one week. All participants completed the Steen Happiness Index (SHI; Seligman et al., 2005) and the Centre for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) at six points in time: pre-intervention, post-intervention, and one-week, one-, three-, and six-month follow-up. The SHI contains 20 items that measure pleasure, engagement, and meaning (e.g., “I enjoy my daily routine so much that I rarely take breaks from it”). ANOVA analyses revealed that relative to the placebo control condition, participants who completed the gratitude visit had significantly higher SHI and significantly lower CES-D scores at post-intervention, one-week, and one-month follow-up assessments. Relative to the placebo control condition, participants in the three good things intervention group reported significantly higher SHI scores at one-, three-, and six-months follow-ups. Moreover, these participants also reported significantly lower CES-D scores at all five post-intervention assessments. These results suggest that short (i.e., one-week long) gratitude-focused interventions may result in improvements in both happiness and depressive symptoms. Expressing gratitude to an individual that one is grateful for may result in short-term boosts in functioning, whereas writing about events and experiences that one is thankful demonstrates promise for long-lasting improvements in functioning.

Sheldon and Lyubomirsky (2006) examined the associations between participating in two activities and wellness outcomes (assessed via the Positive and Negative Affect Schedule [PANAS; Watson, Clark, & Tellegen, 1988]). A total of 67 undergraduate college students were randomly assigned to one of three experimental conditions, including counting blessings (i.e., gratitude activity), visualizing best possible selves (i.e., hope activity), and a control condition that required participants to pay more attention to daily details of life. The gratitude activity modeled after the aforementioned Emmons and McCullough (2003) study, which asked participants to list and describe in as much detail as possible the things that they have to be grateful about. In an initial session, participants completed the PANAS, then their assigned activity, then the PANAS a second time. Participants were asked to continue engaging in their assigned activity for the next few weeks and the PANAS was administered via on-line survey two and four weeks after the initial session, as well as self-report items asking participants about the frequency of their continued performance of the assigned activity. Results from MANOVA analyses revealed that participants in the gratitude and best possible selves conditions significantly increased in positive affect scores from pre-intervention to post-intervention. At follow-up assessment, results from regression analyses demonstrated that continuing to perform the gratitude activity did not yield a significant effect on sustaining increased positive affect. This result could be due to a lack of continued prompting to engage in the gratitude activity resulting in poorer rehearsal and performance of the intervention and thereby shorter boosts in mood. Regarding negative affect, both intervention groups and the control group displayed a similar decrease in scores over time, suggesting that the three activities were comparable in terms of decreasing negative affect. It may be that engaging in any activity aimed at bringing more awareness to aspects of individuals' lives that they otherwise would not be primed to think

about (e.g., things to be grateful for, future goals, interactions with others) is helpful in decreasing negative mood.

Senf and Liao (2013) also examined two separate PPIs in order to determine if they would lead to increases in happiness and decreases in depressive symptoms. A total of 122 Malaysian undergraduate students ( $M$  age = 20.3 years) were randomly assigned to participate in a no-treatment control group condition, a gratitude intervention group, or a strengths-based intervention group (discussed in a later section). The gratitude intervention performed a gratitude visit (i.e., wrote and delivered a letter of thanks to someone for whom they felt grateful) and recorded three things for which participants were grateful (journal daily, for one week). All participants completed the SHI and the CES-D at three points in time: pre-intervention baseline, post-intervention, and at a one month follow-up. Regression analyses revealed that after controlling for pre-intervention levels of happiness, participants in the gratitude intervention had significantly higher levels of happiness than participants in the control group. However, by the one-month follow-up assessment, participants in the gratitude condition and control condition did not differ significantly in their levels of happiness. There were not significant differences between the participants in gratitude and control conditions at the post-intervention assessment on the CES-D, while controlling for pre-intervention levels of depressive symptoms. Nevertheless, by the one-month follow-up assessment, participants in the gratitude intervention group reported significantly less depressive symptoms than their control group counterparts. In sum, the results of this study demonstrate the benefit of participating in a gratitude-based intervention, as happiness and depressive symptoms increased and decreased, respectively, from pre-intervention levels. While the longer-term boosts in happiness associated with the gratitude intervention were not maintained as compared to the control group, longer-term decreases in

depressive symptoms were seen. Given the gratitude intervention lasted for just a week, it is possible that higher happiness levels would be maintained, or even enhanced further, if the intervention was longer in duration.

Odou and Vella-Brodrick (2013) also examined the efficacy of two separate PPIs on well-being. A total of 210 Australian adults ( $M= 34$  years of age) were randomly assigned to one of three experimental conditions: gratitude intervention, hope intervention (discussed in a later section), or a no-treatment control group. In the gratitude intervention, participants journaled daily, for one week (i.e., recalled, imagined, and recorded three good things for which they were grateful). Participants completed the PANAS and Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007) pre-intervention, post-intervention, and two-week follow-up. The WEMWBS is a 14-item measure that comprehensively assesses mental well-being (i.e., includes affective-emotional components, cognitive-evaluative components, and items relating to psychological functioning). ANCOVA analyses, with baseline well-being scores a covariate, revealed no significant differences in WEMWBS or positive affect scores from pre- to post-intervention to follow-up for the gratitude group, but negative affect significantly decreased from pre- to post-intervention. In sum, these results suggest that the gratitude-based intervention exerted a short-term impact on improved negative affect only. Similar to the design of Senf and Liao (2013), it may be that the short duration of the gratitude intervention hindered larger and long-lasting benefits that could be realized by a more comprehensive or prolonged PPI. Taken together, research with adults suggests that gratitude interventions are most commonly observed to have a short-term impact on happiness and affect. Additionally, while a few of the gratitude-based interventions only one to four weeks in duration were associated with short-term gains in components of subjective well-being, at least one saw long-lasting gains from an intervention

lasting only one week. Thus, the findings are still mixed in regard to the ideal duration of gratitude interventions, when offered in isolation, in order to result in long-term positive outcomes).

*Hope.* In the first study of its kind, King (2001) studied 81 undergraduate students ( $M = 21.04$  years old) to determine if a hope-focused writing intervention would benefit participants. Participants were randomly assigned to write for 20 minutes daily about one of four topics over a four day span: their best possible selves in the future, their most traumatic life experiences, both of these, or a control topic. The best possible selves in the future condition (i.e., hope activity) entailed participants writing about their lives in the future, imagining that they have accomplished all of their life goals and dreams. Participants' levels of positive and negative affect were assessed prior to the initial, as well as at the conclusion, of each writing activity. Affect was assessed by a scale comprised of 17 items describing various positive and negative mood states. Three weeks after the conclusion of the intervention, participants completed the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the Life Orientation Test (LOT; Scheier & Carver, 1985). The 5-item SWLS and the 8-item LOT assess life satisfaction and dispositional optimism, respectively. Standard scores on these two measures were averaged to create a subjective well-being composite. ANCOVA analyses revealed that writing about ones' best possible selves was associated with a significant increase in positive mood, while controlling for baseline levels of mood. ANOVA analyses indicated that participants who wrote about their best possible selves had significantly higher subjective well-being than those who did not. These results suggest that a hope-focused activity that involves envisioning and writing about ambitions and goals for the future may lead to boosts in both mood and life satisfaction.

As aforementioned in the gratitude section, Sheldon and Lyubomirsky (2006) compared differences in PANAS scores among undergraduate students who participated in one of three experimental conditions (i.e., gratitude activity, hope activity, control condition). In the hope activity called Best Possible Self, which was adapted from King (2001), 23 participants thought about their best possible selves in the future once they have worked hard, obtained success, and carried out their life goals and dreams. With their best possible selves in their minds, participants wrote about their “ideal life in the future” in as much detail as possible. In an initial session, participants first completed the PANAS, followed by their assigned activity, then the PANAS for a second time. Participants were asked to continue engaging in their assigned activity for the next few weeks, and two and four weeks after the initial session participants were re-administered the PANAS and a self-report items asking participants about the frequency of their continued performance of the assigned activity through an on-line survey. Results from MANOVA analyses revealed that participants in the best possible selves condition significantly increased in positive affect scores from pre-intervention to post-intervention. At follow-up assessment, in contrast to the gratitude and control conditions, continuing to engage in the hope activity yielded significant effect on sustaining increased positive affect. These results suggest that PPIs targeting hope may have a longer-lasting impact on well-being, at least relative to PPIs targeting gratitude. All groups evidenced a similar decrease in negative affect over time.

Utilizing a group therapy format, Cheavens, Feldman, Gum, Michael, and Snyder (2006) investigated the efficacy of a hope-based intervention on reducing psychopathology and increasing wellness. The 32 participants (*M* age = 49 years) were randomly assigned to receive the hope intervention or to a wait-list control condition. At baseline and post-intervention, participants completed measures both depression and anxiety (i.e., CES-D, State-Trait Anxiety

Inventory [STAI; Spielberger et al., 1983], respectively) and wellness (i.e., Purpose in Life Test [PIL; Crumbaugh & Maholick, 1964]). The 20-item PIL measures perceived meaning or purpose in life. The manualized hope intervention consisted of eight two-hour sessions that involved teaching participants to set meaningful, measurable, and achievable goals, developing paths to achieving goals, identify sources of motivation and overcome barriers to goals, monitor progress toward goals, and modify goals as needed. Results from ANOVA analyses revealed that anxiety symptoms significantly decreased among participants in the intervention group as compared to control group participants. Additionally, while there was not a statistically significant difference between the control and intervention groups in depressive symptoms, the mean scores on the CES-D decreased more greatly among members of the intervention group than the control group ( $p = .07$ ). Regarding indicators of wellness, the intervention group reported significantly greater increases in PIL scores than the control group. Taken together, the findings from this study suggest that participation in a manualized comprehensive hope intervention is associated with meaningful declines in psychopathology as well as enhancements in wellness.

The efficacy of a brief hope-focused intervention on well-being was examined by Feldman and Dreher (2012). A total of 96 college-aged students ( $M$  age = 18.71 years) were randomly assigned to participate in a single 90-minute hope intervention, or one of two control conditions (i.e., progressive muscle relaxation, no intervention). All participants completed the PIL at baseline, post-intervention, and at one-month follow-up through online survey; at baseline, they also nominated a goal that they would like to accomplish within the next six months and indicated how important that goal was to them. The hope intervention involved participants choosing a personal goal, psychoeducation on the three components of hope (i.e., goals, pathways, agency), a hope-focused goal mapping exercise, and a hope visualization

exercise. At follow-up, participants indicate the extent of progress they had made on attaining their identified goal at pre-intervention. Data were only collected at all three time points for participants in the hope and muscle relaxation control groups. Therefore, the no-treatment control participants were dropped from analyses. Results from ANOVA analyses revealed no significant differences in PIL scores between the participants in the hope intervention and comparison muscle relaxation groups from pre- to post-intervention or follow-up. Regarding progress toward attaining their goals, participants who received the hope intervention and also rated their goals as high in importance demonstrated the most significant progress toward their goals. The results of this study suggest that while a brief, one-session hope intervention may not result in improvements in perceived meaning of life, it can have a positive impact on goal-oriented thinking and behavior.

The most recent study examining the efficacy of a hope intervention on improving well-being was the aforementioned study by Odou and Vella-Brodrick (2013) that randomly assigned 210 adults ( $M = 34$  years of age) to one of three experimental conditions: gratitude intervention, hope intervention, or control group. The Best Possible Self (i.e., hope intervention) condition was very similar to the intervention used by King (2001) and Sheldon and Lyubomirsky (2006). The intervention required participants to once a day for seven days imagine themselves, using as many of their senses as possible (e.g., smell, sound, sight) in the future when they have accomplished their dreams and reached their highest potential. Furthermore, participants were instructed to choose a different life domain each day they completed the activity (e.g., fitness, home, friends, career). Participants were administered the PANAS and WEMWBS at pre-intervention, post-intervention, two-week follow-up. ANCOVA analyses revealed no significant mean differences in WEMWBS and positive affect scores between experimental groups from



pre- to post-intervention to follow-up. However, the participants in the hope intervention reported a significant decrease in negative affect from pre- to post-intervention. In sum, these results suggest that the hope-based intervention was associated with short-term improvements in negative affect only. Other renditions of the Best Possible Self intervention have involved participants not only visualizing their best possible selves in the future, but also writing about their visualizations. It is possible that simply asking participants to visualize themselves in the future was too abstract, and writing about their goals for the future, making the task more concrete, would result in more positive gains in well-being.

*You at your best.* In the aforementioned study by Seligman et al. (2005), 411 adults were randomly assigned to either a placebo control condition or to complete five separate PPIs, including an activity called you at your best, which involved participants writing about a time when they were at their best and reflecting on the strengths displayed in the story. Additionally, participants were asked to review their story once daily for a week and to reflect on the strengths they identified. Participants completed the SHI and CES-D at pre-intervention, post-intervention, one-week follow-up, and one-, three-, and six-month follow-up. Results from ANOVA analyses revealed that compared to the placebo control group, participants who completed the you at your best activity reported significantly higher SHI and significantly lower CES-D scores at post-intervention, but not at any long-term follow-up assessment. These results suggest that while this brief PPI may not result in long-term benefits, it is associated with short-term improvements in happiness and depressive symptoms. Thus, it may be a nice option as an introductory activity within a more comprehensive PPI.

*Acts of kindness.* To date, only two known published studies have examined the impact of performing acts of kindness on well-being among adults. Lyubomirsky et al. (2005) describe

their unpublished study of a six-week kindness intervention among college undergraduates. Students were asked to perform five acts of kindness per week, and either perform all five in one day or spread them out over the week. In addition, a no-treatment control group was included in the study to compare results on well-being (specific measure unspecified). Results revealed that at post-intervention, the group of students who performed all five acts of kindness in one day exhibited a significant increase in well-being relative to control group students, whom actually decreased in well-being. The students who performed acts of kindness throughout the week versus on one day did not exhibit a significant difference in well-being from pre- to post-intervention. Thus, results of this study provide preliminary support for the efficacy of an intervention targeting kindness in improving individuals' well-being, particularly when several kind acts are performed in a single day.

As a separate example, Otake, Shimai, Tanaka-Matsumi, Otsui, and Fredrickson (2006) randomly assigned 119 Japanese undergraduate students ( $M$  age = 18.75 years) to either the intervention group or a no-treatment control group. The kindness intervention asked participants, for one week, to become more aware of the acts of kindness they perform for other people, record each and every kind act performed daily, and report the daily number of kind acts performed. Participants completed the Japanese Subjective Happiness Scale (JSHS; Shimai, Otake, Utsuki, & Lyubomirsky, 2004) one month prior to and one month following the intervention. The JSHS is a 4-item measure of subjective happiness adapted from Lyubomirsky and Lepper's (1999) Subjective Happiness Scale (SHS). The results from ANOVA analyses revealed a significant group by time interaction, specifically a significant increase in mean JSHS scores for participants in the intervention group, but not for those in the control group. The

results of this study suggest that by simply drawing more attention to performing acts of kindness, individuals may experience gains in subjective happiness.

*Savoring.* Savoring involves a tendency to focus on and relish past, current, and/or future positive events through behavioral (e.g., smiling), interpersonal (e.g., discussing the experience with others), and cognitive (e.g., actively making memories of the experience to reflect on at a later time) strategies (Bryant & Veroff, 2003). A few studies have investigated the impact of savoring-based interventions on well-being. Seligman, Rashid, and Parks (2006) incorporated savoring exercises (e.g., taking time to enjoy activities in daily life and reflect on the experiences) into positive psychotherapy for depressed clients (study discussed in more detail in a later section). Results from Seligman et al. (2006)'s study on positive psychotherapy revealed positive benefits of positive psychotherapy that incorporated savoring activities in terms of decreases in depressive symptoms.

Other researchers have investigated specific savoring-based interventions. For example, Kurtz (2008) randomly assigned 77 American undergraduate students to one of three experimental conditions: grad-soon, grad-far, or placebo control. In the grad-soon condition, participants were asked to write about their college experience, particularly reflecting on their friends, the campus, activities they participated in, and overall college experience, for 10 minutes with keeping in mind the fact that they will be graduating very soon. The grad-far condition involved the same 10-minute writing activity, but participants were told to keep in mind that they have a significant amount of time left before graduation. The placebo control condition participants were asked to write about what they do on a typical day for 10 minutes. Following the conclusion of the assigned 10-minute writing activity, participants rated reported their current mood. Over the next two-week period, participants were e-mailed a link to a secure on-line

survey on five separate days that asked them to indicate whether or not they had participated in 10 college-related activities that day (e.g., spent time with friends, took part in college-related club or activity). Additionally, they were asked to expand on one of the four subtopics (e.g., friends, campus) they wrote about initially, keeping in mind that their respective times until graduation (e.g., soon or far away). Participants also completed the SHS at pre- and two-week post-intervention. ANOVA analyses indicated that participants in the grad-soon condition reported significantly greater increases in SHS scores from pre- to post-intervention as compared with the grad-far and placebo control conditions. SHS scores increased significantly only for the participants in the grad-soon condition. These results suggest that an activity designed to increase the savoring of past and current experiences within the context of the imminent conclusion of these experiences is conducive to increasing subjective well-being.

A more recent study by Hurley and Kwon (2012) examined the impact of a savoring intervention on affect and depressive symptoms. A total of 193 American undergraduate students were randomly assigned to either the intervention group or a no-treatment control condition. At both pre- and post-intervention participants completed the PANAS and the Beck Depression Inventory II (BDI-II; Beck et al., 1996). The savoring intervention group was provided with a 20-minute audio recording created by one of the authors and a packet of written materials providing psychoeducation on the positive psychology movement, savoring, and specific strategies for savoring as well as examples. Next, participants were asked to recall and record three positive events that happened to them over the last week, and then list ways they could have savored the events as they took place. Participants were asked to savor positive events over the next two-week period and given a savoring log to record the times they savored events in this timeframe. ANCOVA analyses, with pre-intervention levels of affect and depressive symptoms

covariates, revealed that while post-intervention positive affect scores on the PANAS did not differ significantly between the intervention and control groups, the intervention group reported significantly lower negative affect scores on the PANAS and BDI-II scores. Taken together, these results suggest that savoring positive experiences is associated with reductions in negative affect and depressive symptoms, but not increases in positive affect.

*Character strengths.* Seligman et al. (2005)'s aforementioned study included two separate character strengths-based activities, in relation to happiness and depressive symptoms. The first of the two character strengths intervention (i.e., using signature strengths in a new way) involved participants first completing the VIA (VIA Institute; 2007) survey online, which contains 240 items assessing participants' character strengths and generates their top five signature strengths. Once participants' top five signature strengths were identified, they were asked to *use one of them in a new and different way each day for one week*. The second character strengths intervention (i.e., identifying signature strengths) was a shorter-version of the aforementioned activity. Participants completed the VIA, took note of their top five signature strengths, and were asked to *use them more often* during the next week, but not given explicit instructions on which ones to focus on or how to use them. Participants completed the SHI and CES-D at pre-intervention, post-intervention, one-week follow-up, and one-, three-, and six-month follow-up. ANOVA analyses revealed that participants in the identifying signature strengths condition reported significantly higher SHI scores and significantly lower CES-D scores than the placebo control condition at immediate post-intervention. Participants in the using signature strengths in a new way condition reported significantly higher SHI scores at one-week follow-up and each subsequent follow-up assessment, as well as significantly lower CES-D scores at each post-intervention assessment than the placebo control condition, Taken together,

these results suggest that simply identifying signature strengths is associated with short-term increases in happiness and decreases in depressive symptoms, but the addition of utilizing identified signature strengths in novel ways may lead to long-term improvements in functioning.

Senf and Liao (2013)'s aforementioned study of Malaysian undergraduates examined two separate PPIs, including a signature character strengths intervention, in relation to happiness and depressive symptoms. The signature character strengths intervention involved participants first completing the VIA. Once the top five signature strengths were identified, participants were asked to use them in novel ways daily over the course of one week. Participants completed the SHI and CES-D at pre-intervention, post-intervention, and one-month follow-up. Regression analyses revealed that after controlling for pre-intervention levels of happiness, participants in the character strengths intervention had significantly higher levels of happiness than participants in the control group at post-intervention. Moreover, by the one-month follow-up assessment, participants in the strengths-based intervention reported significantly higher happiness scores than participants in both the gratitude-based intervention and control group. Results indicated no significant differences between the participants in character strengths and control conditions at the post-intervention assessment of depression, while controlling for pre-intervention levels of depressive symptoms. However, by the one-month follow-up assessment, participants in the strengths-focused intervention group reported significantly less depressive symptoms than their control group counterparts. In sum, the results of this study suggest that participating in a character strengths-based intervention produces beneficial results (i.e., increase in levels of happiness, decrease in depressive symptoms). In addition, the strengths-based intervention was linked to longer-term increases in happiness, as self-reported levels were even higher at one-month follow-up than those reported immediately following the conclusion of the intervention.

*Loving kindness meditation.* In order to examine the impact that a loving kindness meditation intervention on increasing positive emotions, Fredrickson, Cohn, Coffey, Pek, and Finkel (2008) randomly assigned 139 working adults ( $M$  age = 41 years) to immediate receipt of the intervention ( $n = 67$ ) or a wait-list control group ( $n = 72$ ). At baseline and one-week post-intervention, participants completed a battery of self-report measures, including the SWLS. For nine weeks, participants assigned to the intervention group reported their emotions and time spent engaged in “meditation, prayer, or solo spiritual activity” over the course of the past day, as well as rated their experience of various positive and negative emotions (assessed via the Modified Differential Emotions Scale [mDES; Fredrickson et al., 2003]) on a secured online website. After one week of this reporting, those in the intervention group received six 60-minute group sessions of loving kindness meditation training, which involved meditation exercises aimed at building love and compassion first toward the self, then subsequently to loved ones, acquaintances, strangers, and eventually to all living things. Participants also received a CD including guided meditation exercises and were asked to practice loving kindness meditation at home at least five days a week with the aid of the guided recordings. Results from hierarchical linear modeling indicated that the loving kindness meditation increased participants’ positive emotions, but did not influence the experience of negative emotions, over the course of the study. In addition, results from structural equation modeling indicate that participating in the loving kindness meditation intervention and increased time spent meditating led to increases in life satisfaction indirectly by influencing positive emotions. In sum, the results from this study suggest that participation in a meditation intervention focused on increasing levels of love and compassion for the self and others may lead to improved well-being, in terms of increased positive emotions and, in turn, increased life satisfaction.

In order to determine the long-term efficacy of the same loving kindness meditation intervention described above, Cohn and Fredrickson (2010) followed 95 of their original participants 15 months later. Participants completed the SWLS and, each day for one week after completing the SWLS, completed the mDES to indicate their experience of positive and negative emotions, and recorded whether they had engaged in “meditation, prayer, or solo spiritual activity” in the last 24 hours (activity details were described). About one third of participants reported continuing to meditate at least occasionally since the conclusion of the intervention. ANOVA analyses revealed that compared to those who reported the discontinuation of meditating, those who continued to meditate following the intervention concluded reported more positive emotions. Additionally, whether or not participants continued to meditate following the intervention, regression analyses indicated that all participants maintained the increases in life satisfaction that were gained as a result of the intervention. This follow-up study revealed that gains in the increased experience of positive emotions and higher life satisfaction were maintained even over a year after the loving kindness meditation intervention ended. This suggests that learning meditative exercises focused on increasing self- and other-focused love and compassion can result in long-lasting benefits in terms of subjective well-being.

*Positive psychotherapy.* Positive psychotherapy, developed by Seligman and his colleagues, applies the underpinning principles of positive psychology to the therapeutic process and seeks to build positive emotions, strengths, and meaning in life *in the process of treating mental health concerns* (Linley, Joseph, Maltby, Harrington, & Wood, 2009). Seligman et al. (2006) conducted two separate studies examining the efficacy of positive psychotherapy in alleviating symptoms of depression in clients.



The first of these studies was conducted with 40 undergraduate students with mild to moderate symptoms as rated by the Beck Depression Inventory (BDI; Beck & Steer, 1992). Participants were randomly assigned to either a no-treatment control condition or the positive psychotherapy condition ( $n = 19$ ), which included the PPIs of using signature strengths, counting blessings, writing a positive obituary, a gratitude visit, active-constructive responding, and savoring across six weekly two-hour group therapy sessions. At baseline, post-intervention, and three, six, and 12 months follow-up, participants completed the BDI and SWLS. Hierarchical linear modeling results revealed that clients who received positive psychotherapy, but not those in the control group, exhibited significant decreases in depressive symptoms and increases in life satisfaction over the course of the intervention. Additionally, analyses revealed neither the intervention nor the control group participants' levels of depression changed from three- to six-month to one-year follow-up, which suggests that clients who received positive psychotherapy maintained the gains. Furthermore, while levels of life satisfaction for participants in both groups increased in the long-term follow-up, participants in the positive psychotherapy group sustained higher levels than their control group counterparts throughout the three long-term follow up assessments.

The second study by Seligman et al. (2006) was conducted with 45 clients meeting criteria for major depressive disorder (MDD) who were seeking services at a university Counseling and Psychological Services center. Participants were randomly assigned to either individual positive psychotherapy or treatment as usual, which consisted of an integrative and eclectic therapeutic approach. Additionally, positive psychotherapy clients were compared with a non-randomized matched group that received TAU along with antidepressants ( $n = 17$ ). Positive psychotherapy occurred over 14 sessions and the course of up to 12 weeks and included

psychoeducation and several positive psychology components (e.g., signature strengths, gratitude, optimism, hope, savoring). Indicators of mental health completed pre- and post-intervention included: the Zung Self-Rating Scale of depression (ZSRS; Zung, 1965), the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960), the Outcome Questionnaire (OQ; Lambert et al., 1996), the Positive Psychotherapy Inventory (PPTI; Rashid, 2005), and the SWLS. Clinicians rated Global Assessment of Functioning (GAF) scores from the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV*; American Psychiatric Association, 2000). Well-being was assessed primarily by the PPTI (i.e., measure of happiness) and SWLS. ANOVA analyses revealed that at post-intervention participants who received positive psychotherapy had significantly less self-reported and clinician-rated depressive symptoms than participants in the other two experimental conditions. In regard to overall functioning, positive psychotherapy participants self-reported significantly lower scores on the OQ than participants in the TAU combined with antidepressant condition and clinicians rated these participants as having significantly higher GAF scores than those in the TAU condition. Regarding well-being, life satisfaction did not significantly differ among participants in the three groups; however, self-reported happiness levels on the PPTI were significantly higher for participants in the positive psychotherapy group than both of the comparison groups at post-intervention. Taken together, the results from the two Seligman et al. (2006) studies provide preliminary support for the utility of positive psychotherapy, which utilizes PPIs, in not only reducing mild to severe depressive symptoms, but also increasing well-being (e.g., life satisfaction, happiness).

To conclude, several well-designed studies conducted by multiple independent research teams have examined the impact of PPIs on adults' well-being. These studies sought to impact well-being through targeting malleable positive psychology constructs such as gratitude, acts of

kindness, character strengths, hope, and loving kindness meditation, as well as through the use of positive psychotherapy, which aims to increase clients' positive emotions and build on strengths to cultivate a greater meaning in life. Research on PPIs have generally demonstrated positive outcomes in terms of both increased well-being (e.g., decreases in negative affect and/or increases in positive affect and life satisfaction) and decreased psychopathology (e.g., depressive symptoms). Moreover, PPIs have been demonstrated to result in not only short-term benefits, but there is also preliminary support for long-term benefits as well, in particular with hope- and character strengths-based interventions, as well as more comprehensive interventions including positive psychotherapy. Thus, PPIs hold promise for improving adults' overall mental health standing. Most research conducted to date has largely tested the efficacy of one PPI type in order to improve well-being. It is still unknown how comprehensive PPIs (i.e., incorporate multiple positive psychology constructs within the intervention) such as positive psychotherapy, but with a non-clinical population, impact well-being. The next section reviews research on interventions designed to improve indicators of well-being among youth.

**Positive psychology interventions with youth samples.** The literature providing support for the utility of PPIs among youth is emerging, but less research has been conducted with this population relative to adults. For instance, loving kindness meditation, which has demonstrated promising results for improving subjective well-being in the long-term among middle-aged adults, have not been studied with youth samples. Gratitude, character strengths, and hope are all constructs that have been targeted to improve well-being. Additionally, a few comprehensive multi-target interventions have been examined, including positive psychotherapy.

*Gratitude.* Froh and colleagues conducted two separate studies with gratitude as the main construct of interest in relation to indicators of well-being. In the first study, Froh, Sefick, and

Emmons (2008) followed a procedure similar to Emmons and McCullough (2003) by randomly assigning 11 classes of 221 sixth and seventh grade students ( $M$  age = 12.17 years) to one of three conditions (i.e., gratitude, hassles, control) for two weeks. At three separate points in time (i.e., pre-intervention, immediately following intervention, three-week follow-up) participants completed several self-report measures including modified versions for age- and developmental-appropriateness of the positive and negative affect ratings and life satisfaction items utilized by Emmons and McCullough (2003), as well as the BMSLSS to assess students' life satisfaction both globally and across various life domains. Once daily for two weeks, participants in the gratitude condition were asked to list up to five things for which they were grateful, those in the hassles condition were asked to list up to five hassles that occurred in their lives, and those in the control condition only completed the self-report measures discussed above. Additionally, each day after participants completed their assigned activities they completed the measure of affect. ANCOVA analyses indicated that participants in the gratitude condition reported significantly less negative affect relative to those in the hassles condition at both post-test and follow-up assessments, with the control group not differing significantly from either of the other two conditions. Regarding positive affect, analyses did not reveal significant differences between the experimental groups across time. In terms of global life satisfaction, participants in the gratitude condition reported higher mean levels than those in the hassles condition at post-intervention, but the difference between these groups did not reach statistical significance ( $p = .063$ ). However, by three-week follow-up, the gratitude condition exhibited significantly higher global life satisfaction than the hassles condition. At the post-intervention assessment the control group did not differ significantly from the gratitude group on life satisfaction over the past few weeks, and at follow-up assessment the control group did not differ significantly from either the gratitude or

hassles groups. For satisfaction with school experiences, participants in the gratitude group reported significantly more satisfaction than participants in the hassles and control groups at post-intervention, and this difference was maintained at three-week follow-up. Finally, at the follow-up assessment, gratitude intervention participants reported significantly highest mean satisfaction with their living environment than the hassles group. The results from this study demonstrate the benefits in regard to improved mood and increased life satisfaction of adolescents participating in a gratitude-based PPI. Moreover, findings from this study suggest that fostering grateful thinking in adolescent students may result in boosts not only in global life satisfaction, but also satisfaction with specific life domains (e.g., school, living environment).

In order to determine if positive affect moderates the effects of a gratitude-based intervention, Froh, Kashdan, Ozimkowski, and Miller (2009) conducted a study with 89 youth in the third, eighth, and twelfth grades ( $M$  age = 12.74 years). Participants were randomly assigned to participate in either the gratitude intervention, which involved writing a gratitude letter to thank a person for their kindness and deliver the letter to the recipient, or to a control condition that required participants to write about daily events. Students were given 10-15 minutes each day for five days to complete their assigned activities. Immediately preceding and following the intervention, then one and two months upon the intervention's conclusion participants completed the Gratitude Adjective Checklist (GAC; McCullough et al., 2002), which assessed students' gratitude, and the PANAS-C. Hierarchical regression analyses indicated that students who entered into the intervention with low levels of positive affect (i.e., one standard deviation or more below the mean) reported more gratitude at the conclusion of the intervention, as well as more positive affect following the intervention and two months later. In other words, the results suggest that the students most likely to benefit from a gratitude-based PPI are those who have

lowest baseline levels of positive affect. The authors suggest that this may be the result of a ceiling effect in which students with initially high levels of positive affect have less room for improvement than students with lower levels of positive affect.

*Character strengths.* Within the last two years, a handful of researchers have become interested in the relationship between youth's character strengths and well-being (Gillham et al., 2011; Shoshani & Slone, 2013). However, only one study has directly examined the impact of a strengths-based intervention on well-being. Proctor et al. (2011) conducted a character strengths PPI, Strengths Gym, with 319 British adolescents ( $M$  age = 12.98 years). Students were assigned to participate in either the Strengths Gym or a comparison condition. The Strengths Gym program is based on the VIA classification system of strengths and involves 24 lessons comprised of in-class exercises, activities, and discussions led by the classroom teacher, as well as homework designed to solidify skills learned through in-class lessons. In contrast to interventions with adults that focus on individual's signature strengths (e.g., Seligman et al., 2005), Strengths Gym attempts to increase use of all character strengths in each person, without regard to an individual's personal signature strengths. In order to assess changes in well-being, students completed the pre- and post-intervention measures of life satisfaction (i.e., SLSS) and affect (i.e., PANAS), as well as the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). Hierarchical linear modeling revealed that at post-intervention, students who received the intervention had significantly higher levels of life satisfaction and positive affect, but no changes in negative affect nor self-esteem (after controlling for baseline levels), compared to students who did not receive the intervention. These results are encouraging and provide compelling support for Strengths Gym as a school-based character strengths PPI that can improve adolescents' well-being in terms of life satisfaction and positive affect. While negative affect and

self-esteem did not appear to improve significantly as a result of the intervention, the authors suggest that the small number of level 2 (i.e., number of classrooms) predictors in the model precluded the results to reach significance.

*Hope.* Marques, Lopez, and Pais-Ribeiro (2011) investigated the impact of a five-week hope intervention on middle school students' well-being. A total of 62 sixth grade students ( $M$  age = 10.96 years) were assigned to either the intervention group or a matched no-treatment comparison group. The hope-based interventions, Building Hope for the Future, consisted of five weekly one-hour group sessions that helped students to identify clear goals, paths to maintain the pursuit of and attain goals, and conceptualize obstacles to goal attainment as challenges to overcome. Students completed the several self-report measures at four points in time (i.e., pre- and post-intervention, six-month and 18-month follow-up) including the Children Hope Scale (CHS; Snyder et al., 1997), the Self-Worth subscale of the Self Perception Profile for Children (Harter, 1985), the SLSS, and a five-item measure created to describe perceived health state and quality of life that assessed students' mood over the past month. Additionally, students' academic achievement level was obtained from school records. Repeated measures ANOVA analyses indicated that students in the intervention group reported significantly higher levels of hope, life satisfaction, and self-worth (i.e., extent to which one likes him/herself as a person) relative to the comparison group at the post-intervention, and both follow-up assessments. No significant differences in mood and academic were detected between the intervention and comparison groups. These results suggest that a relatively brief hope-based intervention can improve students' well-being, particularly in respect to life satisfaction and self-worth, and that these gains can be maintained in the long-term.

*Multi-target positive psychology interventions.* There are a few examples of multi-target PPIs conducted with youth available in the literature. One such example is positive psychotherapy, which may incorporate several PPIs (e.g., character strengths, gratitude, optimism, hope, savoring) in addition to utilizing more traditional psychotherapy strategies to decrease depressive symptoms in youth (Rashid & Anjum, 2008). Rashid and Anjum (2008) evaluated the efficacy of positive psychotherapy among a sample of 22 Canadian middle school students ( $M$  age = 11.77 years). It is unclear how/why these 22 students were selected for participation in the intervention. Students were randomly assigned to either a no-treatment control condition ( $n = 11$ ) or to the group positive psychotherapy condition ( $n = 11$ ), which consisted of eight 90-minute sessions focused on character strengths, gratitude, and savoring. At pre- and post-intervention, students completed the Children's Depression Inventory (CDI; Helsel & Matson, 1984), SLSS, and PPTI. Results revealed no significant difference in CDI or SLSS scores between the intervention and control groups at post-intervention. However, students in the intervention group reported significantly higher PPTI scores at post-intervention compared to control group students. Results suggest that positive psychotherapy may differentially impact well-being, specifically by increasing overall happiness, but not depressive symptoms of psychopathology. It is unknown if these gains were maintained, as the authors did not report a follow-up period.

Notter's (2013) doctoral dissertation examined the efficacy of a positive psychology curriculum among high school students in New Zealand. In this quasi-experimental study with 134 at-risk ninth-grade students, Notter compared the impact of two different curricula on student outcomes, including depressive symptoms (assessed via the CDI), well-being, e.g., self-acceptance, positive relations with others, purpose in life (assessed via the Ryff's Psychological



Well-Being Scales [RPWS; Ryff & Keyes, 1995]), happiness (assessed via the SHS), and life satisfaction (assessed via the SWLS). Students were in one of three conditions: the Kiwi ACE (Adolescents coping with Emotions) program ( $n = 27$ ), the Positive Approaches to Life (PAL) program ( $n = 38$ ), or a no-treatment control group ( $n = 69$ ) which was matched to the intervention groups in order to permit comparisons. Both Kiwi ACE and PAL were comprised of 12 sessions, but whereas Kiwi Ace involved CBT techniques and social skills instruction to increase coping skills among youth, PAL involved activities designed to build happiness and well-being and incorporated several PPIs, including gratitude, character strengths, savoring, and flow. MANOVA analyses revealed that at post-intervention, and both six-month and one-year follow-up, students who received Kiwi Ace reported significantly lower CDI and significantly higher RPWS scores compared to the control group. Additionally, at six-month follow-up, students who received Kiwi Ace reported significantly higher SHS and SWLS scores compared to control group students, but evidenced no effect on SHS or SWLS either immediately post-intervention or one-year follow-up. Students who received PAL, however, reported significantly lower CDI scores and significantly higher RPWS, SWLS, and SHS scores at post-intervention, and both six-month and one-year follow-up assessments compared to the control group. Taken together, these findings suggest that while a CBT-focused intervention aimed at increasing the coping skills of at-risk adolescents is associated with decreases in depressive symptoms and some improvements in wellness (e.g., well-being, happiness, life satisfaction), a comprehensive intervention incorporating several PPIs is not only associated with decreases in depressive symptoms, but also consistent and long-term increases in well-being, happiness, and life satisfaction.

A separate example involves a multi-target, comprehensive, manualized PPI. Suldo, Savage, and Mercer (2014) randomly assigned 55 sixth grade students ( $M$  age = 11.43 years) to the intervention group ( $n = 28$ ) or a wait-list control group ( $n = 27$ ). In order to participate in the study, students were first screened for less than optimal life satisfaction (i.e., received mean score between one and six on seven-point metric on the BMSLSS). At three points in time (i.e., pre- and post-intervention, six-month follow-up) students also completed the SLSS, PANAS-C, and the YSR in order to determine differences in outcomes between the intervention and control groups. Suldo et al. (2014) developed the manualized intervention utilized in the study based on the work of Seligman and the existing PPI literature. The intervention consisted of 10-weekly group sessions, each approximately 55-minutes in duration, divided into three main phases (i.e., cultivating past-, present-, and future-focused positive feelings) in addition to the introduction and termination sessions. The specific positive psychology constructs targeted were gratitude, acts of kindness, character strengths, optimism, and hope. The individual sessions involved counselor-led discussions focused on happiness-related topics, introduction to and practice with specific PPIs, and homework activities to rehearse and solidify skills learned in weekly sessions. The intervention was implemented during the first several months of the school year, coinciding with the often tumultuous transition to middle school. Repeated measure ANOVA analyses on sample of 40 students matched based on propensity scores at baseline revealed that for the students in the intervention group ( $n = 20$ ), life satisfaction scores significantly increased from pre- to post-intervention, but this was not the case for students in the control group ( $n = 20$ ) whose life satisfaction scores remained stable. From post-intervention to follow-up, the intervention group did not exhibit a significant difference in life satisfaction scores, indicating that gains in life satisfaction were maintained for the intervention group, but not further

improved. Students in the control group exhibited an unanticipated significant increase in life satisfaction scores from post-intervention to follow-up. Regarding affect, there were no statistically significant interaction effects between the intervention and control groups across time for either positive or negative affect, nor were there significant changes in positive or negative affect for either group across time. Regarding psychopathology, there were no statistically significant interaction effects between the intervention and control groups across time for either externalizing or internalizing symptoms. Both groups reported significant decreases in internalizing symptoms from pre- to post-intervention, and the control group, but not intervention group, reported a significant decrease in externalizing symptoms from post-intervention to follow-up. In sum, the results of this study imply that sixth-grade students who participated in this comprehensive manualized PPI experienced some positive gains (e.g., increased life satisfaction) during a developmentally sensitive period, and these gains were maintained up to half of a year later, but no changes in other aspects of well-being in terms of affect or level of psychopathology. It is possible that the cognitive demands inherent to the PPI were somewhat high for the youngest group of middle school students, and that even slightly older youth would better receive the program.

### **Cognitive Development in Early Adolescence**

When considering psychological interventions aimed at improving functioning of youth, it is important to consider the match between developmental appropriateness of the intervention and the age group with which it is intended to be implemented. Conceptualizing adolescents' development within the stage-environment fit perspective suggests that schools' organizational, social, and instructional processes impact adolescents' development (Eccles, 2004). Research indicates that youth's transition to middle school often coincides with decreases in academic

motivation, behavior, and self-perceptions, likely due to an inappropriate match between the middle school environment and early adolescents' needs (Eccles, 2004). Declines in well-being as students enter and move through middle school are evident in average life satisfaction scores across grade levels. For instance, a statewide survey of students in South Carolina found mean life satisfaction levels decreased throughout middle school, from 5.44 (6<sup>th</sup> grade) to 5.26 (7<sup>th</sup> grade) to 5.11 (8<sup>th</sup> grade; Huebner, Suldo, Valois, & Drane, 2006). PPIs for youth may be particularly appropriate for students in seventh grade relative to entry (sixth grade). In sixth grade, students are rapidly adjusting to the structural, social, and instructional processes of middle school; by seventh grade, students are more acclimated to the middle school context and may be more inclined to fully engage in PPIs. Consistent with this reasoning, Suldo et al.'s (2013) PPI seemed to be better suited for seventh grade students compared to sixth grade students, as students in seventh grade more readily comprehended the topics covered in the intervention and demonstrated higher gains in life satisfaction scores from pre- to post-intervention (Friedrich, Thalji, Suldo, Chappel, & Fefer, 2010).

Moreover, some positive psychology constructs are complex and abstract in nature (e.g., optimistic thinking, hope), requiring individuals to utilize future-oriented thinking. It is necessary to determine when the ability to think abstractly and within a future-oriented mindset begins to emerge before implementing PPIs that require these types of thought processes. Research has suggested that inquiry skills (i.e., skills required to be an effective and independent learner) undergo substantial growth in early adolescence (Kuhn, 2009). Social competence and moral reasoning are also increasing throughout adolescence, which are likely skills conducive to participating in a group PPI (Eisenberg & Morris, 2004). Thus, a combination of factors, including a better fit between students' needs and school environment, and increasingly

sophisticated cognitive skills suggest that as adolescents grow older, they are more likely to benefit fully from participation in a PPI.

### **Summary of Positive Psychology Interventions for Youth**

In general, while there have been gains made in recent years in respect to investigating the impact of PPIs on youth well-being, this area of research lags behind the research conducted with adult samples. Among the available literature regarding youth samples, studies have targeted gratitude, character strengths, and hope. Additionally, there are a few examples of comprehensive, multi-target PPIs. Research on PPIs with youth has yielded mixed findings in terms of improved subjective well-being. For example, some studies found that PPIs impacted both life satisfaction and affect (e.g., Froh et al., 2008; Proctor et al., 2011), whereas others have found that only life satisfaction increases (e.g., Marques et al., 2011; Suldo et al., 2014). Furthermore, there is some support indicating that PPIs impact both psychopathology and indicators of wellness (e.g., Notter, 2013). Additionally, preliminary support exists for long-term benefits in various components of subjective well-being; however, more research is needed to confirm this. Furthermore, although a couple of studies have examined comprehensive, multi-target PPIs aimed at increasing youth's subjective well-being, these interventions were designed to work solely with youth themselves, neglecting other key stakeholders such as teachers or parents. Moreover, although some research has examined the maintenance of intervention-associated benefits in the long-term through follow-up assessments of outcomes, prior to the current study, no research has examined the impact of maintenance or booster sessions on preservation of intervention gains. Thus, it was previously unknown how a comprehensive PPI that also incorporates other key stakeholders and includes maintenance sessions impacts youth subjective well-being above and beyond currently existing PPIs. The next sections review the

role of family components and booster sessions in extant psychological interventions, and how these intervention components may impact outcomes for individuals.

### **Role of Family Components Included in Psychological Interventions**

It is often considered best practice among school psychologists to include multiple key stakeholders in the intervention process, specifically parents, teachers, or both in accordance with the nature of the individual intervention (Paternite & Johnston, 2005). Parental involvement in their children's educational experiences, including academic and social-emotional interventions, is strongly encouraged in order to increase the bi-directional communication between the school and home contexts in order to maximize students' success (Esler, Godber, & Christenson, 2008). School psychologists have a critical role in facilitating this communication and involvement among all relevant stakeholders by acting as a liaison and linking activities and processes occurring within the school environment to the home environment. Following is a review of the role that the family has played in psychological interventions for various referral concerns, such as for the purpose of alleviating symptoms of psychopathology (e.g., depression, anxiety) and increasing wellness.

#### **Family components in psychological interventions targeting psychopathology.**

Mental health providers seek to involve parents, and at times entire families, in the therapeutic process for multiple reasons (Kendall, Furr, & Podell, 2010). For instance, for many forms of psychopathology, family members often exhibit symptoms of the disorder themselves, modeling maladaptive behavior for their children. In addition, parents may unknowingly reinforce their child's maladaptive behavior, which serves to help maintain its occurrence. In other cases, the child's mental health issues interfere with and disrupt the communication among family members resulting in dysfunctional communication and interaction patterns. Other times the

parents are included in order to make them aware of skills that their child is learning in therapy and to have parents help their child further solidify and generalize them. The various roles that the family has assumed in two particular forms of psychopathology, depression and anxiety, are reviewed next.

*Family components in psychological interventions targeting depression.* A recent article by Stark, Banneyer, Wang, and Arora (2012) reviewed empirical studies investigating family/parent components in the treatment of depression in youth. Stark et al. (2012) decided that it is inconclusive whether or not including parents in the therapeutic process produces gains above and beyond therapy conducted solely with youth themselves, primarily because most of the research designs of studies that included a parent/family component precluded the ability to isolate the impact of the parent/family component versus the youth component (Stark et al., 2012). A deeper investigation of the literature on family components included in psychological interventions targeting depression in youth confirms the mixed findings reported by Stark et al. (2012), as described next.

The treatment of youth depression has involved family members in several ways. A handful of interventions involved the entire family in the treatment process (e.g., Diamond, Reis, Diamond, Siqueland, & Isaacs, 2002; Diamond et al., 2010; Garoff, Heinonen, Pesonen, & Almqvist, 2012; Kovacs et al., 2006; Luby, Lenze, & Tillman, 2012; Sanford et al., 2006; Thompson et al., 2007). Other interventions involved at least one individual family session in addition to child-only sessions (e.g., Brent et al., 1997; Brent et al., 2008; Dietz, Mufson, Irvine, & Brent, 2008; Goodyer et al., 2007; Kennard et al., 2008; Melvin et al., 2006; Mufson, Gallagher, Dorta, & Young, 2004; Muratori, Picchi, Bruni, Patarnelo, & Romagnoli, 2003; Treatment for Adolescents with Depression Study [TADS] Team, 2004). A few interventions

involved the therapist meeting with parents individually in addition to the child-only sessions (e.g., Dietz et al., 2008; Garoff et al., 2012; Melvin et al., 2006; Nelson, Barnard, & Cain, 2003). Finally, some interventions involved meeting with groups of parents and/or families in addition to child-only sessions (e.g., Clarke et al., 2002; Clarke et al., 2005; Clarke et al., 1999; Fristad, Verducci, Walters, & Young, 2009; Lewinsohn, Clarke, Hops, & Andrews, 1990).

Out of the interventions that focused on providing treatment to the entire family, treatment modalities included attachment-based family therapy (Diamond et al., 2002; 2010), family-focused intervention (Thompson et al., 2007), contextual emotion-regulation therapy (Kovacs et al., 2006), parent-child interaction therapy (Luby et al., 2012), systems-integrated family therapy (Garoff, Heinonen, Pesonen, & Almqvist, 2012), systemic behavior family therapy (Brent et al., 1997), and family psychoeducation (Sanford et al., 2006). Across all of these studies that involved heavy family involvement in treatment of youth depression, findings indicated that either compared to control conditions or baseline measures, youth who participated in the intervention conditions demonstrated significantly better outcomes across a wide array of indicators assessed (e.g., *DSM-IV* criteria for major depressive disorder, suicidal ideation, self-reported depressive symptoms, family conflict).

Regarding interventions that included at least one individual family session in addition to child-only sessions, the majority conducted child-focused cognitive-behavioral therapy (CBT) with family components assuming various forms, ranging from providing parents with psychoeducation about depression for approximately one hour over the course of a few sessions with the child present (Brent et al., 1997; TADS, 2004) to also informing parents about how to cope with having a child with depression at three separate points in treatment (i.e., onset, mid-point, conclusion; Brent et al., 2008). Kennard et al. (2008) involved parents more heavily by



including a conjoint parent and child session at the onset of treatment focused on psychoeducation, providing parents with handouts on skills being learned in each session briefly checking in with parents in each session to receive input on treatment progress, and by having the family participate in a session on family wellness. Other interventions that had more regular conjoint parent and child sessions, either at the mid-point and toward the end of treatment (Melvin et al., 2006) or at the conclusion of each session (Goodyer et al., 2007), did not specify the nature of the parent involvement in terms of session goals. Interpersonal psychotherapy interventions with at least one individual family session range from involving parents periodically, i.e., through four 90-minute family sessions focused on data collection, psychoeducation, treatment planning, and termination (Mufson et al., 2004) to splitting sessions between the child and with the child and parent(s) together (Dietz et al., 2008). A psychodynamic therapy intervention involved parents over the course of five treatment sessions by uncovering how the parents' past was currently impacting their relationship with their child, improving the parent-child relationship, and increasing parental empathy toward the child (Muratori et al., 2003). Across these interventions that involved parent involvement in at least one treatment session of youth depression, findings indicated that compared to control conditions or baseline measures, youth who participated in the intervention conditions demonstrated significantly better outcomes across a wide array of indicators assessed (e.g., *DSM-IV* criteria for major depressive disorder, remission rates, functional impairment, suicidal ideation, self-reported depressive symptoms, family conflict).

Some of the interventions that included individual sessions with parents only (e.g., without their child present) were some of those mentioned above. For instance, in addition to the conjoint parent-child session included, some interventions have one to two parent-only sessions

that provide psychoeducation about depression (TADS, 2004; Thompson et al., 2007), some have an initial intake session with parents only (Dietz et al., 2008), and others offer multiple (e.g., 12) parent-alone sessions focused on psychoeducation, goal setting, and teaching of intervention strategies (Melvin et al., 2006; Nelson et al., 2003). Across all of these studies that involved at least one parent-only treatment session to counter youth depression, findings indicated that compared to control conditions or baseline measures, youth who participated in the intervention conditions demonstrated significantly better outcomes across a wide array of indicators assessed (e.g., *DSM-IV* criteria for major depressive disorder, remission rates, functional impairment, suicidal ideation, self-reported depressive symptoms, family conflict).

Several studies have included multiple sessions (e.g., seven to eight) with groups of parents in addition to child-focused treatment sessions. Most of these utilized CBT to treat youths' depressive symptoms by teaching parents the skills taught to students (Asarnow, Scott, & Mintz, 2002; Clarke et al., 1999, 2002, 2005; Lewinsohn et al., 1990). Another intervention utilized multifamily psychoeducational psychotherapy, which involved each of the eight sessions beginning and ending with both parents and their children together, but the middle portions of the sessions were conducted with the groups of parents and children meeting separately (Fristad et al., 2009). The separate parent and child portions of the group sessions covered similar content (e.g., psychoeducation about depressive symptoms and medication, enhancement of problem-solving, coping, and communication skills). Across all of these studies that involved parent group sessions as part of the treatment of youth depression, findings indicated that compared to control conditions or baseline measures, youth who participated in the intervention conditions demonstrated significantly better outcomes across a wide array of indicators assessed (e.g.,

*DSM-IV* criteria for major depressive disorder, remission rates, functional impairment, suicidal ideation, self-reported depressive symptoms, family conflict).

Although numerous studies have demonstrated positive results investigating the efficacy of interventions for youth depression have included some form of a parent component, very few researchers have compared interventions that include parent components versus similar interventions that do not include parent components within the same study. This type of study design would allow researchers to determine what, if any, added benefit exists with the addition of parent components. Two older studies that attempted this design produced mixed findings (e.g., Clarke et al., 1999; Lewinsohn et al., 1990). In the earliest of these studies, Lewinsohn et al. (1990) randomly assigned 59 adolescents between 14 and 18 years old to one of three conditions: adolescent-only, adolescent and parent, and wait-list control. Both of the intervention conditions utilized the Coping with Depression Course for Adolescents (CWD-A; Clarke & Lewinsohn, 1986), a cognitive-behavioral treatment consisting of 14 two-hour sessions. The adolescent and parent condition also consisted of a separate component for parents consisting of seven two-hour group sessions (occurring on nights that their children were meeting), which were designed to promote parental reinforcement of their children's newly acquired skills from the CWD-A course. In the sessions, parents were provided an overview of the skills taught in the youth session and were also taught coping skills to effectively deal with family problems.

ANOVA analyses indicated that while the adolescent and parent group demonstrated a greater mean score improvement in depressive symptoms as indicated by semi-structured diagnostic interview compared to the adolescent-only group, this difference was not significant ( $p > .05$ , exact value not specified). A similar trend was noted among youth-rated depressive symptoms assessed by both the BDI and CES-D, with fewer, but not statistically significant,

symptoms reported among youth in the adolescent and parent group compared to the adolescent-only group. However, among the parent-rated internalizing and depression scales of the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983), parents in the adolescent and parent group reported significantly fewer concerns than parents in the adolescent-only group. Overall, both intervention groups exhibited post-treatment outcomes superior to the wait-list control group and the findings provide at least a small amount of support for the added benefit of incorporating a parent group component when working with depressed adolescents.

The second study that compared adolescent group CBT for depression to CBT group therapy with the addition of a parent component randomly assigned 123 adolescents (age 14 to 18 years) with a diagnosis of major depressive disorder or dysthymia to one of three conditions: adolescent group CBT, adolescent group CBT plus a separate parent group, or waitlist-control (Clarke et al., 1999). The adolescent group CBT consisted of 16 two-hour sessions. The parent component for the adolescent group CBT plus parent component intervention group consisted of eight two-hour sessions in which parents reviewed skills that their children were learning, as well as communication and problem-solving skills to better manage family conflict. Chi-square analyses indicated the two treatment groups did not differ significantly in regard to recovery rates (i.e., percentage of participants no longer meeting criteria for major depressive disorder or dysthymia). Moreover, on parent-reported (i.e., internalizing and depression scales of the CBCL), youth-reported measures (i.e., BDI), and clinician-rated GAF scores, ANOVA analyses revealed no significant differences between the adolescent-only and adolescent plus parent conditions. In sum, the results of this study imply that the addition of a parent component to the group CBT treatment of adolescent depression does not result in significantly improved outcomes relative to a group child-focused CBT intervention alone.

To conclude, the current state of the literature on the role of family components in interventions treating youth depression generally supports the efficacy of interventions that include parental involvement, but there is little empirical evidence indicating the benefits of including a family component above and beyond interventions focused solely on youth. What is clear, however, is that several youth depression interventions have included family components under the hypothesis that such is likely helpful. The form of these parent components has run the gamut from brief single sessions focused on psychoeducation to heavy involvement in each session through an entire family-focused treatment modality. More research is needed to isolate the forms of parent components that produce the most cost-effective gains in youth outcomes, but the research described above provides support for the efficacy of interventions whose parent involvement component could be characterized as minimal, and does not provide overwhelming evidence that extensive parental involvement components are responsible for radically improved positive outcomes. Next, a similar review of the literature on parent components included in psychological interventions targeting youth anxiety is presented.

*Family components in psychological interventions targeting anxiety.* A recent meta-analysis investigated 55 randomized controlled trials of psychological therapies (mostly CBT) for anxiety disorders in children and adolescents, including 40 that involved parents in some capacity of the therapeutic process (Reynolds, Wilson, Austin, & Hooper, 2012). Reynolds et al. (2012) found that while every category of parental involvement (i.e., none, minimal, some, significant/extended involvement) had medium and significant effect sizes ( $d = -.57$  to  $-.69$ ) in reducing anxiety symptoms, studies that did not include a parental component differed minimally from studies that did incorporate a parental component. A second comprehensive review of CBT treatments for child and adolescent anxiety that included parental involvement posited that

findings on including parents in the treatment process are mixed and inconsistent (Breinholst, Esbjørn, Reinholdt-Dunne, & Stallard, 2012). This author's independent examination of the literature on parental components included in psychological interventions targeting anxiety in youth confirms the conclusions drawn by Reynolds et al. (2012) and Breinholst et al. (2012), as some studies found positive associations of including parents and others did not. Next, a summary of several randomized controlled trials conducted within the last decade that compared outcomes between psychological interventions including a parent or family component to those that did not are presented.

The vast majority of psychological interventions for youth anxiety utilize some variation of CBT, as CBT has been deemed a probably efficacious treatment for anxiety disorders (Chambless & Ollendick, 2001). Nauta, Scholing, Emmelkamp, and Minderaa (2003) randomly assigned 79 Dutch youth between seven and 18 years old ( $M$  age = 11 years) who met diagnostic criteria for an anxiety disorder (i.e., separation anxiety disorder [SAD], social phobia [SP], generalized anxiety disorder [GAD], or panic disorder [PD]) to one of three experimental conditions: CBT, CBT plus seven-session parent training program, or wait-list control. The CBT used in both active treatment conditions was a 12-session Dutch adaptation of Coping Cat (Kendall, 1994), an empirically-validated program that incorporates several CBT techniques (e.g., graduated-exposure tasks, relaxation training, self-reinforcement, development of adaptive coping strategies). Results from MANOVA analyses indicated that while both active treatment conditions resulted in significantly fewer parent-reported anxiety symptoms (assessed via the CBCL [Achenbach, 1991] and the parent version of the Spence Child Anxiety Scale [SCAS-p; Spence, 1998]) as compared to the waitlist-control condition, but there were not significant outcome differences between the two active treatment conditions. These results suggest that the

addition of a group cognitive parent training program to a child-focused CBT program does not result in any added benefits.

As part of the latter of a two-phase study, Siqueland, Rynn, and Diamond (2005) randomly assigned 11 adolescents (*M* age = 14.9 years) who met diagnostic criteria for an anxiety disorder (i.e., GAD, SP, SAD) to either a CBT alone (16 individual therapy sessions) or a CBT and family based treatment (CBT-ABFT) condition, which included the same components of the CBT alone treatment, but with a modified order and structure in order to include parents by incorporating discussions and activities to help their children overcome their anxiety. Similar to Nauta et al. (2003), results from ANOVA analyses revealed no significant differences between the two treatment conditions in regard to adolescents' self-reported anxiety symptoms (assessed via the Beck Anxiety Inventory [BAI; Beck, Epstein, & Brown, 1988]) at either post-treatment or at six-month follow-up assessments. These results do not provide support for additional benefits of a parent component beyond those already associated with a child-focused psychological intervention for anxiety disorders in youth.

Among a sample of 128 youth ages eight to 18 years old who met criteria for an anxiety disorder (i.e., SP, SAD, GAD, specific phobia, PD), Bodden et al. (2008) randomly assigned participants to a child-focused CBT condition (CCBT) or family-focused CBT (FCBT) condition. Both conditions involved 13 sessions. Pre- to post-intervention to three-month follow-up assessments were conducted to compare diagnostic criteria (assessed via the Anxiety Disorders Interview Schedule for DSM-IV [(ADIS-IV; Brown, DiNardo, & Barlow, 1994)], child- and parent-rated anxiety symptoms (assessed via the Screen for Child Anxiety Related Emotional Disorders-71 [SCARED-71; Bodden, 2007] and State Trait Anxiety Inventory for Children [STAI-C; Spielberger, 1973]), parent-rated internalizing problems (assessed by the

CBCL), and child-rated negative self-statements (assessed by the Children's Automatic Thought Scale [CATS; Schniering & Rapee, 2002]) between the two conditions. Results were somewhat mixed, but generally favored the CCBT over the FCBT condition. For instance, binary logistic analysis indicated that significantly more children no longer met the criteria for any anxiety disorder in the CCBT compared to FCBT condition at post-treatment, but the difference between these groups was no longer significant by three-month follow-up. However, based on cutoff scores used to assess the percentage of children falling into the normal range on the SCARED, STAI-C, CBCL, and CATS, there were no differences between the two treatment conditions at post-treatment. However, after controlling for pre-treatment cutoff scores, significantly more children in the CCBT condition fell into the normal range on the STAI-C compared to the FCBT condition. Moreover, at follow-up, significantly more children in the CCBT condition fell into the normal range on the CBCL internalizing scale compared to the FCBT condition. Taken together, these results suggest that a child-focused treatment for youth anxiety may be more beneficial than a treatment that also incorporates a parental component.

Kendall, Hudson, Gosch, Flannery-Schroeder, and Suveg (2008) also failed to find much added benefit of a parental component in the treatment of youth anxiety disorders. Specifically, 161 youth aged seven to 14 years ( $M$  age = 10.27 years) who met diagnostic criteria for an anxiety disorder (i.e., SAD, SP, GAD) were randomly assigned to one of three conditions: CCBT, FCBT, or a family-based education/support/attention (FESA) active control. Chi-square analyses revealed that at post-treatment and one-year follow-up assessments, children in both the CCBT and FCBT conditions had significantly greater reductions in clinician-rated severity of anxiety symptoms (derived from the ADIS-IV) than children in the FESA condition, but the CCBT and FCBT conditions did not differ significantly from one another. Additionally,



hierarchical linear modeling revealed that compared to the FCBT and FESA conditions, youth in the CCBT condition had significantly less teacher-reported youth anxiety symptoms (assessed via the TRF) at post-treatment and follow-up. Analyses did not reveal significant differences among treatment groups regarding youth's self- and parent-rated anxiety symptoms. In sum, while this randomized controlled trial identified some superior outcomes (e.g., teacher-rated anxiety symptoms) for CCBT compared to FCBT and an active control group, other measures of anxiety symptoms (e.g., parent- and youth-rated) were not significantly different between various treatment modalities. Thus, this study does not provide support for added benefits of a parental component in above and beyond a child-focused intervention in the treatment of youth anxiety

In contrast to the lackluster findings discussed above associated with an added parent component in the treatment of youth anxiety disorders, Wood, Piacentini, Southam-Gerow, Chu, and Sigman (2006) found that compared to a child-focused CBT condition, family-focused CBT was associated with superior outcomes. Specifically, 40 youth between six and 13 years old ( $M$  age = 9.83 years) who met diagnostic criteria for an anxiety disorder (i.e., SAD, SP, GAD) were randomly assigned to either a child- or family-focused CBT condition. Each condition consisted of 12-16 sessions. FCBT sessions were split between time spent with the child individually, the parents individually, and the child and parents conjointly. Results from ANOVA analyses indicated that the FCBT demonstrated significantly greater reductions in clinician-rated anxiety symptoms (assessed via the Clinical Global Impressions- Improvement Scale [RUPP Anxiety Group, 2001]) as compared to the CCBT condition. Additionally, results from hierarchical linear modeling indicated that post-treatment parent-rated youth anxiety symptoms (assessed via the Multidimensional Anxiety Scale for Children [MASC; March, 1998]), declined at a significantly faster rate over time among the FCBT compared to the CCBT condition. However, child-rated

anxiety symptoms (assessed via the MASC) were not significantly different between the FCBT and CCBT condition. In a one-year follow-up study with 35 of these youth, repeated measures ANOVAs revealed statistically significant intervention group by time interactions for three out of four anxiety outcomes assessed (i.e., parent- and child-reported anxiety symptoms per the ADIS-IV, parent-rated anxiety per the MASC, parent-rated internalizing symptoms per the internalizing scale of the CBCL), each favoring the FCBT condition (Wood, McLeod, Piacentini, & Sigman, 2009). However, child-rated anxiety symptoms (assessed via the MASC) did not differ significantly between the CCBT and FCBT conditions at follow-up. In other words, at one-year follow-up, there were greater reductions in child anxiety symptoms compared to pre-treatment for the FCBT group on parent-rated measures, but not for child-rated measures.

To conclude, the current literature does not provide consistent support for the added benefit of including a parent component in the treatment of youth anxiety disorders above and beyond child-focused interventions. Moreover, some research has implied superior outcomes among child-focused compared to family-focused interventions. Nevertheless, there is some empirical support indicating the reverse to be true. Taken together, these varied findings suggest that more research is needed to further investigate the impact of parent components in the treatment of youth anxiety. Notably, most of the parent components that have been studied extensively and compared to child-focused interventions have consisted of intensive involvement through family-focused CBT. More research should investigate less substantial parental involvement components (e.g., brief psychoeducation sessions) compared to solely child-focused treatment approaches. Next, the role of parent components in prevention- and wellness-oriented interventions is discussed, to contrast the literature on reduction of emotional distress.

**Family components in preventative interventions.** There is stronger empirical rationale for including a parent component in psychological interventions for youth within the universal and indicated prevention literature (e.g., Barrett, Farrell, Ollendick, & Dadds, 2006; Lochman & Wells, 2002; Morrison, Storino, Robertson, Weissglass, & Dondero, 2000). To illustrate, an examination of the effectiveness of an after school substance use prevention program that included a child component (i.e., academic tutoring and problem-solving skills training), as well as parent component (i.e., five once-monthly parent education meetings) found that students self-reported more connections with school and increased parental supervision at home among those whose parents attended more meetings (Morrison et al., 2000). As a separate example, a study investigating the long-term outcomes of a youth anxiety and depression prevention program, which included both a youth component (i.e., brief CBT intervention for managing emotional distress) and parent component (i.e., four evening psychoeducation sessions for parents), found the intervention to be associated with the prevention of experiencing symptoms of anxiety up to two-years post-intervention (Barrett et al., 2006). Taken together, these findings suggest that parental involvement in prevention programs is associated with positive outcomes (e.g., prevention of psychopathology, increases in student engagement with school).

**Family components in psychological interventions targeting wellness.** To date, only one known published study has involved parents in a PPI. Marques et al. (2011), discussed more thoroughly earlier in this chapter, included parents in a five-week hope-focused intervention among 62 middle school students. Students met in a group for one-hour sessions weekly for five weeks. The parent component consisted of a single one-hour group session that occurred during the first week of the student intervention. In this session, parents were provided with, and provided an overview of, a three-segment manual, which consisted of psychoeducation about

hope and activities for instilling and increasing hope. The manual was created with two goals in mind: 1) increasing parental awareness of the principles of hope and increasing goal-directed behavior, and 2) facilitating goal-setting behavior in the parents' children. While the effects of the parent component were not isolated in this study, the results of this hope-based PPI that included a parent component indicated that the intervention group had significantly higher levels of hope, life satisfaction, and self-worth relative to a comparison group at post-intervention and two follow-up assessments. To date, this intervention is one of the few youth PPIs associated with improved outcomes at follow-up, suggesting the potential necessity of including parents.

Further empirical rationale for the likely benefit of including parents in PPIs includes recent correlational evidence of associations between parent and youth well-being. Specifically, a study of 148 children in fourth and fifth grades, and these children's mothers ( $n = 137$ ) and fathers ( $n = 109$ ), found children's gratitude was significantly positively correlated with their mothers' gratitude ( $r = .23$ ), but not significantly linked to fathers' gratitude, and children's life satisfaction was significantly positively correlated with both their mothers' ( $r = .26$ ) and fathers' ( $r = .29$ ) life satisfaction (Hoy, Suldo, & Raffaele Mendez, 2013). Moreover, children's levels of hope was significantly positively correlated with both their mothers' and fathers' life satisfaction. Such findings suggest that interventions intended to increase youth subjective well-being may have secondary positive impacts on parental life satisfaction and gratitude, or vice versa. For example, by informing parents on activities and strategies their children are learning in PPIs, which are designed to improve subjective well-being, parents may modify their own behaviors in line with this increased knowledge. In turn, this may also positively affect youth subjective well-being through parental modeling and enhanced life satisfaction.

The lack of available PPIs that have involved parents and/or families in the promotion of youth wellness suggest a clear need for more research within this realm, which was partly addressed in the current study. The larger mental health literature on outcomes associated with parent components in the treatment of youth depression and anxiety suggest there is not any one clear type of parent component that has promoted superior outcomes, which allows researchers flexibility in developing parent components to accompany youth-focused PPIs. The next section reviews the role of booster or maintenance sessions in psychological interventions for youth, and how these may impact treatment outcomes.

### **Role of Booster Sessions in Psychological Interventions**

Booster, or maintenance, sessions are recommended for clients who have undergone psychotherapy in order to maintain the gains they made after the termination of treatment. Beck (2011) recommends that clients schedule booster sessions after termination of CBT for several reasons. For one, a client and their therapist can discuss how the client has handled difficulties that arose and problem-solve ways that he or she could handle it better in the future. Second, therapists can assess the return of any maladaptive strategies for coping with difficulties. Third, therapists can help clients develop plans to work toward new goals that clients identify. Finally, scheduling booster sessions can quell some of clients' fears and anxieties associated with terminating treatment. The role of booster sessions in psychological interventions in the treatment of psychopathology as well as wellness promotion interventions is discussed next.

**Booster sessions in the treatment of psychopathology.** Surprisingly little empirical research has examined the efficacy of booster sessions in the treatment of psychopathology within the last 25 years. To illustrate, the only known published review on the efficacy of booster sessions within behavioral therapy was published over 20 years ago (Wishman, 1990). The

review included 30 clinical trials in the treatment of various behavioral concerns (e.g., alcoholism, smoking, assertiveness, weight loss) from 1973 to 1990 and concluded that booster sessions are moderately successful. However, the review was limited in scope to behavioral therapy. Other researchers have investigated the efficacy of booster sessions included in other forms of therapy (e.g., CBT, family therapy) and a majority found support for effectiveness of booster sessions.

Initial work regarding the utility of booster sessions by Baker and Wilson (1985) suggested that booster sessions were not effective in reducing relapse in depressive symptoms or producing further treatment gains. Specifically, 31 adults between 20 and 65 years old ( $M$  age = 39.5 years) who were clinically depressed were randomly assigned to one of three conditions: CBT booster sessions, nonspecific booster sessions, or no booster sessions. Participants in each condition received four 90-minute sessions after the conclusion of seven weeks of CBT for depression (i.e., two weeks, one month, two months, and three months after initial treatment ended). The CBT booster sessions involved reviewing and establishing cognitive and behavioral skills to prevent and overcome any future episodes of depression. The nonspecific booster sessions primarily involved group discussion of problems, but with no specific suggestions for using cognitive or behavioral strategies. ANOVA analyses revealed no significant differences between the three conditions in the extent to which improvement was maintained, suggesting that booster sessions are not helpful in preventing relapse of depressive symptoms.

Another study failed to reveal benefits associated with booster sessions. Lochman et al. (2013) randomly assigned 60 fifth grade students who took part in the Coping Power program to either receive monthly booster intervention sessions during the subsequent sixth grade school year or to a control condition (i.e., received Coping Power intervention only). The Coping Power

program students received was an abbreviated form of a manualized CBT intervention designed to reduce anger, which was comprised of 24 child sessions and 10 parent sessions. The booster intervention was designed to reinforce children's skills learned through Coping Power and consisted of five to 10 ( $M = 7.3$  sessions) 20-30 minute once monthly sessions. Results from hierarchical linear modeling revealed that the booster sessions did not produce any significant benefits above and beyond participating in the Coping Power program alone. In fact, the only significant difference between the booster condition and Coping Power only condition indicated that participants who just received the Coping Power intervention displayed significantly greater decreases in proactive aggressive behavior than participants who also received booster sessions. These results suggest that booster sessions did not further enhance the benefits associated with an anger coping program.

A study by Baggs and Spence (1990) paints a different picture. Participants included 46 adults ( $M$  age = 34.5 years) who were recruited due to issues with being unassertive. Participants first underwent an eight-week group assertiveness training in order to improve assertive responses in various situations and contexts, and then were randomly assigned to one of three booster session conditions: monthly assertion training boosters, monthly attention placebo boosters, or no boosters. The monthly assertion training boosters involved six once monthly 90-minute sessions focused on reviewing and practicing skills learned in assertion training. The monthly attention placebo boosters consisted of six once monthly 90-minute sessions that involved non-directive group discussion, but with no specific review or practice of skills. MANOVA analyses revealed that while there were no significant differences between booster conditions at three-month follow-up, by six-month follow-up the assertion training booster condition demonstrated significantly more assertiveness and social skills than the other booster

conditions. These results suggest that in the long-term, booster sessions focused on the review and practice of skills learned throughout the course of therapeutic treatment result in superior outcomes for those who receive them.

A family-focused intervention with youth also found positive outcomes associated with booster sessions. After 424 families received a 22-session family intervention to help low-income parents manage their children's transition into first grade, as well as 20-sessions of academic tutoring, Tolan, Gorman-Smith, Henry, and Schoeny (2009) randomly assigned 196 participants to either receive a booster intervention or a control condition. The booster intervention consisted of 20-sessions that spanned a range of topics (e.g., effective parenting practices, managing school achievement motivation and school involvement, peer relations) through a combination of psychoeducation, group discussion, and practice. Regression analyses indicated that participants in the booster sessions had significantly less impulsivity than those in the control condition, with near significant differences ( $p < .10$ ) reported for aggression, concentration, and adaptability. Moreover, for families and children deemed high-risk (i.e., scores on the composite family relationships or parenting practices scales, and average standardized scores on parent- and teacher-rated aggression, hyperactivity, and concentration scales more than one standard deviation below the mean, respectively), participants in the booster session condition reported significantly lower aggression, improved family organization, higher academic achievement, and lower impulsivity. Results suggest that extensive booster sessions resulted in more positive outcomes for participants, particularly those deemed high-risk.

A study conducted to determine efficacy of group CBT for the treatment of depressive symptoms in adolescents found some mixed results regarding the use of booster sessions. Clarke et al. (1999) randomly assigned 46 adolescents between 14 and 18 years old who underwent eight



weeks of CBT to one of three conditions for a two-year follow-up period: assessments every four months with booster sessions, assessments only every four months, or assessments only every 12 months. The booster sessions were tailored to the needs of the adolescent at the time (e.g., pleasant events, social skills and communication, relaxation, cognitions, negotiation and problem-solving, setting goals) and focused on rehearsal of and applying skills learned in group CBT to problems that occurred since termination. Chi-square analyses revealed that at 12-month follow-up, all of the depressed adolescents who received booster sessions had recovered (i.e., displayed no or minimal depression symptoms in an eight-week period), but only half of adolescents in the two assessment-only conditions had recovered. The difference between the booster session condition and two assessment-only conditions was no longer significant by 24-month follow-up, however. Regarding recurrence of depressive episodes, there was no significant difference between the two assessment-only conditions or the booster condition at either 12- or 24-month follow-up. Finally, while parents of adolescents in the booster condition reported significantly less externalizing symptoms over time than those in the two assessment-only conditions, there were no significant differences between the conditions in clinician-, parent-, or youth-reported depressive or internalizing symptoms. Thus, results suggest that while booster sessions may result in a steeper recovery rate for depressed adolescents, they did not prevent relapse in depressive symptoms or result in significantly fewer clinician-, parent-, or child-rated internalizing or depressive symptoms.

To conclude, the empirical support for the importance of maintenance sessions in the treatment of psychopathology is far from overwhelming, despite strong recommendations for including booster sessions in the continuation of treatment gains. The current literature is

somewhat mixed, but generally suggests that booster sessions may not result in further gains after treatment termination, but may result in maintenance of gains made in treatment.

**Booster sessions in wellness-promotion interventions.** Given the infancy of the research on PPIs, to date there is no known published study examining the role that booster sessions play in the maintenance or enhancement of treatment outcomes. However, it is notable that some PPIs that evidenced gains from pre- to post-intervention did not see further improvement upon intervention conclusion (Froh et al., 2008; Marques et al., 2011; Notter, 2013; Suldo et al., 2014), suggesting that further rehearsal of skills taught may be needed in order to achieve continued improvement. A logical extension of the research on PPIs is to examine the effects of booster sessions on outcomes associated with participation in PPIs, particularly maintenance and further improvement of gains observed at after intervention termination. The findings are still mixed as to the optimal frequency of booster sessions. Although as few as six follow-up sessions have been associated with positive outcomes (i.e., Baggs & Spence, 1990), the most superior outcomes have been associated with booster sessions extended up to 20 meetings past post-intervention (i.e., Tolan et al., 2009). What is more clear is that booster sessions should focus on reviewing and practicing skills learned in the initial intervention, as these have been associated with positive results (e.g., Baggs & Spence, 1990; Clarke et al., 1999).

### **Summary of Literature**

Within the last decade, the positive psychology movement has grown tremendously, largely due to discontent with the traditional deficit-based models of mental health and human functioning. As a result of the positive psychology focus, there is increasing interest in the aspects and traits that result in optimal human functioning and thriving among individuals. There are also parallels between the positive psychology movement and school psychology, as both are

shifting in focus to more proactive and preventative approaches in order to maximize individuals' functioning. Within positive psychology, researchers and practitioners have become interested in both malleable constructs (e.g., gratitude, character strengths, hope), as well as outcomes impacted through intervention (e.g., subjective well-being).

Some of the key positive psychology constructs studied to date include subjective well-being, gratitude, kindness, character strengths, optimism, and hope. Subjective well-being is often deemed the scientific term for happiness (a common outcome variable in positive psychology research), and is comprised of three separate, but related components: life satisfaction (cognitive evaluation of one's life on the whole), positive affect (experience of positive emotions), and negative affect (experience of negative emotions). The other constructs listed have been conceptualized as likely pathways to increasing subjective well-being.

Positive psychology also emphasizes the importance of conceptualizing mental health within a dual-factor framework, considering the presence or absence of both psychopathology and indicators of wellness. Research on the dual-factor model of mental health has uncovered four separate mental health categories (i.e., troubled, vulnerable, symptomatic but content, complete mental health), which are based on levels of psychopathology and subjective well-being, and have been replicated by several independent research teams. Individuals with complete mental health have consistently demonstrated superior outcomes, highlighting the important role of subjective well-being in optimizing student functioning. Research suggests that positive psychology constructs are related to mental health status, and that subjective well-being is a target separate from psychopathology for improving overall mental health functioning.

Moreover, within the last decade, research on interventions designed to improve both adults' and youths' positive functioning and subjective well-being has emerged. Such

interventions are termed positive psychology interventions (PPIs), and have targeted several positive psychology constructs including gratitude, acts of kindness, character strengths, and hope in order to increase indicators of subjective well-being. Research on PPIs for youth lags behind adult counterparts, but so far has resulted in improvements in at least one component of subjective well-being (e.g., life satisfaction, affect) through targeting singular constructs (e.g., gratitude, character strengths, hope). While other positive psychology targets exist (e.g., mindfulness, forgiveness), there is either insufficient empirical support (e.g., forgiveness) or the targets may be too cognitively taxing and too involved (e.g., mindfulness, loving kindness meditation) to warrant inclusion in PPIs intended for early adolescents in a school setting. There has been less research conducted on comprehensive PPIs designed to target multiple positive psychology constructs. A preliminary multi-target PPI study by Suldo et al. (2014) yielded promising results and a template from which to build upon.

Beyond knowing little about the impact of multi-target PPIs intended to improve youths' subjective well-being, researchers have largely failed to explore the impact of additional intervention components on subjective well-being. For example, researchers and clinicians have advocated for parental involvement in the treatment process for various psychological concerns (e.g., depression, anxiety), as well as booster sessions to maintain or further enhance intervention gains. While empirical support for the inclusion of parental and booster session components is somewhat mixed for psychological interventions targeting psychopathology, research on the inclusion of these components in interventions targeting wellness is virtually nonexistent.

### **Purpose of the Current Study**

Prior to the current study, no known published studies empirically examined the impact of a comprehensive multi-target youth PPI that included a parent component and/or follow-up

session(s) on youth subjective well-being. The need for such research was enhanced due to the growing interest in the field of positive psychology and a dual-factor model of mental health, which seek to promote wellness and maximize positive student functioning. The purpose of the current study was to investigate the impact of a comprehensive youth PPI on middle school students' subjective well-being. The study built upon and improved a previous wellness promotion intervention developed by Suldo et al. (2014) by involving a key group of previously neglected stakeholders (i.e., parents), and including booster sessions with the intention of maintaining and augmenting treatment gains. The study was intended to provide valuable information to key stakeholders such as parents, teachers, school psychologists, and guidance counselors about evidence-based techniques to implement to improve levels of youth subjective well-being. The current study answered the following research questions:

1. Relative to a wait-list control group, is participation in a manualized positive psychology group counseling intervention with a parent component associated with improvements in middle school students':
  - a. Life satisfaction
  - b. Positive affect
  - c. Negative affect
  - d. Psychopathology?
2. Relative to a wait-list control group, will booster sessions prevent the intervention group students from experiencing post-intervention declines in:
  - a. Life satisfaction
  - b. Positive affect
  - c. Negative affect

d. Psychopathology?

It was hypothesized that participation in the manualized positive psychology group counseling intervention with a parent component would significantly and positively impact life satisfaction, positive and negative affect, and reduce both internalizing and externalizing symptoms of psychopathology. It was further hypothesized that booster sessions would prevent the students who participated in the intervention group from experiencing post-intervention declines in life satisfaction, positive and negative affect, and increases in internalizing and externalizing symptoms of psychopathology.

### **Chapter III: Method**

The current study examined the impact of a comprehensive group positive psychology intervention on middle school students' mental health, as defined by positive indicators (subjective well-being) and negative indicators (psychopathology). In addition to weekly meetings with small groups of students, the intervention involved parents and incorporated booster sessions in the process in order to help students practice and generalize skills learned (as well as possibly enhance parents' subjective well-being), and maintain gains made throughout the intervention, respectively. This chapter describes information pertaining to the participants and procedures in the study. Next, the intervention implemented and ultimately evaluated is described. Finally, measures used to examine the key outcome variables are described, as well as an overview of the data analyses conducted to answer the research questions presented in Chapter I.

#### **Participants**

Students in seventh grade were recruited from one large middle school within an urban school district in a Southeastern state. Previous research of this nature included a sample of sixth grade students (Suldo, Savage, & Mercer, 2014). In line with recommendations made by Suldo et al. (2014), a slightly older sample of youth was recruited due to their more advanced cognitive capabilities and ability to understand complex and abstract concepts (e.g., hope, optimism) relative to younger adolescents. This author chose to recruit students in grade seven (vs. grade eight) in order to increase the likelihood that students with room for growth in life satisfaction will continue to be enrolled at the participating school the following school year, i.e., the period

in which the students randomly assigned to the wait-list control group will receive the intervention.

The partnering school was selected based on the school's interest in the research (in particular, in positive psychology) and willingness to allow students to take part in the intervention. Buy-in for participation in this study was in part secured through meeting with the partnering school's school psychologist and principal. A handout was created for these stakeholders that outlined the key points of the study and requirements for participation in the research (see Appendix A). At the participating school, there were 298 seventh grade students, all of whom were considered in the screening process. A total of 42 students met criteria for participation (described later in this chapter) and secured written parental consent for participation. The descriptive statistics of the student participants in the study are summarized in Table 1, and mirror the demographic characteristics of the participating school's student body.

## **Procedures**

**Recruitment of student participants.** As part of a recent school-wide priority at the partnering school to regularly collect progress monitoring data regarding students' life satisfaction, and consistent with the school mental health providers' unique interest in positive psychology, all sixth, seventh, and eighth grade students complete a brief rating scale about their satisfaction with life across multiple domains (described below). This researcher gained access to this data after students completed the screening measure in December 2013. Seventh grade students' average scores were examined to determine who would be recruited to participate in the intervention. All 111 7<sup>th</sup> grade students (40.51% of students screened) whose average scores on the six-item screening measure were six or less on the seven-point metric (indicating less than optimal satisfaction with life) were recruited to participate in the intervention. Only students who



received active parental consent to participate in the study could take part in the intervention. Two copies of parental consent forms (see Appendix B), which explained the purpose of the study, were sent home with targeted students via their homeroom teacher (one copy was to be signed and returned to the school, the second copy was for the family's records). In order to facilitate the return of consent forms, incentives were provided. Specifically, all students who returned their consent forms received a candy bar and were entered into a raffle for one of four \$25 iTunes gift cards.

During the recruitment process, 60 students returned permission forms (a 54.05% return rate). Eighteen of these students' parents specified their child was not allowed to participate in the intervention study, and 42 parents provided positive consent for participation (a 37.84% participation rate). All students with parent consent to participate completed a demographics survey and baseline self-report measures of subjective well-being (i.e., global life satisfaction, positive and negative affect) and emotional distress (i.e., internalizing and externalizing symptoms of psychopathology). Prior to completing these measures, a member of the research team read aloud the student assent form (see Appendix C), and all students provided written assent (no students refused assent). Upon completion of baseline measures, a stratified random assignment procedure was used to place students in one of two conditions: immediate receipt of intervention, or delayed intervention (i.e., wait-list) control group. More specifically, students were randomly assigned to either immediately receive the intervention or to a wait-list control condition, stratified on their baseline life satisfaction scores. For example, the two students with the highest Students' Life Satisfaction Scale (SLSS) scores were paired, then one was randomly assigned to the intervention group and the other one to the wait-list group, and so forth until all pairings of students with near identical SLSS scores were assigned to different groups. This type

of random assignment made it more likely that the intervention and control groups have near equal numbers of students with relatively higher and lower baseline levels of life satisfaction.

Table 1

*Demographic Characteristics as a Percentage of the Sample (N = 42)*

Characteristic	Whole School (N = 928) %	Total (N = 42) %	Intervention Group (n = 21) %	Wait-List Group (n = 21) %
<b>Gender</b>				
Male	49.50	50.00	42.86	57.14
Female	50.50	50.00	57.14	42.86
<b>Free or Reduced-Price Lunch</b>				
Not Eligible	73.30	78.57	76.19	80.95
Eligible	26.70	21.43	23.81	19.05
<b>Ethnicity</b>				
Hispanic, Latino, or other Spanish origin	12.00	21.43	23.81	19.05
Not Hispanic	88.00	78.57	76.19	80.95
<b>Race</b>				
White	74.40	83.33	80.95	85.71
African-American	4.80	9.52	4.76	14.29
Asian/Pacific Islander	3.40	2.38	4.76	0.00
Other race	5.40	4.76	9.52	0.00
<b>Family Composition</b>				
Married Parents	n/a	43.90	42.86	45.00
Parents not Married	n/a	56.10	57.14	55.00

*Note.* n/a = not applicable. Data are reflective of the 2013-2014 school year.

**Student survey administration.** Students completed self-report measures (described below) at four separate time points in the 2013-2014 school year: baseline assessment (January 2014), immediate post-intervention assessment (April 2014), and five- and seven-week follow-up assessments (May 2014). For each data collection session, a list was compiled of all students (i.e., students in both intervention and wait-list control groups) who received parent consent to participate in data collection. These students reported to a predetermined location in the school (i.e., vacant classroom, cafeteria, conference room) during school hours. Students were provided

with a writing utensil and asked not to speak to one another while completing their surveys in order to ensure privacy. Prior to the baseline assessment, this author and other members of her university research team read aloud the student assent form and students provided written assent prior to their completion of the self-report measure. Students were informed that they could withdraw from the study at any time without risk of penalty. Finally, research team members provided direct instruction on how to complete Likert-style survey items by walking student through an example item. Students then independently completed the baseline surveys, which took approximately 15 to 20 minutes to complete the entire packet. In order to control for order effects, the measures in the survey packets were counterbalanced (i.e., four separate versions of the packet were administered). At least one member of the research team remained available at all times to answer questions and monitor students' completion of the surveys. Upon each student's completion of the packet, a member of the research team visually scanned the packet to check for skipped items or response errors; students were asked to complete or correct items as needed in order to minimize incomplete data. Upon successful completion of the survey packet, students were provided a candy bar. The baseline assessment took place shortly after students were screened by school personnel on their levels of life satisfaction. The post-intervention assessment occurred the week after the conclusion of the intervention. Follow-up data collection points occurred five and seven weeks following the conclusion of the intervention.

**Intervention implementation.** The intervention implemented included both a student component and parent component, which are both described below.

**Parent component.** During the first week of the intervention with students, parents of students in the intervention group were invited to attend a session (approximately 60-minutes in length) during which the group leaders provided parents with psychoeducation and an overview

of the student intervention. Specifically, parents learned about the goals of positive psychology broadly and how it relates to students' well-being and the specific constructs of focus in the intervention (e.g., gratitude, acts of kindness, hope, optimism, character strengths). Additionally, parents were provided the opportunity to ask questions and group leaders clarified any misconceptions about the purpose of the intervention (e.g., that their children were asked to participate because they have mental health *problems*). A total of four psychoeducation sessions were held and attended by parent(s) of 14 of the 21 youth in the intervention group (66.67% parent participation rate). The number of parents that participated at each session ranged from 2 to 6 ( $M = 3.75$ ). Only one participating student had both parents present at a psychoeducation session. Parents who did not attend one of the scheduled psychoeducation sessions were called and emailed to reschedule to receive the session at an alternative time. Despite several attempts via phone, email, and letters home, make-up sessions were unable to be scheduled with seven parents.

After this initial meeting, all parents were sent weekly handouts via email that provided (a) an overview of the lesson covered that week in the students' intervention session, (b) a description of the homework task(s) assigned to students for the week related to the content covered in session, and (c) suggestions for parents to apply intervention strategies in their own lives and/or as a family unit. Regular communication with parents was intended to foster and solidify the knowledge and skills students learned each week through the intervention, as well as provide parents with strategies for improving their own levels of well-being.

***Student component.*** The students randomly assigned to the immediate receipt of the intervention (described below) were evenly divided into three groups, resulting in seven students per group. Each group had one leader and one co-facilitator. This author served as the leader for

all three groups, and this author's major professor (a licensed psychologist) and trained doctoral students in the University of South Florida's School Psychology Program served as co-facilitators.

Each of the intervention groups received 10 sessions of group intervention during one period of the school day once weekly for a total of ten weeks from January to April 2014. This author worked collaboratively with the school psychologist and school administration to determine the best schedule for students to participate in the intervention. In order to reduce the amount of time students missed instruction for any given class, meetings with student groups were scheduled on a rotating schedule. For example, group A participated in the first session of the intervention during 1<sup>st</sup> period, second session of the intervention during 2<sup>nd</sup> period, etc. Group B participated in the first session of the intervention during 2<sup>nd</sup> period, second session of the intervention during 3<sup>rd</sup> period, etc. After the conclusion of the intervention, students attended two booster sessions with group leaders during one period of the school day (May 2014) to review skills learned and discuss progress. These sessions reviewed the concepts and skills discussed throughout the course of the intervention and provided students with opportunities to share positive psychology intervention (PPI) activities in which they had engaged since the termination of the intervention, as well as discussed the helpfulness of these activities.

The wait-list control group will receive the intervention in the 2014 – 2015 school year. During the 2013 – 2014 school year, they had no exposure to the concepts or activities involved in the intervention. They also had no interactions with members of the research team, with the exception of the baseline, post-intervention, and follow-up data collection sessions.

### **Wellness-Promotion Intervention**

The intervention implemented (see Appendix G) was originally developed and first implemented in 2007 by the Positive Psychology Research Team within the School Psychology Program at the University of South Florida. Intervention development and results of the efficacy trial are reported by Suldo, Savage, and Mercer (2014). The intervention was developed to be consistent with Seligman's (2002) framework for increasing happiness and PPIs that have worked to increase adults' happiness in the literature, with intervention content and activities developmentally modified by the research team for use with middle school students (Suldo & Michalowski, Savage, 2007). Specific intervention activities are divided into three phases focused on the past, present, and future aspects of emotional well-being (Suldo & Savage, 2007). The original treatment manual created by Suldo and Savage (2007) consists of 10 student sessions that contain therapist-facilitated discussions of concepts relevant to happiness, activities related to specific PPIs, and homework activities involving completion and/or rehearsal of the PPI taught during the group sessions. The 2007 version of the intervention contains no booster sessions and no components for any stakeholders beyond youth.

The first session is an introduction to the intervention and includes an activity called "You at Your Best," which asks students to write about a time that they were at their best (e.g., a time they did something very well, displayed a talent), reflect on that time, and share with the group. During the first session, there is also a group discussion on what it means to be happy and why being happy is important. Additionally, the purpose of the group and confidentiality are discussed. Sessions two and three focus on positive emotions about the past, specifically through activities designed to increase gratitude. The main focus of session two is introducing gratitude journals for documenting things in life that students are grateful for, and the main focus of

session three is introducing gratitude visits, in which students are encouraged to express gratitude to a person that has been especially kind to them in the past.

Sessions four, five, six, and seven focus on positive emotions within the present, specifically through activities designed to increase acts of kindness, identify and utilize character strengths, and savor positive emotions. The main focus of session four is discussing the character strength of kindness and how it relates to happiness, and encouraging students to increase their performance of kind acts. The main focus of session five is introducing students to character strengths and identify their perceived strengths. The main focus of session six is to objectively assess students' signature character strengths and facilitate the use of these strengths in novel ways. The main focus of session seven is for students to explore and plan new ways to use signature strengths across various domains of life and to introduce savoring to students.

Sessions eight and nine focus on positive emotions about the future, specifically through activities designed to increase optimistic thinking and hope. The main focus of session eight is to assess students' current levels of optimism and facilitate optimistic thinking. The main focus of session nine is facilitating hope through an activity in which students write about their future goals and paths to reach them to realize their best possible selves in the future. Session ten focuses on issues related to treatment termination. Specifically, the framework for increasing happiness is reviewed, as well as the activities and exercises learned through group participation. Additionally, students are encouraged to share reflections on the progress they have made and students' feedback is solicited.

This author implemented the abovementioned sessions as originally developed, as well as the supplemental parent and booster session components discussed in the procedures section above. The revised version of the intervention program represents a second edition of the

intervention described by Suldo, Savage, and Mercer (2014). To recap the parent component, parents were invited to attend one group session that provided psychoeducation related to positive psychology concepts and constructs such as subjective well-being, gratitude, character strengths, and hope. Additionally, parents were provided with an overview of the student-focused intervention sessions. Finally, parents were provided the opportunity to ask questions to group leaders and clear up misconceptions about the purpose of the intervention. Parents also received weekly handouts (see Appendix in the intervention manual, which is Appendix G in this document) providing overviews of lessons covered with their children that week.

Students participated in two booster sessions five- and seven-weeks following the conclusion of the intervention. These sessions were similar to the termination session, as they reviewed all of the concepts and skills learned throughout the course of the intervention. The booster sessions also provided students with opportunities to share PPI activities in which they had engaged since the termination of the intervention, as well as discuss how successful these activities were. Both booster sessions began the same, with a review of skills and activities learned throughout the intervention and student reflections on growth and progress, but the latter section of each booster session focused on rehearsal of specific strategies learned in the intervention to improve well-being. Specifically, booster session 1 reviewed gratitude journaling and booster session 2 reviewed new uses of signature strengths and optimistic thinking.

### **Student Self-Report Measures**

**Demographics form.** The demographics form (see Appendix H) contains questions regarding students' gender, age, grade, race, ethnicity, free or reduced-price lunch status, parents' marital status, and students' living arrangements. All items included on the demographics form include multiple choice answer options.



**Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003).** The BMSLSS is a brief form of the Multidimensional Students' Life Satisfaction Scale (MSLSS; Huebner, 1994), which comprehensively measures students' satisfaction with life across five domains (i.e., school, living environment, family, friends, self). The BMSLSS is a 6-item self-report measure of students' satisfaction with life across life domains (see Appendix I). There is one item for each of the five domains, plus one item that assesses global satisfaction with one's life overall. Respondents indicate on a 7-point Likert scale (1 = *terrible* to 7 = *delighted*) their satisfaction with various life domains (e.g., "I would describe my satisfaction with my family life as," "I would describe my satisfaction with myself as"). In the current study, the six items were averaged to create a total life satisfaction score. Higher scores indicate higher satisfaction with life.

Seligson et al. (2003) reported the five-item BMSLSS (domain-specific items) to have adequate internal consistency (coefficient alpha = .75) with an early adolescent sample, strong criterion-related validity, and construct validity. Specifically, the BMSLSS correlated significantly with other life satisfaction measures, including the MSLSS ( $r = .66$ ) and SLSS ( $r = .62$ ). Additionally, the BMSLSS correlated significantly with theoretically-related instruments (i.e.,  $r = .43$  with PANAS-C positive affect scale and  $r = -.27$  with PANAS-C negative affect scale). The BMSLSS is a comprehensive (i.e., assesses life satisfaction across life domains and globally) and concise and feasible (i.e., consists of six simply worded items) measure, lending to its utility as a school-wide screening measure of students' life satisfaction.

**Students' Life Satisfaction Scale (SLSS; Huebner, 1991).** The SLSS is a 7-item self-report measure of students' global satisfaction with life (see Appendix J). Respondents indicate on a 6-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*) the degree to which they

agree with various statements about their lives (e.g., “My life is just right,” “I have what I want in life”). After reverse-scoring two negatively-worded items, the seven items are averaged to yield a total life satisfaction score, with higher scores indicating higher levels of satisfaction.

The initial validation study of the SLSS reported it to have high internal consistency (coefficient alpha = .82) and construct validity. Specifically, SLSS scores yielded moderate to high significant correlations ( $r = .36$  to  $.62$ ) with other measures of happiness (i.e., Happiness subscale of the Piers-Harris [Piers, 1984], Andrews & Withey’s [1976] measure of life satisfaction, Bradburn’s [1976] measure of subjective well-being). Published research with adolescent samples reported the SLSS to have strong internal consistency, with coefficient alphas ranging from .82 to .91 (Gilman & Huebner, 1997; Suldo & Huebner, 2006; Suldo et al., 2014). The SLSS was chosen as the primary measure of life satisfaction at baseline, post-intervention, and follow-up assessments due to its wide-spread usage.

**Positive and Negative Affect Scale for Children (PANAS-C; Laurent et al., 1999).** The PANAS-C is a 27-item self-report measure of students’ experience of both positive and negative emotions (see Appendix K). A 12-item positive affect scale and a 15-item negative affect scale assess the respondents’ experience of various positive (e.g., interested, energetic, cheerful) and negative (e.g., sad, angry, lonely) emotions. Respondents are asked to indicate on a 5-point Likert scale (1 = *very slightly or not at all* to 5 = *extremely*) how often they have felt the various emotions in the last two weeks. The 12 items comprising the positive affect scale and 15 items comprising the negative affect scale are averaged to obtain total scores for each scale.

Laurent et al. (1999) reported high internal consistency for both the negative affect (coefficient alpha = .92) and positive affect (coefficient alpha = .89) scales, as well as convergent and divergent validity. Specifically, the negative affect scale correlated positively and strongly

with the Children's Depression Inventory (CDI; Kovacs, 1992;  $r = .60$ ) and Trait Anxiety scale of the State-Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973;  $r = .68$ ). Moreover, the positive affect scale correlated negatively and moderately with the CDI ( $r = -.55$ ) and Trait Anxiety scale of the STAIC ( $r = -.30$ ). Additionally, positive and negative affect scales of the PANAS-C yield negative moderate correlations with one another ( $r = -.36$ ), indicating that they measure opposing constructs. Published research with adolescent samples reported the negative affect and positive affect scales to have strong internal consistencies, ranging from .92 to .95 and from .90 to .94, respectively (Suldo et al., 2014). The PANAS-C was chosen as the primary measure of affect at baseline, post-intervention, and follow-up assessments due to its widespread usage.

**Brief Problem Monitor-Youth (BPM-Y;** Achenbach, McConaughy, Ivanova, & Rescorla, 2011). The BPM-Y is a 19-item self-report measure of youth's internalizing, attention, and externalizing problems. A sample of the BPM-Y is not included as an Appendix due to copyright restrictions. The BPM-Y was developed from items included on the comprehensive YSR measure through item response theory and factor analysis, and is appropriate for youth aged 11 to 18 years old. Respondents were asked to indicate on a 3-point Likert scale (0 = *not true*, 1 = *somewhat true*, 2 = *very true*) the extent to which various statements about themselves (e.g., "I argue a lot," "I worry a lot," "I have trouble sitting still") are true. The BPM-Y yields separate scale scores for Internalizing Problems, Attention Problems, and Externalizing Problems, as well as a Total Problems score. This researcher only analyzed the Internalizing and Externalizing Problem composites.

In the technical manual, Achenbach et al. (2011) reported good internal reliability coefficients for the scales of the BPM-Y, ranging from .75 (Externalizing scale) to .78

(Internalizing scale) for youth in the standardization sample, as well as strong test-retest reliability, ranging from .80 (Internalizing scale) to .85 (Externalizing scale). Evidence of criterion-related validity has been demonstrated via multiple regression analyses comparing BPM-Y scale scores of youth referred for mental health services and non-referred youth. The BPM-Y Internalizing and Externalizing scale scores were significantly higher for referred compared to non-referred youth, indicating that the BPM-Y assesses clinical levels of youth internalizing and externalizing problems. Due to the recent publication of the BPM-Y, no published studies have yet investigated the convergent validity of this measure with other measures of youth mental health problems. However, Achenbach and Rescorla (2001) report that the YSR, from which the BMP-Y was developed, correlates highly with other empirically sound measures, such as the Behavioral Assessment System for Children (BASC; Reynolds & Kamphaus, 2004).

### **Ethical Considerations**

Precautions were taken to safeguard participants' rights. Prior to data collection and implementation of the intervention, this author obtained approval from the University of South Florida Institutional Review Board (IRB), as well as approval from the Department of Assessment and Accountability within the participating school district. All students who participated in the study were required to obtain written parental consent. The consent form described the purpose of the study, potential risks and benefits of participating, and provided contact information for the principal investigator in the event of any questions or concerns regarding the study. Furthermore, students were required to provide written assent to participate. Similar to the parent consent form, the student assent form described the purpose of the study and the details involved in participating in the intervention. Students were given the choice to

participate or not to participate, and were given the option to withdraw from the study at any time without penalty.

Students were not required to provide any identifying information (e.g., name, address). Rather, each student was assigned a code number, which ensured the confidentiality of student data. Additionally, only approved members of the research team participated in data collection or entry, assisted with intervention implementation, and/or had access to documents linking students' names and code numbers. At the beginning of the intervention, confidentiality issues and concerns were discussed with students and it was emphasized that the content of group discussions should remain confidential.

### **Overview of Analyses**

Means, standard deviations, and additional descriptive data (e.g., skew, kurtosis) were calculated for the two subsamples of students (i.e., intervention group, control group), at each assessment point for all variables of interest, including: life satisfaction (SLSS), positive affect (positive affect scale of the PANAS-C), negative affect (negative affect scale of the PANAS-C), internalizing problems (Internalizing Problems scale of the BPM-Y), and externalizing problems (Externalizing Problems scale of the BPM-Y). Correlation matrices were constructed that contains the bivariate relationships between all continuous outcome variables, one for each assessment point.

Following preliminary analyses, a series of statistical analyses were conducted to answer the two research questions posed in this study:

1. *Relative to a wait-list control group, is participation in a manualized positive psychology group counseling intervention with a parent component associated with improvements in middle school students'?*

- a. *Life satisfaction*
  - b. *Positive affect*
  - c. *Negative affect?*
  - d. *Psychopathology?*
2. *Relative to a wait-list control group, will booster sessions prevent the intervention group students from experiencing post-intervention declines in:*
- a. *Life satisfaction*
  - b. *Positive affect*
  - c. *Negative affect*
  - d. *Psychopathology?*

**Group differences and growth.** Longitudinal analyses were conducted to determine if and how students in the two experimental conditions differed in regard to the outcomes from pre- to post-intervention to follow-up. Specifically, piecewise growth modeling was conducted to test the statistical significance of differences between the wait-list control and intervention groups in the patterns of subjective well-being (i.e., life satisfaction, positive affect, negative affect) and psychopathology (i.e., internalizing and externalizing symptoms) over time. Five separate piecewise models were conducted, one for each outcome: life satisfaction, positive affect, negative affect, internalizing symptoms of psychopathology, and externalizing symptoms of psychopathology. More specifically, each outcome (e.g., Life Satisfaction [mean SLSS score]) was modeled as a function of a dummy variable indicating whether the student was in the waitlist group (Group = 0) or intervention group (Group = 1), a dummy coded variable D that indicated whether the observation was pre-intervention (D = 0) or post-intervention (D = 1), and a time variable, that was centered such that Time = 0 immediately after intervention. The following is

an example equation for the model of one outcome, life satisfaction. Each of the five outcomes followed the same model as below.

$$LS_{ij} = \beta_{0j} + \beta_{1j}D_{ij} + \beta_{2j}D_{ij} * Time_{ij} + e_{ij} \quad e_{ij} \sim N(0, \sigma_e^2)$$

$$\beta_{0j} = \gamma_{00} + \gamma_{01}Group_j + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}Group_j + u_{1j}$$

$$\begin{bmatrix} u_{0j} \\ u_{1j} \end{bmatrix} \sim N\left(\begin{bmatrix} 0 \\ 0 \end{bmatrix}, \begin{bmatrix} \sigma_{u0}^2 & \\ & \sigma_{u1}^2 \end{bmatrix}\right)$$

$$\beta_{2j} = \gamma_{20} + \gamma_{21}Group_j$$

This piecewise growth model allowed the author to estimate the difference between the wait-list control and intervention groups on each outcome at pre-intervention (i.e.,  $\hat{\gamma}_{01}$ ), immediately after intervention (i.e.,  $\hat{\gamma}_{11}$ ) and in the rate of change in each outcome over time post-intervention (i.e.,  $\hat{\gamma}_{21}$ ). That is, piece one estimates the average value for each group prior to the introduction of the Wellness-Promotion Intervention, whereas piece two estimates the average growth trajectory for each group from immediate post-intervention to seven-week follow-up. The piecewise growth models were estimated with restricted maximum likelihood estimation using the Mixed Procedure in SAS.

## Chapter IV: Results

This chapter includes the results of the statistical analyses conducted to answer the two research questions in the current study. First, steps taken to screen the data and create variables are described. Next, treatment integrity, acceptability, and dosage are described, followed by a description of preliminary analyses. Finally, the results of a series of piecewise analyses are presented to compare the treatment groups on the changes in level from pre-intervention to post-intervention, and the changes from post-intervention to follow-up (i.e., 5- and 7-weeks) in the components of subjective well-being (i.e., life satisfaction, positive affect, negative affect) and psychopathology (i.e., internalizing problems, externalizing problems).

### Data Screening

**Data entry.** Raw student self-report data were entered into Microsoft Excel by this author. Two IRB-approved members of the research study staff checked for data entry errors. To ensure accurate data entry, integrity checks were completed on the complete survey packets for 14% of the participants. No errors were found in these integrity checks, indicating that the trustworthiness of the data entry procedure was very high. The resulting dataset analyzed in the current study is thus reflective of students' self-report responses. Upon completion of data integrity checks, the dataset was imported into SPSS and then into SAS for data analysis.

**Missing data.** Rates of missing data points were very low, largely due to data collection procedures in which study staff visually scanned completed survey packets for skipped items and directed students' attention to the missing items. When missing data were accidental, participants completed the item(s) on site. For the scales analyzed in the current study (i.e., SLSS, BMSLSS,



PANAS-C, BPM-Y), overall composite scores were calculated as the average of the completed items (i.e., SLSS, BMSLSS, PANAS-C) or the sum of completed items (i.e., BPM-Y) and participants' scale scores were retained in the analysis as long as 80% or more of the items on that scale were completed for a given participant. All participants completed at least 80% of all items on each scale or subscale at each time point, thus composite scores for all scales utilized in the study for each student at each time point were calculated and analyzed.

### **Variable Creation**

To permit analyses between constructs (vs. individual items), composite scores were created to index participants' levels of life satisfaction, positive affect, negative affect, internalizing symptoms of psychopathology, and externalizing symptoms of psychopathology.

Participants' global life satisfaction scores for each assessment point were calculated as the mean of participants' responses to the seven items on the SLSS (after items 3 and 4 were reverse-scored). Participants' positive affect and negative affect scores for each assessment point were calculated as the mean of participants' responses to the 12 items on the positive affect scale and 15 items on the negative affect scale of the PANAS-C, respectively. Participants' internalizing and externalizing scores for each assessment point were calculated as the sum of participants' responses to the 6 items on the Internalizing Problems scale and the 7 items on the Externalizing Problems scale of the BPM-Y, respectively.

### **Treatment Integrity**

In order to document that the intervention was implemented as intended, group co-facilitators completed a treatment integrity check form (see Appendix D) throughout both the parent component (i.e., parent psychoeducation session) and student component (i.e., 10 intervention sessions, two booster sessions) included in the wellness-promotion intervention.

This measured the group leader's levels of adherence to delivering the intervention as intended, with respect to percentage of primary elements per session that were observed by the co-facilitator to occur. The treatment integrity for each of the four parent psychoeducation sessions held was 100%. Across all intervention and booster sessions for all three intervention groups, treatment integrity averaged 98.4% (range from 90% to 100% per session). Treatment integrity for two of the three intervention groups was 100% for each intervention and booster session held. Treatment integrity for the third intervention group was 100% for eight out of 10 intervention sessions (91% for session 8 and 90% for session 10) and 100% for each of the two booster sessions.

### **Treatment Acceptability**

In order to assess treatment acceptability, or the degree to which students found the intervention helpful, feedback from students was solicited during the tenth intervention session, in which the 10-week intervention was terminated (with the exception of subsequent booster sessions). Students completed a feedback form (see Appendix in the intervention manual, which is Appendix G in this document) that asked them to provide information about what they liked and disliked, as well as what they learned through participation and suggestions for future implementations of the Wellness-Promotion intervention.

On the feedback form, students expressed considerable interest in and enjoyment of intervention sessions through statements such as “[I learned] to gain confidence and be happy” and “[I learned] ways to make the past, present, and future for us look better.” Regarding most important or preferred aspects of the intervention, students' responses varied. For instance, 19% of students mentioned that they enjoyed particular activities learned throughout the course of the program (e.g., gratitude visit, gratitude journaling, character strengths). Beyond discussion of

specific strategies for improving happiness, students commented positively on (a) the growth witnessed across the course of the intervention (e.g., “I liked how over the course of 10 weeks my attitude changed”) (57% of participants), (b) receiving candy during group sessions (33% of participants), (c) the opportunity to work and talk as a group (e.g., “having people to hear me and talk to,” “you get to come together and talk about life and get happier”) (29% of participants), and (d) the help provided by the co-facilitators (e.g., “they talked to you and helped you”) (14% of participants).

Regarding least important or preferred aspects of the intervention, 19% of students mentioned that they enjoyed all aspects of the program (e.g., “I liked everything...”). Thirty-eight percent of students mentioned homework (e.g., “a little too much homework some nights”), 14% of students mentioned missing class (e.g., “classes I missed”), and 10% of students mentioned completing the Values in Action Inventory survey to identify students’ signature character strengths (e.g., “...the survey at the media center”). Beyond discussion of the abovementioned aspects of the program, students mentioned (a) the time-limited nature of the program (e.g., “it was only once a week”) (two participants), (b) a specific lesson within the program (e.g., “the positive thinking”) (one participant), and (c) the reluctance of all students to share their thoughts and opinions in the group setting (e.g., “I did not like how my other group members were not as open as I am”) (one participant).

Regarding suggestions for improvement, 48% of students indicated that would not change anything about the program (an additional 10% of students left the section blank). Two students mentioned the desire for more or better candy, and three students discussed assigning less homework. Beyond the above suggestions, students mentioned the desire to (a) meet more

often (one participant), (b) meet outside of school or during lunch (one participant), and (c) practice skills learned more intensely (one participant).

Regarding which of the activities learned in meetings students were likely to continue to do on their own, all but two students checked at least one activity. The largest proportion of students (67%) indicated optimistic thinking, followed by (a) gratitude journals (57%), (b) acts of kindness (48%), (c) signature strengths (33%), (d) savoring (29%), (e) “best possible self in the future” writing activity (29%), (f) gratitude visit (19%), and (g) “me at my best” writing activity (one participant; 5%). Summative comments indicated that (a) students appeared to enjoy working closely with the co-facilitators (e.g., “I loved [my counselor,] she was sweet and nice,” “My counselors were very nice and fun”), and (b) were grateful for the opportunity to participate in the program (e.g., “thank you!”).

While formal treatment acceptability data were not gathered from parents of students who participated in the Wellness-Promotion intervention, several parents emailed this author at various points throughout implementation of the intervention to comment positively about the intervention. For example, one parent reported, “I appreciate being kept apprised of all activities, and feel it has made [my child] think about her own responsibility for happiness. She actually does seem happier! But more than that seems to realize that she has the power to effect change for herself.” Another parent shared, “I feel my daughter...is benefitting from this "positive" experience. Thank you for including her.”

### **Treatment Dosage**

Treatment dosage for the student component of the intervention was assessed using two methods for students. First, each week, attendance was recorded for each student in the intervention group (see Appendix E). Students who missed sessions were given the opportunity

to attend make-up sessions either later in the day when possible (i.e., joined a different group scheduled for a later class period later) or later in the week in order to maximize treatment dosage. Additionally, the extent to which students completed assigned homework tasks was recorded by the leaders and co-facilitators (see Appendix F) each week. Specifically, at the beginning of sessions two - 10, the leaders and co-facilitators assessed whether students completed their homework prior to the session (three points earned), did not complete their homework (one point earned), or partially completed their homework or completed it at the beginning of the session (two points earned). Regarding attendance, 20 out of 21 students attended all 12 intervention sessions. The 21<sup>st</sup> student attended all 10 core intervention sessions and the first booster session. Regarding homework completion, students earned a mean score of 23.10 ( $SD = 2.86$ ) on a scale from 9 to 27 (actual range = 17 to 27). A sum score of 23.10 corresponds to an average of two to three homework points earned in a given week. Taken together, these data indicate that the treatment dosage for the student component of the intervention was high.

Treatment dosage for parental involvement was assessed using two methods. First, parents' attendance at the psychoeducation session was documented. Second, at the beginning of each weekly student-focused session when student homework completion was assessed (sessions two – 10), as well as at the beginning of the second booster session, the group leaders and co-facilitators asked students to rate the extent to which their parent(s) discussed program-related topics with them the previous week (i.e., one = *none*, two = *some*, three = *a lot*). Regarding attendance at the psychoeducation session, the parents of 67% of students in the intervention group, or 14 out of 21 parents, attended the parent psychoeducation session. Regarding extent of weekly parental involvement in program-related topics and activities, parents received a mean

score of 22.90 ( $SD = 4.78$ ) on a scale from 10 to 30 (actual range = 15 to 30). A sum score of 22.90 corresponds to an average of two, and sometimes three, homework points earned in a given week. Taken together, these data indicate that the treatment dosage for the parent component of the intervention was moderate to high, depending on how it was indexed.

### **Preliminary Analyses**

Preliminary analyses consisted of: (a) computing Cronbach's alphas for all of the multi-item scales, (b) computing descriptive statistics (i.e., means, standard deviations, skewness, kurtosis) for all variables of interest, and (c) examining correlations between key variables.

**Measure reliability.** The internal consistency was examined for all multi-item scales (i.e., BMSLSS, SLSS, negative affect scale of PANAS-C, positive affect scale of PANAS-C, Internalizing Problems scale of BPM-Y, Externalizing Problems scale of BPM-Y) for each time point, as summarized in Table 2 below.

For the 6-item BMSLSS, the internal consistency was .49 at the screening assessment point. The coefficient alpha for the 7-item SLSS ranged from .86 (pre-intervention) to .86 (immediate post-intervention). Internal consistency for the 15-item negative affect scale of the PANAS-C ranged from .92 (five-week follow-up) to .93 (all other time points). The coefficient alpha for the 12-item positive affect scale of the PANAS-C ranged from .88 (five-week follow-up) to .92 (seven-week follow-up). For the 6-item Internalizing Problems scale of the BPM-Y, the internal consistency ranged from .82 (immediate post-intervention) to .88 (five-week follow-up). The coefficient alpha for the 7-item Externalizing Problems scale of the BPM-Y ranged from .74 (pre-intervention) to .82 (immediate post-intervention). In sum, while the internal consistency of the BMSLSS was poor at the screening assessment point (presumably, alpha would be higher if the complete range of scores were represented in the sample, but the design

precluded such via purposeful exclusion of students with a mean score between six and seven), all other scales and subscales analyzed in this study had internal consistencies in the good to excellent range across time points.

Table 2

*Internal Consistency of Measures at Each Time Point (N = 42)*

Measure	Time Point				
	Screening	Baseline	Post- Intervention	Five-Week Follow-Up	Seven-Week Follow-Up
BMSLSS	.49	n/a	n/a	n/a	n/a
SLSS	n/a	.86	.86	.83	.83
PANAS-C: NA	n/a	.93	.93	.92	.93
PANAS-C: PA	n/a	.89	.88	.92	.91
BPM-Y: Int	n/a	.84	.82	.88	.87
BPM-Y: Ext	n/a	.74	.82	.77	.77

*Note.* NA = negative affect, PA = positive affect, Int = internalizing problems, Ext = externalizing problems, n/a = not applicable.

**Descriptive analyses.** To assess normality issues, skewness and kurtosis of the outcome variables, as well as other descriptive statistics (e.g., mean, standard deviation), were calculated for both the intervention and wait-list control students at each time point. Tables 3, 4, 5, and 6 present these results. All of the variables had an approximate normal distribution (skew and kurtosis between -2.00 and +2.00) across time points, with the exception of the Externalizing Problems scale of the BPM-Y at 7-week follow-up for the intervention group students (kurtosis = 4.21).

Table 3

*Descriptive Statistics for Key Variables at Pre-Intervention (N = 42)*

Variable	<i>n</i>	Minimum	Maximum	<i>M</i>	( <i>SD</i> )	Skew	Kurtosis
Wait-List Group Students							
Life Satisfaction	21	2.29	5.57	4.08	(.93)	-.15	-.47
Positive Affect	21	2.17	5.00	3.43	(.76)	-.06	-.58
Negative Affect	21	1.00	3.60	1.73	(.75)	1.56	1.52
Internalizing Prob	21	0.00	10.00	3.67	(3.20)	.66	-.93
Externalizing Prob	21	0.00	7.00	3.38	(2.46)	.34	-1.31
Intervention Group Students							
Life Satisfaction	21	1.29	5.86	4.10	(1.09)	-.54	.88
Positive Affect	21	1.58	4.67	3.23	(.81)	-.56	-.25
Negative Affect	21	1.00	3.87	1.87	(.85)	1.33	1.02
Internalizing Prob	21	0.00	11.00	4.43	(3.09)	.61	-.44
Externalizing Prob	21	0.00	12.00	4.24	(3.10)	.92	.69

*Note.* Prob = problems.

Table 4

*Descriptive Statistics for Key Variables at Immediate Post-Intervention (N = 42)*

Variable	<i>N</i>	Minimum	Maximum	<i>M</i>	( <i>SD</i> )	Skew	Kurtosis
Wait-List Group Students							
Life Satisfaction	21	2.00	5.57	4.17	(1.06)	-.47	-.60
Positive Affect	21	2.08	5.00	3.51	(.74)	-.03	.22
Negative Affect	21	1.07	4.20	1.94	(.82)	1.27	1.59
Internalizing Prob	21	0.00	9.00	3.86	(2.99)	.48	-1.09
Externalizing Prob	21	0.00	11.00	4.10	(3.19)	.72	-.46
Intervention Group Students							
Life Satisfaction	21	3.14	6.00	4.71	(.76)	-.21	-.34
Positive Affect	21	2.58	4.75	3.96	(.60)	-1.05	.89
Negative Affect	21	1.00	3.67	1.74	.73	1.30	1.13
Internalizing Prob	21	0.00	9.00	3.48	3.03	.63	-1.25
Externalizing Prob	21	0.00	12.00	3.81	3.03	1.27	1.89

*Note.* Prob = problems.

**Correlational analyses.** To permit examination of the bivariate relationships between all outcome variables, correlation matrices were constructed for both the intervention and wait-list students at each assessment point. Tables 7, 8, 9, and 10 present the correlations among variables



at pre-intervention, immediate post-intervention, 5- week, and 7-week follow-up, respectively.

An alpha level of .05 was used to determine statistical significance.

Table 5

*Descriptive Statistics for Key Variables at 5-Week Follow-Up (N = 42)*

Variable	N	Minimum	Maximum	M	(SD)	Skew	Kurtosis
Wait-List Group Students							
Life Satisfaction	21	2.29	5.71	4.18	(1.09)	.02	-1.43
Positive Affect	21	1.33	5.00	3.27	(.98)	-.40	-.37
Negative Affect	21	1.00	3.53	1.94	(.95)	.68	-1.19
Internalizing Prob	21	0.00	10.00	3.48	(3.44)	.75	-.91
Externalizing Prob	21	0.00	11.00	4.33	(3.31)	.62	-.94
Intervention Group Students							
Life Satisfaction	21	2.71	6.00	4.52	(.91)	-.58	-.53
Positive Affect	21	1.83	5.00	3.69	(.76)	-1.10	1.74
Negative Affect	21	1.00	2.80	1.66	(.59)	.74	-.95
Internalizing Prob	21	0.00	10.00	3.00	(3.16)	.81	-.63
Externalizing Prob	21	0.00	12.00	4.24	(3.06)	.80	.92

Note. Prob = problems.

Table 6

*Descriptive Statistics for Key at 7-Week Follow-Up (N = 42)*

Variable	N	Minimum	Maximum	M	(SD)	Skew	Kurtosis
Wait-List Group Students							
Life Satisfaction	21	3.00	5.86	4.31	(.84)	.14	-.86
Positive Affect	21	1.33	5.00	3.22	(.93)	.16	-.01
Negative Affect	21	1.00	3.47	1.66	(.76)	1.36	.97
Internalizing Prob	21	0.00	12.00	2.90	(3.43)	1.31	1.06
Externalizing Prob	21	0.00	8.00	3.48	(2.75)	.66	-1.18
Intervention Group Students							
Life Satisfaction	21	3.14	6.00	4.60	(.92)	-.16	-1.06
Positive Affect	21	1.67	5.00	3.73	(.77)	-.80	1.21
Negative Affect	21	1.00	3.00	1.59	(.62)	1.03	-.24
Internalizing Prob	21	0.00	8.00	2.76	(2.68)	.61	-1.16
Externalizing Prob	21	0.00	12.00	3.38	(2.69)	1.58	4.21

Note. Prob = problems.

Table 7

*Correlation Matrix for Variables at Pre-Intervention (N = 42)*

	LS	PA	NA	IP	EP
<b>Wait-List Group Students (n = 21)</b>					
LS	1.00				
PA	.27	1.00			
NA	-.36	-.10	1.00		
IP	-.58*	.05	.71*	1.00	
EP	-.32	-.02	.39	.40	1.00
<b>Intervention Group Students (n = 21)</b>					
LS	1.00				
PA	.64*	1.00			
NA	-.64*	-.27	1.00		
IP	-.61*	-.51*	.78*	1.00	
EP	-.75*	-.43	.84*	.65*	1.00

*Note.* LS = life satisfaction, PA = positive affect, NA = negative affect, IP = internalizing problems, EP = externalizing problems, \*p < .05

Table 8

*Correlation Matrix for Variables at Immediate Post-Intervention (N = 42)*

	LS	PA	NA	IP	EP
<b>Wait-List Group Students (n = 21)</b>					
LS	1.00				
PA	.35	1.00			
NA	-.36	-.19	1.00		
IP	-.22	-.06	.88*	1.00	
EP	-.56*	-.07	.47*	.58*	1.00
<b>Intervention Group Students (n = 21)</b>					
LS	1.00				
PA	.43*	1.00			
NA	-.61*	.07	1.00		
IP	-.40	-.27	.67*	1.00	
EP	-.17	-.17	.33	.45*	1.00

*Note.* LS = life satisfaction, PA = positive affect, NA = negative affect, IP = internalizing problems, EP = externalizing problems, \*p < .05

Table 9

*Correlation Matrix for Variables at 5-Week Follow-Up (N = 42)*

	LS	PA	NA	IP	EP
<b>Wait-List Group Students (n = 21)</b>					
LS	1.00				
PA	.38	1.00			
NA	-.61*	.00	1.00		
IP	-.58*	-.14	.93*	1.00	
EP	-.59*	-.17	.58*	.58*	1.00
<b>Intervention Group Students (n = 21)</b>					
LS	1.00				
PA	.50*	1.00			
NA	-.62*	-.09	1.00		
IP	-.71*	-.43*	.81*	1.00	
EP	-.38	-.11	.61*	.49*	1.00

*Note.* LS = life satisfaction, PA = positive affect, NA = negative affect, IP = internalizing problems, EP = externalizing problems, \*p < .05

Table 10

*Correlation Matrix for Variables at 7-Week Follow-Up (N = 42)*

	LS	PA	NA	IP	EP
<b>Wait-List Group Students (n = 21)</b>					
LS	1.00				
PA	.56*	1.00			
NA	-.53*	-.13	1.00		
IP	-.44*	-.12	.88*	1.00	
EP	-.60*	-.29	.61*	.47*	1.00
<b>Intervention Group Students (n = 21)</b>					
LS	1.00				
PA	.41	1.00			
NA	-.61*	-.06	1.00		
IP	-.59*	-.40	.83*	1.00	
EP	-.41	.01	.70*	.47*	1.00

*Note.* LS = life satisfaction, PA = positive affect, NA = negative affect, IP = internalizing problems, EP = externalizing problems, \*p < .05

### Analysis of Group Differences and Growth

Five separate piecewise models were conducted to test wait-list control and intervention group differences in the patterns of subjective well-being (i.e., life satisfaction, positive affect,

negative affect) and psychopathology (i.e., internalizing and externalizing symptoms) over time. Specifically, each piecewise growth model allowed this author to estimate the difference between the wait-list control and intervention groups on each outcome at pre-intervention, immediately after intervention, and in the rate of change in each outcome over time post-intervention. That is, piece one estimates the average value for each group prior to the introduction of the Wellness-Promotion Intervention, whereas piece two estimates the average growth trajectory for each group from immediate post-intervention to seven-week follow-up. Thus, the average growth trajectory for piece two includes the data collected at five-week follow-up (as well as the aforementioned seven-week time point) rather than two distinct trajectories from post-intervention to five-week follow-up and from five- to seven-week follow-up.

**Life satisfaction.** At pre-intervention, the average SLSS score was 4.08 for students in the wait-list control group and 4.10 for students in the intervention group. The difference in pre-intervention SLSS scores between the two experimental groups was not statistically significant. At immediate post-intervention, a statistically significant difference in change of SLSS scores ( $\beta_1 = .52, p < .05$ ) was found between the two experimental groups, with the intervention group exhibiting greater growth (average SLSS score of 4.69 for intervention group and 4.15 for wait-list control group). From immediate post-intervention to 7-week follow-up, there was not a statistically significant change in SLSS scores for the wait-list control group, and the difference in slope between the two experimental groups was not statistically significant. By 7-week follow-up, the average SLSS score for the intervention group (4.55) was higher than the wait-list control group (4.27), but this difference was not statistically significant. In sum, both experimental groups had similar pre-intervention levels of life satisfaction, but the students in the

intervention group experienced significant growth in life satisfaction at immediate post-intervention whereas students in the wait-list control group did not. However, by 7-week follow-up, the difference in life satisfaction between the two experimental groups diminished and was no longer statistically significant. The residual variance in life satisfaction within and across individuals at pre-intervention was statistically significant, but between-person error variance in change of life satisfaction was not statistically significant (see variance components listed at the bottom of Table 11).

A standardized effect size was computed by taking the difference in the predicted values between the treatment and control group at a particular point in time (e.g.,  $d^*_{\text{group fixed effect}} = .5205$ ) divided by the pooled standard deviation within group immediately following intervention (e.g.,  $SD = \sqrt{\sigma_e^2 + \sigma_{u0}^2 + \sigma_{u1}^2}$ ). At immediate post-intervention and 7-week follow-up the intervention was estimated to have an overall moderate (0.53) and small (0.27) effect size, respectively, on the outcome of life satisfaction.

**Positive affect.** At pre-intervention, the average positive affect (PA) score was 3.43 for students in the wait-list control group and 3.23 for students in the intervention group. The difference in pre-intervention PA scores between the two experimental groups was not statistically significant. At immediate post-intervention, a statistically significant difference in change of PA scores ( $\beta_1 = .63, p < .001$ ) was found between the two experimental groups, with the intervention group exhibiting greater growth (average PA score of 4.14 for intervention group and 3.51 for wait-list control group). From immediate post-intervention to 7-week follow-up, a statistically significant decrease in PA scores ( $\beta_2 = -.04, p < .01$ ) was found for the wait-list control group, and the difference in slope between the two experimental groups across follow-up was not statistically significant.

Table 11

*Parameter Estimates for Life Satisfaction*

Parameter	Parameter Estimate	SE	Test	
			Statistic	<i>p</i> -Value
<b>Fixed Effects</b>				
<i>Intercept</i>				
Average initial LS at pre-intervention for control	4.08	.20	19.92	< .0001
Average difference in LS between intervention and control at pre-intervention	.02	.29	.07	> .05
<i>Pre- to Post-Intervention Change Factor</i>				
Average change from pre- to post-intervention for control	.07	.16	.46	> .05
Average difference between intervention and control in the change between pre- and post-intervention	.52	.22	2.33	< .05
<i>Post-Intervention to Follow-Up Change Factor</i>				
Average slope across follow-up for control	.02	.02	.80	> .05
Average difference between intervention and control in the slope across follow-up	-.04	.03	-1.28	> .05
Parameter	Parameter Estimate	SE	Test Statistic	<i>p</i> -Value
<b>Variance Estimates</b>				
Between-person error variance in initial level	.65	.17	3.91	< .0001
Between-person error variance in change	.08	.08	.98	> .05
Within-person error variance	.23	.03	6.46	< .0001

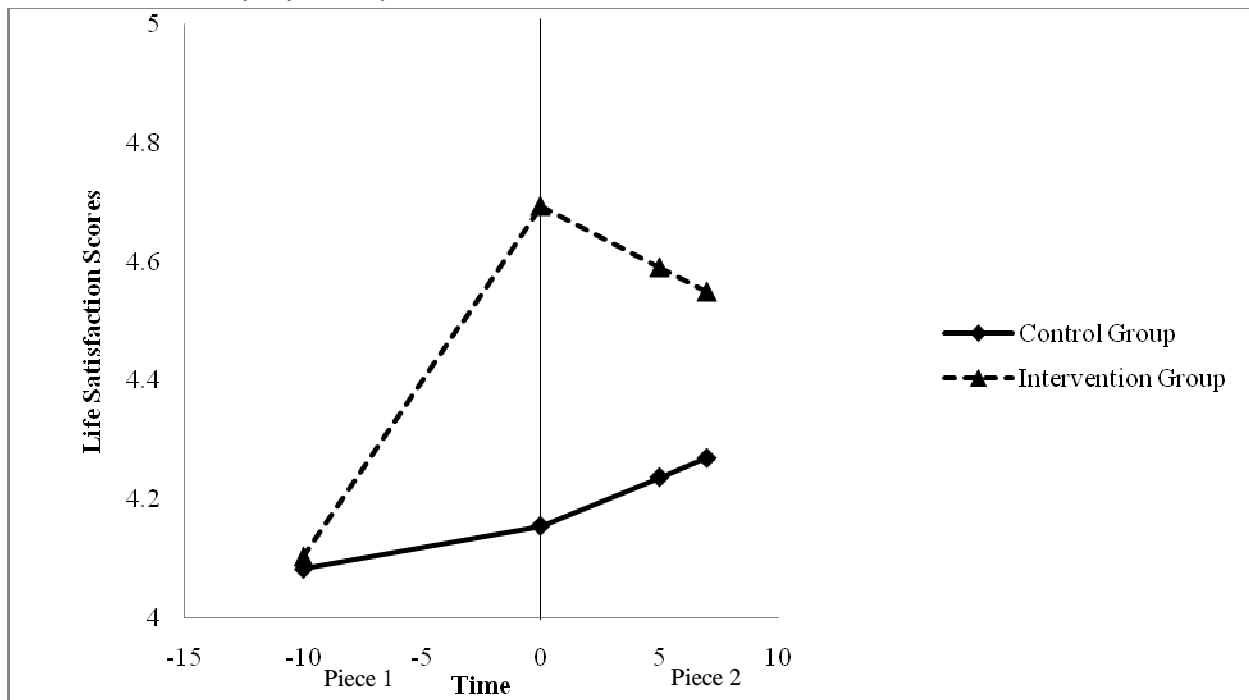
*Note.* LS = life satisfaction.

By 7-week follow-up, the average PA score for the intervention group was 3.68, which was significantly higher than the average PA score of 3.20 for the wait-list control group ( $p < .001$ ). In sum, both experimental groups had similar pre-intervention levels of PA, but students in the intervention group experienced significant growth in PA at immediate post-intervention whereas students in the wait-list control group did not, and this difference in PA between the two experimental groups remained statistically significant by 7-week follow-up. The variance in PA within and across individuals was statistically significant (see variance components listed at the bottom of Table 12).

A standardized effect size was computed by taking the difference in the predicted values between the treatment and control group at a particular point in time (e.g.,  $d^*_{\text{group fixed effect}} = .6345$ ) divided by the pooled standard deviation within group immediate post-intervention (e.g., (e.g.,  $SD = \sqrt{\sigma_e^2 + \sigma_{u0}^2 + \sigma_{u1}^2}$ )). At immediate post-intervention and 7-week follow-up the intervention was estimated to have an overall large (0.76) and large (0.81) effect, respectively, on the outcome of positive affect.

Figure 1

*Piecewise Model of Life Satisfaction*



*Note.* The x-axis, time, is centered with the conclusion of the intervention at 0. The time of -10 represents the 10-week span the intervention occurred, the time of 5 represents the 5-week follow-up assessment point, and the time of 7 represents the 7-week follow-up assessment point. The transition point (0 on the x-axis) marks the transition from pre- to post-intervention. Piece 1 represents the growth from pre- to post-intervention (from -10 to 0). Piece 2 represents the growth after the intervention concluded (from 0 to 7).

**Negative affect.** At pre-intervention, the average negative affect (NA) score was 1.73 for students in the wait-list control group and 1.87 for students in the intervention group. The

difference in pre-intervention NA scores between the two experimental groups was not statistically significant.

Table 12

*Parameter Estimates for Positive Affect*

Parameter	Parameter Estimate	SE	Test	
			Statistic	p-Value
<b>Fixed Effects</b>				
<i>Intercept</i>				
Average initial PA at pre-intervention for control	3.43	.17	20.59	< .0001
Average difference in PA between intervention and control at pre-intervention	-.20	.24	-.84	> .05
<i>Pre- to Post-Intervention Change Factor</i>				
Average change from pre- to post-intervention for control	.08	.13	.60	> .05
Average difference between intervention and control in the change between pre- and post-intervention	.63	.18	3.50	< .001
<i>Post-Intervention to Follow-Up Change Factor</i>				
Average slope across follow-up for control	-.04	.01	-2.94	< .01
Average difference between intervention and control in the slope across follow-up	.01	.02	.28	> .05
Parameter	Parameter Estimate	SE	Test	
			Statistic	p-Value
<b>Variance Estimates</b>				
Between-person error variance in initial level	.46	.12	3.90	< .0001
Between-person error variance in change	.11	.06	1.90	< .05
Within-person error variance	.12	.02	6.51	< .0001

*Note.* PA = positive affect.

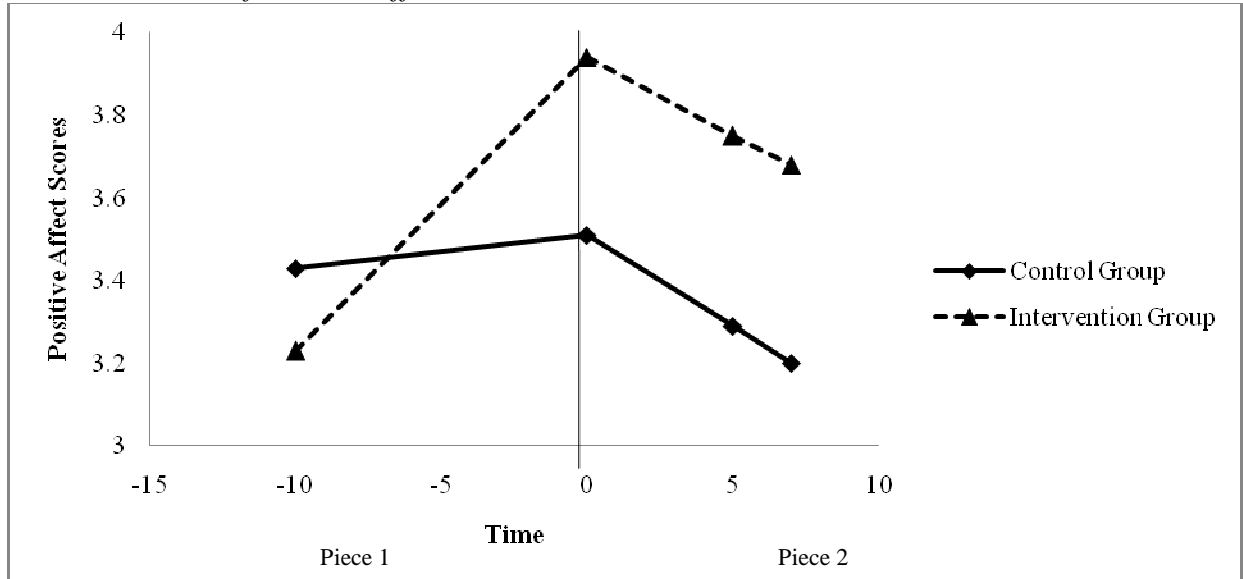
At immediate post-intervention, a statistically significant difference in change of NA scores ( $\beta_1 = -.37, p < .05$ ) was found between the two experimental groups, with the intervention group exhibiting declines, whereas the students in the wait-list control group exhibited increases in NA (average NA score of 1.60 for intervention group and 1.97 for wait-list control group). From immediate post-intervention to 7-week follow-up, there was not a statistically significant change in NA scores found for the wait-list control group, and the difference in slope between the two experimental groups across follow-up was not statistically significant. By 7-week follow-up, the



average NA score for the intervention group (1.60) was lower than the average NA score for the wait-list control group (1.75).

Figure 2

*Piecewise Model of Positive Affect*



*Note.* The x-axis, time, is centered with the conclusion of the intervention at 0. The time of -10 represents the 10-week span the intervention occurred, the time of 5 represents the 5-week follow-up assessment point, and the time of 7 represents the 7-week follow-up assessment point. The transition point (0 on the x-axis) marks the transition from pre- to post-intervention. Piece 1 represents the growth from pre- to post-intervention (from -10 to 0). Piece 2 represents the growth after the intervention concluded (from 0 to 7).

The difference in NA between the two experimental groups was not statistically significant, but the difference approached statistical significance ( $p = .07$ ). In sum, both experimental groups had similar pre-intervention levels of NA, but the students in the intervention group experienced significant declines in NA at immediate post-intervention whereas the students in the wait-list control group actually experienced a significant increase in NA. However, by 7-week follow-up, the difference in NA between the two experimental groups diminished and was no longer statistically significant. The variance in NA within and across individuals at pre-intervention was statistically significant, but between-person variance in change of NA was not statistically significant (see variance components listed at the bottom of Table 13).

Table 13

*Parameter Estimates for Negative Affect*

Parameter	Parameter Estimate	SE	Test Statistic	p-Value
<b>Fixed Effects</b>				
<i>Intercept</i>				
Average initial NA at pre-intervention for control	1.73	.17	10.38	< .0001
Average difference in NA between intervention and control at pre-intervention	.14	.24	.59	> .05
<i>Pre- to Post-Intervention Change Factor</i>				
Average change from pre- to post-intervention for control	.24	.12	2.04	< .05
Average difference between intervention and control in the change between pre- and post-intervention	-.37	.17	-2.21	< .05
<i>Post-Intervention to Follow-Up Change Factor</i>				
Average slope across follow-up for control	-.03	.02	-1.97	> .05
Average difference between intervention and control in the slope across follow-up	.01	.02	.51	> .05
Parameter	Parameter Estimate	SE	Test Statistic	p-Value
<b>Variance Estimates</b>				
Between-person error variance in initial level	.44	.11	4.06	< .0001
Between-person error variance in change	.01	.04	.28	> .05
Within-person error variance	.14	.02	6.65	< .0001

*Note.* NA = negative affect.

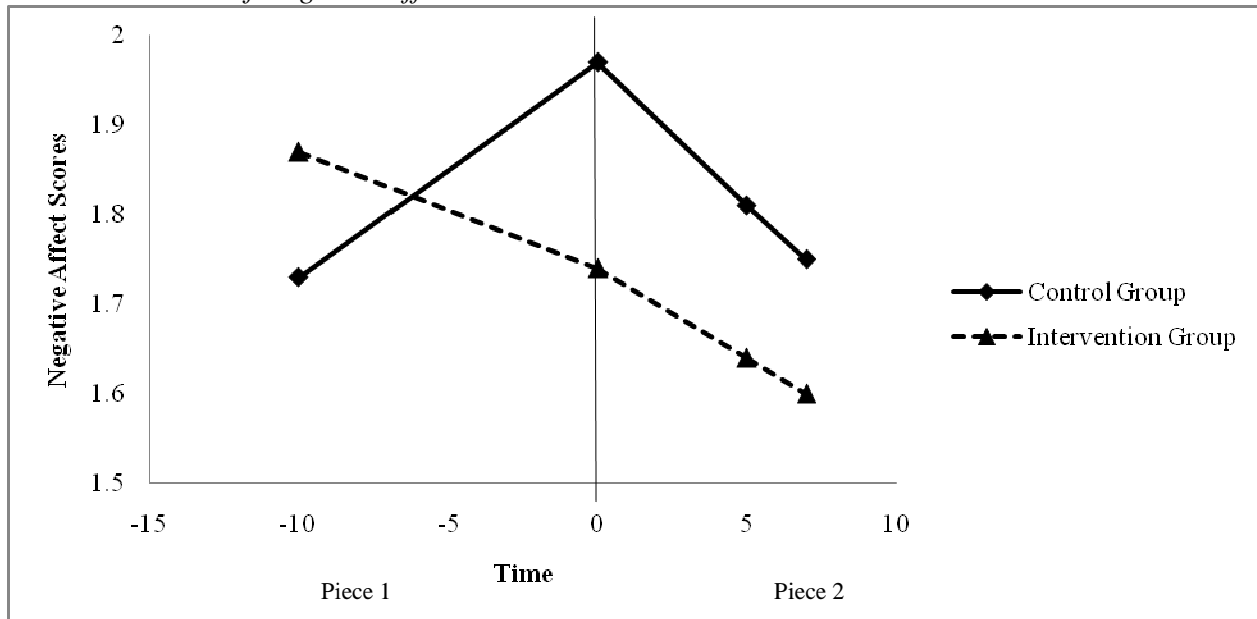
A standardized effect size was computed by taking the difference in the predicted values between the treatment and control group at a particular point in time (e.g.,  $d^*_{\text{group fixed effect}} = .3681$ ) divided by the pooled standard deviation within group immediate post-intervention (e.g., (e.g.,  $SD = \sqrt{\sigma_e^2 + \sigma_{u0}^2 + \sigma_{u1}^2}$ )). At immediate post-intervention and 7-week follow-up the intervention was estimated to have an overall moderate (0.48) and small (0.37) effect, respectively, on the outcome of negative affect.

**Internalizing problems.** At pre-intervention, the average internalizing problems score was 3.67 for students in the wait-list control group and 4.43 for students in the intervention

group. The difference in pre-intervention internalizing problems scores between the two experimental groups was not statistically significant.

Figure 3

*Piecewise Model of Negative Affect*



*Note.* The x-axis, time, is centered with the conclusion of the intervention at 0. The time of -10 represents the 10-week span the intervention occurred, the time of 5 represents the 5-week follow-up assessment point, and the time of 7 represents the 7-week follow-up assessment point. The transition point (0 on the x-axis) marks the transition from pre- to post-intervention. Piece 1 represents the growth from pre- to post-intervention (from -10 to 0). Piece 2 represents the growth after the intervention concluded (from 0 to 7).

At immediate post-intervention, the difference in change of internalizing problems scores between the two experimental groups approached statistical significance ( $\beta_1 = -1.19, p = .06$ ), with the intervention group exhibiting greater declines (average internalizing problems score of 2.72 for intervention group and 3.91 for wait-list control group). From immediate post-intervention to 7-week follow-up, a statistically significant decrease in internalizing problems scores ( $\beta_2 = -.12, p < .05$ ) was found for the wait-list control group, and the difference in slope between the two experimental groups across follow-up was not significant. By 7-week follow-up, the average internalizing problems score for the intervention group (2.78) was lower than the

wait-list control group (3.04), but this difference was not statistically significant. In sum, both experimental groups had similar pre-intervention levels of internalizing problems, and while students in the intervention group experienced a decline in internalizing problems at immediate post-intervention whereas students in the wait-list control group did not, the difference between the two experimental groups did not reach statistical significance. By 7-week follow-up, the difference in internalizing problems between the two experimental groups continued not to remain non-significant. The variance in internalizing problems within and across individuals was statistically significant (see variance components listed at the bottom of Table 14).

Table 14

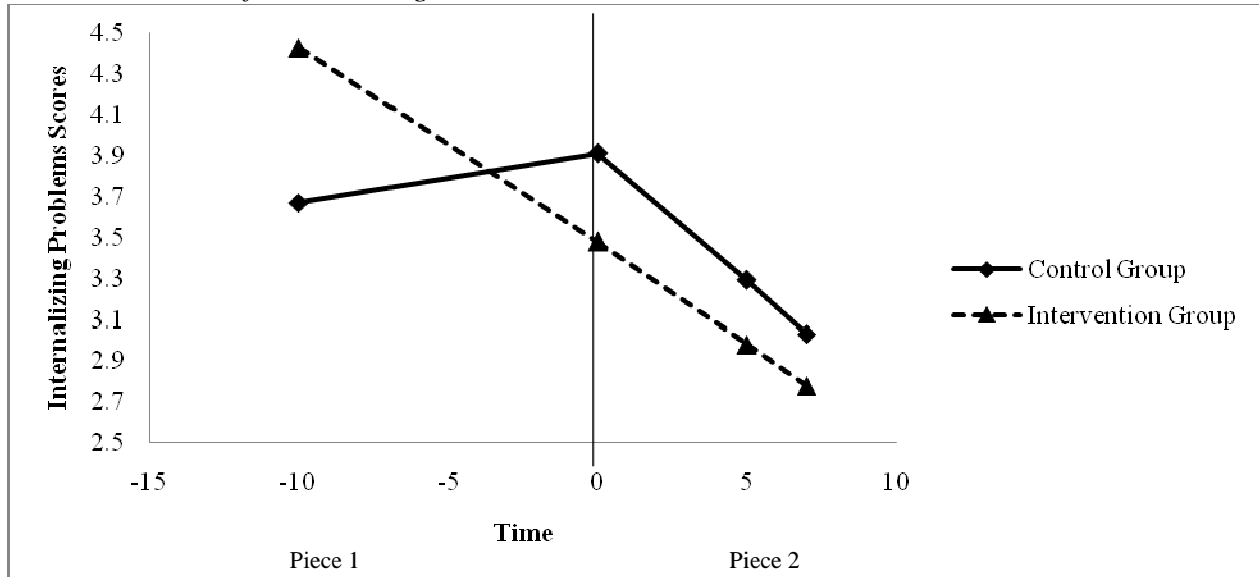
*Parameter Estimates for Internalizing Problems*

Parameter	Parameter Estimate	SE	Test Statistic	p-Value
<b>Fixed Effects</b>				
<i>Intercept</i>				
Average initial IP at pre-intervention for control	3.67	.66	5.53	< .0001
Average difference in IP between intervention and control at pre-intervention	.76	.94	.81	> .05
<i>Pre- to Post-Intervention Change Factor</i>				
Average change from pre- to post-intervention for control	.24	.45	.54	> .05
Average difference between intervention and control in the change between pre- and post-intervention	-1.19	.63	-1.88	> .05
<i>Post-Intervention to Follow-Up Change Factor</i>				
Average slope across follow-up for control	-.12	.05	-2.35	< .05
Average difference between intervention and control in the slope across follow-up	.02	.07	.32	> .05
Parameter	Parameter Estimate	SE	Test Statistic	p-Value
<b>Variance Estimates</b>				
Between-person error variance in initial level	7.70	1.91	4.04	< .0001
Between-person error variance in change	1.24	.73	1.70	< .05
Within-person error variance	1.53	.24	6.44	< .0001

*Note.* IP = internalizing problems.

Figure 4

*Piecewise Model of Internalizing Problems*



*Note.* The x-axis, time, is centered with the conclusion of the intervention at 0. The time of -10 represents the 10-week span the intervention occurred, the time of 5 represents the 5-week follow-up assessment point, and the time of 7 represents the 7-week follow-up assessment point. The transition point (0 on the x-axis) marks the transition from pre- to post-intervention. Piece 1 represents the growth from pre- to post-intervention (from -10 to 0). Piece 2 represents the growth after the intervention concluded (from 0 to 7).

A standardized effect size was computed by taking the difference in the predicted values between the treatment and control group at a particular point in time (e.g.,  $d^*_{\text{group fixed effect}} = 1.1905$ ) divided by the pooled standard deviation within group immediate post-intervention (e.g., (e.g.,  $SD = \sqrt{\sigma_e^2 + \sigma_{u0}^2 + \sigma_{u1}^2}$ )). At immediate post-intervention and 7-week follow-up the intervention was estimated to have an overall small (0.37) and small (0.32) effect, respectively, on the outcome of internalizing problems.

**Externalizing problems.** At pre-intervention, the average externalizing problems score was 3.38 for students in the wait-list control group and 4.24 for students in the intervention group. The difference in pre-intervention externalizing problems scores between the two experimental groups was not statistically significant. At immediate post-intervention, a

significant difference in change of externalizing problems scores between the two experimental groups was not found.

Table 15

*Parameter Estimates for Externalizing Problems*

Parameter	Parameter Estimate	SE	Test Statistic	p-Value
<b>Fixed Effects</b>				
<i>Intercept</i>				
Average initial EP at pre-intervention for control	3.38	.60	5.59	< .0001
Average difference in EP between intervention and control at pre-intervention	.86	.86	1.00	> .05
<i>Pre- to Post-Intervention Change Factor</i>				
Average change from pre- to post-intervention for control	.84	.47	1.78	> .05
Average difference between intervention and control in the change between pre- and post-intervention	-1.13	.66	-1.71	> .05
<i>Post-Intervention to Follow-Up Change Factor</i>				
Average slope across follow-up for control	-.06	.05	-1.18	> .05
Average difference between intervention and control in the slope across follow-up	.03	.07	.39	> .05
Parameter	Parameter Estimate	SE	Test Statistic	p-Value
<b>Variance Estimates</b>				
Between-person error variance in initial level	6.16	1.58	3.89	< .0001
Between-person error variance in change	1.66	.79	2.10	< .05
Within-person error variance	1.52	.23	6.59	< .0001

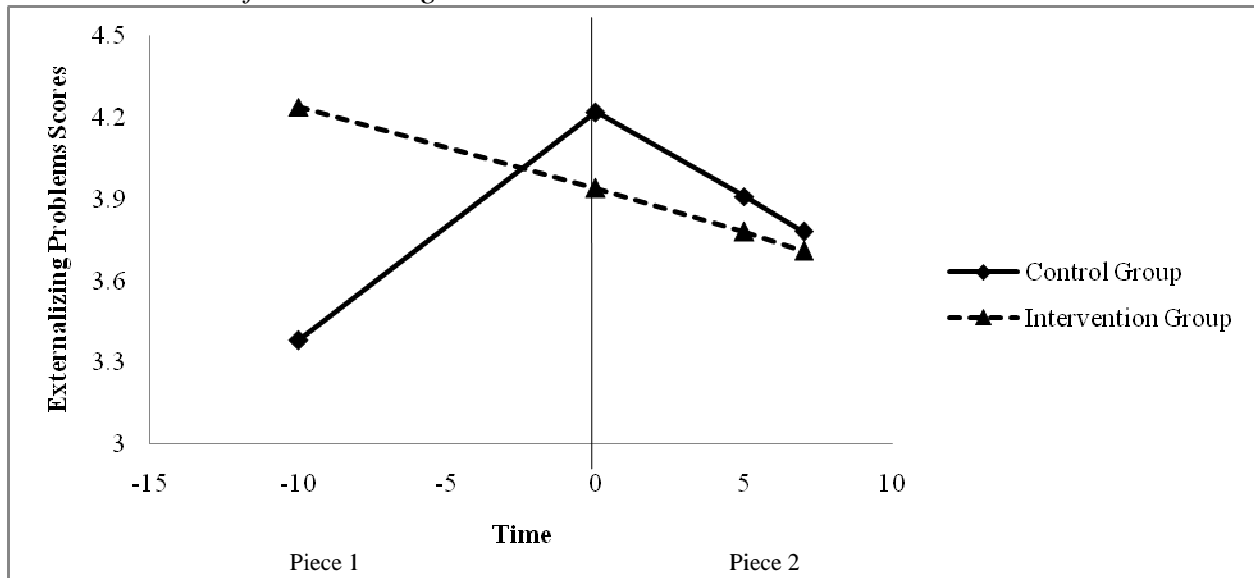
*Note.* EP = externalizing problems.

Neither experimental group exhibited significant changes in levels of externalizing problems from pre-intervention levels. Furthermore, from immediate post-intervention to 7-week follow-up, a significant difference in externalizing problems scores was not found for students in the wait-list control group, and the difference in slope between the two experimental groups across follow-up was not significant. By 7-week follow-up, the average externalizing problems score for the intervention group (3.71) was marginally lower than the wait-list control group (3.78), but this difference was not statistically significant. In sum, both experimental groups had similar pre-

intervention levels of externalizing problems, and neither group of students experienced any significant changes in externalizing problems at immediate post-intervention. Additionally, by 7-week follow-up neither students in the wait-list control group nor the intervention group exhibited a significant change in externalizing problems. The variance in externalizing problems within and across individuals was statistically significant (see variance components listed at the bottom of Table 15).

Figure 5

*Piecewise Model of Externalizing Problems*



*Note.* The x-axis, time, is centered with the conclusion of the intervention at 0. The time of -15 represents the 15-week span the intervention and booster sessions occurred, the time of 5 represents the 5-week follow-up assessment point, and the time of 7 represents the 7-week follow-up assessment point. The transition point (0 on the x-axis) marks the transition from pre- to post-intervention. Piece 1 represents the growth from pre- to post-intervention (from -15 to 0). Piece 2 represents the growth after the intervention concluded (from 0 to 7).

A standardized effect size was computed by taking the difference in the predicted values between the treatment and control group at a particular point in time (e.g.,  $d^*$  group fixed effect = 1.1331) divided by the pooled standard deviation within group immediate post-intervention (e.g., (e.g.,  $SD = \sqrt{\sigma_e^2 + \sigma_{u0}^2 + \sigma_{u1}^2}$ )). At immediate post-intervention and 7-week follow-up the

intervention was estimated to have an overall small (0.37) and small (0.30) effect, respectively, on the outcome of externalizing problems.

### Summary of Findings

The present study explored the immediate and lasting changes in student mental health associated with participation in a student-focused intervention that included both a parent component and booster sessions. Mental health was assessed via indicators of subjective well-being and psychopathology. The effect sizes and levels of statistical significance between the intervention and control groups on the various outcomes, at post-intervention and follow-up, is summarized below in Table 16.

Table 16

#### *Summary of Outcomes Assessed in Piecewise Models*

	Group Differences from		Group Differences from Post-	
	Pre- to Post-Intervention		Intervention to Follow-Up	
	(Piece 1)		(Piece 2)	
	<i>p</i>	<i>d</i>	<i>p</i>	<i>d</i>
Life Satisfaction	.02*	0.53	.20	0.27
Positive Affect	< .001*	0.76	<.001*	0.81
Negative Affect	.03*	0.48	.07 <sup>t</sup>	0.37
Internalizing Problems	.06 <sup>t</sup>	0.37	.09 <sup>t</sup>	0.32
Externalizing Problems	.09 <sup>t</sup>	0.37	.15	0.30

*Note.* \* $p < .05$ ; <sup>t</sup> $p < .10$ .



## Chapter V: Discussion

The purpose of this study was to examine the efficacy of a comprehensive multi-component small group positive psychology intervention (PPI) with youth and parent components. Specifically, the study examined the differences between the components of subjective well-being (i.e., positive and negative affect, life satisfaction) and psychopathology (i.e., internalizing and externalizing psychopathology symptoms) between 21 middle school students who received a comprehensive manualized PPI targeting several positive psychology constructs (e.g., gratitude, character strengths, savoring, kindness, hope, optimism) with a parent component (e.g., psychoeducation, regular correspondence) and booster sessions, and 21 of their peers who were randomly assigned to a wait-list control condition.

This chapter summarizes the results of the current study and discusses the findings in the context of the existing literature. First, a discussion of the results and significant findings is presented. Next, implications of these results for school psychologists are presented, followed by a discussion of the current study's contributions to the literature. Finally, limitations and directions for future research are discussed.

### Group Differences and Growth at Immediate Post-Intervention

The purpose of the first research question was to document the group differences between students randomly assigned to wait-list control or intervention group in terms of the patterns of subjective well-being (i.e., life satisfaction, positive affect, negative affect) and psychopathology (i.e., internalizing and externalizing symptoms) at *immediate post-intervention*. Following is a

summary of findings that address this research question along with an integration of the results within the larger body of literature.

**Life satisfaction.** In the current study, students in the intervention group exhibited significantly greater life satisfaction than students in the wait-list control immediately following the conclusion of the intervention. Several singular-target PPIs conducted with both adults (e.g., gratitude, hope, you at your best, acts of kindness, savoring, character strengths) and youth (e.g., gratitude, character strengths, hope) have been associated with similar boosts in life satisfaction at immediate post-intervention (e.g., Cheavens et al., 2006; Emmons & McCullough, 2003; Froh et al., 2008; King, 2001; Kurtz, 2008; Marques et al., 2011; Otake et al., 2006; Proctor et al., 2011; Seligman et al., 2005; Senf & Liau, 2013). Additionally, the multi-target, comprehensive, manualized PPI preceding the one utilized in the current study also resulted in significant increases in life satisfaction at post-intervention (Suldo et al., 2014). Positive psychotherapy, another intervention also consisting of multiple PPIs (e.g., using signature strengths, counting blessings, gratitude visit, savoring) resulted in post-intervention gains in life satisfaction (Seligman et al., 2006). Thus, the hypothesis that students who participated in the intervention would demonstrate significantly steeper growth in life satisfaction as compared to peers in a wait-list control group was supported. This finding suggests that participation in a multi-component and multi-target PPI results in statistically significant increases in life satisfaction, at least in the short-term, similar to what several other PPI efficacy studies have found. The clinical significance of such gains is supported by the medium effect size (0.53) associated with participation in the Wellness-Promotion Program. Previous school-based interventions for youth with clinical levels of anxiety and depression were considered relatively robust when they yielded small to moderate effects (Mychailyszyn, Brodman, Read, & Kendall, 2012). Thus, small

to moderate effects associated with participation in the current study, a *preventative* intervention with a nonclinical sample, may be interpreted as robust.

**Positive affect.** In the current study, it was hypothesized that students who participated in the intervention would demonstrate significantly steeper growth in positive affect than students in the wait-list control group. This hypothesis was supported, as the students in the intervention group exhibited significantly greater positive affect than students in the wait-list control at immediate post-intervention. The large effect (0.76) of the PPI on participants' positive affect is consistent with previous studies that utilized singular-construct PPIs with adults (e.g., gratitude, hope) and youth (e.g., character strengths) that also resulted in increases in positive affect at post-intervention (e.g., Emmons & McCullough, 2003; King, 2001; Odou & Vella-Brodrick, 2013; Proctor et al., 2011; Sheldon & Lyubomirsky, 2006). This finding runs contrary to findings from a study that utilized an initial version of the PPI that was utilized in the current study. Suldo et al. (2014) did not find statistically significant increases in positive affect from pre- to post-intervention. Notably, the rendition of the comprehensive multi-component manualized PPI tested by Suldo et al. (2014) did not contain the parent component that was developed by this researcher. It is possible that the parent component (i.e., psychoeducation, weekly parental correspondence) added to the PPI in the current study contributed to the short-term boosts in positive affect that were not previously observed. The students in the current study were also slightly older (i.e., seventh-grade) than the student sample in Suldo et al.'s (2013) study (i.e., sixth-grade). These slightly older students could have potentially greater cognitive capacity to continually rehearse usage of specific mood-increasing strategies that resulted in more positive affect post-intervention.

In the current study, at pre-intervention the students in the intervention group had lower mean positive affect than students in the wait-list group, though this difference was not statistically significant. In their gratitude-focused PPI, Froh et al. (2009) found that youth with initially low levels of positive affect were the most likely to benefit from the intervention. It is possible that a phenomenon similar to that as observed by Froh et al. (2009) was at work in the current study, with students in the intervention group reaping greater benefit from the comprehensive PPI due to their slightly lower initial levels of positive affect.

**Negative affect.** In the current study, students in the intervention group exhibited significantly lower negative affect than wait-list control students immediately following the conclusion of the intervention. The moderate effect (0.48) of the PPI on students' negative affect is similar to what has previously been found with some other singular-construct PPIs with adult and youth samples. To illustrate, among adult samples, gratitude-, hope-, and savoring-based PPIs were associated with post-intervention decreases in negative affect (Hurley & Kwon, 2012; Odou & Vella-Brodrick, 2013; Sheldon & Lyubomirsky, 2006). Among youth samples, a gratitude-based PPI was also linked to declines in negative affect in the short-term (Froh et al., 2008), but similar declines were not found for a character strengths-focused PPI (Proctor et al., 2011). The finding that the comprehensive multi-component PPI utilized in the current study resulted in significant declines in negative affect at immediate post-intervention is contrary to the finding reported by Suldo et al. (2014), who utilized the initial version of the PPI utilized in the current study. As aforementioned, given that the former version of the PPI used by Suldo et al. (2014) lacked the parental component implemented in the current study, this parental component may have influenced the post-intervention decrease in negative affect for students in the intervention group not observed in previous studies that used the PPI. Additionally, as previously

mentioned, the students in the current study were also slightly older (i.e., seventh-grade) than the student sample in Suldo et al.'s (2013) study (i.e., sixth-grade). The increased cognitive capacity to consistently utilize mood-increasing techniques could have resulted in lower negative affect post-intervention.

Taken together, the hypothesis that students who participated in the intervention would demonstrate significantly steeper declines in negative affect than students in the wait-list control group was supported in the current study. Moreover, the results indicate that all components of SWB were positively impacted by the PPI, at least in the short-term. While other, but not all, singular- and multi-target PPIs conducted with both adults and youth have resulted in similar positive gains in SWB, the most directly comparable youth-focused multi-target PPI (i.e., Suldo et al., 2013) failed to produce the significant changes in positive and negative affect at post-intervention found in the current study. Thus, the addition of the parent component of the PPI utilized in the current study may have more added benefit than a solely youth-focused PPI. While it is not possible to make direct links between the parent component of the PPI and outcomes among the present sample of 7<sup>th</sup> grade students due to the lack of a comparison intervention condition without the parent component, previous versions of this PPI implemented without the parent component did not significantly and positively impact all components of SWB.

**Internalizing problems.** In the current study, while students in the intervention group exhibited a trend for fewer internalizing problems at immediate post-intervention students in the wait-list group, this difference did not reach statistical significance using traditional thresholds ( $p < .05$ ). Of note, the sample size in the current study was modest, which may have limited the ability to detect a statistically significant effect using the traditional threshold of  $p < .05$ .

Nevertheless, the trend in the data was for students who participated in the PPI to experience

decreases in internalizing symptoms post-intervention, demonstrated by a small to moderate effect size (0.37). In consideration of the non-statistically significant effect, the hypothesis that students who participated in the intervention would demonstrate significantly steeper declines in internalizing symptoms than students in the wait-list control group was not fully supported. Only a handful of studies with adults and youth have examined the impact of PPIs on internalizing psychopathology, with a few providing support for PPIs positively impacting internalizing symptoms. For example, four separate singular-construct PPIs (i.e., gratitude, savoring, character strengths, you at your best) and one multi-target PPI (i.e., positive psychotherapy), all adult-focused interventions, resulted in significantly decreased depressive symptoms at post-intervention (Hurley & Kwon, 2012; Seligman et al., 2005; Seligman et al., 2006). Additionally, a hope-focused PPI used with adults resulted in significantly decreased anxiety symptoms at post-intervention (Cheavens et al., 2006).

In contrast, only one of three known multi-target youth-focused PPIs (i.e., PAL curriculum; Notter, 2013) was associated with statistically significant decreases in internalizing symptoms, specifically depressive symptoms. Thus, while several adult-focused PPIs were associated with post-intervention declines in internalizing symptoms, there is little support for the occurrence of the same phenomenon in youth-focused PPIs, including the one utilized in the current study. The sample in Notter's (2013) study was slightly older (i.e., ninth grade students) than middle school-aged student samples in other studies, including the current study. As such, these students may have more sophisticated cognitive abilities that rendered them more likely to receive secondary benefits from PPIs in terms of reduced internalizing psychopathology. It may be the case that with youth, traditional clinical interventions that target causal mechanisms of depression and anxiety are necessary for positive change in indicators of psychopathology.

However, it is plausible that had the sample in the current study been larger, the positive effect on internalizing symptoms would have been statistically significant, suggesting it may be premature to conclude that PPIs do not or cannot have secondary effects on mental health problems.

**Externalizing problems.** This author hypothesized that students who participated in the intervention would demonstrate a significantly steeper decrease in externalizing symptoms than students in the wait-list control group. Within a motivation framework, attribution theory posits that interventions can impact individuals' perceived responsibility to create and affect both positive and negative outcomes for themselves (Graham et al., 2014). Interventions designed to change elementary school-aged students' attributions have been successful in decreasing externalizing behavior problems, including aggression (Graham et al., 2014). It was anticipated that the PPI implemented in the current study, which aimed to facilitate healthy attributions about one's past, present, and future experiences, would impact the cognitive processes involved in changing attributions and thus decrease externalizing behaviors among students in the intervention group. This hypothesis was not supported. Students in the intervention group and wait-list did not exhibit significantly different levels of externalizing symptoms from each other at immediate post-intervention. However, a small to moderate effect size (0.37) indicates that the trend in the data was for the PPI to reduce externalizing problems for students who participated in the PPI. As mentioned above, if the current study had a larger sample size (resulting in more power to detect differences between groups), significant differences in externalizing problems between students who participated in the intervention and those in the wait-list group may have been detected. This finding is inconsistent with the findings from the only other known PPI study that examined externalizing symptoms as an outcome (i.e., Suldo et al., 2014), which found that

externalizing symptoms decreased over time for students in the wait-list control group, but did not change over time for students in the intervention group. While positive psychology research has suggested that increasing positive indicators of mental health may *prevent* development of later externalizing mental health problems given the protective nature of high life satisfaction (e.g., Suldo & Huebner, 2004), PPIs may not have immediate positive impacts on students' aggressive and rule-breaking behaviors. It is possible that externalizing mental health problems cause more distress to those individuals external to the person with the symptoms than the person himself/herself. This notion is supported by low correlations between life satisfaction and externalizing symptoms in the current study ( $r = -.17$  at immediate post-intervention for students in the intervention group).

In sum, findings suggest that the comprehensive multi-component PPI used in the current study positively impacted youth SWB and, to a lesser extent, internalizing and externalizing psychopathology symptoms at intervention termination.

### **Group Differences and Growth across Follow-Up**

The purpose of the second research question was to document differences between the wait-list control and intervention groups in the patterns of subjective well-being (i.e., life satisfaction, positive affect, negative affect) and psychopathology (i.e., internalizing and externalizing symptoms) across a seven-week follow-up period. Following is a summary of findings that address this research question along with an integration of the results within the larger body of literature.

**Life satisfaction.** The current study hypothesized that booster sessions would prevent students in the intervention group from experiencing post-intervention declines in life satisfaction. This hypothesis was not fully supported. Despite experiencing declines in life



satisfaction across follow-up, students who participated in the intervention still had higher mean life satisfaction than students in the wait-list control group by seven-week follow-up, supported by a small effect (0.27), but the difference was not statistically significant. In previously conducted singular-construct adult-focused PPIs that have examined life satisfaction as an outcome across a follow-up period, some have found that increases in life satisfaction can be maintained in the long-term whereas others have not. For example, one gratitude-based PPI study with adults (i.e., Seligman et al., 2005) found significantly greater life satisfaction for intervention group participants up to six months post-intervention, but another similar study (i.e., Senf & Liao, 2013) found that by one-month follow-up, differences in life satisfaction between the intervention and control group participants were not significant. Another singular-construct adult-focused PPI, You at Your Best, also failed to yield long-term boosts in life satisfaction (Seligman et al., 2005), but two separate character strengths interventions were associated with sustained life satisfaction for students in the intervention group across long-term follow-up (i.e., one- and six-months post-intervention; Seligman et al., 2005; Senf & Liao, 2013). A multi-target adult-focused PPI (i.e., positive psychotherapy) has also been associated with sustained high levels of life satisfaction up to one year following intervention conclusion (Seligman et al., 2006).

In regard to youth-focused PPIs, singular-construct PPI studies (i.e., gratitude- and hope-based) have yielded longer-term maintenance of increased life satisfaction for intervention group students, up to 18 months post-intervention (Froh et al., 2008; Marques et al., 2011).

Additionally, multi-target PPI studies have also been associated with maintenance of gains in life satisfaction at six-month (Suldo et al., 2014; however, the wait-list control students caught up to intervention group students by follow-up) and even one-year (Notter, 2013) follow-up. Given the

overall positive long-term impacts of youth-focused PPIs on life satisfaction, it is somewhat surprising that gains made in life satisfaction in the current study were not maintained by seven-week follow-up, particularly since the current study employed two booster sessions specifically designed to maintain intervention gains. However, there is little empirical support that booster sessions result in further gains or even maintenance of gains after termination of psychotherapy for mental health problems among adults (e.g., Baker & Wilson, 1985) and youth (e.g., Lochman et al., 2013). It is possible that, similar to what has largely been found for treatment of mental health problems, booster sessions play a limited role in maintaining or further enhancing life satisfaction after termination of PPIs. Additionally, time constraints at the end of the school year resulted in the delivery and execution of booster sessions in a manner that deviated from the original plan for implementation. Specifically, this author had hoped to conduct *three* booster sessions to review and practice strategies for improving happiness learned throughout the Wellness-Promotion Program, each one month apart. Instead, only two booster sessions were held, one five weeks after the Wellness-Promotion Program ended, and the second two weeks following the first. Due to the schedule for standardized state testing and the school's final exam schedule, the three booster sessions were consolidated and delivered in two sessions. It is possible that the implementation of booster sessions as originally intended would have resulted in the maintenance of gains, or even further growth, in life satisfaction for students who participated in the PPI.

**Positive affect.** In the current study, the students who participated in the intervention exhibited significantly greater positive affect students assigned to the wait-list control condition at seven-week follow-up, further supported by a large effect (0.81). This lends support for the hypothesis that booster sessions would prevent students in the intervention group from

experiencing post-intervention declines in positive affect. This finding is consistent with two previous studies that utilized singular-construct PPIs with adults (e.g., hope) and youth (e.g., character strengths) that were also associated with longer-term sustainability of increased positive affect (e.g., Sheldon & Lyubomirsky, 2006). However, a majority of previous PPI studies with adults and youth (e.g., gratitude, hope) were not associated with sustained high levels of positive affect across longer-term follow-up (e.g., Froh et al., 2008; Odou & Vella-Brodrick, 2013; Sheldon & Lyubomirsky, 2006), including the predecessor to the PPI utilized in the current study (i.e., Suldo et al., 2013). It is possible that, unlike the previous version of the PPI implemented in the current study, the two booster sessions implemented in the current study served to maintain the elevated levels of positive affect for students in the intervention group.

**Negative affect.** The current study hypothesized that booster sessions would prevent students in the intervention group from experiencing post-intervention increases in negative affect. This hypothesis was not fully supported. Although the students in the intervention group continued to exhibit a decreasing trend in negative affect across seven-week follow-up, a similar trend was observed among students in the wait-list group. By seven-week follow-up, mean negative affect for the intervention group continued to be lower than the wait-list group, supported by a small to moderate effect (0.37), but the difference was not statistically significant. This finding is consistent with a majority of previous PPI studies with adults (e.g., gratitude, hope) and youth (e.g., hope), which were not associated with sustained low levels of negative affect across an extended period of time post-intervention for intervention group participants relative to control group participants (e.g., Marques et al., 2011; Odou & Vella-Brodrick, 2013; Sheldon & Lyubomirsky, 2006). This includes the previous version of the PPI utilized in the current study (i.e., Suldo et al., 2013). In fact, only one singular-construct PPI (i.e., gratitude)

implemented with a youth sample was associated with longer-term sustainability of increased negative affect for intervention group participants relative to control group participants (Froh et al., 2008). Results from the current study combined with previous findings suggest that maintaining low levels of negative emotions such as anger, guilt, and disgust may be difficult to attain via a time-limited PPI, even when booster sessions are provided.

In sum, results from the current study indicate that participation in the PPI differentially impacted the components of SWB in longer-term follow-up. While all components of SWB were positively impacted by the PPI at intervention termination, the only statistically significant difference that remained between students in the intervention and wait-list groups at seven-week follow-up was positive affect, but there continued to be small to moderate positive effects on other SWB indicators associated with participation in the PPI. By nature, mood fluctuates frequently from day to day and is often context and situation dependent. It is possible that the sustained high levels of positive affect for students in the intervention group resulted from increased knowledge of strategies to utilize when in need of a boost in positive mood. Conversely, these same strategies do not prevent aversive experiences from occurring and may not be as effective in the long-term to buffer against negative affect stemming from such aversive situations. Regarding life satisfaction, it is unknown why increased levels were not maintained for students in the intervention group relative to the wait-list, but it is possible that a combination of confounding factors (e.g., end of school year testing schedule which inhibited ability to implement booster sessions as originally intended) played a role.

Taken as a whole, it does not appear that the addition of booster sessions in the current study translated to long-term maintenance of post-intervention growth in SWB in a consistent and robust manner (i.e., across all indicators). However, given the lackluster empirical support

for the efficacy of booster sessions in maintaining treatment gains in psychotherapy, this finding is not shocking. Since mean levels of life satisfaction and positive affect were greater, and negative affect was lower, for students in the intervention group compared to the wait-list group across time, it is also possible that the rigorous hierarchical linear growth models conducted precluded the ability to detect statistically significant differences (vs. clinically meaningful differences) between the two experimental groups across long-term follow-up.

**Internalizing problems.** The hypothesis that at long-term follow-up, students who participated in the intervention would demonstrate significantly lower levels of internalizing symptoms of psychopathology relative to students in the wait-list control group was not supported. By seven-week follow-up, the average internalizing problems score for the intervention group was lower than the wait-list control group, but this difference was not statistically significant. Nonetheless, a small effect (0.32) was detected.

Only a handful of studies with adults and youth have examined the impact of PPIs on internalizing psychopathology in the long-term, with a few providing support for PPIs positively impacting internalizing symptoms. For example, two separate singular-construct PPIs (i.e., gratitude, character strengths) and one multi-target PPI (i.e., positive psychotherapy), all adult-focused interventions, resulted in significantly decreased depressive symptoms that extended in the weeks, and even months, post-intervention (Seligman et al., 2005; Seligman et al., 2006; Senf & Liao, 2013). However, Seligman et al. (2005) found that a You at Your Best PPI was not associated with maintenance in the improvement of depressive symptoms even just one week post-intervention.

In contrast, only one of two known multi-target youth-focused PPIs that examined internalizing symptoms longitudinally (i.e., PAL curriculum; Notter, 2013) was associated with

significant decreases in internalizing symptoms, specifically depressive symptoms, over an extended period of time (i.e., up to one-year post-intervention). In the other study, Suldo et al. (2014), whose intervention preceded the one utilized in the current study, did not find a decrease in students' internalizing symptoms over time. In sum, while some empirical support suggests that PPIs are implicated in long-term alleviation of internalizing symptoms, there is little support for the occurrence of the same trend in youth-focused PPIs, including the one utilized in the current study. As discussed above, Notter's (2013) sample of slightly older (i.e., ninth grade students) adolescents may have received a greater benefit from PPIs in relation to reduced internalizing symptoms due to more sophisticated cognitive abilities. It is also possible that internalizing psychopathology should be addressed via a separate and more narrowly-focused mental health intervention, as research indicates that while psychopathology and SWB are related, they are separable constructs (Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008). Furthermore, mental health status from a dual-factor standpoint can fluctuate over time (Suldo et al., 2011). Thus, PPIs may have a brief positive impact on mental health problems, but as individuals' mental health changes over time, the positive impacts associated with PPIs may be difficult to sustain longitudinally and individuals may require additional interventions that target psychopathology.

**Externalizing problems.** The hypothesis that at long-term follow-up, students who participated in the intervention would demonstrate significantly lower levels of externalizing symptoms of psychopathology relative to students in the wait-list control group was not supported. By seven-week follow-up, the average externalizing problems score for the intervention group was marginally lower than the wait-list control group, but despite a small effect (0.30), this difference was not statistically significant. The only other known PPI study

that examined externalizing symptoms as an outcome (i.e., Suldo et al., 2013) had similar findings in terms of a null long-term impact on psychopathology. As discussed above, while it is plausible that PPIs may help prevent development of later externalizing mental health problems through increasing SWB, alleviation of externalizing problems in both the short- and long-term may require mental health interventions that extend beyond the scope of PPIs.

In sum, findings suggest that the comprehensive multi-component PPI used in the current study was associated with sustained high levels of positive affect almost two months post-intervention, but positive impacts on other components of SWB as well as psychopathology were not maintained at a statistically significant level within this small sample. While confounding factors may have influenced these results (e.g., end of school year time constraints, changes to original plan for booster session implementation), booster sessions do not generally appear to be effective in maintaining or further enhancing growth in SWB or alleviation of internalizing and externalizing psychopathology affiliated with the PPI for an extended time period. It appears that in order to have a meaningful and lasting impact on the reduction of mental health problems, separate interventions should be employed.

### **Implications for School Psychologists**

Educators should be concerned about students' well-being given the links between SWB and several important outcomes including academic achievement, school valuation, social support, and physical health (Antaramian et al., 2010; Renshaw & Cohen, 2014; Suldo & Shaffer, 2008). While SWB is relatively stable (Eid & Diener, 2004; Fujita & Diener, 2005), research has determined that it is amenable to change when individuals face various life circumstances (Eid & Diener, 2004). Thus, theoretically, SWB can be increased, which is substantiated empirically by the growing body of research among youth samples supporting the efficacy of PPIs in promoting

increases in SWB. Preliminary findings suggest that singular- and multi-target PPIs have impacted the components of SWB differentially. For example, some PPIs impacted both life satisfaction and affect (e.g., Froh et al., 2008; Proctor et al., 2011), whereas others have found that only life satisfaction increases (e.g., Marques et al., 2011; Suldo et al., 2013). Additionally, there is some support indicating that PPIs impact psychopathology in addition to SWB (e.g., Notter, 2013). Finally, preliminary support exists for long-term increases in SWB (e.g., Froh et al., 2008; Notter, 2013; Senf & Liao, 2013; Sheldon & Lyubomirsky, 2006). That literature provides promise for PPIs to improve the SWB and overall functioning of youth at-risk of low well-being. However, the efficacy of a comprehensive, multi-target PPI including parent and booster session components was unexplored prior to the current study.

By finding evidence of promise with regard to the efficacy of a group positive psychology counseling intervention that included a parent component and booster sessions among a sample of early adolescents, this study provides school psychologists with an additional data-based intervention for improving students' SWB, particularly their positive affect. Findings from the current study indicate that the comprehensive PPI significantly and positively impacted students' life satisfaction and mood in the short-term. Providing parents with psychoeducation about positive psychology constructs and regular weekly correspondence appears to be beneficial, as a previous version of this PPI that did not involve parents did not yield significant improvements in all components of SWB from baseline to post-intervention (Suldo et al., 2013). Thus, it is recommended that school psychologists strive to include parents when implementing this PPI in the future, not only due to the current study's promising findings, but also because it is best practice to engage in home-school collaboration to improve student outcomes (Esler et al., 2008).



Additionally, findings from the current study suggest that a youth PPI alone may not suffice to significantly impact youth psychopathology. While a previous study suggested that adolescents' internalizing psychopathology can be significantly positively impacted by a PPI (i.e., Notter, 2013), the current study's findings did not fully support this notion. While SWB and psychopathology are related constructs, they are separate (Greenspoon & Saklofske, 2001). In order to identify students who would benefit from PPIs, school psychologists could administer screening measures of psychopathology (e.g., Brief Problem Monitor-Youth [BPM-Y; Achenbach et al., 2011]) and life satisfaction (e.g., Students' Life Satisfaction Scale [SLSS; Huebner, 1991] or the Brief Multidimensional Students' Life Satisfaction Scale [BMSLSS; Seligson, Huebner, & Valois, 2003]). Students who are considered vulnerable from a dual-factor perspective (i.e., low levels of psychopathology coupled with low life satisfaction) are the most likely to benefit from PPIs in that they have room for growth in SWB may not need supplemental services to reduce psychopathology. Beyond PPIs, school psychologists may need to implement separate evidence-based mental health interventions for youth experiencing internalizing and externalizing forms of psychopathology. Therefore, school psychologists should consider incorporating interventions to address both mental health problems and low SWB, as appropriate, into treatment plans for the youth with whom they work. To address psychopathology, school psychologists could conduct cognitive-behavioral therapy, an empirically-supported treatment approach, with youth experiencing internalizing symptoms such as anxiety and depression (Weisz & Kazdin, 2010). Additionally, for students exhibiting externalizing symptoms, school psychologists could implement a number of appropriate evidence-based treatments matched to the presenting concerns (e.g., anger management training,

contingency management, parent management training, attribution training; Graham et al., 2014; Weisz & Kazdin, 2010).

Regarding the efficacy of booster sessions to maintain, or possibly further enhance, gains in SWB made via the intervention, the current study suggests that booster sessions may not be as beneficial as intended; although they may have been responsible for sustaining gains in positive affect, some reductions in improvements in life satisfaction and negative affect were evident. The state of the literature on efficacy of booster sessions for the treatment of mental health problems is mixed, but generally does not indicate that booster sessions result in further improvement in outcomes post-intervention termination. As this study is the first PPI known of its kind to incorporate booster sessions, more research on efficacy of booster sessions is warranted. However, these preliminary findings suggest that, given the promising trends in the data at follow-up, it may be an efficient use of time and resources for school psychologists to implement booster sessions in an effort to maintain intervention gains.

In essence, the findings in the current study pertinent to significant improvements in subjective well-being, and sustain gains in positive affect, provides further rationale for school psychologists to provide mental health services that aim to promote and increase students' SWB, particularly via a comprehensive, multi-target, multi-component PPI. Given the links between SWB and other important student outcomes, school psychologists and other educators should be interested to learn about techniques that maximize students' SWB.

### **Contributions to the Literature**

While the research on the efficacy of PPIs is growing, particularly for adults, similar research for youth lags behind. Most of the research that has been conducted with youth has been singular-construct PPIs and most of these have been solely youth-focused. To date, no

known PPIs have included other relevant stakeholders beyond youth themselves in the intervention process. Parents are one key group of stakeholders that have been neglected in the implementation of PPIs, but should be considered for involvement for a few reasons. First, best practice in school psychology dictates that increasing parental involvement in educational matters, including interventions, is one means to maximizing students' success (Esler, Godber, & Christenson, 2008). Second, research suggests that youth and parental SWB are related; thus, increases in youth SWB may impact parental SWB, or vice versa (Hoy et al., 2013). The current study addressed a gap in the literature by including parents in the comprehensive, multi-component, multi-target PPI and empirically investigated its efficacy in producing increases in SWB and decreases in psychopathology among a sample of adolescents. The current study supports the claim that involving parents in PPIs for youth is beneficial, as all components of SWB were positively impacted at intervention termination.

Additionally, the current study found that the PPI alone did not significantly decrease either internalizing or externalizing symptoms of psychopathology, suggesting a need for the provision of separate well-being and psychopathology interventions. Finally, the current study is the first known PPI to include and evaluate the role that booster sessions play in the maintenance or enhancement of intervention outcomes. While booster sessions are often recommended and implemented for clients who have undergone psychotherapy in order to maintain treatment gains (Beck, 2011), empirical support for the utility of booster sessions is mixed, with many studies failing to reveal benefits associated with booster sessions (Baker & Wilson, 1985; Lochman et al., 2013). The current study's data suggest that booster sessions do not appear to buffer youth from experiencing post-intervention declines in outcomes. Therefore, school psychologists may not wish to invest their time and other resources in the implementation of many pre-

determined/scheduled booster sessions. Perhaps a periodic booster session, or an as-needed appointment when suggested by long-term progress monitoring data or student request, would be a more efficient use of resources. In sum, the current study indicates that involving parents in the intervention process is beneficial, suggests that students with co-occurring mental health problems may need mental health services that extend beyond the scope of a PPI, and indicates that booster sessions are not robustly effective in the maintenance of long-term elevations in mood and SWB.

### **Limitations**

A potential limitation of this study relates to concerns about population validity, or the ability to generalize findings from a sample to the larger population. The current study utilized a convenience sample rather than a random sample, which can result in lower generalizability of findings. Ideally, random sampling would have been used to minimize threats to population validity, but the nature of research in school settings did not make this feasible. It was necessary to partner with a school that was motivated to participate in a mental health initiative and intervention research.

Second, the sample size ( $n = 21$  per experimental condition) was smaller than ideal, which likely resulted in reduced power to detect differences between the intervention and wait-list control groups. The less than ideal parent consent and resulting participation rate (37.84% of recruited youth) limited the sample size of students available to participate in the study. A third limitation to note is that only student self-report data was collected. Students may have felt inclined to respond in a socially desirable manner. However, the self-report measures used in this study have strong psychometric properties and have been utilized in multiple studies with

adolescent samples. Also, the gold standard informant for levels of subjective well-being is the individual him/herself given the internal nature of the topic.

Another limitation of this study is in regard to a deviation in the initial plan for booster session implementation. Due to the standardized testing schedule, this author was required to reduce the number of booster sessions implemented from three to two and change the timeline for booster session implementation (i.e., the originally plan was to implement each booster session one month apart, but in reality the first booster session was implemented five-week post-intervention and the second booster session occurred just two weeks later). Had the booster sessions been implemented as initially designed, the results across the follow-up period may have been more in line with hypothesized findings (i.e., booster sessions would prevent the intervention group from experiencing post-intervention declines in life satisfaction, positive affect, and negative affect). In future research on the value of booster sessions, the research team should considering commencing implementation of the PPI earlier in the school year to avoid complications toward the end of the school year, including standardized testing and final exams.

Another limitation is that the parent component of the PPI could have been strengthened. It was unexpected that not all parents would have taken part in the initial session; the participation of only 67% of parents was less than ideal. Further, parents who participated in that session had more of a passive role (i.e., consumer of information); future research could attempt to engage parents more actively throughout the intervention, for instance by providing feedback on their direct implementation of the PPI intervention strategies. Third, this study did not gather parent ratings of youth adjustment/outcome, in part due to the logistic challenges inherent to gathering data from parents. Finally, the small size of the total sample precluded the ability to test more than one version of the PPI; ideally, the PPI would have been evaluated in conditions

that included and excluded the parent component (keeping the implementation of the student group component constant) in an effort to directly test whether the parent component influenced student adjustment above and beyond the influence of the student-focused component.

A final limitation of this study to note is the fact that the follow-up data collection points were confounded with the end of the school year (i.e., data collection occurred 8 school days before the last day of school). During this time period, students in both the intervention and wait-list control groups exhibited similar trends in means on all measured outcomes. It is possible that all students, regardless of their assigned experimental group, were positively anticipating summer break and subsequently experienced similar boosts in SWB and decreases in symptoms of psychopathology.

### **Future Directions**

In order to provide further understanding of how various components of PPIs operate and relate to student outcomes, there are several future directions for research. To address the gaps in the literature, future research should randomly assign students to groups with and without the inclusion of the parent component and booster sessions component (i.e., five conditions: 10-week PPI, 10-week PPI with parent component, 10 week PPI with parent component and boosters, 10 week PPI with boosters and no parent component, and no-intervention control group). Furthermore, future studies should seek to determine which aspect of the PPI parent component (e.g., attendance at parent psychoeducation session, weekly home-based parental involvement in intervention-related activities) drives intervention effects. Such studies will allow researchers to disentangle the impact of each component on outcomes separately and provide further understanding of which PPI elements are of the most critical importance. In order to randomly assign students to receive the various PPI components discussed above, a future study

would need to begin with a larger sample size, which may require additional outreach efforts during recruitment to improve the participation rate. A larger sample is needed to provide researchers with more statistical power to detect true differences in outcomes between the various experimental groups.

It would also be beneficial for future research to examine mediators of change, specifically pathways responsible for the effects of intervention observed in the current study. The current study did not investigate how students' and parents' levels of key positive psychology constructs of focus in the PPI (e.g., gratitude, hope, optimism) may have fluctuated throughout the course of the intervention or how these variables may have influenced SWB and psychopathology at post-intervention and follow-up. It would be valuable to learn more about how these variables may mediate (e.g., Emmons & McCullough, 2003) or moderate (e.g., Froh et al., 2009) the relationship between the PPI and outcomes. For example, researchers may wish to measure participants' levels of gratitude, a potential mediator or moderator, over time, and conduct mediational analyses to determine if the intervention has significant impacts on gratitude and subsequently positive affect, or alternatively if the intervention significantly impacts positive affect alone (Layous & Lyubomirsky, 2014). Similarly, researchers should investigate which group of students is the most likely to benefit from the PPI (e.g., students with the lowest initial levels of life satisfaction, positive affect, or negative affect; students in a particular mental health quadrant in the dual-factor model such as vulnerable or troubled). Beyond examining pathways by which PPIs impact student mental health, future research may wish to examine how the PPI impacts additional student outcomes, such as social relationships and academic achievement.

Another direction for future research is to include other key stakeholders in the PPI, including teachers, and examine the efficacy of this added ecological component. As students

spend a sizeable amount of time with teachers each week, teachers may be able to help students generalize strategies learned in the PPI to the classroom and larger school context. However, research is needed to empirically determine whether or not including teachers in PPIs is beneficial. Additionally, it would be beneficial for future researchers to follow youth enrolled in the intervention and control groups over an extended follow-up period (e.g., six months, one year). This would help determine what, if any, long-term gains in outcomes may be associated with participation in the intervention.

Finally, future research could modify the PPI conducted in the current study to be developmentally appropriate, specifically by adjusting the cognitive complexity of the intervention content, for younger and older students. Researchers could then pilot the revised intervention with the respective intended population, and evaluate its efficacy. For example, for younger students, researchers could remove from the PPI those abstract future-oriented aspects of the program (e.g., hope, optimism) that younger children may not fully grasp. As few examples exist of tier-two PPIs that have been evaluated empirically with elementary and high school students, there is a clear gap in the literature that should be addressed by future researchers.

## **Summary**

In conclusion, the current study has expanded the available literature by examining the efficacy of a comprehensive, multi-target, multi-component PPI on adolescents' SWB and psychopathology. Specifically, the current study investigated the differences in life satisfaction, positive and negative affect, and internalizing and externalizing symptoms between students randomly assigned to receive a comprehensive PPI or to a wait-list control condition. The current study was the first one known to include a parent component (i.e., psychoeducation, regular



weekly correspondence) in a PPI and evaluate its impact on youth's functioning. Additionally, the current study was the first to examine the role that booster sessions play in maintaining gains made through participation in the PPI across a follow-up period.

At immediate post-intervention, students who received the PPI exhibited significant improvements in all components of SWB; they had greater life satisfaction and positive affect, and lower negative affect, than students in the wait-list group. However, students who participated in the intervention did not exhibit similar significant improvements in severity of internalizing and externalizing problems, and did not differ significantly from students assigned to the wait-list.

By seven-week follow-up, the only component of SWB that continued to remain significantly greater for intervention group students relative to wait-list group students was positive affect. Thus, students in the intervention group who participated in the PPI continued to experience more frequent positive emotions on a daily basis than reported by their peers who did not take part in the intervention. The differences between the two experimental groups in life satisfaction and negative affect diminished some across the follow-up period, but trends in the data suggested that participation in the PPI was associated with small to moderate positive impacts on both mood and life satisfaction. Additionally, the differences in internalizing and externalizing problems between students in the intervention and wait-list groups across follow-up continued to remain not statistically significant; however, trends in the data suggested that participation in the PPI was associated with small to moderate positive impacts on internalizing and externalizing symptoms of psychopathology. Collectively, the current study's findings suggest that involving parents in the intervention process is valuable, but booster sessions are at best marginally effective in maintaining positive changes in SWB resulting from receiving PPIs.

Furthermore, findings suggest that students who exhibit both low SWB and the presence of psychopathology likely require separate targeted interventions to address each type of concern. Links between students' complete mental health and positive outcomes (Antaramian et al., 2010) highlights the importance of continuing to develop, modify, and investigate PPIs for youth in order to maximize students' functioning.

## References

- Achenbach, T. M. (1991). *Integrative Guide for the 1991 CBCL/4-18, YSR and TRF Profiles*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M., McConaughy, S. H., Ivanova, M. Y., & Rescorla, L. A. (2011). *Manual for the ASEBA Brief Problem Monitor (BPM)*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington DC: Author.
- Antaramian, S. P., Huebner, E. S., Hills, K. J., & Valois, R. F. (2010). A dual-factor model of mental health: Toward a more comprehensive understanding of youth functioning. *American Journal of Orthopsychiatry*, 80(4), 462-472.
- Asarnow, J. R., Scott, C. V., & Mintz, J. (2002). A combined cognitive-behavioral family education intervention for depression in children: A treatment development study. *Cognitive Therapy and Research*, 26, 221–229. doi:10.1023/A:1014573803928

- Baggs, K., & Spence, S. H. (1990). Effectiveness of booster sessions in the maintenance and enhancement of treatment gains following assertion training. *Journal of Consulting and Clinical Psychology, 58*(6), 845-854.
- Baker, A. L., & Wilson, P. H. (1985). Cognitive-behavior therapy for depression: The effects of booster sessions for relapse. *Behavior Therapy, 16*, 335-344.
- Barrett, P. M., Farrell, L. J., Ollendick, T. H., & Dadds, M. (2006). Long-term outcomes of an Australian universal prevention trial of anxiety and depression symptoms in children and youth: An evaluation of the Friends program. *Journal of Clinical Child and Adolescent Psychology, 35*(3), 403-411.
- Beck, J. S. (2011). *Cognitive therapy: Basics and beyond* (2<sup>nd</sup> ed.). New York, NY: Guildford Press.
- Beck, A. T., Epstein, N., & Brown, G. (1988). An inventory for measuring clinical anxiety. *Journal of Consulting and Clinical Psychology, 56*, 893-897.
- Beck, A. T., & Steer, R. A. (1992). *Beck Anxiety Inventory manual*. San Antonio, TX: The Psychological Corporation.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for Beck depression inventory-II*. San Antonio, TX: Psychological Corporation.
- Blakemore, S. J., & Choudury, S. (2006). Development of the adolescent brain: Implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry, 47*(3), 296-312. doi: 10.1111/j.1469-7610.2006.01611.x
- Bodden, D. H. M. (2007). *Individual versus family cognitive behavioral therapy in children with anxiety disorders: A clinical and economic evaluation*. Maastricht: University Press.

- Bodden, D. H. M., Bögels, S. M., Nauta, M. H., De Haan, E., Ringrose, J., Appelboom, C.,...Appelboom-Geerts, C. M. M. J. (2008). Child versus family cognitive-behavioral therapy in clinically anxious youth: an efficacy and partial effectiveness study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 1384–1394.doi: 10.1097/CHI.0b013e318189148e
- Boman, P., Furlong, M. J., Shochet, I., Lilles, E., & Jones, C. (2009). Optimism in the school context. In R. Gilman, E. S. Huebner, & M.J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 51-64). New York, NY: Routledge.
- Bono, G., &Froh, J. J. (2009). Gratitude in school: Benefits to students and schools. In R. Gilman, E. S. Huebner, & M. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 77 – 88). New York: Routledge.
- Breinholst, S., Esbjørn, B. H., Reinholdt-Dunne, M. L., & Stallard, P. (2012). CBT for the treatment of child anxiety disorders: A review of why parental involvement has not enhanced outcomes. *Journal of Anxiety Disorders*, 26, 416-424.  
doi:10.1016/j.janxdis.2011.12.014
- Brent, D., Emslie, G., Clarke, G., Wagner, K. D., Asarnow, J. R., Keller, M.,...Zelazny, J. (2008). Switching to another SSRI or to Venlafaxine with or without cognitive behavioral therapy for adolescents with SSRI-resistant depression: The TORDIA randomized controlled trial. *Journal of the American Medical Association*, 299, 901–913.  
doi: 10.1001/jama.299.8.901

- Brent, D. A., Holder, D., Kolko, D., Birmaher, B., Baugher, M., Roth, C., & Johnson, B. A. (1997). A clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive therapy. *Archives of General Psychiatry*, *54*, 877– 885. doi:10.1001/archpsyc.1997.01830210125017
- Brown, T. A. , DiNardo, P. A., Barlow, D. H. (1994). *Anxiety Disorders Interview Schedule for DSM-IV*. New York: Graywind.
- Bry, B. H., & Krinsley, K. E. (1992). Booster sessions and long-term effects of behavioral family therapy on adolescent substance use and school performance. *Journal of Behavioral Therapy and Experimental Psychiatry*, *23*(3), 183-189.
- Bryant, F. B., & Veroff, J. (2007). *Savoring: A new model of positive experience*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Causey, D. L., & Dubow, E. F. (1992). Development of a self-report coping measure for elementary school children. *Journal of Clinical Child Psychology*, *21*, 47–59.
- Chambless, D. L., & Ollendick, T. H. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*, *52*, 685-716.
- Cheavens, J. S., Feldman, D. B., Gum, A., Michael, S. T., & Snyder, C. R. (2006). Hope therapy in a community sample: A pilot investigation. *Social Indicators Research*, *77*, 61-78. doi: 10.1007/s11205-005-5553-0
- Clarke, G. N., Debar, L., Lynch, F., Powell, J., Gale, J., O'Connor, E.,... Hertert, S. (2005). A randomized effectiveness trial of brief cognitive-behavioral therapy for depressed adolescents receiving antidepressant medication. *Journal of the American Academy of Child & Adolescent Psychiatry*, *44*, 888-898. doi:10.1016/S0890-8567(09)62194-8

- Clarke, G. N., Hornbrook, M., Lynch, F., Polen, M., Gale, J., O'Connor, E.,...Debar, L. (2002). Group cognitive behavioral treatment for depressed adolescent offspring of depressed parents in a health maintenance organization. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41, 305–313. doi:10.1097/00004583-200203000-00010
- Clarke, G. N., Rohde, P., Lewinsohn, P. M., Hops, H., & Seeley, J. R. (1999). Cognitive behavioral treatment of adolescent depression: Efficacy of acute group treatment and booster sessions. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38, 272–279. doi:10.1097/00004583-199903000-00014
- Clonan, S. M., Chafouleas, S. M., McDougal, J. L., & Riley-Tillman, T. C. (2004). Positive psychology goes to school: Are we there yet? *Psychology in the Schools*, 41(1), 101-110.
- Cohn, M. A., & Fredrickson, B. L. (2010). In search of durable positive psychology interventions: Predictors of consequences of long-term positive behavior change. *The Journal of Positive Psychology*, 5(5), 355-366. doi: 10.1080/17439760.2010.508883
- Crumbaugh, J. C., & Maholick, L. T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology* 20, 200–207.
- Derogatis, L. R. (2001). *Brief symptom inventory-18*. Minneapolis, MN: Pearson.
- Diamond, G. S., Reis, B. F., Diamond, G. M., Siqueland, L., & Isaacs, L. (2002). Attachment-based family therapy for depressed adolescents: A treatment development study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41, 1190 – 1196. doi:10.1097/00004583-200210000-00008

- Diamond, G. S., Wintersteen, M. B., Brown, G. K., Diamond, G. M., Gallop, R., Shelef, K., & Levy, S. (2010). Attachment-based family therapy for adolescents with suicidal ideation: A randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry, 49*, 122–131.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologists, 55*, 34-43.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, G. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*, 71-75.
- Diener, E., Oishi, S., & Lucas, R. E. (2009). Subjective well-being: The science of happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.), *Oxford Handbook of positive psychology* (pp. 187-194). New York, NY: Oxford University Press.
- Dietz, L. J., Mufson, L., Irvine, H., & Brent, D. A. (2008). Family-based interpersonal psychotherapy for depressed preadolescents: An open-treatment trial. *Early Intervention in Psychiatry, 2*, 154 –161. doi:10.1111/j.1751-7893.2008.00077.x
- Eccles, J. S. (2004). Schools, academic motivation, and stage-environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 125-153). Hoboken, NJ: Wiley.
- Eid, M., & Diener, E. (2004). Global judgments of subjective well-being: Situational variability and long-term stability. *Social Indicators Research, 65*, 245–277. doi:10.1023/B:SOCI.0000003801.89195.bc
- Eisenberg, N., & Morris, A. S. (2004). Moral cognitions and prosocial responding in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 155-188). Hoboken, NJ: Wiley.



- Eklund, K., Dowdy, E., Jones, C., & Furlong, M. (2011). Applicability of the dual-factor model of mental health for college students. *Journal of College Student Psychotherapy*, 25, 79-92.
- 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(2), 377-389. doi: 10.1037/0022-3514.84.2.377
- Esler, A. N., Godber, Y., & Christenson, S. L. (2008). Best practices in supporting school-family partnerships. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology- V* (pp. 917-936). Bethesda, MD: National Association of School Psychologists.
- Feldman, D. B., & Dreher, D. E. (2012). Can hope be changed in 90 minutes? Testing the efficacy of a single-session goal-pursuit intervention for college students. *Journal of Happiness Studies*, 13, 745-759. doi: 10.1007/s10902-011-9292-4
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 1045-1062. doi: 10.1037/a0013262
- Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. (2003). What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology*, 84, 365-376.
- Friedrich, A., Thalji, A., Suldo, S. M., Chappel, A., & Fefer, S. (2010). Increasing thirteen year-olds' happiness through a manualized group intervention. *National Association of School Psychologists Annual Convention*. Paper presented at conference in Chicago, IL.

- Fristad, M. A., Verducci, J. S., Walters, K., & Young, M. E. (2009). Impact of Multifamily psychoeducational psychotherapy in treating children aged 8 to 12 years with mood disorders. *Archives of General Psychiatry*, *66*, 1013–1021. doi:10.1001/archgenpsychiatry.2009.112
- Froh, J. J., Kashdan, T. B., Ozimkowski, K. M., & Miller, N. (2009). Who benefits the most from a gratitude intervention in children and adolescents? Examining positive affect as a moderator. *The Journal of Positive Psychology*, *4*(5), 408-422. doi: 10.1080/17439760902992464
- 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. doi: 10.1016/j.jsp.2007.03.005
- Fujita, F., & Diener, E. (2005). Life satisfaction set point: Stability and change. *Journal of Personality and Social Psychology*, *88*, 158-164.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, *9*(2), 103-110.
- Garoff, F. A., Heinonen, K., Pesonen, A., & Almqvist, F. (2012). Depressed youth: Treatment outcome and changes in family functioning in individual and family therapy. *Journal of Family Therapy*, *34*, 4 –23. doi:10.1111/j.1467-6427.2011 .00541.x
- Gillham, J., Adams-Deutsch, Z., Werner, J., Reivich, K., Coulter-Heindl, V., Linkins, M., ... Seligman, M. E. P. (2011). Character strengths predict subjective well-being during adolescence. *The Journal of Positive Psychology*, *6*(1), 31-44.

- Gillham, J. E., Reivich, K. J., Jaycox, L. H., & Seligman, M. E. P. (1995). Prevention of depressive symptoms in schoolchildren: Two-year follow-up. *Psychological Science, 6*, 343-351.
- Goodyer, I., Dubicka, B., Wilkinson, P., Kelvin, R., Roberts, C., Byford, S.,...Harrington, R. (2007). Selective serotonin reuptake inhibitors (SSRIs) and routine specialist care with and without cognitive behavior therapy in adolescents with major depression: Randomised controlled trial. *British Medical Journal, 335*, 142-146.  
doi:10.1136/bmj .39224.494340.55
- Graham, S., Taylor, A., & Hudley, C. (2014). A motivational intervention for African American boys labeled as aggressive. *Urban Education, 1*-31.
- Greenspoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective well-being and psychopathology. *Social Indicators Research, 54*, 81-108.
- Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery, and Psychiatry, 23*, 56– 62.
- Harter, S. (1985). *Manual for the self-perception profile for children*. Denver: University of Denver.
- Helsel, W. J., & Matson, J. L. (1984). The assessment of depression in children: The internal structure of the Children's Depression Inventory (CDI). *Behavior Research and Therapy, 22*, 289-298.
- Howard, B., Chu, B. C., Krain, A. L., Marrs-Garcia, M. A., & Kendall, P. C. (2000). *Cognitive-behavioral family therapy for anxious children: Therapist manual* (2nd ed.). Ardmore, PA: Workbook.
- Howell, A. J. (2009). Flourishing: Achievement-related correlates of students' well-being. *Journal of Positive Psychology, 4*, 1–13.

- Hoy, B. D., Suldo, S. M., & Raffaele Mendez, L. (2013). Links between parents' and children's levels of gratitude, life satisfaction, and hope. *Journal of Happiness Studies*, *14*, 1343-1361. doi: 10.1007/s10902-012-9386-7
- Huebner, E. S. (1991). Initial development of the Students' Life Satisfaction Scale. *School Psychology International*, *12*, 231-240.
- Huebner, E. S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment* *6*, 149-158.
- Huebner, E. S., Gilman, R., & Furlong, M. J. (2009). A conceptual model for research in positive psychology in children and youth. In R. Gilman, E. S. Huebner, & M.J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 3-8). New York, NY: Routledge.
- Huebner, E. S., & Hills, K. J. (2011). Does the positive psychology movement have legs for children in schools? *The Journal of Positive Psychology*, *6*(1), 88-94.
- Huebner, E. S., Suldo, S. M., Valois, R. F., & Drane, J. W. (2006). The Brief Multidimensional Students' Life Satisfaction Scale: Sex, race, and grade effects for applications with middle school students. *Applied Research in Quality of Life*, *1*, 211-216. doi: 10.1007/s11482-006-9016-9
- Hurley, D. B., & Kwon, P. (2012). Results of a study to increase savoring the moment: Differential impact on positive and negative outcomes. *Journal of Happiness Studies*, *13*, 579-588. doi: 10.1007/s10902-011-9280-8
- Kelly, R. M., Hills, K. J., Huebner, E. S., & McQuillin, S. D. (2012). The longitudinal stability and dynamics of group membership in the dual-factor model of mental health: Psychosocial predictors of mental health. *Canadian Journal of School Psychology*, *27*(4), 337-355. doi: 10.1177/0829573512458505

- Kendall, P. C. (1994). Treating anxiety disorders in children: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology, 62*, 100-110.
- Kendall, P. C., Furr, J. M., & Podell, J. L. (2010). Child-focused treatment of anxiety. In J. R. Weisz & A. E. Kazdin (Eds.), *Evidence-based psychotherapies for children and adolescents* (2nd ed.) (pp. 45-60). New York, NY: Guilford.
- Kendall, P. C., & Hedtke, K. A. (2006). *Cognitive-behavioral therapy for anxious children: Therapist manual* (3rd ed.). Ardmore, PA: Workbook.
- Kendall, P. C., Hudson, J. L., Gosch, E., Flannery-Schroeder, E., & Suveg, C. (2008). Cognitive-behavioral therapy for anxiety disordered youth: A randomized clinical trial evaluating child and family modalities. *Journal of Consulting and Clinical Psychology, 76*(2), 282-297. doi: 10.1037/0022-006X.76.2.282
- Kendall, P. C., Kane, M., Howard, B., & Siqueland, L. (1989). *Cognitive-behavioral therapy for anxious children: treatment manual*.
- Kendall, P. C., Kane, M., Howard, B., Siqueland, L. (1990), *Cognitive-Behavioral Treatment of Anxious Children: Treatment Manual*. Ardmore, PA: Workbook Publishing
- Kennard, B. D., Emslie, G. J., Mayes, T. L., Nightngale-Teresi, J., Nakonezy, P. A., Hughes, J. L., & Jarrett, R. B. (2008). Cognitive-behavioral therapy to prevent relapse in pediatric responders to pharmacotherapy for major depressive disorder. *Journal of the American Academy of Child & Adolescent Psychiatry, 47*, 1395–1404. doi:10.1097/CHI.0b013e31818914a1
- King, L. A. (2001). The health benefits of writing about life goals. *Personality and Social Psychology Bulletin, 27*, 798-807.

- Kovacs, M. (1992). *Children's Depression Inventory (CDI) manual*. North Tonawanda, NY: Multi-Health Systems.
- Kovacs, M., Sherrill, J., George, C. J., Pollock, M., Tumuluru, R. V., & Ho, V. (2006). Contextual emotion-regulation therapy for childhood depression: Description and pilot testing of a new intervention. *Journal of the American Academy Of Child and Adolescent Psychiatry*, 45, 892–903. doi:10.1097/01.chi.0000222878.74162.5a
- Krain, A., Hudson, J., Choudhury, M., & Kendall, P. C. (2000). Family education, support and attention for child anxiety. Unpublished therapist manual, Temple University.
- Kuhn, D. (2009). Adolescent thinking. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Individual bases of adolescent development* (3<sup>rd</sup> ed.). (pp. 152-186). Hoboken, NJ: John Wiley & Sons, Inc.
- Kurtz, J. (2008). *Looking to the future to appreciate the present*. *Psychological Science*, 19, 1238–1241.
- Lambert, M. J., Hansen, N. B., Umphress, V., Lunnen, K., Okiishi, J., Burlingame, G. M., & Reisinger, C. W. (1996). *Administration and scoring manual for the Outcome Questionnaire (OQ-45.2)*. Stevenson, MD: American Professional Credentialing Services.
- Laurent, J., Catanzaro, J., Joiner, T. E., Rudolph, 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.
- Layous, K., & Lyubomirsky, S. (2014). Benefits, mechanisms, and new directions for teaching gratitude to children. *School Psychology Review*, 43, 153-159.

- Lehman, A. (1995). *Evaluating quality of life for persons with severe mental illness: Assessment toolkit*. Cambridge, MA: The Evaluation Center at Health Services Research Institute.
- Lewinsohn, P. M., Clarke, G. N., Hops, H., & Andrews, J. (1990). Cognitive-behavioral treatment for depressed adolescents. *Behavior Therapy, 21*, 385–401. doi:10.1016/S0005-7894(05)80353-3
- Linley, P. A., Joseph, S., Maltby, J., Harrington, S., & Wood, A. M. (2009). Positive psychology applications. In C. R. Snyder & S. J. Lopez (Eds.), *Oxford Handbook of positive psychology* (pp. 35-47). New York, NY: Oxford University Press.
- Lochman, J. E., Baden, R. E., Boxmeyer, C. L., Powell, N. P., Qu, L., Salekin, K. L., & Windle, M. (2013). Does a booster intervention augment the preventive effects of an abbreviated version of the Coping Power program for aggressive children? *Journal of Abnormal Child Psychology*. doi: 10.1007/s10802-013-9727-y
- Lochman, J. E., & Wells, K. C. (2002). The coping power program at the middle-school transition: Universal and indicated prevention effects. *Psychology of Addictive Behaviors, 16*(45), S40-S54. doi: 10.1037//0893-164X.16.4S.S40
- Lopez, S. J., Rose, S., Robinson, C., Marques, S. C., & Pais-Ribeiro, J. (2009). Measuring and promoting hope in schoolchildren. In R. Gilman, E. S. Huebner, & M.J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 37-50). New York, NY: Routledge.
- Luby, J., Lenze, S., & Tillman, R. (2012). A novel early intervention for preschool depression: Findings from a pilot randomized controlled trial. *Journal of Child Psychology and Psychiatry, 53*, 313– 322. doi:10.1111/j.1469-7610.2011.02483.x

- Lyons, M. D., Huebner, E. S., Kills, K. J., & Shinkareva, S. V. (2012). The dual-factor model of mental health: Further study of the determinants of group differences. *Canadian Journal of School Psychology, 27*(2), 183-196. doi: 10.1177/0829573512443669
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*, 137-155.
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*(2), 111-131.
- March, J. S. (1998). *The Multidimensional Anxiety Scale for Children (MASC)*. North Tonawanda, NY: MHS.
- Marques, S. C., Lopez, S. J., & Pais-Ribeiro, J. L. (2011). "Building Hope for the Future": A program to foster strengths in middle-school students. *Journal of Happiness Studies, 12*, 139-152. doi: 10.1007/s10902-009-9180-3
- McCullough, M. E., Emmons, R. A., & Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*, 112–127.
- McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin, 127*, 249–266.
- Melvin, G. A., Tonge, B. J., King, N. J., Heyne, D., Gordon, M. S., & Klimkeit, E. (2006). A comparison of cognitive-behavioral therapy, sertraline, and their combination for adolescent depression. *Journal of the American Academy of Child & Adolescent Psychiatry, 45*, 1151–1161. doi: 10.1097/01.chi.0000233157.21925.71



- Morrison, G. M., Storino, M. H., Robertson, L. M., Weissglass, T., & Dondero, A. (2000). The protective function of after-school programming and parent education and support for students at risk for substance abuse. *Evaluation and Program Planning, 23*, 365-371.
- Mufson, L., Gallagher, T., Dorta, K. P., & Young, J. F. (2004a). A Group adaptation of interpersonal psychotherapy for depressed adolescents. *American Journal of Psychotherapy, 58*, 220-237.
- Muratori, F., Picchi, L., Bruni, G., Patarnello, M., & Romagnoli, G. (2003). A two-year follow-up of psychodynamic psychotherapy for internalizing disorders in children. *Journal of the American Academy of Child & Adolescent Psychiatry, 42*, 331-339.  
doi:10.1097/00004583-200303000-00014
- Mychailyszyn, M. P., Brodman, D. M., Read, K. L., & Kendall, P. C. (2012). Cognitive-behavioral school-based interventions for anxious and depressed youth: A meta-analysis of outcomes. *Clinical Psychology: Science and Practice, 19*, 129-153.
- Nauta, M. H., Scholing, A., Emmelkamp, P. M. G., & Minderaa, R. B. (2003). Cognitive-behavioral therapy for children with anxiety disorders in a clinical setting: no additional effect of a cognitive parent training. *Journal of American Academy of Child and Adolescent Psychiatry, 42*, 1270-1278.
- Nelson, E. L., Barnard, M., & Cain, S. (2003). Treating childhood depression over videoconferencing. *Telemedicine Journal and E-health, 9*, 49-55. doi:  
10.1089/153056203763317648
- Norrish, J. M., & Vella-Broderick, D. A. (2009). Positive psychology and adolescents: Where are we now? Where to from here? *Australian Psychologist, 44*(4), 270-278.

- Notter, O. S. (2013). *Building resilience in at-risk adolescents: Comparing the mechanisms of two school-based prevention programmes*. (Unpublished doctoral dissertation). Victoria University of Wellington, New Zealand.
- Odou, N., & Vella-Brodrick, D. A. (2013). The efficacy of positive psychology interventions to increase well-being and the role of mental imagery ability. *Social Indicators Research, 110*, 111-129. doi: 10.1007/s11205-011-9919-1
- Otake, K., Shimai, S., Tanaka-Matsumi, J., Otsui, K., & Fredrickson, B. L. (2006). Happy people become happier through kindness: A counting kindnesses intervention. *Journal of Happiness Studies, 7*, 361–375.
- Park, N. (2004). The role of subjective well-being in positive youth development. *Annals of the American Academy of Political & Social Science, 591*, 25-39.
- 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. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology, 23*, 603–619.
- Paternite, C. E., & Johnston, T. C. (2005). Rationale and strategies for central involvement of educators in effective school-based mental health programs. *Journal of Youth and Adolescence, 34*(1), 41-49. doi: 10.1007/s10964-005-1335-x
- Peterson, C., & Seligman, M.E.P. (2004). *Character strengths and virtues: A classification and handbook*. Washington, DC: American Psychological Association.

- Proctor, C., Tsukayama, E., Wood, A. M., Maltby, J., Eades, J. F., & Linley, P. A. (2011). Strengths gym: The impact of a character strengths-based intervention on the life satisfaction and well-being of adolescents. *The Journal of Positive Psychology, 6*(5), 377-388.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401.
- Rashid, T. (2005). *Positive Psychotherapy Inventory*. Unpublished manuscript, University of Pennsylvania.
- Rashid, T., & Anjum, A. (2008). Positive psychotherapy for young adults and children. In J. R. Z. Abela & B. L. Hankin (Eds.), *Handbook of depression in children and adolescents* (pp. 250–287). New York, NY: Guilford Press.
- Renshaw, T. L., & Cohen, A. S. (2014). Life satisfaction as a distinguishing indicator of college student functioning: Further validation of the two-continua model of mental health. *Social Indicators Research, 117*, 319-334.
- Reschly, D. (2008). School psychology paradigm shift and beyond. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology- V* (pp. 3-15). Bethesda, MD: National Association of School Psychologists.
- Reynolds, C. R., & Kamphaus, R. W. (1992). *Behavior Assessment System for Children*. American Guidance Service: Circle Pines, MN.
- Reynolds, C. R., & Kamphaus, R. W. (2004). *Behavior Assessment System for Children—second edition* (BASC-2). Circle Pines, MN: American Guidance Services.

- Reynolds, S., Wilson, C., Austin, J., & Hooper, L. (2012). Effects of psychotherapy for anxiety in children and adolescents: A meta-analytic review. *Clinical Psychology Review*, 32, 251-262. doi:10.1016/j.cpr.2012.01.005
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, IL: Princeton University Press.
- RUPP Anxiety Group (2001), Fluvoxamine for the treatment of anxiety disorders in children and adolescents. *New England Journal of Medicine*, 344, 1279-1285.
- Ryff, C. D., & Keyes, C. L. (1995). The structure of the psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.
- Sanford, M., Boyle, M., McCleary, L., Miller, J., Steele, M., Duku, E., & Offord, D. (2006). A Pilot study of adjunctive family psychoeducation in adolescent major depression: Feasibility and treatment effect. *Journal of the American Academy of Child & Adolescent Psychiatry*, 45(4), 386-495. doi:10.1097/01.chi.0000198595.68820.10
- Scheier, M., & Carver, C. S. (1985). Optimism, coping and health: Assessment and Implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.
- Seligman, M. E. P. (1991). *Learned optimism: How to change your mind and your life*. New York: Random House, Inc.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York, NY: Free Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.
- Seligman, M. E. P., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist*, 61, 774-788.

- Seligman, M. E. P., Steen, T. A., Park, N., Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410-425.
- Seligson, J. L., Huebner, E. S., & Valois, R. F. (2003). Preliminary validation of the brief multidimensional students' life satisfaction scale (BMSLSS). *Social Indicators Research*, 61, 121-145.
- Senf, K., & Liao, A. K. (2013). The effects of positive interventions on happiness and depressive symptoms, with an examination of personality as a moderator. *Journal of Happiness Studies*, 14, 591-612. doi: 10.1007/s10902-012-9344-4
- Schniering, C. A., & Rapee, R. M. (2002). Development and validation of a measure of children's automatic thoughts: The Children's Automatic Thoughts Scale. *Behavioral Research and Therapy*, 40, 1091-1109.
- Sheldon, K. M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *The Journal of Positive Psychology*, 1(2), 73-82. doi: 10.1080/17439760500510676
- Shimai, S., Otake, K., Utsuki, N., Ikemi, A., & Lyubomirsky, S. (2004). Development of Japanese subjective happiness scale, (SHS), and its examination of validity and reliability. *Japanese Journal of Public Health*, 51, 1-9.
- Shosani, A., & Slone, M. (2013). Middle school transition from the strengths perspective: Young adolescents' character strengths, subjective well-being, and school adjustment. *Journal of Happiness Studies*, 14(4), 1163-1181. doi: 10.1007/s10902-012-9374-y
- Siqueland, L., Rynn, M., & Diamond, G. S. (2005). Cognitive behavioral and attachment based family therapy for anxious adolescents: Phase I and II studies. *Journal of Anxiety Disorders*, 19, 361-381.

- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al. (2006). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*, 570–585.
- 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. *Journal of Pediatric Psychology, 22*, 399–421.
- Speilberger, C. D. (1973). *Manual for State-Trait Anxiety Inventory for Children*. Palo Alto, CA: Consulting Psychologists Press.
- Speilberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory- STAI (Form Y) Self-Evaluation Questionnaire*. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Spence S.H. (1998). A measure of anxiety symptoms among children. *Behavioral Research and Therapy, 36*, 545–566.
- Stark, K. D., Banneyer, K. N., Wang, L. A., & Arora, P. (2012). Child and adolescent depression in the family. *Couple and Family Psychology: Research and Practice, 1*(3), 161-184. doi: 10.1037/a0029916
- Suldo, S. M., & Huebner, E. S. (2004). Does life satisfaction moderate the effects of stressful life events on psychopathological behavior during adolescence? *School Psychology Quarterly, 19*, 93–105.
- Suldo, S. M., & Michalowski, J. A. (2007). Subjective well-being intervention program: Procedures manual. Unpublished therapist manual, University of South Florida.

- Suldo, S. M., Savage, J. A., & Mercer, S. H. (2014). Increasing middle school students' life satisfaction: Efficacy of a positive psychology group intervention. *Journal of Happiness Studies*, 15(1), 19-42.
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review*, 37(1), 52-68.
- Suldo, S. M., Thalji, A., & Ferron, J. (2011). Longitudinal academic outcomes predicted by early adolescents' subjective well-being, psychopathology, and mental health status yielded from a dual factor model. *The Journal of Positive Psychology*, 6(1), 17-30.
- TADS Team. (2004). Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents with Depression Study (TADS) randomized controlled trial. *The Journal of the American Medical Association*, 292, 807–820. doi:10.1001/jama.292.7.807
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., et al. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5(1), 63–75. doi: 10.1186/1477-7525-5-63
- Tolan, P. H., Gorman-Smith, D., Henry, D., & Schoeny, M. (2009). The benefits of booster interventions: Evidence from a family-focused prevention program. *Prevention Science*, 10, 287-297. doi: 10.1007/s11121-009-0139-8
- Tompson, M. C., Pierre, C., Haber, F. M., Fogler, J., Groff, A., & Asarnow, J. (2007). Family-focused treatment for childhood-onset depressive disorders: Results of an open trial. *Clinical Child Psychology and Psychiatry*, 12, 403–420. doi: 10.1177/1359104507078474

VIA Institute.(2007). *Psychometric data*. Retrieved from

[https://www.viame.org/survey/Account/Register?\\_\\_utma=61228211.2054491514.1376280045.1376280045.1376280045.1&\\_\\_utmb=61228211.3.10.1376280045&\\_\\_utmc=61228211&\\_\\_utmz=61228211.1376280045.1.1.utmcsr=\(direct\)|utmccn=\(direct\)|utmcid=\(none\)&\\_\\_utmv=-&\\_\\_utmh=159852410](https://www.viame.org/survey/Account/Register?__utma=61228211.2054491514.1376280045.1376280045.1376280045.1&__utmb=61228211.3.10.1376280045&__utmc=61228211&__utmz=61228211.1376280045.1.1.utmcsr=(direct)|utmccn=(direct)|utmcid=(none)&__utmv=-&__utmh=159852410)

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.

Wishman, M. A. (1990). The efficacy of booster maintenance sessions in behavior therapy: Review and methodological critique. *Clinical Psychology Review, 10*, 155-170.

Wood, A. M., Froh, J. J., & Geraghty, A. W. A. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review, 30*, 890-905.

Wood, J. J., McLeod, B. D., Piacentini, J. C., & Sigman, M. (2009). One-year follow-up of family versus child CBT for anxiety disorders: Exploring the roles of child age and parental intrusiveness. *Child Psychiatry and Human Development, 40*, 301-316. doi: 10.1007/s10578-009-0127-z

Wood, J. J., Piacentini, J. C., South-Gerow, M., Chu, B. C., & Sigman, M. (2006). Family cognitive behavioral therapy for child anxiety disorders. *Journal of American Academy for Child and Adolescent Psychiatry, 45*, 314–321.

Zung, W. W. K. (1965). A self-rating depression scale. *Archives of General Psychiatry, 12*, 63–70.



## Appendix A: School Handout

### Improving Middle School Students' Happiness via Small-Group Instruction

Positive Psychology Research Team (Rachel Roth, M.A., and Shannon Suldo, Ph.D.)  
University of South Florida; [suldo@usf.edu](mailto:suldo@usf.edu) 813-974-2223

#### Project Details

- **Who:** Students in 7<sup>th</sup> grade who are less than completely satisfied with life (as indicated on a brief survey screening their life satisfaction), and who have parent permission to participate.
- **What:** Wellness-promotion program conducted with small groups of students, approximately 6 to 8 per group. Meetings will consist of lessons about ways of thinking and behaving that are related to feelings of happiness and satisfaction with life, activities to demonstrate the content taught in the lessons, and instructions for homework that will reinforce the content taught in meetings. After the program concludes, students will meet for a follow-up meeting (about once per month), to review and rehearse skills taught earlier. At the beginning of the program, parents will be invited to attend an information session, in which they will receive an overview of the purpose and content of the meetings for students. To allow us to assess changes in students' well-being throughout the school year, students will be asked to complete several paper-and-pencil questionnaires before and after the intervention. These surveys will ask about students' thoughts, behaviors, and attitudes towards life, as well as current wellness. Before the program begins, students will be divided into two larger groups—one will receive the intervention immediately, and the other later (after the first group has finished).
- **When:** Beginning in Fall semester, student meetings will be held each Tuesday for 10 weeks. Meeting times will rotate through class periods (1, 2, 3, 5, 6, 7) in order to minimize disruption of any single course.
- **Why:** Research indicates that middle school students who are both happy with their lives AND do not have emotional or acting-out problems have the best scores on the FCAT, the highest grade point averages, and the most positive attitudes towards school. Also, happy students report better relationships with their teachers, parents, and classmates. Happy students also report the best physical health, including fewer illnesses.  
**Importantly, it is not enough to just not have mental health problems; the presence of happiness (combined with minimal emotional distress and acting-out problems) is associated with the best outcomes.**

#### Requirements for Participation in the Project

- Letter of support from principal.
- Following the school-wide screening measure of happiness, inform the USF research team which 7<sup>th</sup> grade students have room for growth in terms of happiness.
- Assistance distributing and collecting parent permission forms to and from students invited to take part in the wellness-promotion program.
- Space and time (about 45 minutes) on 3 – 5 occasions throughout the school year to administer surveys to monitor student progress.
- Space (i.e., conference room) and time (Tuesdays for 10 weeks) to conduct wellness-promotion program.

#### Timeline of Events (Pending timely response from HCPS research office and USF IRB)

- **1<sup>st</sup> week of November:** After Coleman administers the brief (6-question) screening measure of happiness to all 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade students during homeroom, parent permission forms will be distributed to the 7<sup>th</sup> grade students identified as having room for growth in happiness.
- **2<sup>nd</sup> week of November:** Students with parent permission to participate in the program/research project will be assigned to either receive the program immediately or later; students will complete pre-intervention surveys regarding their health and functioning in one class period during school hours.
- **Next 10 weeks:** Students in the wellness-promotion program will participate in once-weekly group meetings (likely on Tuesdays) that teach the principles of positive psychology; parents will be invited to an introductory information session and receive weekly information on content and activities taught to students.

## Appendix A: School Handout (continued)

- After program ends: All students will complete post-intervention surveys for one class period; once monthly for 3 months students will take part in follow-up meetings that review content learned in the program.
- 1 to 3-month post-intervention: All students will complete follow-up surveys during one class period.
- Before end of the school year or next year: Students who did not already participate in the wellness-promotion program will be offered the opportunity to receive it.

## Appendix B: Parent Consent Form

Dear Parent or Caregiver:

This letter provides information about a research study that will be conducted in your child's school by investigators from the University of South Florida (USF). Prior research with middle school students has found that students who are happiest and least emotionally distressed achieve the best in school, have the best attitudes toward school, and the best social relationships. Earlier this year, the school psychologist at Coleman asked all students to answer a few questions about their happiness. This information helped the school monitor students' well-being, and to identify students who may benefit from a wellness-promotion program. This letter provides information about the study we will conduct to determine the effect of the wellness-promotion program on students' emotional well-being and subsequent school performance.

- ✓ Who We Are: The research team is led by Rachel Roth, a doctoral student under the supervision of Dr. Shannon Suldo, an Associate Professor in the School Psychology Program at USF. We are planning the study with Coleman Middle School administrators to make sure that the study provides information that will be helpful to the school.
- ✓ Why We are Requesting Your Child's Participation: This study is being conducted as part of a project entitled, "Improving Middle School Students' Happiness." Your child is being asked to participate in this project because of his or her responses on a screening measure of life satisfaction administered recently by school personnel at Coleman. Your child's responses indicated that he or she is less than completely satisfied with life. This is not an immediate cause for alarm; most adolescents are less than delighted with their daily experiences. Your child is eligible to take part in the wellness-promotion program described below that is intended to increase students' happiness, including from "pleased" to "delighted" with life.
- ✓ Why Your Child Should Participate: Your child may experience an increase in happiness resulting from participation in the wellness-promotion program. In addition to a personal benefit, research support for the effectiveness of activities to increase happiness may enable other children in the future to participate in such wellness-promotion programs. Group-level results of the study will be shared with the guidance counselors, teachers, and administrators at Coleman in order to increase their knowledge of activities that promote emotional wellness in students. Please note neither you nor your child will be paid for your child's participation in the wellness-promotion program. However, all students who return this parent permission form will receive an edible treat (such as a candy bar) and will be placed into a drawing for one of several \$25 gift cards to a local store or iTunes.
- ✓ What Participation Requires: Children with permission to participate will be randomly assigned to one of two groups. Group A will begin the wellness-promotion program in the coming weeks. Group B will be given the opportunity to participate in the wellness-promotion program later (after Group A concludes). The wellness-promotion program will consist of 10 meetings in which members of the research team will meet with small groups of students once per week, on a rotating class schedule (for example, during Period 1 the first week, Period 2 the second week, Period 3 the third week, etc.). Each meeting will last one class period. Meetings will consist of lessons about ways of thinking and behaving that are related to feelings of happiness and satisfaction with life,

## Appendix B: Parent Consent Form (continued)

activities to demonstrate the content taught in the lessons, and instructions for homework that will reinforce the content taught in the meetings. At the conclusion of the 10-meeting program, students will receive once-monthly follow-up meetings to review topics and activities learned earlier. Parents will be asked to attend one mandatory parent information meeting, where we will describe the activities in the wellness-program program, and answer any questions. The time, date, and location at Coleman for the meeting will be emailed to you (in the coming weeks for Group A; later for group B). During the meeting, we will provide refreshments and child care will be available. To allow us to assess changes in children's well-being, all students in Groups A and B will be asked to complete several paper-and-pencil surveys on 5 occasions this school year. These surveys will ask about your child's thoughts, behaviors, and attitudes towards life, as well as current wellness and symptoms of emotional distress. Completion of surveys is expected to take about 30 minutes on each occasion. We will administer the surveys at Coleman, during regular school hours, to large groups of students. Another part of participation involves a review of your child's school records. Under the supervision of school administrators, we will retrieve this information: grades earned in classes, FCAT scores, attendance, and number of discipline referrals incurred. In total, participation will take about 15 hours of time for students in Groups A and B.

- ✓ **Please Note:** Your decision to allow your child to participate in this research study must be completely voluntary. You or your child's decision to participate, not to participate, or to withdraw participation at any point during the study will no way affect your child's student status, his or her grades, or your relationship with Coleman, USF, or any other party.
- ✓ **Confidentiality of Your Child's Responses:** There is minimal risk to your child for participating in this research. Your child's privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Department of Health and Human Services, the USF Institutional Review Board and its staff, and other individuals acting on behalf of USF may inspect the records from this research project, but your child's individual responses will not be shared with school system personnel or anyone other than us and our research assistants. Please note that we cannot guarantee that what your child says during the group meetings will not be repeated by other students who participate in the same group, but we will encourage privacy. Your child's completed questionnaires will be assigned a code number to protect the confidentiality of his or her responses. Only we will have access to the locked file cabinet stored at USF that will contain: 1) all records linking code numbers to participants' names, and 2) all information gathered from school records. All records from the study (completed surveys, activity sheets completed during the group meetings, information from school records) will be destroyed five years after the study is completed. Please note that although your child's specific responses and comments will not be shared with school staff, if your child indicates that he or she intends to harm him or herself or someone else, or if your child's responses on specific surveys indicate extreme emotional distress, we will contact district mental health counselors to ensure your child's safety as well as the safety of others.
- ✓ **What We'll Do With Your Child's Responses:** We plan to use the information from this study to inform educators and psychologists about activities that foster feelings of happiness in youth, and educate others about the link between happiness and school success. The results of this study may be published. However, the data obtained from your child will be combined with data from other people in the publication. The published results will not include your child's name or any other information that would in any way personally identify your child.
- ✓ **Questions?** If you have any questions about this research study, please contact Dr. Suldo at (813) 974-2223. If you have questions about your child's rights as a person who is taking part in a research

**Appendix B: Parent Consent Form (continued)**

study, you may contact a member of the Division of Research Integrity and Compliance at the University of South Florida at (813) 974-5638, and refer to eIRB # 00015094.

- ✓ Want Your Child to Participate? To permit your child to participate in the study, please complete the attached consent form and have your child turn it in to his or her designated teacher. The second copy of this letter is yours to keep.

Sincerely,

Rachel Roth, M.A.  
Doctoral Candidate  
School Psychology Program  
Foundations

Shannon Suldo, Ph.D.  
Associate Professor of School Psychology  
Department of Psychological and Social

**Consent for Child to Take Part in this Research Study**

I freely give my permission to let my child take part in this study. I understand that this is research. I have received a copy of this letter and consent form for my records.

\_\_\_\_\_  
Printed name of child

\_\_\_\_\_  
Grade level

\_\_\_\_\_  
Parent email address

\_\_\_\_\_  
Preferred method of communication (if other than email, such as phone number/text)

\_\_\_\_\_  
Signature of parent of child taking part in the study

\_\_\_\_\_  
Printed name of parent

\_\_\_\_\_  
Date

**Statement of Person Obtaining Informed Consent**

I certify that participants have been provided with an informed consent form that has been approved by the University of South Florida’s Institutional Review Board and that explains the nature, demands, risks, and benefits involved in participating in this study. I further certify that a phone number has been provided in the event of additional questions.

\_\_\_\_\_  
Signature of person obtaining consent

\_\_\_\_\_  
Printed name of person obtaining consent

\_\_\_\_\_  
Date

## Appendix C: Student Assent Form

Dear Student,

You are being asked to take part in a research study to determine the effect of a wellness-promotion program of students' well-being and academic achievement. The title of the study is "Improving Middle School Students' Happiness." The goal of the study is to learn more about activities that increase students' happiness. This is important because students who are happy and have little emotional distress earn better grades, have better social relationships, and have the best attitudes toward school. You are being asked to take part in this study because your answers on a recent survey indicated that you have some room for growth in your satisfaction with life; for instance, you could move from feeling "pleased" to feeling "delighted" with your life. Your parent/guardian has already said it is okay for you to take part in this study.

To take part in this study, you will be asked to fill-out brief surveys now and a few more times throughout the school year. These surveys will ask you questions about your thoughts, behaviors, and attitudes toward life. Your answers will stay private unless you are in danger, then we will have to get help to make sure you stay safe. To take part in this study, you will also participate in a 10-week wellness-promotion program. We will meet with small groups of students once a week, and teach you ways to think and act that are related to feeling happy. Some of you will start the program now, and some of you will start it several months from now. If you decide to take part in the study you still have the right to change your mind later. No one will think badly of you if you decide to stop.

---

### Assent to Take Part in this Research Study

I understand what the person running this study is asking me to do. I have thought about this and agree to take part in this study.

---

Name of person agreeing to take part in the study

---

Date

---

Signature of person agreeing to take part in the study

---

Name of person providing information to child

---

Date

---

Signature of person providing information to child

## Appendix D: Treatment Integrity Forms

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

Treatment Integrity Check

#### Session # 1

	Session Activity	Completed?	
		Yes	No
1.	You at Your Best activity: students write their personal stories	Yes	No
2.	Students share their You at Your Best stories	Yes	No
3.	Discuss strengths students' displayed in their stories	Yes	No
4.	Discuss purpose of group (to increase students' happiness)	Yes	No
5.	Discuss what determines happiness	Yes	No
6.	Comprehension Check: What Determines Happiness worksheet	Yes	No
7.	Discuss confidentiality	Yes	No
8.	Comprehension Check: Definition of confidentiality	Yes	No
9.	Discuss incentives available for completing group homework	Yes	No
10.	Assign homework (read and reflect on You at Your Best Stories)	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

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

Leader: \_\_\_\_\_

Co-Leader: \_\_\_\_\_

Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 2

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: You at Your Best	Yes	No
2.	Provide incentives for students who completed homework	Yes	No
3.	Discuss definition of gratitude	Yes	No
4.	Students rate own level of gratitude and share with group	Yes	No
5.	Discuss benefits of gratitude	Yes	No
6.	Decorate gratitude journals	Yes	No
7.	Complete initial entry in gratitude journal	Yes	No
8.	Share notebook entries	Yes	No
9.	Assign homework (gratitude journaling)	Yes	No



## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 3

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: gratitude journals	Yes	No
2.	Provide incentives for students who completed homework	Yes	No
3.	Students create a list of people who have been kind/helpful to them	Yes	No
4.	Students share story about how someone has helped them	Yes	No
5.	Students write a letter to a person to whom they are grateful	Yes	No
6.	Complete gratitude visit planning form	Yes	No
7.	Discuss how grateful thinking is a purposeful activity	Yes	No
8.	Discuss link between grateful thinking and current feelings of happiness	Yes	No
9.	Assign homework (gratitude visit)	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 4

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: gratitude visits	Yes	No
2.	Provide incentives for students who completed homework	Yes	No
3.	Students create a list of kind behaviors	Yes	No
4.	Discuss link between kindness and current feelings of happiness	Yes	No
5.	Group leader discusses and estimates the frequency of her acts of kindness	Yes	No
6.	Students discuss and estimate the frequency of their friends' and/or family members' acts of kindness	Yes	No
7.	Students discuss recent acts of kindness they have performed	Yes	No
8.	Students estimate the frequency of their acts kindness	Yes	No
9.	Students complete the Acts of Kindness record form	Yes	No
10.	Assign homework (acts of kindness)	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 5

	Session Activity	Completed?	
1.	Homework Review: acts of kindness	Yes	No
2.	Provide incentives for students who completed homework	Yes	No
3.	Discuss definition of character strengths	Yes	No
4.	Distribute and discuss "Classification of 24 Character Strengths"	Yes	No
5.	Group leader discusses own strengths exemplified in You at Your Best story	Yes	No
6.	Students write list of their self-identified strengths on a piece of lined paper	Yes	No
7.	Discuss link between using character strengths and current feelings of happiness	Yes	No
8.	Discuss positive feelings related to choice and effort involved in use of character strengths	Yes	No
9.	Inform group of use of online survey to determine character strengths in the next session	Yes	No
10.	Assign homework (acts of kindness)	Yes	No

**Appendix D: Treatment Integrity Forms (continued)**

Date: \_\_\_\_\_  
 Leader: \_\_\_\_\_  
 Co-Leader: \_\_\_\_\_  
 Group #: \_\_\_\_\_

**Subjective Well-Being Intervention Program**

Treatment Integrity Check

**Session # 6**

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: acts of kindness	Yes	No
2.	Provide incentives for students who completed homework	Yes	No
3.	Administer Values in Action Inventory of Strengths for Youth via Authentic Happiness website	Yes	No
4.	Discuss expected vs. objectively assessed signature strengths on an individual and/or small group basis	Yes	No
5.	Discuss fit of signature strengths	Yes	No
6.	Students identify one signature strength to work on this week and talk about a way they have used it previously	Yes	No
7.	Students brainstorm (list) new ways to use chosen character strength during the week and write methods on “New Uses of My First Signature Strength” record form	Yes	No
8.	Assign homework (use of one character strength in a new way)	Yes	No
9.	Assign homework (choose acts of kindness or gratitude journal)	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
 Leader: \_\_\_\_\_  
 Co-Leader: \_\_\_\_\_  
 Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 7

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: acts of kindness or gratitude journal	Yes	No
2.	Homework Review: using signature strength in new ways	Yes	No
3.	Provide incentives for students who completed homework	Yes	No
4.	Discuss the three domains of life for students in middle school	Yes	No
5.	Plan which strength they will use in new ways this week	Yes	No
6.	Students independently make lists of new ways to use strength	Yes	No
7.	Categorize volunteers' ways to use their signature strength into life domains on the whiteboard	Yes	No
8.	Problem-solve potential obstacles for student volunteers	Yes	No
9.	Divide into small groups and prepare "New Uses of My Second Signature Strength" forms for each student	Yes	No
10.	Define savoring related to happiness and explain ways to savor	Yes	No
11.	Assign homework (use signature strength in new ways and savor)	Yes	No
12.	Assign homework (gratitude journals or acts of kindness)	Yes	No
13.	Administer the TASC-C to students and leaders complete TASC-T	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 8

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: using signature strengths in new ways and students choose new strength to work on this week	Yes	No
2.	Homework Review: gratitude journals/acts of kindness	Yes	No
3.	Provide incentives for students who completed homework	Yes	No
4.	Discuss students' definition of optimism	Yes	No
5.	Students rate own level of optimism and share with group	Yes	No
6.	Discuss actual/scientific definition of optimism	Yes	No
7.	Complete practice section of "Examples of Optimistic Thinking" reference sheet	Yes	No
8.	Discuss the value of optimism	Yes	No
9.	Practice homework by completing an entry on the "My Optimistic Thoughts" form	Yes	No
10.	Assign homework (use optimistic thinking at least 1x per day)	Yes	No
11.	Assign homework (use of signature strength and savoring)	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
 Leader: \_\_\_\_\_  
 Co-Leader: \_\_\_\_\_  
 Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 9

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: using optimistic thinking	Yes	No
2.	Discuss snowball effect of optimistic thinking	Yes	No
3.	Homework Review: use of signature strength in new ways with savoring	Yes	No
4.	Provide incentives for students who completed homework	Yes	No
5.	Discuss students' definition of hope	Yes	No
5.	Students rate own level of hope and share with group	Yes	No
6.	Discuss actual/scientific definition of hope	Yes	No
7.	Discuss the importance/value of hope	Yes	No
8.	Discuss the link between hope and optimism	Yes	No
9.	Complete writing activity: Best Possible Self in Future	Yes	No
10.	Assign homework (continue to write about BPS in Future)	Yes	No
11.	Assign homework (gratitude journals, acts of kindness, signature strengths, or optimistic thinking)	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Session # 10

	Session Activity	Completed?	
		Yes	No
1.	Homework Review: Best Possible Self in Future writing including group members' reflections	Yes	No
2.	Homework Review: Choice of acts of kindness, gratitude journal, optimistic thinking, or character strength	Yes	No
3.	Provide incentives for students who completed homework	Yes	No
4.	Review "What Determines Happiness"	Yes	No
5.	Review the "Happiness Flow Chart"	Yes	No
6.	Review list of activities that promote positive feelings about past, present, and future	Yes	No
7.	Allow time for personal quiet reflection	Yes	No
8.	Students share personal changes during past 10 weeks	Yes	No
9.	Provide "Certificate of Completion"	Yes	No
10.	Administer treatment acceptability measure and ask students to write down their thoughts about the group	Yes	No



## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
 Leader: \_\_\_\_\_  
 Co-Leader: \_\_\_\_\_  
 Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Booster Session # 1

	Session Activity	Completed?	
		Yes	No
1.	Allow students time to independently journal	Yes	No
2.	Review the “Happiness Flow Chart”	Yes	No
3.	Review “What Determines Happiness”	Yes	No
5.	Allow students to share activities they have continued to engage in since termination	Yes	No
6.	Review list of activities that promote positive feelings about past, present, and future	Yes	No
7.	Students share personal changes in feelings or thoughts during 10 weeks of intervention and/or weeks since termination	Yes	No
9.	Provide overview of focus of last booster session	Yes	No
10.	Complete entry in gratitude journal	Yes	No
11.	Plan for generalization	Yes	No
12.	Provide incentives for students who participate in group activities and discussions	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Booster Session # 2

	Session Activity	Completed?	
		Yes	No
1.	Review progress with gratitude journals	Yes	No
2.	Review the “Happiness Flow Chart”	Yes	No
3.	Review “What Determines Happiness”	Yes	No
4.	Review list of activities that promote positive feelings	Yes	No
5.	Divide into small groups and allow students make lists of new ways to use fifth signature strength across life domains	Yes	No
6.	Plan for implementation of using signature strengths	Yes	No
7.	Discuss actual/scientific definition of optimism and how it relates to happiness	Yes	No
8.	Rehearse optimistic thinking by having each student volunteer at least one situation and completing the “My Optimistic Thoughts” form	Yes	No
9.	Plan for generalization of optimistic thinking	Yes	No
10.	Provide incentives for students who participate in group activities and discussions	Yes	No
11.	Communicate gratitude for students’ participation in Wellness-Promotion Program	Yes	No

## Appendix D: Treatment Integrity Forms (continued)

Date: \_\_\_\_\_  
Leader: \_\_\_\_\_  
Co-Leader: \_\_\_\_\_  
Group #: \_\_\_\_\_

### Subjective Well-Being Intervention Program

#### Treatment Integrity Check

#### Parent Psychoeducation Session

	Session Activity	Completed?	
		Yes	No
1.	Ask parents to sign in as they arrive	Yes	No
2.	Distribute Parent Handouts as they arrive	Yes	No
3.	Introduce self and other co-facilitators present	Yes	No
4.	Deliver prepared presentation to parents	Yes	No
5.	Provide parents opportunity to pose questions following presentation	Yes	No
6.	Clarify purpose of the group is to maximize overall well-being	Yes	No
7.	Discuss main components of wellness-promotion program	Yes	No

## Appendix E: Student Attendance Record

### Attendance Record

Group #: \_\_\_\_\_

Leaders: \_\_\_\_\_

Student	Week									
	1	2	3	4	5	6	7	8	9	10
	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____
	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____
	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____
	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____
	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____	Present Absent MU:_____

**Appendix E: Student Attendance Record (continued)**

	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____
	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____	Present Absent MU: ____

	Booster Session	
Student	1	2
	Present Absent MU: ____	Present Absent MU: ____
	Present Absent MU: ____	Present Absent MU: ____
	Present Absent MU: ____	Present Absent MU: ____
	Present Absent MU: ____	Present Absent MU: ____
	Present Absent MU: ____	Present Absent MU: ____
	Present Absent MU: ____	Present Absent MU: ____
	Present Absent MU: ____	Present Absent MU: ____

## Appendix F: Homework Record

### Student Homework Completion Record

Group #: \_\_\_\_\_

Leaders: \_\_\_\_\_

1 = Student did not complete homework

2 = Student either partially completed homework *or* completed it at the beginning of the session

3 = Student brought homework to session completed

	Week								
Student	2	3	4	5	6	7	8	9	10
	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3

## Appendix F: Homework Record (continued)

### Extent of Parental Discussion of Program-Related Activities Record Form

1 = Student indicates that parent(s) did not discuss program-related activities at all with student

2 = Student provides vague description of discussion with parent(s) (e.g., says “kind of,” or “maybe”)

3 = Student indicates that parent(s) discussed program-related activities in depth or to a large extent with student

Student	Week										
	2	3	4	5	6	7	8	9	10	Booster 2	
	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3

**Appendix G: Intervention Manual**  
(Modified to fit in current document)

**Subjective Well-Being Intervention Program, 2<sup>nd</sup> Edition**

**Procedures Manual**

Wellness-Promotion Groups with 7<sup>th</sup> Grade Children

Shannon M. Suldo, Ph.D.

Associate Professor of School Psychology

Jessica A. (Michalowski) Savage, Ph.D.

Rachel A. Roth, M.A.

Doctoral Student in School Psychology

University of South Florida

Spring 2014



## Appendix G: Intervention Manual (continued)

### Table of Contents

Introduction

Therapist's Guide to Use of Manual

Parent Psychoeducation Session

Session 1: Introduction to Intervention

Overview of Sessions 2-3: Positive emotions about the Past

    Session 2: Introduction to Gratitude

    Session 3: Gratitude Visits

Overview of Sessions 4-7: Positive emotions within the Present

    Session 4: Acts of Kindness

    Session 5: Introduction to Character Strengths

    Session 6: Assessment of Signature Character Strengths

    Session 7: Use of Signature Strengths in New Ways

Overview of Sessions 8-9: Positive emotions about the Future

    Session 8: Optimistic Thinking

    Session 9: Hope

Session 10: Termination

Booster Session 1: Review Gratitude Journals

Booster Session 2: Review Use of Signature Strengths in New Ways and Optimistic Thinking

References

Appendix

    Materials for Use within Sessions

## Appendix G: Intervention Manual (continued)

### Introduction

The traditional focus of psychological interventions has been on the amelioration of disorders. However, there has been a movement in the psychological field, known as positive psychology, which has shifted from the traditional disease model to strengths and wellness promotion. In the spring of 2006, Suldo and colleagues completed an empirical study in which approximately 400 middle school students completed surveys about their mental health status (both mental illness *and* subjective well-being (SWB) - that is, happiness) and functioning in several important domains of life, including academic achievement (perceived competence in learning; GPA and FCAT scores were also yielded from school records). A central purpose of the study was to understand the extent to which students' levels of mental illness (in line with the traditional disease-oriented focus of psychology) and subjective well-being (in line with the focus of positive psychology) related to their academic functioning.

Results included the following findings: (1) approximately 13% of the students did not display symptoms of mental illness but yet still reported low SWB (a group we called "vulnerable youth"), and (2) between-group differences emerged on many indicators of educational functioning (e.g., scores on statewide standardized achievement test, attitudes towards schooling); specifically, the "complete mental health youth" (no symptoms of mental illness *and* average to high SWB) scored significantly better than the vulnerable youth, suggesting that it's not sufficient to be free of mental illness (Suldo & Shaffer, 2008). Instead, being satisfied with one's life and experiencing a preponderance of positive emotions (i.e., high SWB) is associated with maximum academic functioning.

Happiness is a blanket term often used in ordinary language when referring to an emotional state. Seligman (2002) operationalized happiness as including positive emotion, engagement with life, and having meaning in life. Researchers have identified factors that determine levels of happiness, including set point, life circumstances, and intentional activity (Lyubomirsky, Sheldon, & Schkade, 2005). Happiness is set within a chronic range that is stable over time and linked to one's genetics. A person's set point is the expected happiness value within their range, reflecting intrapersonal, temperamental, and affective personality traits (Lyubomirsky et al., 2005). Circumstances are incidental but relatively stable facts of an

## Appendix G: Intervention Manual (continued)

individual's life (i.e., region you live in, age, gender, personal history, occupational status). Finally, intentional activity includes varied actions and thoughts in one's daily life, such as amount of exercise, looking at things in a positive light, and setting goals (Lyubomirsky, et al., 2005).

Although positive psychology has a relatively young history, research in happiness has begun to look beyond the topography and demographic correlates to viable methods of intervention. To date, research on happiness interventions has aimed at factors in adulthood. An overview of the research on happiness interventions reveals positive support for several methods, including increasing daily acts of kindness (Lyubomirsky, Tkach, & Sheldon, 2004), goal attainment (Sheldon, Kasser, Smith, & Share, 2002), and practicing grateful thinking (Emmons & McCullough, 2003). However, these interventions are unable to neither provide support for lasting effects on happiness levels in and of themselves nor provide a comprehensive framework. In contrast, research on strengths of character as a viable method for building happiness has provided evidence of lasting effects (Seligman, Steen, Park, & Peterson, 2005).

Seligman (2002) asserted that people are capable of increasing their happiness levels into the upper range of their set points through intentional activities. He proposed a multidimensional view of increasing happiness, including attention to past, present, and future aspects of emotional life. Seligman suggested that feelings of satisfaction with the past can be increased through expressions of gratitude for positive events. Based on the research of Emmons and McCullough (2003), Seligman suggested increasing happiness through expressions of gratitude, such as journaling happenings for which one has been grateful or interpersonal expressions of gratitude. In terms of the present, Seligman discussed happiness levels as dependent on both pleasures (i.e., immediate, fading sensations) and gratifications (i.e., the enactment of personal strengths in meaningful ways). He suggested that people can improve lasting happiness by increasing gratifications through identifying their personal strengths and virtues, termed character strengths, and using them in new ways. Published research by Seligman and colleagues (2005) has supported this claim. In an internet-based study, 577 adults participated in one of five activities designed to increase happiness as well as one placebo control group. Happiness levels were found to significantly increase in both the group that completed gratitude visits (i.e., delivered a

## Appendix G: Intervention Manual (continued)

letter of gratitude to an influential person in their life) and the group that used their character strengths in a new way. Finally, Seligman suggested that happiness levels for the future could be increased through learned optimism, which is a cognitive-behavioral method of changing pessimistic modes of thought through disputations of negative attributions based on evidence in everyday life. Seligman (1990) stated that people develop explanatory styles for interpreting the world by the age of seven. A pessimistic explanatory style includes attributions of negative events as permanent, pervasive across life domains, and caused by personal factors. This type of style increases risk for internalizing disorders, such as depression, decreases success, and decreases physical health. On the other hand, an optimistic explanatory style includes attributions of negative events as temporary, specific to situations, and related to external causes. This style increases ability to cope with trauma as well as generates positive emotions (Seligman, 1990).

Seligman's (2002) framework for increasing happiness has provided a base from which the current intervention was developed. Within his work, important recommendations for improving optimal well-being in childhood and throughout life are provided. The current intervention is a product of the developmentally appropriate modification of both Seligman's recommendations and empirically supported adult focused interventions aimed at increasing well-being and positive outcomes. It is structured in three phases, including past, present, and future aspects of emotional well-being. In addition to Seligman's description of gratitude interventions and character strengths, sections on acts of kindness, savoring, and hope were added into his framework in order to increase the comprehensiveness of the intervention according to the literature. Furthermore, learned optimism is a complex skill that would require more time than could be provided for this intervention. Consequently, a scaled down version of his principals has been included under optimistic thinking. Specific interventions will be included within these phases.

Due to the evidence that an absence of mental illness is not sufficient for optimal mental health functioning, the current intervention was developed to act as both an enhancement and prevention for vulnerable youth. It is designed to increase student happiness, which is related to more desirable academic, social, and physical health outcomes (Suldo & Shaffer, 2008). In

## **Appendix G: Intervention Manual (continued)**

effect, an enhancement of life satisfaction and the factors with which it is correlated may work as protective factors against the occurrence of such negative outcomes as school failure.

### **Therapist's Guide to Use of Manual**

The intent of this manual is to provide guidance to therapists in implementing positive psychology interventions within a comprehensive framework. All activities are clearly defined for the therapist. However, the therapist will need to provide examples from personal experience and make modifications as necessary to accommodate student needs.

Aside from the introduction and termination sessions, each of the sessions are categorized into phases (i.e., happiness in the past, present, and future). Each phase is described prior to presentation of specific session outlines. Please read these descriptions carefully as they orient the therapist to the nature and goals of each phase.

The session outlines within each phase provide an overview of the goals, procedures, and materials needed. Detailed descriptions of intervention activities follow with a rationale for how activities relate to the topic of the session. Directions for therapists to complete activities with students are single spaced in bulleted lists. Sub-bullets indicate examples. It is important for therapists to become familiar with this material before beginning the intervention. Within particular activities, wording of instructions and/or explanations of concepts is important to clarity. When verbatim instructions are required, they are printed in *italics*.

## **Appendix G: Intervention Manual (continued)**

### **Parent Psychoeducation Session**

#### **Overview**

##### **Goals**

Establish rapport with parents.

Introduce parents to the field of positive psychology and key constructs.

Introduce parents to content of student intervention.

Address questions and clarify misconceptions (as needed).

##### **Session Procedures**

A. Brief presentation: Positive psychology and key constructs covered in intervention

B. Clarify Purpose of Group

C. Overview of Student Intervention

##### **Materials Needed**

Computer/Projector and screen to view presentation

Parent handout: What is Positive Psychology? How Does it Relate to my Child? (see Appendix)

Copy of Intervention Manual

## Appendix G: Intervention Manual (continued)

### Parent Psychoeducation Session Procedures Defined

#### A. Brief presentation: Positive psychology and key constructs covered in intervention

Begin by welcoming parents, and record which parents are in attendance. Once parents have arrived, provide them with a copy of the parent handout and thank them for attending the introductory session. Introduce self and other group leaders/co-facilitators to parents before beginning the presentation.

➤ Presentation to Parents

Initiate by saying: *In order to provide you a better understanding of the kinds of concepts and activities that your children will be learning and engaging in throughout participation in the wellness promotion program, we will first share with you information related to the field the program is based upon- positive psychology.*

Deliver prepared presentation to parents.

Once completed, provide parents with the opportunity to pose questions.

#### B. Clarify Purpose of Group

Ensure that parents understand that their child has been asked to participate in the group in order to maximize their happiness and overall well-being. Use the following script to explain this:

*Optimal well-being involves both being happy (satisfied with life) in addition to not having mental health problems. We have asked your child to participate in this group intervention in order to maximize his or her happiness, not because of mental health*

## **Appendix G: Intervention Manual (continued)**

*problems. Research tells us that we all have genetically set ranges of happiness, and the key to increasing happiness within our range is through purposeful activities. The purpose of the intervention group is to increase your children's happiness by talking about key concepts we covered in the presentation and engaging in activities focused on them, such as gratitude, character strengths, optimism, and hope.*

### **C. Overview of Student Intervention**

Describe the main components of the wellness promotion program. Use the following script to explain the intervention to parents:

*The happiness-increasing interventions we will teach your children will be taught in a small group format, with roughly 6-7 students per group, as well as one group leader and co-facilitator. All leaders and co-facilitators are trained in the program and are either doctoral students or professors in the USF School Psychology Program or school employees, such as the school psychologist or school social worker here at the school. Students will meet once weekly during one period of the school day, for ten weeks. Additionally, once the program ends, your children will attend once monthly check-in meetings to review skills learned in the program, which will also occur during one period of the school day, for 3 months. The weekly meetings will include leader-guided group discussions and activities. Students will also be assigned homework at the conclusion of each meeting in order to facilitate further practice with concepts and skills learned. In order to keep you apprised of what your children are learning, at the end of each week you will receive a handout via email or a hard copy that will be sent home with your*



## **Appendix G: Intervention Manual (continued)**

*child, which will provide an overview of the skills learned and types of activities performed that week in the student meetings, as well as the homework tasks assigned. Regarding the focus of the meetings, the first is mainly focused on establishing a positive group environment and introducing the students to the program. The second and third meetings focus on gratitude and include activities such as students writing about things they're grateful for and expressing thanks to people who have been kind to them in the past. The fourth meeting focuses on acts of kindness and includes activities such as increasing the frequency of performing kind acts. The fifth, sixth, and seventh meetings focus mainly on identifying one's character strengths and include activities such as identifying perceived strengths, objectively identifying them through completing a survey, and using strengths in new ways. Additionally, the seventh meeting teaches students how to savor positive experiences. The eighth meeting focuses on optimism and includes an activity that teaches students to think optimistically. The ninth meeting focuses on hope and includes an activity in which they write about their best possible selves in the future, including goals for themselves and paths to attaining these goals. The tenth and final meeting includes a review of the program, including activities and skills learned in the program. The check-in meetings also review the skills and concepts learned in addition to reviewing students' progress and experiences since the conclusion of the program, and rehearsal with specific activities they learned through participating in the program.*

Allow parents to ask questions about the intervention and go more into depth about the intervention components and sessions as necessary to address questions.

## **Appendix G: Intervention Manual (continued)**

### **Session 1: Introduction to Intervention Overview**

#### **Goals**

- Establish a supportive group environment.
- Increase awareness of subjective well-being.

#### **Session Procedures**

- A. Get to Know You exercise: You at Your Best
- B. Group Discussion: What does it mean to be happy? Why is that important?
- C. Clarify Purpose of Group and Confidentiality
- D. Homework: You at Your Best

#### **Materials Needed**

- Binder to hold documents provided and created throughout the program
- Folder in which students can transport group homework assignments
- Whiteboard or easel
- What Determines Happiness? Graph (see Appendix)
- Student worksheet: What Determines Happiness? (see Appendix)
- Student worksheet: Confidentiality (see Appendix)

## Appendix G: Intervention Manual (continued)

### Session 1 Procedures Defined

#### A. Get to Know You exercise: You at Your Best

This exercise has been found by Seligman et al. (2005) to provide an initial boost of happiness and immediate increase to set point levels within a sample of adults. These researchers have indicated that the “You at Your Best” exercise is likely a good introductory exercise for more effective, long-lasting interventions due to its potential to amplify effects.

➤ You at Your Best

- Initiate by saying: *Before we talk about why we’re all here in this group, I’d like to do an activity to help us get to know each other.*
- Provide students with a plain sheet of lined paper
- Ask them to write about a time when they were at their best
  - doing something really well
  - going above and beyond for someone else
  - displaying a talent
  - creating something
- Once completed, ask them to take a few minutes to reflect on the story
  - remember the feelings of that day
  - identify the personal strengths they displayed in the story
  - think about the time, effort, and creativity that comprised such an accomplishment
- Ask students to share their story with the group and one or two reflections
- As the group leader, you should initiate reflections on group members stories with identifications or reaffirmations of strengths within the story
- Encourage group members to reflect on the positives of each other’s stories
  - something they admired or liked in the story
  - a quality they share with the presenter
- Make a photocopy of the stories. File the original You at Your Best paper in the permanent group binder, and place the original in a folder in which the student can keep their group homework assignments.

## Appendix G: Intervention Manual (continued)

### B. Group Discussion: What does it mean to be happy? Why is that important?

Begin by asking students: *What do you think this group is all about?*

- Once answers are received, state that the group is about happiness.

Pose these questions to the group and facilitate a brief discussion:

- *What does happiness mean to you?*
- *Why is happiness important to you?*
- *What do you do to increase your own happiness?*

No specific answers are necessary. Simply facilitate students' thoughts and discussions on these topics. Participate in the discussion as well with examples from your own life in order to develop a relationship with the group.

### C. Clarify Purpose of Group and Confidentiality

Discuss the set point of happiness and how people have the power to change where they spend their time in their emotional range, at the lower versus upper ends.

- Purpose of Group
  - Describe this concept with the aid of the “What Determines Happiness?” graph in the appendix (developed from the research of Lyubomirsky et al., 2005).
  - Use the following script verbatim to explain this concept:

*Look at the graph “What Determines Happiness?” Happiness is made up of three things: a genetic or biological set point, purposeful activity, and life circumstances. Set point is the biggest cause of happiness and it is controlled by our genetics. We all have a range of ability to be happy based on what we're born with. Let's use the ruler and pretend that people can be happy on a scale of 1-6. Some people's ranges are naturally high, so even when they are at their lowest happy level, they may seem a lot happier than other people. In that case, their range could be 4-6. However, some people's ranges are lower, so they don't seem happy that often. They may have a range of 0-2. A person's set point is the level of happiness they usually have within their range. For example, a person could have a range of 3-5 but are usually at a 4*

## Appendix G: Intervention Manual (continued)

*level of happiness. It is a good thing that genetics isn't the only thing that makes up happiness, or else we wouldn't be able to get any happier. Changes in life circumstances and purposeful ways of thinking and acting help us to move our level of happiness within our ranges. Circumstances are facts of life, such as the state you live in, your age, how much money you have, and the school you go to. These are things that we usually can't change or can't do so very easily. The key to increasing happiness within our ranges is purposeful activity; in other words, what you choose to do or think. Purposeful activity includes the things you do, the way you think, your attitudes, and your goals. Everyone has the opportunity to increase their level of happiness through purposeful activities and that's what we'll be talking about in group. The purpose of this group is to increase your happiness by talking about good attitudes, feelings, thoughts, and activities from your past, present, and future. We'll meet one time each week, for ten weeks, in this room, at this time. During our meetings, we'll learn how to make our purposeful activities (those things we choose to do and think about) more in line with activities that people feel happier with their lives. Do you have any questions?*

- Comprehension Check: Ask the students to fill in the blanks that correspond to the 3 determinants of happiness. File the worksheet in the students' binders.

### ➤ Confidentiality

- Discuss with students their ideas of what confidentiality means
- Ask them if they have heard the word before and how they would define it for this group (e.g., confidential = private or secret)
- Compile their ideas into a confidentiality definition on a whiteboard. Make sure that it includes the following components:
  - Respect for others' privacy outside of group
  - Times when the group leader will have to break confidentiality (e.g., danger to self, danger to others, student is in danger)
  - Any other concerns students express
- Comprehension Check: Ask all students to write the definition on the worksheet (see Appendix); file in binder

### ➤ Disclaimer about parental involvement

- Discuss with students that we will be meeting with their parents in order to share with them the purpose of the group and overview topics taught
- Inform students that each week their parents will receive a generic update informing them about the activities done in each meeting so they can further discuss these at home with them
- Emphasize that individual information about a specific child will not be shared

## **Appendix G: Intervention Manual (continued)**

### **D. Homework: You at Your Best**

Discuss with the group specific incentives that will be provided weekly for completion of group homework (for instance, school supplies, stickers, etc.).

For each night this week, ask the students to read their story and reflect on identified strengths. They can add more details and length to the story if they would like. A brief discussion in the next session will touch on student follow through with homework and resulting feelings of happiness.

### **E. Administer the CES**

#### **Overview of Sessions 2-3: Positive Emotions about the Past**

According to Seligman (2002), positive emotions about the past include serenity, pride, fulfillment, contentment, and satisfaction. Positive and negative emotions related to the past are driven by thoughts and interpretations of past events, actions, and relationships. When one dwells on past events that (s)he has interpreted negatively, negative emotion is perseverated. Mood returns within its set range when it is not the focus of thoughts. Therefore, focusing thoughts on positive interpretations of past events can hold emotion in the upper range of its set point. Gratitude works to increase life satisfaction because it amplifies the intensity and frequency of positive memories. Within sessions 2 and 3, increasing gratitude is used as a method for bringing positive emotion about the past into focus. Session 2 introduces gratitude and gratitude journaling. Session 3 opens discussion of those journals, introduces enactment of gratitude through visits, and makes the connection between thoughts, feelings, and actions.

## **Appendix G: Intervention Manual (continued)**

### **Session 2: Introduction to Gratitude Overview**

#### **Goals**

- Explore students' current levels of gratitude.
- Define gratitude and how it can impact happiness.
- Learn a method of using gratitude to create a focus on positive interpretations of past events.

#### **Session Procedures**

- A. Review Homework: You at Your Best
- B. Rate Your Own Gratitude
- C. Why may Gratitude be Important?
- D. Gratitude Journals
- E. Homework: Gratitude Journals

#### **Materials Needed**

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Whiteboard or easel
- Small squares of paper for students to note self-identified ratings
- Notebooks/journals with blank cover to be inserted in individuals' binders for group
- Pens, pencils, markers, etc. (or other colorful supplies to decorate journals)

## Appendix G: Intervention Manual (continued)

### Session 2 Procedures Defined

#### A. Review Homework: You at Your Best

Ask students how often they read their “You at Your Best” stories. If students did not comply with the daily requirement, stress the importance of daily effort for changes in happiness to occur. Provide a small tangible reward (e.g., pencil, sticker) for homework completion

- Ask students to share any new reflections that they had over the week
- Ask students to share if they felt any difference in happiness since the prior session

Ask students if their parent(s) discussed program content with them, particularly their “You at Your Best” stories.

- Ask students if they shared or read their “You at Your Best” stories with parents or family members
- Ask students if their parents shared with them a time when they were at their best

#### B. Rate Your Own Gratitude

Pose this question to the group:

- *What is gratitude?*
  - Facilitate a brief discussion on what students think constitutes gratitude
- Rate Your Own Gratitude
  - Tell the students: *We are going to rate our own level of gratitude.*
  - Draw a number line from 0-10 on a whiteboard and state the following: *Think about how often you have felt grateful in the past few months. On a scale from 0 to 10 with 0 being never grateful, 5 being sometimes grateful, and 10 being always grateful, rate your gratitude.*
  - Have students write their ratings on a piece of paper and fold it over
  - Circle the room and have each student share their number and the reason they have chosen it



## Appendix G: Intervention Manual (continued)

### C. Why may Gratitude be Important?

Pose these questions to the group:

- *Why is it important or not important to have gratitude in your life?*
- *Do you think being grateful can increase happiness? Why or why not?*
  - Discuss how gratitude helps us focus our emotions on the positive parts of our pasts as related to school, friendships, and in family life
  - Group leader provide a personal example of a time in which you've felt grateful and how that refocused your attention on a positive experience

### D. Gratitude Journals

Emmons and McCullough (2003) found that daily attention to grateful thoughts significantly and noticeably increased positive affect and life satisfaction. In that vein, gratitude journals are a method of focusing student thoughts on things, people, and events for which they are grateful. The intensity is high for the first week, in that students are asked to journal daily. This is due to Emmons and McCullough's finding that higher intensity lead to greater increases in happiness. Subsequent journaling will be recommended on a once per week basis.

- Create Gratitude Journal
  - Provide each student with a plain cover journal or notebook
  - Ask them to use the writing/art materials to design a cover that shows something positive about their history
    - Something they have done, was given to them, part of a family event, or any other kind of experience valued as positive
    - It could be done entirely as a picture or can incorporate writing and drawing/symbols
- Gratitude Journaling
  - Once the journal have be completed, give the following instructions verbatim:

## Appendix G: Intervention Manual (continued)

*I want you to take five minutes, think about your day, and write down five things in your life that you are grateful for, including both small and large things, events, people, talents, or anything else you think of. Some examples may include: generosity of my friends, my teacher giving me extra help, family dinner, your favorite band/singer, etc. [You may provide examples relevant to your students that you are aware of].*

- Help students complete an initial entry during group
  - Allow students 5 minutes to list 5 things for which they are currently grateful
  - Explain that a variety of responses is acceptable and expected
  - Prompt each student to share 1 – 2 of their responses with the group after the independent writing time is over

### E. Homework: Gratitude Journals

For each night this week, ask the students to complete gratitude journals:

*For each night this week, I want you to set aside five minutes before you go to sleep. At that time, think about your day and write down five things in your life that you are grateful for, just like we did here today in your journals. Remember that you can include events, people, talents, or anything else you think of, whether it is large or small. Also, you can repeat some things if they are really important to you. But also try to think of different ones as well.*

Remind students that they will never be asked to share all of their responses, but to be sure that they are comfortable with sharing 2-3 of the responses they record during the week in group next week. Send them home with the decorated notebooks contained in their homework folders, but not the permanent binders to be held by the group leaders. Remind them of the incentives they can receive the following group contingent on homework completion and return of the gratitude journal.

## Appendix G: Intervention Manual (continued)

### Session 3: Gratitude Visits Overview

#### Goals

- Explore students' experiences with gratitude journals.
- Make the connection between thoughts and feelings.
- Learn to incorporate actions of gratitude.

#### Session Procedures

- A. Review Homework: Gratitude Journals
- B. Gratitude Visit
- C. Thoughts about the Past
- D. Homework: Gratitude Visits and/or Journals

#### Materials Needed

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Gratitude Visit Planning Form (see Appendix)
- Access to computer lab or letter stationary
- Letter size envelopes
- What Determines Happiness? Graph (see Appendix)

## Appendix G: Intervention Manual (continued)

### Session 3 Procedures Defined

#### A. Review Homework: Gratitude Journals

Discuss with the students when and how they completed the journals; stress the importance of journaling if necessary. Provide tangible reward for completion.

- Have the students pick 2-3 things for which they recorded being grateful to share with the group
- Discuss the significance of gratitude for these things in terms of positive feelings about the past
- Ask students to express any changes in feelings of gratitude or happiness

Ask students if their parent(s) discussed program content with them, particularly gratitude and gratitude journaling.

- Ask students if their parent(s) incorporated gratitude journaling into their weekly routine (e.g., they sat down before bedtime and journaled together)
- Ask students if their families shared what they are grateful for at some point in the day (e.g., during meal time, while driving in the car)

#### B. Gratitude Visit

Seligman and colleagues (2005) described a study in which several interventions based on positive psychology theories were implemented via online registration.

Completion of a gratitude visit was one of the three intervention exercises that resulted in positive changes in happiness through a one month follow-up. The current exercise is based on their study and intended to increase the experience of gratitude by intensifying the connection between thoughts, feelings, and actions.

- Gratitude Visit
  - Introduce the gratitude visit by using the following verbatim script:

*We all have people in our lives who have helped us in some way. This helping can be part of someone's job, like a teacher or parent, or help that*

## Appendix G: Intervention Manual (continued)

*someone gives without being required to. Even when people's kindness or help is provided as part of their job, the help can be important because of the way they did it or how it benefited us so much. Sometimes other people's kindness towards us goes unnoticed or unrecognized.*

- As the group leader, begin by providing some examples of people who were particularly kind or helpful to you during childhood that were never properly thanked
- Instruct students to write a list of people who had been especially kind to them but may not have been properly thanked (use Gratitude Visit Planning Form)
- Ask students to share at least one story about how one person has helped them
- Explain: “*gratitude visits*” are when you express this gratitude in a one-page letter and deliver the letter to the person who has been especially kind to you
- Help students identify someone from their list of people to whom they are grateful that they could meet in person to deliver such a letter
- Assist students in composing a one-page letter that described the reason(s) why they are grateful to this person (access to computers may be secured in advance of the session if the group prefers to type)
- Assist students in planning a day and time during which they will read the letter aloud to the person (use Gratitude Visit Planning Form). Emphasize to students that they must read slowly with expression and eye contact during a face-to-face visit. Warn students that they should not reveal the reason why they want to meet with the person; instead, simply make plans to spend time with the person

### C. Thoughts about the Past

Discuss the connection between their thoughts of the past and current affect.

- How has gratitude refocused thoughts and changed feelings?
  - Review the “What Determines Happiness?” graph and discuss how grateful thinking is a purposeful activity
    - Doing things like gratitude journaling and visits refocuses thoughts on the positive parts of your past, which increases positive attitudes about your history and your life (brings you into the upper range of your set point-use ruler)
    - It can even help you feel more confident in your goals because you recognized people in your life who are there to help you

## **Appendix G: Intervention Manual (continued)**

### **D. Homework: Gratitude Visits and/or Journals**

Instruct students to enact their gratitude visit. Note: in situations in which this is impossible (student does not have means to meet with someone to whom they're grateful, or cannot identify a person), instruct students to continue working on your gratitude journals as done the previous week. Ask all students to complete at least one gratitude journal entry at some point during the week before the next session.

**E. Administer the TASC-C. Group leader complete TASC-T for each student.**

## **Appendix G: Intervention Manual (continued)**

### **Overview of Sessions 4-7: Positive emotions within the Present**

According to Seligman (2002), positive emotions within the present include joy, zest, ecstasy, calm, pleasure, ebullience, and flow. Typically, these are the emotions that people refer to when they discuss happiness. There are two distinct types of present positive emotions, including pleasures (i.e., raw sensory feelings) and gratifications (i.e., full engagement or absorption in activities that are enjoyed through thinking, interpreting, and tapping into strengths and virtues). Since pleasures are fleeting, momentary, and of short duration, the focus in this intervention is on increasing gratifications, which are more highly related to long-term happiness outcomes. Gratifications are not easy to come by as are pleasures. They require identification and development of character strengths, challenging those strengths, and absorbing oneself into strength-related activities. In session 4, we begin by focusing on the character strength of kindness due to its strong relationship with increases in subjective well-being as found in the literature (Lyubomirsky et al., 2004; Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006). Within sessions 5-7, students are taught about their signature character strengths and how they can be utilized to achieve increased gratifications. Sessions 5 and 6 are focused on the identification of signature character strengths and how they may be used in new and unique ways. Session 7 provides an opportunity for students to discuss their experiences with using their signature strengths in a new way, and teaches them how to savor positive emotions, such as those that may result from using one's signature strengths (Bryant & Veroff, 2007).

## **Appendix G: Intervention Manual (continued)**

### **Session 4: Acts of Kindness Overview**

#### **Goals**

- Discuss how kindness is considered a moral virtue, or strength of character, in general terms and how it may relate to happiness.
- Explore students' estimations of how often they spontaneously perform acts of kindness.
- Learn a method using kindness as a focus on positive interpretations of present events.

#### **Session Procedures**

- A. Review Homework: Gratitude Visits and/or Journals
- B. Discuss Kindness as a Virtue Related to Happiness
- C. Student Estimations of Acts of Kindness
- D. Homework: Performing Acts of Kindness

#### **Materials Needed**

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Whiteboard or easel
- Performing Acts of Kindness Record Form (see Appendix)



## Appendix G: Intervention Manual (continued)

### Session 4 Procedures Defined

#### A. Review Homework: Gratitude Visits and/or Journals

Discuss with the students their experiences during the gratitude visits. Provide tangible rewards for completion.

- Ask the students: *How did the recipients of the visit respond? How did they feel following the visit?*
- Ask students if their parent(s) discussed program content with them, particularly gratitude and gratitude journaling.
  - Ask students if their parent(s) incorporated gratitude journaling into their weekly routine (e.g., they sat down before bedtime and journaled together)
  - Ask students if their families shared what they are grateful for at some point in the day (e.g., during meal time, while driving in the car)
  - Ask students if their parent(s) enacted a gratitude visit, or plan on it in the coming days

For students who continued to complete gratitude journals:

- Have the students pick 1 entry to share with the group  
Brief reflections on happiness feelings may be discussed

#### B. Discuss Kindness as a Virtue Related to Happiness

Lyubomirsky and colleagues (2005) discussed acts of kindness as a method for temporarily boosting moods and leading to long-lasting well-being through satisfying basic human needs of relatedness. Park, Peterson, and Seligman (2004) defined kindness as a virtue, or character strength, which can be utilized in impacting level of happiness. Otake and colleagues (2006) found a positive relationship between happiness and motivation to perform, enactment of, and recognition of kind behaviors. The following discussion is based on the work of these researchers.

## Appendix G: Intervention Manual (continued)

- Ask students what they think of when someone is called a kind person? What specifically is that person doing?
  - On a whiteboard, create a list of behaviors as students define them
  - Be sure that the end conclusion of the list is that acts of kindness are behaviors that benefit other people or make others happy, typically at the cost of your time and effort
  - Say to the students: *When a person consistently performs these behaviors, we say they are kind, or they possess the virtue of kindness. A virtue, also called strength of character, is a moral strength that people do by choice. We'll talk more about character strengths next week. For today, how do you think using this particular virtue, that is kindness, can impact someone's happiness?*
  
- Discuss how kindness can help us to focus our emotions on the positive parts of our present lives. Examples:
  - Creating a positive view of others and the community
  - Increased cooperation
  - Awareness of your own good fortune
  - Seeing yourself as helpful
  - Increased confidence and optimism about being able to help others
  - Getting others to know and like us
  - Receipt of appreciation and gratitude
  - Others reciprocating kindness and friendship to you

### C. Student Estimations of Acts of Kindness

In their 2006 study, Otake et al. found that happiness could be increased through a counting of the acts of kindness that a person typically performs over one week's time. For the present purposes, the basis of this study is used in this preparatory exercise for enacting kindness for homework.

- As the group leader, begin by providing some examples of acts of kindness that you have performed recently, focusing mainly on the past week.
  - Make sure that you provide a wide range of acts of kindness that are authentic to you but also relatable to the group
  - Give yourself a loose estimate of the amount of kind acts you perform in a week (e.g., 3-5, 4-6, or 7-10)
- Ask the students to think about the people in their lives such as family, friends, and teachers

## Appendix G: Intervention Manual (continued)

- Have them provide a few examples of kind acts they observed by these significant figures in their lives during the past week
- Have them provide a weekly estimate of these observed kind acts
- Have students provide some examples of acts of kindness that they have performed in the past week. If it is too difficult for students to think of acts of kindness limited to this time frame, have students think back to the past 2 or 3 weeks.
  - Have students give themselves a weekly estimate
  - It is important to create a climate of openness and nonjudgmental attitudes since kindness was described as a moral virtue and it can be interpreted as negative, or even shameful, if a student states low amounts of kind acts
    - Preface the exercise with a statement that all people vary in the amount of kind acts they perform, which is not a reflection on the quality of their moral character. As will be examined in the following session, moral strengths come in many forms. People are stronger in different areas than others.

### D. Homework: Performing Acts of Kindness

Lyubomirsky and colleagues (2004) found that people who performed 5 acts of kindness in one day each week for 6 weeks showed a significant increase in well-being. Utilizing their format, instruct students in performing acts of kindness:

- Acts of Kindness
  - Ask students to perform 5 acts of kindness during one designated day over the next week
  - Remind students that the acts of kindness, as discussed, are behaviors that benefit other people or make others happy, typically at the cost of your time and effort
  - Have the group brainstorm some ideas of the acts of kindness they might like to perform
  - Provide them with the “Acts of Kindness Record Form” to jot down the acts they perform
  - Have students decide on a date to perform the acts before ending session
  - Inform students that they will be asked to share 2-3 acts of kindness performed with the group and related feelings

## **Appendix G: Intervention Manual (continued)**

### **Session 5: Introduction to Character Strengths Overview**

#### **Goals**

- Define character strengths and virtues.
- Discuss character strengths and virtues related to happiness in the present.
- Students identify perceived strengths.
- Reinforce acts of kindness.

#### **Session Procedures**

- A. Review Homework: Performing Acts of Kindness
- B. Discuss Character Strengths and Virtues
- C. Students Identify Perceived Strengths
- D. Relationship of Character Strengths to Happiness in the Present
- E. Homework: Continue Acts of Kindness

#### **Materials Needed**

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Whiteboard or easel
- Lined paper
- Classification of 24 Character Strengths (see Appendix)
- Performing Acts of Kindness Record Form (see Appendix)

## Appendix G: Intervention Manual (continued)

### Session 5 Procedures Defined

#### A. Review Homework: Performing Acts of Kindness

- Discuss with the students how well they were able to complete all five acts of kindness during the week. Provide tangible rewards for completion.
- Ask students if their parent(s) discussed program content with them, particularly the virtue of kindness.
  - Ask students if their parent(s) discussed with them the importance of acting kindly toward others
  - Ask students if their parent(s) planned on engaging in acts of kindness
  - Ask students if their parent(s) discussed incorporating kindness into their daily lives
- Ask students if they have completed any gratitude journal entries since last meeting. Provide tangible rewards for completion.
  - Have the students pick 2-3 acts of kindness to share with the group
  - Discuss the significance of acts of kindness in terms of positive feelings about the present, ensuring that the acts performed benefited someone else at the cost of the student's time and/or effort
  - Inform students that their homework for this week will be to continue doing acts of kindness in the same manner.

#### B. Discuss Character Strengths and Virtues

Park, Peterson, and Seligman (2004) defined character strengths as “traits that reflect thoughts, feelings, and behaviors” (p. 603). These strengths are identifiable but related and used voluntarily in differing degrees by individuals. Strengths are

## Appendix G: Intervention Manual (continued)

dispositions to act that require judgment and enable people to thrive. On this basis, conduct the following discussion.

- Ask students: *How would you define a character strength or virtue of a person?*
  - Encourage an active discussion of the meanings of these words
  - Be sure to discuss that character strengths are moral strengths done by choice, which is different from talents: *Talents are qualities that you are born with but may be improved somewhat by purposeful actions (e.g., perfect pitch in your singing voice, rhythm in dance, running speed). However, character strengths are moral virtues that are built-up and used by choice (integrity, kindness, fairness, originality)*
  - Have leader and co-leader provide examples of their own talents vs. moral strengths.

Share with students the “Classification of 24 Character Strengths” sheet. Interactively discuss the meanings of each of the 24 identified strengths by having each student read one of the character strength definitions and saying what that means to them; ensure that students understand meanings by clarifying definitions as necessary. The leader should describe each category before students read and discuss the strengths that comprise them. This will give the character strengths context and clarify that the categories are more general, not character strengths in themselves. A round robin method should be used to ensure each student has several turns to define and discuss character strengths.

### C. Students Identify Perceived Strengths

- Have students generate ideas as to what they think their top 5 character strengths may include:
  - Ask students to think back to the “You at Your Best” activity they did during the first week of group and have them reread their stories to themselves
  - As the group leader, briefly summarize the You at Your Best story you shared earlier in order to then identify some character strengths and virtues (consistent with the terminology used in the “Classification of 24 Character Strengths”) of your own that you demonstrated in that story
  - Ask students to identify character strengths they believe they have, possibly in the context of the strengths they showed during their You at Your Best stories, by choosing from the “Classification of 24 Character Strengths” sheet.
    - Have each student write down their own identified strengths on a piece of lined paper
    - Ask students to share the strengths they chose for themselves and write them out on the white board
    - Have the group look at strengths shared by different group members

## Appendix G: Intervention Manual (continued)

### D. Relationship of Character Strengths to Happiness in the Present

- Discuss how using character strengths may relate to happiness in the present
  - Have students provide their ideas and list them on the white board. The leader and co-leader should ensure that the following are also discussed:
    - Focus on current efforts
    - Engaging in a challenges that build on abilities and skills
    - Concentration
    - Absorption in a task where time flies by
    - Creating and working on clear goals
    - Immediate feedback from others and yourself
    - Sense of self-control
  - Emphasize that good feelings resulting from use of character strengths are due to the choice and effort in using them
    - Provide this example: *A cashier undercharges you for your order. Although you think that the items are overpriced and you really want to keep the extra money, you tell the cashier that you owe more than he stated. You feel good about yourself afterward because you chose to exercise your character strength of honesty.*
    - Ask students to pick one of the strengths they listed for themselves and explain to the group how it may take effort to use it
  - Be sure to collect each student's list of self-identified strengths as they will be needed for the next session
  - Inform students that the group will use an online survey to identify their character strengths in the next session and will compare the strengths they chose for themselves with the survey results.

### E. Homework: Continue Acts of Kindness

Ask students to continue performing acts of kindness as completed during the previous week. Remind them that changes in happiness occur with repeated used of exercises such as performing acts of kindness. If needed, remind students of the components of this exercise:

- Acts of Kindness
  - Ask students to perform 5 acts of kindness during one designated day over the next week
  - Remind students that the acts of kindness, as discussed, are behaviors that benefit other people or make others happy, typically at the cost of your time and effort

### **Appendix G: Intervention Manual (continued)**

- Provide them with the “Acts of Kindness Record Form” to jot down the acts of kindness they intend to perform
- Have students decide on a date to perform the acts before ending session
- Inform students that they will be asked to share 2-3 acts of kindness performed with the group and related feelings



## **Appendix G: Intervention Manual (continued)**

### **Session 6: Assessment of Signature Character Strengths**

#### **Overview**

##### **Goals**

- Objectively identify students' signature strengths
- Discuss students' individual signature character strengths.
- Explore new ways to use one signature strength
- Develop individual plan for use of one signature strength.

##### **Session Procedures**

- A. Review Homework: Continue Acts of Kindness
- B. Assessment of Signature Strengths
- C. Discuss Expected vs. Objectively Assessed Signature Strengths
- D. Homework: Use Signature Strength in New Ways

##### **Materials Needed**

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Blackboard, whiteboard, or easel and appropriate writing utensil
- Extra copies of the "Classification of 24 Character Strengths" sheet (see Appendix)
- Students' handwritten lists of self-identified strengths created in the previous session
- Lined paper
- Access to computer lab and the internet: [www.authentichappiness.org](http://www.authentichappiness.org)
- New Uses of My First Signature Strength record form (see Appendix)
- Extra copies of Acts of Kindness record form (see Appendix)

## Appendix G: Intervention Manual (continued)

### Session 6 Procedures Defined

#### A. Review Homework: Continuing Acts of Kindness

As in the previous session, discuss with the students how well they were able to complete all five acts of kindness during the week. Provide tangible rewards for completion.

- Ask students if their parent(s) discussed program content with them, particularly the virtue of kindness.
  - Ask students if their parent(s) discussed with them the importance of acting kindly toward others
  - Ask students if their parent(s) planned on engaging in acts of kindness
  - Ask students if their parent(s) discussed incorporating kindness into their daily lives
- Ask students if their parent(s) discussed character strengths with them
  - Ask students if their parent(s) shared their perceived strengths with them and/or compared and contrasted their perceived strengths with students'
- Ask students if they have completed any gratitude journal entries since last meeting.

Provide tangible rewards for completion.

- Have the students pick 1-2 acts of kindness to share with the group
- Discuss the significance of acts of kindness in terms of positive feelings about the present (emphasis if needed on benefit to others at cost of student's time and/or effort)
- Encourage students to continue completing activities that increase their happiness: either acts of kindness (i.e., 5 acts of kindness in one day) or making entries in their gratitude journals (i.e., 5 things they are grateful for in one entry). Inform students that today's homework will include two parts; one

## Appendix G: Intervention Manual (continued)

- Part is for them to choose between continuing acts of kindness or their gratitude journal- remind them either activity is to be completed in a single day.

### B. Assessment of Signature Strengths

The Values in Action Inventory of Strengths for Youth (VIA-Youth) was developed by Park and Peterson in 2006 as an extension of their original adult version. The purpose of this assessment is to identify individual adolescents' personal ranking of the 24 character strengths with particular emphasis on their top 5 strengths, known as signature character strengths. Seligman (2002) discussed how use of one's signature strengths is a viable method of increasing happiness in the present.

- VIA-Youth
  - Before beginning, you will need to register on the website in order to access the survey. It is recommended that you do this prior to the session. During session, the group leader will be able to logon multiple child users on separate computers all under the group leader's account/logon.
  - Begin by explaining to students that researchers have developed a method for people to rank their character strengths through a survey. The top five strengths are called *signature character strengths*
  - Explain to students the use of the internet site designed to help define their signature strengths, specifically [www.authentichappiness.org](http://www.authentichappiness.org)
    - Once on the website, scroll down and click on the link VIA Strength Survey for Children
    - Follow the online instructions for entering the survey
    - Go over the instructions for completing the questions provided online as a group
  - Have each student individually complete the survey

### C. Discuss Expected vs. Objectively Assessed Signature Strengths

As individual students complete the online survey, print out their top 5 signature character strengths. If a printer is not available, have students circle their signature strengths on their "Classification of 24 Character Strengths" sheet and number them from 1-5 as indicated by the website feedback. Provide students with the print-out (or

## Appendix G: Intervention Manual (continued)

individualized “Classification of 24 Character Strengths” sheet) and their hand written lists of self-identified strengths. On an individual and/or small group level (depending on students’ rate of survey completion), discuss the following topics:

- *How are your signature strengths from the online survey the same or different from the strengths you wrote about yourself before we went online?*
- *What were your reactions to your signature strengths?*
  - Explore surprise, expected, happy, disappointed, and curious reactions
- *Sometimes the computer generated strengths don’t feel like they are a good fit. That’s okay; you just don’t concentrate on using them. Instead, think about how you use the strengths that do fit you. The ones that fit may just feel right, may be exciting to use, may help you to do well in new activities, may be something you enjoy doing, may be something that gets you pumped up, or something you want to try using in different ways.*
  - Example of Leadership as a signature strength: You may be the kind of person who thinks that being a leader is something you can do well, you get excited about the chance to lead groups in class work, in sports, or on trips, or you may already be a leader on your football team but you also want to be student government present and lead a food drive at school for Thanksgiving. Being a leader just feels like it is right for you.
  - *Are there any strengths that you feel just don’t fit you? Why?*
    - Examples of ways strengths may not fit:
      - Strength doesn't feel "like me"
      - Not comfortable using the strength
      - Can't think of examples of situations they could use the strength
    - Assist the students cross off from their printout any strengths that don’t seem to fit, as these are not signature strengths
- *Which of your signature strengths do you use often?*
- *Can you think of ways you have used your signature strengths recently?*
  - Have students pick one strength they would like to work on this week and give an example of one way they already use that strength.

## Appendix G: Intervention Manual (continued)

### D. Homework: Use Signature Strength in New Ways

Continue on an individual and/or small group basis with students:

- Part 1: Ask each student to use their chosen signature strength in new ways each day of the upcoming week. Brainstorm ideas of new ways they could use their strength and have the student write down their chosen ways on the “New Uses of My First Signature Strength” record form. Ask them to write down the feelings they had after they used their strength each day. If they think of different ways to use the strength during the week, ask them to note on their form how they used it. Encourage students to try a different way to use the character strength if they encounter obstacles with the plan on their record form. **Make copies of the students VIA-Youth results and handwritten lists of strengths as well as their “New Uses of My First Signature Strength” record form for their permanent folders.**
- Part 2: Ask students to choose whether they will continue doing acts of kindness or completing their gratitude journal. Make a notation of each student’s choice to check in with next session. Provide “Acts of Kindness” record form as needed.

## Appendix G: Intervention Manual (continued)

### Session 7: Use of Signature Strengths in New Ways

#### Overview

#### Goals

- Review students' use of their signature strengths in new ways and discuss related feelings.
- Problem-solve obstacles that limited students use of character strengths in new ways.
- Explore/plan new uses of signature strengths across life domains.
- Present simple methods of savoring to expand positive experiences with use of signature strengths.

#### Session Procedures

- A. Review Homework: Use Signature Strength in New Ways
- B. Explore/Plan uses of Signature Strengths in New Ways across Life Domains
- C. Savor the Experience
- D. Homework: Use Signature Strength in New Ways with Savoring
- E. Administer the TASC-C. Group leaders complete TASC-T for each student.

#### Materials Needed

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Blackboard, whiteboard, or easel and appropriate writing utensil
- Extra copies of Classification of 24 Character Strengths sheet (see Appendix)
- New Uses of My Second Signature Strength record form (see Appendix)
- TASC-C and TASC-T forms for students and leaders (see Appendix)

## Appendix G: Intervention Manual (continued)

### Session 7 Procedures Defined

#### A. Review Homework: Signature Strength in New Ways

Part 1: Ask students how well they were able to complete either acts of kindness (i.e., 5 acts of kindness in 1 day) or their gratitude journal (i.e., 5 things they are grateful for in entry). Group leaders should check homework completion. Have students share either one kind act or grateful item. If students did not comply with the daily requirement, stress the importance of daily effort for changes in happiness to occur. Provide tangible reward for completion.

Part 2: Discuss with students how well they were able to use their signature strength in new ways each day.

- Have students share with the group their signature strengths from the online survey and how well that matched up to the ones they wrote for themselves (students can refer to the copies of their VIA-Youth results and hand written lists of strengths in their permanent folders if needed)
- Ask students to get into pairs and interview their partner about the signature strength they chose to enact for homework. Have each partner talk about two examples of new ways they used their chosen signature strength during last week and reflect on their feelings related to use of strengths. The partners will then report to the group. Facilitate encouragement over use of strengths.
- Ask students if they had any difficulties that made it hard to use their strength; Problem solve with the group in terms of how those obstacles could be addressed or avoided
  
- Ask students if their parent(s) discussed program content with them, particularly character strengths.
  
- Ask students if parent(s) completed the VIA themselves and discussed results with them.

#### B. Explore/Plan uses of Signature Strengths in New Ways across Life Domains

Seligman and colleagues (2005) reported that participants who used their signature

## Appendix G: Intervention Manual (continued)

strengths in new ways showed significant increases in happiness above other positive psychology interventions and with a longer duration, including an intervention in which participants simply identified and used signature strengths in the same ways but with increased frequency. It was hypothesized that the increased effort in creating new ways to utilize signature strengths may be related to the lasting impact on happiness. Considering their findings, pose this question to the group:

- *In which ways do you currently use your signature strengths?*
  - Prompt them pick two strengths (different than the one they worked on for homework) and think of examples in school, friendships, and/or with family
  - Ensure that each student has an opportunity to respond
  - Inform students that researchers have found that use of character strengths in new ways is a good way to increase happiness in the present (emphasis on not just using strengths more but in new and different ways than ever before)

### ➤ Domains of Life

According to Seligman (2002), it is important to lasting happiness that signature strengths be used across life domains. Since his book was designed for adults, those domains included work, love, and raising children. For the current purposes, the life domains of adolescents include school, friendships, and family.

- Explain to students that there are three important areas of life for students their age, including school, friendship, and family. In order to use character strengths in new ways to effectively increase happiness, they must be utilized in each area of life.
  - Provide this example: *A student whose signature strength is creativity can use it in school by joining the art club or organizing the layout of the school newspaper, in friendship by thinking of new activities friends can do together, and in family by coming up with new ways to save family memories, such as in a scrapbook.*
- Ask students to decide on a signature strength that they would like to work on this week (which may not be the same as last week's homework)
- Provide students with lined paper and ask them to work independently in making a list of ways they may use this signature strength that are different from or unique to prior usage. As students work, group leaders should make



## Appendix G: Intervention Manual (continued)

- sure that the activities they are listing are manageable and concrete. For instance, if a student's character strength is "fairness," maybe she can intervene when she sees a younger or smaller sibling getting taken advantage of by an older relative. Such a plan is more feasible than joining the student council between groups.
- As students finish, write the life domain categories on the white board.
- Tell the students that you will need two volunteers to share their lists with the group.
- Individually, have her/him state the signature strength and ways in which (s)he has thought about using it differently.
- As the student states each way to use his strength, the group leader should ask the group what category of life domain the activity would go under and write it under such heading on the whiteboard. Then, ask the group to brainstorm other ideas for use of this strength and write them on the whiteboard under appropriate life domain.
- Have the volunteer student write down ideas that are appealing to him/her on the "New Uses of My Second Signature Strength" record form, making sure to note life domain and use. Tell students they do not have to write in the days just yet.
- Ask the volunteer student if they think there might be any obstacles that would make it hard for him/her to use their strength this week. Problem solve with the group in terms of how those obstacles could be addressed or avoided
- Be sure to clarify any suggestions that may stray from the content of the signature strength and guide students to more targeted suggestions. Copies of the "Classification of 24 Character Strengths" sheet should be made available to help students remember the meanings of the strengths.
- After demonstrating with the second volunteer, put the students into two small groups. One student volunteer who has already prepared his/her record form should be in each group. Each group will help members complete their "New Uses of My Second Signature Strength" record form by going through their prepared lists of uses of strengths and determining domains as well as brainstorming other ideas and problem solving potential obstacles. A group co-leader should facilitate each small group.
- Once each student in the small group has prepared their record form, tell students to write in days this week they think they can do each of the ways to use their strengths. The days do not have to be in order, but each day of the week should be designated for use of strength.
- Make a copy of each students "New Uses of My Second Signature Strength" record form

## Appendix G: Intervention Manual (continued)

### C. Savor the Experience

Bryant and Veroff (2007) defined savoring as attending to, appreciating, and enhancing the positive qualities of one's life. Adolescents' perceived abilities to savor positive events are empirically distinct from their abilities to cope with negative events (Meehen, Durlak, & Bryant, 1993). In middle school students, savoring is linked to higher self-esteem, positive affect, and life satisfaction (Cafasso, 1994; 1998).

#### ➤ Define Savoring and Relate to the Present

- *Savoring is the term for when you pay attention to, appreciate, and boost your positive experiences in the present. When you savor, you pay extra close attention to things that you are enjoying now, such as when you pay attention to the taste of a favorite meal, the notes in a favorite song, or a job well done.*
- Ask: *What are some things that you think would be worth savoring?*
  - Prompt for preferred foods, vacations, activities, events, friendships, TV shows, etc.
- *Savoring makes us happier by stretching out the positive feelings of those activities, foods, events, etc., to last longer in the present. When you savor, you slow down time by purposefully focusing on the good experience before moving onto something else. Instead of going fast into future stuff, you stay and enjoy the present moment.*

#### ➤ Ways to Savor

- *We can make the good feelings we have when using our signature strengths last longer by savoring.*
- Tell students that there are two easy ways to savor that take very little time
  - Share the experience with someone else: You could tell a friend or family member about how you used your strength and how it felt to use it
    - Tell students they already used this way to savor when we went over homework and they interviewed each other; they shared their experiences
    - Ask students if they remembered their good feelings from using their strength when talking to their partner
  - Absorb yourself: Take a minute to close your eyes and think about your experience and the good feelings you had; you could even congratulate yourself on a job well done

## Appendix G: Intervention Manual (continued)

- Tell students: *Let's all practice absorbing ourselves now. Think about one of the ways you used your strength for homework. How did it feel? How did others react? Was it something you could congratulate yourself on?*
- Have everyone close their eyes for a minute to reflect. Then, tell students how good you feel after reflecting on a use of your strengths. Explain the good feelings connected to the actions you did. Have one or two volunteers talk about their reflections.

### D. Homework: Use Signature Strength in New Ways with Savoring

- Part 1: Ask students to use their chosen signature strength in new ways each day of the upcoming week across life domains as was prepared on their “New Uses of My Second Signature Strength” record form. Ask them to write down the feelings they had after they used their strength each day on their form and how they savored the experience (e.g., who talked to or when thought about it). If they think of different ways to use the strength during the week, ask them to note on their form how they used it. Encourage students to enact a different route for using character strengths if they encountered obstacles with the first plan.
- Part 2: Ask students to choose whether they will continue doing acts of kindness or completing their gratitude journal. Make a notation of each student's choice to check in with next session. Provide “Acts of Kindness” record form as needed.

### E. Administer the TASC-C. Group leader complete TASC-T for each student.

## **Appendix G: Intervention Manual (continued)**

### **Overview of Sessions 8-9: Positive emotions about the Future**

According to Seligman (2002), positive emotions about the future include faith, trust, confidence, hope, and optimism. Optimism and hope can be built-up in people to act as buffers against negative life events. This phase of the intervention focuses on shifting awareness toward an optimistic explanatory style, the way in which attributions are made about events, as well as increasing a perspective of hope. An optimistic explanatory style includes attributions of permanency to positive life events (i.e., good events are viewed in terms of traits and abilities; “I made the goal because I’m talented in sports) and temporary attributions to negative life events (i.e., negative events are transient due to mood or effort; “I didn’t study enough to get an A, so I’ll have to try harder for the next test”). Optimists see the positive as universal (e.g., “I’m good at all of my classes because I’m smart”) and the negative as specific (e.g., “Mr. Smith is an unfair teacher”). The final piece of explanatory style is personalization, specifically optimists self-blame for positive events. In effect, the optimistic style leads to resilience (i.e., negative events are temporary and specific). Snyder, Rand, and Sigmon (2005) discuss hope theory in terms of “belief that one can find pathways to desired goals and become motivated to use those pathways” (p. 257). Therefore, this combination includes optimism in terms of an explanation of life events and an expectation of future events in addition to hope in terms of an expectation of and motivation for goal accomplishment. Session 8 will introduce optimistic thinking in terms of this explanatory style while session 9 provides methods for increasing a hopeful perspective.

## **Appendix G: Intervention Manual (continued)**

### **Session 8: Optimistic Thinking Overview**

#### **Goals**

- Discuss feelings related to use of signature strengths and use of savoring.
- Introduce optimistic thinking.
- Discuss the value of optimism in happiness as related to the future.
- Learn methods for increasing optimistic thinking.

#### **Session Procedures**

- A. Review Homework: Use Signature Strength in New Ways with Savoring
- B. Rate Your Own Optimism
- C. How Can You Think More Optimistically?
- D. What is the Value of Optimism?
- E. Homework: Optimistic Thinking

#### **Materials Needed**

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Uses of My Third Signature Strength record form (see Appendix)
- Lined paper
- Examples of Optimistic Thinking reference sheet (see Appendix)
- My Optimistic Thoughts record form (see Appendix)
- Blackboard, whiteboard, or easel and appropriate writing utensil

## Appendix G: Intervention Manual (continued)

### Session 8 Procedures Defined

#### A. Review Homework: Signature Strength in a New Way with Savoring

Part 1: Discuss with students how well they were able to use their strengths in new ways each day; stress the importance of daily effort if necessary. Provide tangible reward for completion.

- Character Strengths and Savoring
  - Ask each student to provide 1-2 examples of ways they used their chosen signature strength in new ways during last week
  - Encourage reflection on their feelings related to use of strengths
  - Ask students in which ways did they savor the experience and how that may have enhanced positive feelings
  - Facilitate group discussion and encouragement over each other's use of strengths and savoring
  - Discuss any obstacles that may have occurred and problem solve with the group in terms of how those obstacles could be addressed or avoided
  - Have each student verbalize a different signature strength in which they will independently complete the "Uses of My Third Signature Strength" record form during this week.

Part 2: Ask students how well they were able to complete either acts of kindness (i.e., 5 acts of kindness in 1 day) or their gratitude journal (i.e., 5 things they are grateful for in one entry). Group leaders should check homework completion. Have students share either one kind act or grateful item.

#### B. Rate Your Own Optimism

- *What is optimism?*
  - Introduce optimism by stating: *We've all had people tell us to think more optimistically, to smile, or to be positive. What does thinking optimistically mean to you?*
  - Facilitate a brief discussion on what students think about optimism and write ideas on the whiteboard.
- Rate Your Own Optimism
  - Tell the students: *We are going to rate our own level of optimism.*

## Appendix G: Intervention Manual (continued)

- Draw a number line from 0-10 on a whiteboard and state the following: *Think about how often you have been optimistic in the past few months. On a scale from 0 to 10 with 0 being never optimistic, 5 being sometimes optimistic, and 10 being always optimistic, rate your optimism.*
- Have students write their ratings on a piece of paper and pass it to the group leader. Group leader will circle each of the numbers indicated by the group on the number line and discuss the overall group range.
- Then circle the room and have each student share their number and the reason they have chosen it

### C. How Can You Think More Optimistically?

Seligman (1990) described a method of developing optimistic thinking called learned optimism. It is a cognitive-behavioral method for changing one's explanatory style in making attributions about events. Due to the time and space constraints of the current intervention, Seligman's work on optimism has been modified. The focus of this activity is on using his description of an optimistic explanatory style (as provided in the overview) to increase optimistic thinking whereas a pessimistic explanatory style is not discussed. The object of this activity is to teach students how to increase use of optimistic thinking, not to change their existing explanatory style.

#### ➤ Optimistic Thinking

- Begin by stating: *Everyone can learn to think more optimistically, even those who already rated themselves highly.*
- Provide the following explanation using the "Examples of Optimistic Thinking" reference sheet: *On your examples sheet, optimistic thinking is broken into two categories, the way you look at good events and the way you look at bad events.*

*Thinking optimistically means:*

- *Thinking about good things in your life as being permanent, such as being caused by your traits and abilities. Look at the good events column under permanent.*
  - *You might say, "I made the goal because I'm talented in sports."  
A talent is a permanent ability.*

## Appendix G: Intervention Manual (continued)

- Also, you would see bad events as temporary, only lasting as long as your mood or effort. Look at the bad events column under temporary.
  - That would be like saying, “Even Beckham would have missed that one; I’ll probably make the next goal I try for. “The missed goal was a onetime thing.
- Also, optimists see good events as widespread, that is happening throughout life Look at the good events column under widespread.
  - That would be like thinking, “I’m good at all of my classes because I’m smart.” Being smart is something that will always be a part of you and will be a part of everything you do.
- Optimists see negative events as specific to certain areas of life Look at the bad events column under specific.
  - You may think, “I’m not good at math because Mr. Smith is an unfair teacher.” Mr. Smith is only one of your teachers, a specific person. When you work with different teachers, you could do better at math.
- Optimists take credit for causing good events in their lives but blame other sources for bad events.
  - Look at the good events column under take credit. An optimist would think “I won the contest because of my effort and talent in creative writing.” You won the contest because of your hard work and talent, not something other people did.
  - Look at the bad events column under blame other sources. An optimist would think, “I lost the contest because I needed better materials to prepare myself.” You lost the contest because of poor materials, not because you didn’t try hard.

### ➤ Practice Thinking Optimistically

- Complete the practice section of the “Examples of Optimistic Thinking” reference sheet
- Help students to identify events as good or bad and develop optimistic thoughts corresponding to events
- Instruct students in the following way:

*First, read the event and then decide if it is a good or bad situation. If it is a good situation, write an optimistic thought that is permanent, widespread, or takes credit. If it is a bad situation, write an optimistic thought that is temporary, specific, or blames another source. (Point to “Examples of Optimistic Thinking” reference sheet as providing explanation).*

*Let’s do the first one together.*

- *Is this a good or bad situation? It’s a good event. Write good underneath the event.*
- *What’s something permanent that I can say about it?*



## Appendix G: Intervention Manual (continued)

- *What about widespread?*
- *Taking credit?*
- *Complete the rest on your own and then we'll discuss.* (Be sure that students use this format for all of the answers).
  
- Examples of corresponding optimistic thoughts include (in order of appearance on the “Examples of Optimistic Thinking” reference sheet)
  - This is a good event:
    - Permanent: I was invited because I am a fun person.
    - Widespread: I was invited because I am always cheerful.
    - Taking credit: I was invited because I helped come up with ideas for the theme of the party.
  - This is a bad event:
    - Temporary: She probably isn't feeling well and will call me as soon as she is better.
    - Specific: My other friends have called me back, so if there is a problem, it is just between the two of us.
    - Blame other sources: She has been under a lot of stress with having trouble in school and her parents arguing, it probably doesn't have to do with me.
  - This is a good event:
    - Permanent: My parents increased my allowance because I have shown that I am a responsible person.
    - Widespread: My parents have increased my allowance because they trust me to be responsible in school, at home, and with my friends.
    - Taking credit: It was because I made the effort to show them how responsible I can be that my parents decided to increase my allowance.
  - This is a good event:
    - Permanent: My science group did well because we are smart, hardworking students.
    - Widespread: I always do well on my class projects because I work well in groups.
    - Taking credit: I had a large part in why our group did well because I organized our project and acted as the group leader.
  - This is a bad event:
    - Temporary: I did poorly on my assignment because I only had a little bit of time to work on it. I will plan more time for the next assignment and will do much better.
    - Specific: This was a very difficult assignment, not like most of my school work. I usually do really well.

## Appendix G: Intervention Manual (continued)

- Blame other sources: I didn't have enough time for this project because of other responsibilities, which distracted me from doing my best.

### D. What is the Value of optimism?

Pose these questions to the group:

- *Do you think it is valuable to be optimistic?*
- *Do you think being an optimist can increase happiness? Why or why not?*
- *How can being optimistic help you in school? In friendships? In family life?*
- *How is optimism related to your happiness about the future?*
- Cover resilience in the discussion. It can be described in the following way:

*Optimistic thinking leads to resilience: feeling like you can face any bad situation and come out okay.*

- *Because of resilience, you are more likely to try when things get hard.*
- *A person who doesn't think optimistically may instead feel helpless and give up easily, which means missing out in possible success.*
- *However, a resilient person keeps trying until they accomplish what they want in life.*
- *Remember, we discussed increasing happiness through purposeful activities. Optimistic thinking is one form of purposeful activity (in this case, a purposeful attitude) and it can help you get involved in other kinds of activities as well.*

### E. Homework: Optimistic Thinking

- Part 1: Ask students to intentionally use optimistic thinking one time each day until the next session. Have them note the situation and their optimistic thought on their "My Optimistic Thoughts" form. To ensure they understand the format, complete the first line together:
  - My Optimistic Thoughts
    - Have 2 or 3 students volunteer a situation from their day (or yesterday)
    - Ask the student describe the situation and then briefly write it under the situation category
    - Then ask the student to decide if it was a good or bad event and fill in that column accordingly.

## Appendix G: Intervention Manual (continued)

- Ask the student how the situation could be thought of more optimistically
  - If the student has difficulty, ask the group for assistance
  - Reminder Note: If the situation is negative, the optimistic thought must be temporary, specific, and/or blaming another source. If it is positive, the thought must be permanent, widespread, and/or taking credit for oneself.
- Part 2: Use chosen signature strength in a new way each day and complete the “Uses of My Third Signature Strength” record form. Help students brainstorm ways to use their strengths and note ideas on their record form as time allows.

## **Appendix G: Intervention Manual (continued)**

### **Session 9: Hope Overview**

#### **Goals**

- Discuss student use of optimistic thinking and creating a snowball effect.
- Discuss what hope means to the group.
- Introduce hope as goal-directed.
- Collaborate on how hope can be utilized to increase happiness about the future.

#### **Session Procedures**

- A. Review Homework: Optimistic Thinking
- B. Rate Your Own Hope
- C. Discussion of Hope
- D. Writing activity: Best Possible Self in the Future
- E. Homework: Best Possible Self in the Future

#### **Materials Needed**

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Blackboard, whiteboard, or easel and appropriate writing utensil
- Extra copies of Examples of Optimistic Thinking reference sheet (see Appendix)
- Extra copies of Acts of Kindness record form (see Appendix)
- Extra copies of My Optimistic Thoughts record form (see Appendix)
- Uses of My Fourth Signature Strength record form (see Appendix)

## Appendix G: Intervention Manual (continued)

### Session 9 Procedures Defined

#### A. Review Homework: Optimistic Thinking

Part 1: Discuss with the students when and how they completed their “My Optimistic Thoughts” form; stress the importance of daily efforts if necessary. Provide tangible reward for completion.

- Begin by asking the group how they felt using optimistic thinking
  - Did it produce any positive feelings about situations?
  - Was it difficult to do?
  - Anything they liked or did not like about completing the activity?
- Have volunteers read some of their situations (approximately 2) and their corresponding optimistic thoughts. Reminder Note: If the situation is negative, the optimistic thought must be temporary, specific, and/or blaming another source. If it is positive, the thought must be permanent, widespread, and/or taking credit for oneself.
  - If the student does not follow this format, review the examples on the “Examples of Optimistic Thinking” reference sheet and assist with rewriting the optimistic thought. Group members may provide assistance.
- In order to demonstrate versatility of optimistic thinking, ask the group to think of a different way the situation could be thought of optimistically for 2-3 student responses.
  - For example, if the event was positive and the student wrote a permanent optimistic thought, challenge students to think of a widespread or taking credit optimistic thought for the same situation.
- Once each student has had an opportunity to participate, explain the snowball effect of optimistic thinking:

*The great thing about optimistic thinking is that it has a snowball effect. Have you ever heard of a snowball effect? When snowballs roll, they pick up more snow and get bigger. When people start practicing optimistic thinking, it starts to take over how they think. At first, it takes work trying to come up with optimistic thoughts. You have to really think about the situation. But soon it becomes natural and easy. So, keep working on those optimistic thoughts and see if you can get it to snowball.*

Part 2: Ask students how well they were able to complete using their signature strength in new ways. Have students provide 1-2 examples of ways they used their

## Appendix G: Intervention Manual (continued)

strength and related feelings. Did savoring stretch out those positive feelings? Where there any problems that the group could help with?

### B. Rate Your Own Hope

Pose this question to the group:

- *What is hope?*
  - Facilitate a brief discussion on what students think constitutes hope
  - Do not define hope at this time, simply allow students to provide their own opinions and write their ideas on the whiteboard to refer back. Hope will be defined in the next section
  
- Rate Your Own Hope
  - Tell the students: *We are going to rate our own level of hope.*
  - Draw a number line from 0-10 on a whiteboard and state the following: *Think about how often you have felt hope in the past few months. On a scale from 0 to 10 with 0 being never hopeful, 5 being sometimes hopeful, and 10 being always hopeful, rate your level of hope.*
  - Have students write their ratings on a piece of paper and fold it over
  - Then circle the room and have each student share their number and the reason they have chosen it

### C. Discussion of Hope

Snyder and colleagues (2005) discussed the development of their hope theory in terms of hopeful thinking comprising both the ability to envision viable methods for goal attainment and belief in one's ability to utilize those methods in reaching specific goals. The following discussion is based on their work. Present discussion questions to the group and ensure the topics below the questions are a part of the conversation:

- *A few moments ago, we discussed the question "What is hope?" Now that we have shared our ideas, I'm going to tell you how psychologists have defined hope:*

## Appendix G: Intervention Manual (continued)

*Having hope means believing that you can become motivated and find ways to meet your goals. This is like telling yourself, “I’ll find a way to get this done or make this happen!” When an obstacle gets in your way, having hope means believing you can find another way to meet your needs and coming up with ideas on what those other ways might be. When you are hopeful, you believe that you can reach your goals because you have the ability and can get the resources – you are motivated. You might say to yourself “Nothing can stop me!” For example, if you want to play basketball but you don’t make the school team, then you may organize a recreational team in your neighborhood so that you can play and practice somewhere besides school. Or, if you want to make a new friend and the first person you ask to go to the movies says “no,” then you identify another classmate and try a different approach.*

- *Thinking about hope like this, how can it be important or not important in your life? In school? In friendships? With family?*
  - School:
    - Motivation to do well, work harder, be more successful
    - Find different ways to meet goals (e.g., better grades, meeting deadlines, meeting criteria for college)
    - Stress impacts you less
  - Athletics:
    - Greater performance because get “psyched” that you can win, compete, or make it to the end
    - Confidence in your abilities
    - Willingness to practice harder because you believe it will help you win
  - Physical Health:
    - Motivation and goals to find ways to keep healthy or reduce illness when sick (e.g., eating nutritiously, drinking lots of water, regular medical check-ups, or taking medications, avoiding infections, following doctor’s orders specifically)
    - Help to cope with being sick or being hurt
    - Focus on recuperating or improving condition
  - Emotions:
    - Good feelings about yourself (self-esteem) and beliefs that you can do well (self-efficacy) because you are motivated and believe you can find ways to meet your goals
    - Develop strategies to deal with stress and are motivated to use them because you believe one way will work
    - More likely to problem-solve when difficult situations occur
  - Social Relationships:
    - Make friendships
    - Work and maintain positive relationships with family and friends

## Appendix G: Intervention Manual (continued)

- *How do you think hope could impact people's happiness about their future?*
  - Discuss how hope can help us focus on positive goals for our futures and prevent feelings of helplessness through the belief that there are ways to meet those goals
  - Tie in with optimism:

*Hope works like optimistic thinking about the future, in that people see the things they do now as leading to future benefits across life domains (widespread across school, friends, and family parts of life) and that are lasting (or permanent parts of the future). On the other hand, misfortunes or problems are seen as temporary and limited to a particular situation, thereby minimizing impact on the future. When thinking that way, people are more likely to believe there are ways to meet goals and more motivated to work toward those positive future goals.*

### D. Writing activity: Best Possible Self in the Future

King (2001) found that writing about life goals in the form of an exercise known as one's "best possible self" was highly associated with increased happiness and decreased negative affect. Additionally, results of a study by Sheldon and Lyubomirsky (2006) suggested that envisioning one's best possible self (i.e., a version of the future self having accomplished desired goals) is potentially beneficial to maintaining increased positive affect. Since this exercise consists of writing about desired goals, paths taken to achieve such goals, and motivation involved in future success, it fits well with hope theory. In this section, writing about one's best possible self in the future is used as a concrete method of practicing hopeful thinking.

- Best Possible Self in the Future
  - Talk with students about how they have the ability to change their levels of hope by practicing using hopeful thinking about their futures. Introduce the activity in this way:

*I would like you to think about your life in the future. Take a few minutes to imagine that everything has gone as well as it possibly could. You have worked hard and succeeded at accomplishing all of your life goals. After a*



## Appendix G: Intervention Manual (continued)

two minute pause, state: *Now write about what you imagined* (adapted from King, 2001).

- Provide lined paper.
- Allow 5 minutes for them to write their thoughts and then ask the students to share what they have written so far with the group
- Encourage students to provide more detail in describing how they will meet their goals
- Make copies of what they have written thus far and return original to students

### E. Homework: Best Possible Self in the Future

- Part 1: Instruct the students to continue writing about their best possible selves in the future. Ask them to review their stories each night and add new thoughts and ideas or make revisions to what they have already written. Encourage students to think about ways in which they could achieve the goals they imagined in their futures.
- Part 2: Ask students to either continue gratitude journals, acts of kindness, using signature strengths in new ways, or optimistic thinking, whichever activity individual students have found to be most personally meaningful. Provide corresponding record forms as needed.

## **Appendix G: Intervention Manual (continued)**

### **Session 10: Termination Overview**

#### **Goals**

- Review framework for increasing personal happiness.
- Review activities and exercises learned in the group.
- Encourage a personal reflection.
- Gather student feedback on exercises perceived to be most helpful and activities they plan to continue.

#### **Session Procedures**

- A. Review Homework: Best Possible Self in the Future
- B. Review of Happiness Framework
- C. Personal Reflection: Progress During Group
- D. Wrap-up and Solicit Student Feedback

#### **Materials Needed**

- Tangible rewards for homework completion (stickers, pencils, etc.)
- Blackboard, whiteboard, or easel and appropriate writing utensil
- What Determines Happiness? Graph (see Appendix)
- Happiness Flow Chart (see Appendix)
- Wellness-Promotion Summary Sheet (see Appendix)
- Certificate of Completion(see Appendix)
- Treatment Acceptability Measure (CEI- Child Evaluation) (see Appendix)

## Appendix G: Intervention Manual (continued)

### Session 10 Procedures Defined

#### A. Review Homework: “Best Possible Self in the Future” form

Part 1: Have students take a moment and reread their “Best Possible Self in the Future” writing activity and reflect on their feelings, strengths, qualities, accomplishments, and so forth. Then, ask students to share their stories with the group along with one or two reflections. Provide tangible reward for completion.

- Ask students to share their stories with examples of domains of life in which they envisioned their best possible future selves (e.g., School, Athletics, Physical Health, Emotions, Social Relationships)
- Ask what changes/additions occurred since last session
- Encourage a reflection on which goals in life seem most important to students and what ways they can go about achieving those goals
- Ask if students felt any different about themselves after thinking about their future in a positive manner
- Ask if they feel more motivated to work on future goals
- As the group leader, you should initiate reflections on group members’ stories with identifications or reaffirmations of motivations and goal orientation within the story
- Encourage group members to reflect on the positives of each other’s stories
  - Something they admired or liked in the story
  - Goals they share with the presenter
  - Other ideas for ways of achieving goals
- Once each student has had a turn, ask students how this activity has impacted their hope for the future, if at all

Part 2: Ask students to share 1-2 examples of the activity they chose to do for the second part of homework (e.g., gratitude journal, acts of kindness, character strengths, or optimistic thinking) and talk about why they chose that activity. Group leaders and members should provide feedback on student examples and preferred choice of activities.

## Appendix G: Intervention Manual (continued)

### B. Review of the Happiness Framework

Review that happiness can be best increased through the purposeful activities that we do each day (show “What Determines Happiness Graph?”), and that happiness is thought to result from positive interpretations of one’s past experiences, present behaviors, and positive views of the future using the “Happiness Flow Chart.” Then, review exercises used to increase happiness within these areas of life:

#### ➤ Group Review and Reflection

- State: *In the past 10 weeks, we have completed multiple exercises that were designed to improve happiness by changing the activities (thoughts and behaviors) that we do on purpose.* [reference the What Determines Happiness graph]
- *The exercises we have done during the group have helped you learn how to purposefully create positive thoughts about your past experiences, how to act in positive ways that use your strengths in the present, and how to create positive thoughts about your future.* [reference the Happiness Flow Chart]
- *Which exercises are meant to promote positive feelings about one’s past?*
  - Gratitude journaling
  - Gratitude visits
- *How did gratitude improve your satisfaction with your past?*
- *Which exercises are intended to promote positive emotions in the present?*
  - Acts of kindness
  - Using signature character strengths in new ways
  - Savoring positive experiences when using character strengths
- *How did these activities improve your satisfaction with your present?*
- *Which exercises are meant to improve your view of the future?*
  - Optimistic thinking
  - Hope (best possible self in future)
- *How did these exercises improve your feelings about the future?*

#### ➤ Application to Future Situations; Summarize Activities

- Distribute the “Wellness-Promotion Program Summary Sheet”. To promote application of learned material to future situations, ask the students to identify situations/times in which it would be a good idea to use the activities to increase positive thoughts about past, present, and future in their own future lives (i.e., upon completion of the group).
  - For instance, in addition to practicing grateful thinking at all times, they may want to enact a gratitude visit or complete a gratitude journal

## Appendix G: Intervention Manual (continued)

at times they are feeling regret or disappointment with their life circumstances. They may want to do acts of kindness, use strengths in new ways, or savor when they catch themselves feeling “blah” about their daily experiences. When they catch themselves feeling hopeless about their future, they should prompt themselves to practice hopeful and/or optimistic thinking.

- After students identify perceived emotions that cue them to increase positive thoughts about a specific time period (past, present, and future), ask students to read aloud the definition of activities that correspond to this period (use round robin format).
  - Note: Students should record their character strengths in their summary sheet during the discussion of planning to improve daily experiences.
- *Which activities do you plan to continue in the future?*
  - *Why that particular activity?*

### C. Personal Reflection: Progress During Group

It is important to have the students think through and reflect on their personal growth during the intervention. Provide them with the following instructions.

- Personal Reflection
  - Say to the students: *Take a few minutes to think of the ways you have changed over the past ten weeks. Allow 2-3 minutes for students to reflect.*
  - Pose these questions to the group:
    - *How have your feelings about your life changed?*
    - Follow-up prompts for topics not addressed to general question on life change:
      - *Any changes in happiness?*
      - *What about your feelings about yourself?*
      - *People in your life?*
      - *Your past?*
      - *Your future?*

### D. Wrap-up and Solicit Student feedback

Provide students with the “Certificate of Completion” and express appreciation for their continued efforts over the weeks. Administer the measure of treatment

## Appendix G: Intervention Manual (continued)

acceptability (CEI- Child Evaluation) and instruct students to write down their thoughts about their satisfaction with the group before leaving.

## **Appendix G: Intervention Manual (continued)**

### **Booster Session 1**

#### **Overview**

#### **Goals**

- Review framework for increasing personal happiness.
- Review activities and exercises learned in the group.
- Review progress and activities students have continued since termination.
- Review and rehearse method for using gratitude to create a focus on positive interpretations of past events.

#### **Session Procedures**

- A. Students independently journal strategies they have used generally since termination, and strategies used specifically during times of distress
- B. Review of Happiness Framework and activities
- C. Review of student progress since termination and activities continued
- D. Overview of activities for further practice
- E. Gratitude Journals

#### **Materials Needed**

- Tangible rewards for student participation (stickers, pencils, etc.)
- Blackboard, whiteboard, or easel and appropriate writing utensil
- What Determines Happiness? Graph (see Appendix)
- Happiness Flow Chart (see Appendix)
- Wellness-Promotion Summary Sheet (see Appendix)
- Students' Gratitude Notebooks/journals
- Pens, pencils, markers, etc.

## Appendix G: Intervention Manual (continued)

### Booster Session 1 Procedures Defined

#### A. Students Independently Journal

Greet students individually as they arrive and ask them to spend a few minutes in independent writing, to record and reflect on the strategies designed to increase happiness that they have used since intervention termination.

- Ask students to write about the activities they engaged in or strategies they used the most frequently *in general* since the last meeting
- Ask students to write about the activities they engaged in or strategies they used *in response to difficult situations or during times of distress* since the last meeting
- Inform students that they will have the opportunity to share with the group later
- Ask students about the extent they have discussed wellness-promotion activities/strategies with their parents since the last meeting

#### B. Review of Happiness Framework and Activities

Review that happiness can be best increased through the purposeful activities that we do each day (show “What Determines Happiness Graph?”), and that happiness is thought to result from positive interpretations of one’s past experiences, present behaviors, and positive views of the future using the “Happiness Flow Chart.” Then, review exercises used to increase happiness within these areas of life:

- Group Review and Reflection  
State: *Throughout the 10 weeks of our group meetings, we completed multiple exercises that were designed to improve happiness by changing the activities (thoughts and behaviors) that we do on purpose* [reference the What Determines Happiness graph].



## Appendix G: Intervention Manual (continued)

*The exercises we did during the group helped you learn how to purposely create positive ways that use your strengths in the present, and how to create positive thoughts about your future [reference the Happiness Flow Chart].*

*Which exercises did we do that are meant to promote positive feelings about one's past?*

- Gratitude journaling
- Gratitude visits
  - *Since our last meeting, in what ways have these activities impacted your feelings of satisfaction with your past? (prompt for continued "fall out" of gratitude activities completed during the weekly program, such as additional outcomes or, or feedback to, the gratitude visit)*

*Which exercises did we do that are meant to promote positive emotions in the present?*

- Acts of kindness
- Using signature character strengths in new ways
- Savoring positive experiences when using character strengths
  - *Since our last meeting, in what ways have these activities impacted your feelings of satisfaction with how things are going now, in the present?(prompt for continued effects of activities completely during the course of the weekly program)*

*Which exercises did we do that are meant to improve your view of the future?*

- Optimistic thinking
- Hope (best possible self in future)
  - *Since our last meeting, in what ways have these activities impacted your feelings about your future?(prompt for continued impact of activities completely during the course of the weekly program)*

### C. Review of Student Progress and Continued Activities

It is important to have students think through and reflect on their personal growth since the termination of the intervention, as well as discuss the activities they have continued to perform since termination. Provide them with the following instructions.

- *Let's share the activities that you have continued to use since we ended our weekly group meetings, as you described in your writing at the beginning of today's meeting*

Pose these questions to the group:

*What activities have you used the most often since we last met?*

*What are some situations/times that you have used the activities we learned to increase positive thoughts about the past, present, and future?*

## Appendix G: Intervention Manual (continued)

- For instance, in addition to practicing grateful thinking at all times, students may have enacted a gratitude visit or completed a gratitude journal at times they felt regret or disappointment with their life circumstances. They may have performed acts of kindness, used their strengths in new ways, or savored when they caught themselves feeling “blah” about their daily experiences. If they caught themselves feeling hopeless about their future, they may have prompted themselves to practice hopeful and/or optimistic thinking.

Encourage each student to share at least one example with the group. If a student cannot identify a time they have used a happiness-increasing activity in the face of distress, ask the student to share his or her distressful situation, and receive assistance from group members to generate ideas of activities likely to increase mood in such negative situations.

- Personal Reflection

Say to students: *Take a few minutes to think of the ways you changed over the course of our 10 weekly meetings, and how you have changed or stayed the same since we stopped meeting each week.* Allow 1-2 minutes for students to reflect.

Pose these questions to the group:

*How have your feelings about your life changed?*

Follow-up prompts for topics not addressed with general question on life change:

- *Any changes in happiness?*
- *What about your feelings about yourself?*
- *People in your life?*
- *Your past?*
- *Your future?*

### D. Overview of Activities for Further Practice

- Rationale

State: *One way to keep improving our lives and feelings is to continue to practice the strategies you learned during our weekly meetings. For our remaining time together today, we'll practice grateful thinking. When we meet for our final follow-up meeting in a couple of weeks, we'll focus on using signature strengths in new ways and review optimistic thinking.*

### E. Gratitude Journal

Review what a gratitude journal is and why they are completed. Discuss the links between positive affect and happiness and gratitude.

## Appendix G: Intervention Manual (continued)

### ➤ Gratitude Journal

Introduce the gratitude journal by refreshing students about the purpose of gratitude journals by saying: *remember a while back we learned that keeping a gratitude journal is a way for you to express thanks for the things in life that you are grateful for. Remember that gratitude is linked to feelings of happiness through refocusing our thoughts on the positive parts of our past, which increases positive attitudes about our histories and lives. Take 5 minutes to think about your day and write down five things in your life that you are grateful for, including both small and large things, events, people, talents, or anything else you can think of. Some examples may include: generosity of my friends, my teacher giving me extra help, family dinner, your favorite band/singer, etc.* [You may provide examples relevant to your students that you are aware of].

Allow students 5 minutes to list 5 things for which they are currently grateful. Prompt each student to share 1-2 of their responses with the group after the independent writing time is over. Praise the student to be specific with identifying positive situations.

### ➤ Plan for Generalization

- *How do you intend to continue gratitude journaling in your daily life?*
  - Encourage students to continue journaling on a regular basis, for example each night before bed

## **Appendix G: Intervention Manual (continued)**

### **Booster Session 2**

#### **Overview**

##### **Goals**

Review progress with gratitude journals

Review activities and exercises learned in the group (particularly those that promote positive emotions within the present and toward the future)

Review and rehearse method for planning new uses of signature strengths across life domains

Review method for thinking optimistically

##### **Session Procedures**

A. Progress with gratitude journals

B. Review of happiness framework and activities

C. Explore/plan uses of signature strengths in new ways across life domains

D. Thinking Optimistically

##### **Materials Needed**

Tangible rewards for student participation (stickers, pencils, etc.)

Blackboard, whiteboard, or easel and appropriate writing utensil

What Determines Happiness? Graph (see Appendix)

Happiness Flow Chart (see Appendix)

Extra copies of Classification of 24 Character Strengths sheet (see Appendix)

New Uses of My Fifth Signature Strength record form (see Appendix)

My Optimistic Thoughts record form (see Appendix)

## Appendix G: Intervention Manual (continued)

### A. Progress with Gratitude Journals

Remind students of their plan at the first booster meeting to continue gratitude journaling.

- State: *Last time we were together, we ended with a discussion of gratitude and developed plans for writing down our thoughts in gratitude journals. Please share your progress with continuing to write in your gratitude journals.*
  - *How often did you journal? At what time and where?*
  - *What types of things did you acknowledge you were grateful for?*
  - *How did focusing on those events and situations impact your mood?*
  - *What obstacles did you face when attempting to journal?*
  - *To what extent were your parents involved in your gratitude journaling?*

### B. Review of Happiness Framework and Activities

Review that happiness can be best increased through the purposeful activities that we do each day (show “What Determines Happiness Graph?”), and that happiness is thought to result from positive interpretations of one’s past experiences, present behaviors, and positive views of the future using the “Happiness Flow Chart.” Then, review exercises used to increase happiness within the present and future:

#### ▪ Group Review and Reflection

State: *Throughout the 10 weeks of our group meetings, we completed multiple exercises that were designed to improve happiness by changing the activities (thoughts and behaviors) that we do on purpose [reference the What Determines Happiness graph].*

*The exercises we did during the group helped you learn how to purposely create positive ways that use your strengths in the present, and how to create positive thoughts about your future [reference the Happiness Flow Chart].*

*Last week we practiced gratitude journaling, one of the exercises we did that was meant to promote positive feelings about one’s past?*

*Which exercises did we do that are meant to promote positive emotions in the present?*

- Acts of kindness
- Using signature character strengths in new ways
- Savoring positive experiences when using character strengths

*Which exercises did we do that are meant to improve your view of the future?*

- Optimistic thinking
- Hope (best possible self in future)

## Appendix G: Intervention Manual (continued)

### C. Explore/Plan uses of Signature Strengths in New Ways across Life Domains

Review the links between using signature strengths in new ways across the major life domains and positive affect and happiness.

- Using Signature Strengths in New Ways Across Life Domains: Introduce using signature strengths in new ways by refreshing students about the purpose of using signature strengths in new ways by saying: *remember a while back we learned that using our character strengths in **new** and **different** ways than we have before is a good way to increase happiness in the present. We also learned that in order to use character strengths in new ways to effectively increase happiness, they must be used in multiple areas of life, including school, friendships, and family.*
  - Ask each student to refer to his/her list of signature strengths
    - Prompt each student to indicate which strengths they have targeted for increased use in prior sessions
    - Students should then identify a fifth strength to focus on this week; student can “re-do” a strength targeted prior if they desire
  - Provide students with the “New Uses of my Fifth Signature Strength” record form and ask them to work in small groups to make a list of ways they may use their 5<sup>th</sup> signature strength that are different from, or unique, to prior usage.
  - Write the life domain categories on the white board and remind students to think of ways they can use their signature strength in each domain.
  - As students work, group leaders should make sure that the activities that they are listing are manageable and concrete. Group leaders should assist in brainstorming ideas alongside students and solicit ideas from other students.
  - Be sure to clarify any suggestions that may stray from the content of the signature strength and guide students to more targeted suggestions. Copies of the “Classification of 24 Character Strengths” sheet should be made available to help students remember the meanings of the strengths.
- Plan for Implementation
  - Ask students to use their chosen signature strength in new ways each day of the upcoming week across life domains as was prepared on their “New Uses of My Fifth Signature Strength” record form. Ask them to write down the feelings they had after they used their strength each day on their form. If they think of different ways to use the strength during the week, ask them to note on their form how they used it. Encourage students to enact a different route for using character strengths if they encountered obstacles with the first plan.
    - *Typically, you’ve shared your homework completion with me and the other members of the group. After you complete your plan for using*

## Appendix G: Intervention Manual (continued)

*your 5<sup>th</sup> strength in new ways, who can you share your experiences and feelings with?*

- Prompt students to consider family members, friends, educators, and possibly other group members
- Remind students that sharing successes with others helps us savor our positive experiences
- *After your plan for next week is completed, how do you intend to continue using your top 5 strengths in your daily life?*
- Encourage students to continue to use all or any of their signature strengths in new ways

### D. Thinking Optimistically

Review the links between optimistic thinking and positive affect and happiness.

Practice Thinking Optimistically: Introduce optimistic thinking by refreshing students about the purpose of optimistic thinking by saying: *remember a while back we learned about optimistic thinking, which involves thinking about good things in your life as being permanent, such as being caused by your traits and abilities and thinking about bad events as temporary, only lasting as long as your mood or effort. Also, optimistic thinking involves seeing good events as widespread, or seeing good things as happening throughout life, and seeing bad events as specific to certain areas of life. Finally, optimistic thinking involves taking credit for causing good events in our lives, but blaming other sources for bad events.*

- Illustrate with own example of a positive situation (e.g., observation of current group of students' progress with happiness promotion skills); ask students to help generate the optimistic attributions

*Also, remember that optimistic thinking leads to resilience, the feeling that you can face any bad situation and come out okay and that optimistic thinking is a purposeful attitude that can increase our happiness. We would like at least one person to share a situation they have been in from the last couple of week, where they did or could have practiced optimistic thinking.*

- Distribute the “My Optimistic Thoughts” form to students. Have one or two students volunteer a situation from the last 2-4 weeks. Ask the speaker to decide if it was a good or bad event, and ask them how the situation could be thought of more optimistically. Ask the group to assist the speaker generate thoughts about the situation that are optimistic.
- Reminder Note: If the situation is negative, the optimistic thought must be temporary, specific, and/or blaming another source. If it is positive, the thought must be permanent, widespread, and/or taking credit for oneself.

## Appendix G: Intervention Manual (continued)

- Plan for Generalization
  - *How do you intend to continue to practice optimistic thinking in your daily life?*
  - Encourage students to continue using optimistic thinking regularly in their lives, for both positive and negative situations and events

### D. Communicate Gratitude for Students' Participation in Wellness Promotion

#### Program

- End program by:
  - Asking students their final thoughts on the interventions beyond character strengths and optimistic thinking that they plan to continue
  - Reminding them of the importance of including their parents in their happiness efforts
  - Expressing gratitude for the students' continued efforts to take control over their actions and thoughts that are related to feeling happy



## Appendix G: Intervention Manual (continued)

### References

- Bryant, F. B., & Veroff, J. (2007). *Savoring: A new model of positive experience*. Mahwah, NJ: Lawrence Erlbaum Associates.
- 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(2), 377-389.
- Cafasso, L. L. (1994). *Uplifts and hassles in the lives of young adolescents*. Unpublished master's thesis, Loyola University Chicago, Chicago, IL.
- Cafasso, L. L. (1998). *Subjective well-being of inner-city resilient and non-resilient young adolescents*. Unpublished doctoral dissertation, Loyola University Chicago, Chicago, IL.
- King, L. A. (2001). The health benefits of writing about life goals. *Personality and Social Psychology Bulletin*, 27(7), 798-807.
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9(2), 111-131.
- Lyubomirsky, S., Tkach, C., & Sheldon, K. M. (2004). [Pursuing sustained happiness through random acts of kindness and counting one's blessings: Tests of two six-week interventions]. Unpublished raw data.
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82(1), 112-127.

## Appendix G: Intervention Manual (continued)

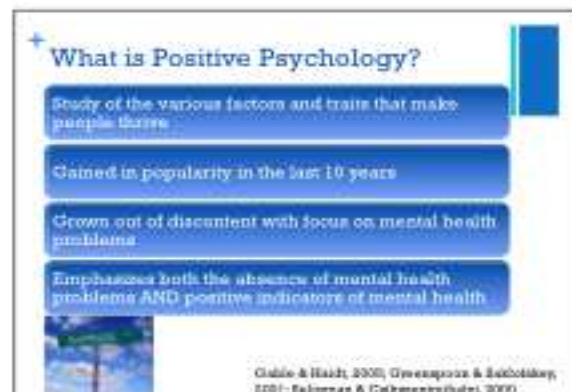
- Meehan, M. P., Durlak, J. A., & Bryant, F. B. (1993). The relationship of social support to perceived control and subjective mental health in adolescents. *Journal of Community Psychology, 21*, 49 – 55.
- Otake, K., Shimai, S., Tanaka-Matsumi, J., Otsui, K., & Fredrickson, B. L. (2006). Happy people become happier through kindness: A counting kindnesses intervention. *Journal of Happiness Studies, 7*, 361-375.
- Park, N., & Peterson, C. (2006). 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., & Seligman, M. E. P. (2004). Strengths of Character and Well-Being. *Journal of Social and Clinical Psychology, 23*(5), 603-619.
- Seligman, M. E., P. (1990). *Learned Optimism: How to Change Your Mind and Your Life*. New York: Random House, Inc.
- Seligman, M. E. P. (2002). *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment*. New York: Free Press.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist, 60*(5), 410-421.
- Sheldon, K. M., Kasser, T., Smith, K., & Share, T. (2002). Personal goals and psychological growth: Testing an intervention to enhance goal attainment and personality integration. *Journal of Personality, 70*(1), 5-31.

## Appendix G: Intervention Manual (continued)

- Sheldon, K. M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *The Journal of Positive Psychology, 1*(2), 73-82.
- Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2005). 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, Inc.
- Suldo, S. M., & Shaffer, E. S. (in press). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review*.

## Appendix G: Intervention Manual (continued)

### Appendix



## Appendix G: Intervention Manual (continued)

### + Key Positive Psychology Terms

**Subjective well-being**

- Life satisfaction
- Positive and creative affect

**Gratitude**


**Kindness**

**Character strengths**

**Savoring**

**Optimism**

**Hope**



### + Subjective Well-Being



**Scientific term for happiness**

**Oversees positive indicators of wellness**

**Often the outcome of focus of interventions designed to improve happiness**

**Composed of three components:**

- Life satisfaction (my life is going well on the whole)
- Positive affect (I experience positive emotions like excitement and cheeriness)
- Negative affect (I experience negative emotions like anger and disgust each)

Diener, Oishi, & Lucas, 2009

### + Gratitude

**Underlying disposition to:**

- Appreciate positive aspects of life
- Feel grateful for positive things in life
- Carry thankfulness and appreciation to others

**Crucial to making and maintaining positive relationships with others**



Wood et al., 2010

### + Kindness

**A character strength involving intention to, and actually acting kindly toward others, as well as forgetting kindness to others**

**Acts of kindness or behaving in ways that benefit others or make them happy at the expense of others has been shown to result in increased mental well-being and happiness**



Spekreijse et al., 2015; Oishi, Bauer, Tugade, Nelson, Oishi, & Fredrickson, 2010

### Character Strengths

**Set of 24 individual positive traits without an overriding class of virtues**

- Wisdom & Knowledge
- Courage
- Humanity
- Justice
- Temperance
- Transcendence

**Each person has unique profile of strengths and signature strengths, or traits more frequently used and appreciated in their life**

**Research has shown that using signature strengths to everyday life can improve mental well-being**



Park, Peterson & Seligman (2004; Peterson et al., 2011); Seligman, Steyer, Park, & Peterson, 2009

### Positive Character: VIA Classification of Strengths

Wisdom and Knowledge	Courage	Humanity	Justice	Temperance	Transcendence
Curiosity	Adaptability	Wisdom	Forgiveness	Prudence	Appreciation of Beauty and Excellence
Gratitude	Bravery	Love	Kindness	Self-control	Humor
Open-mindedness	Perseverance	Teamwork	Leadership	Restraint	Hope
Learning	Self-regulation	Kindness	Teamwork	Self-regulation	Humor
Forgiveness	Self	Kindness	Teamwork	Self-regulation	Individual

Diener & Park, 2010

## Appendix G: Intervention Manual (continued)

### + Savoring

Focusing on and enjoying past, present, and/or future positive events

Three components of savoring:

- Savoring through anticipation
- Savoring through recollection
- Savoring for savorers

Savoring can be facilitated through behavioral, interpersonal, and cognitive strategies

Savoring is associated with higher levels of life satisfaction

Bryant, 1989; Bryant, 2003; Bryant & Veroff, 2007; Quambach et al., 2010

### + Optimism

Two-folded definition:

- Tendency to expect positive outcomes and emphasize the positive aspects of situations
- Tendency to attribute positive things to permanent, universal, and personal factors, but negative events to temporary and external factors

Related to overall well-being:

- Prevention and reduction of mental health problems
- Better school adjustment and resilience

Bonnie, Purling, Schochet, Latta, & Jones, 2006; Peterson, 2000; Seligman, 1991

### + Hope

Positive motivational state involving goal-directed thoughts and strategies, as well as paths to achieving goals

Significantly related to positive mental health and well-being

Lopez et al., 2009; Snyder, Irving, & Anderson, 1991

### + Positive Psychology Interventions

Interventions designed to help people experience and increase well-being, such as gratitude, kindness, and optimism exercises.

Interventions for children and teens have focused on gratitude and optimism exercises.

- Gratitude
- Optimism
- Mindfulness
- Resilience
- Self-compassion

Interventions can have long-lasting benefits for children and teens.

Increases with persistence  
Relevant goal

*Live Happy* with a smile

Froh et al., 2008; Macgeary et al., 2011; Foster et al., 2011; Seligman et al., 2012

### + Activity Time!

For the next 2-3 minutes, think about an enjoyable experience you have had (within recently or in the past)

Take a minute to close your eyes and think about your experience and the good feelings you had

- Use your senses (i.e., sight, smell, hearing, touch, taste)

Pair up and spend a few minutes talking with your partner about your experience

Discuss the feelings associated with completing this activity

### + Final Thoughts

- Sharing the strategies your children are learning through the program with you may produce even greater improvements in well-being for both of you!
- Visit [www.authentichappiness.org](http://www.authentichappiness.org) to learn more about ways to maximize your well-being!



## Appendix G: Intervention Manual (continued)

### + The Wellness-Promotion Program at Coleman Middle School

**Target groups of 7th grade students:**

**Wellness program goals for 7th grade students:**

**1.1 Identify sources of wellness resources:**

- Introduction to Program
- Wellness Goals
- Wellness Vision
- Role of Counselor
- Wellness Resources
- Wellness Report on Progress
- Wellness Planning
- Wellness Evaluation

**1.2 Identify sources of wellness resources:**

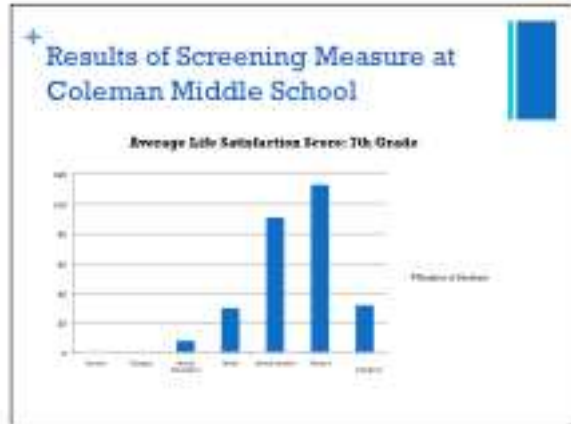
- Wellness Goals
- Wellness Vision
- Role of Counselor
- Wellness Resources
- Wellness Report on Progress
- Wellness Planning
- Wellness Evaluation

### + References

- 1. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 2. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 3. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 4. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 5. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 6. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 7. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 8. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 9. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 10. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.

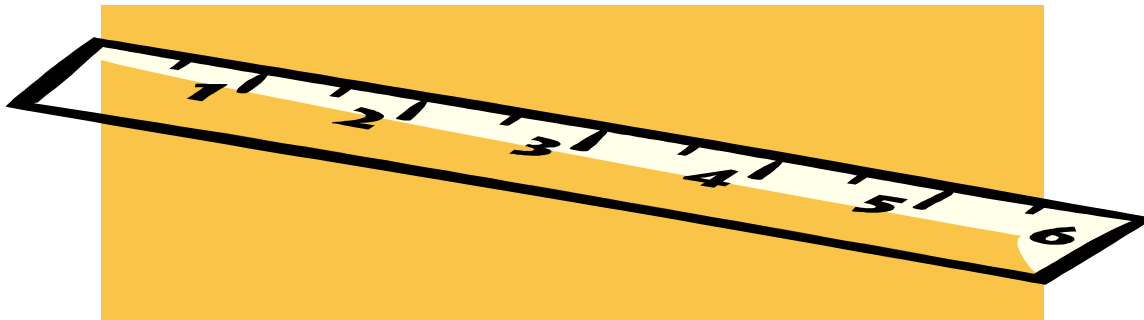
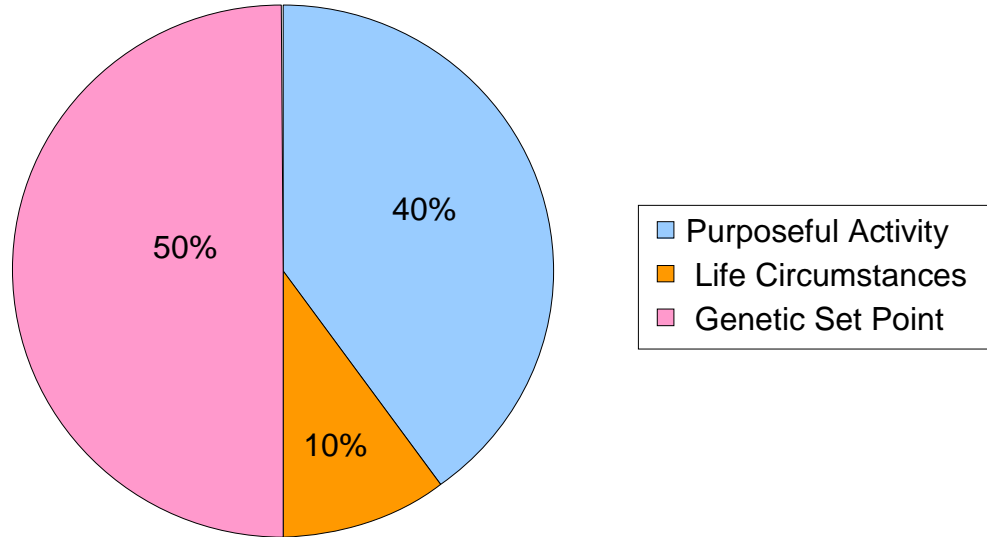
### + References, Cont'd

- 11. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 12. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 13. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 14. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 15. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 16. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 17. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 18. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 19. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.
- 20. American Psychological Association. (2013). *Handbook of stress and stress management*. Washington, DC: American Psychological Association.



Appendix G: Intervention Manual (continued)

### What Determines Happiness?

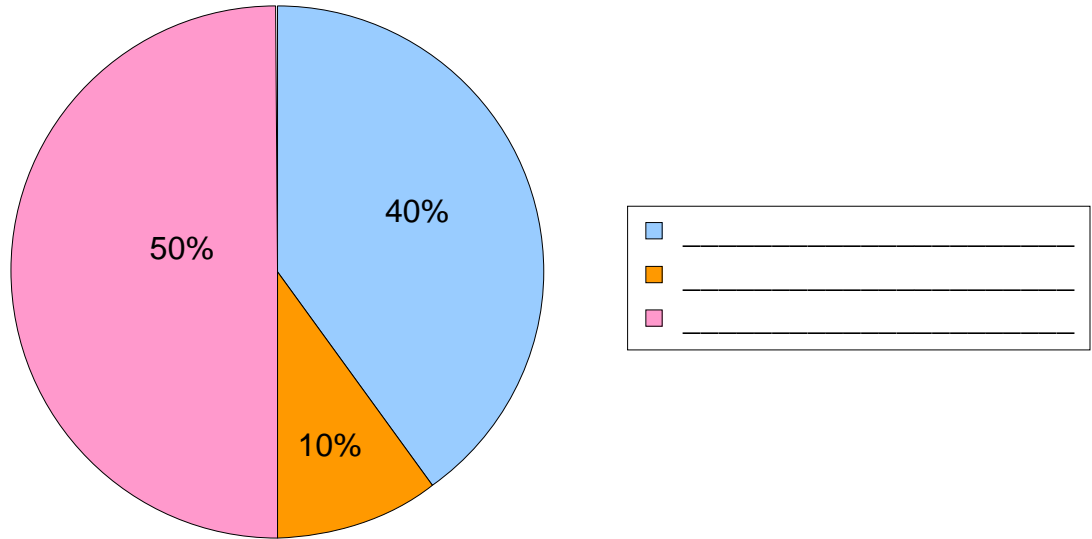




**Appendix G: Intervention Manual (continued)**

*Student's Copy for Binder*

**What Determines Happiness?**



**What is the Purpose of this Wellness-Promotion Group?**

1. During our weekly group meetings, which of the three areas that determine happiness are we going to focus on in order to improve our happiness?  
\_\_\_\_\_
2. How many times each week are we going to meet? \_\_\_\_\_
3. How many weeks will we meet? \_\_\_\_\_

**Appendix G: Intervention Manual (continued)**

*Student's Copy for Binder*

**What is Confidentiality?**

---

---

---

---

---

**How Will I Keep what Students Say in this Group Confidential?**

---

---

---

---

---

**Appendix G: Intervention Manual (continued)**

**Gratitude Visit Planning Form**

People who have been especially kind or helpful to me:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Person I will make a gratitude visit to: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**\*\*Reminder:** Tell the person that you want to make plans to spend time with them. Don't tell them about your gratitude letter before the visit. To have the gratitude visit work really well, remember to read your letter out loud to the person. Read slowly with expression and make eye contact.

## Appendix G: Intervention Manual (continued)

**TASC-C**  
(Shirk & Saiz, 1992)

**Code #** \_\_\_\_\_  
**Date:** \_\_\_\_ \_

**Instructions:** We are going to read some sentences about meeting with your counselor. After reading the sentence, you decide how much the sentence is like you. Let's try this example:

I do activities with my counselor when we meet together.

Would you say that is:

**1**  
Not Like You
**2**  
A Little Like You
**3**  
Mostly Like You
**4**  
Very Much Like You

Here are the rest; remember there are no right or wrong answers, just how you feel

	Not Like You	A Little Like You	Mostly Like You	Very Much Like You
1. I like spending time with my counselor.	1	2	3	4
2. I find it hard to work with my counselor on solving problems in my life.	1	2	3	4
3. I feel like my counselor is on my side and tries to help me.	1	2	3	4
4. I work with my counselor on solving my problems.	1	2	3	4
5. When I'm with my counselor, I want the meetings to end quickly.	1	2	3	4
6. I look forward to meeting with my counselor.	1	2	3	4
7. I feel like my counselor spends too much time working on my problems.	1	2	3	4
8. I'd rather do other things than meet with my counselor.	1	2	3	4
9. I use my time with my counselor to make changes in my life.	1	2	3	4
10. I like my counselor.	1	2	3	4
11. I would rather not work on my problems with my counselor.	1	2	3	4
12. I think my counselor and I work well together on dealing with my problems.	1	2	3	4

**Appendix G: Intervention Manual (continued)**

**TASC-T**  
(Shirk & Saiz, 1992)

**Counselor:** \_\_\_\_\_  
**Client/Student:** \_\_\_\_\_  
**Date:** \_\_\_\_ \_

**Instructions:** Please rate your client’s current presentation in treatment on the following scales. Circle the number corresponding to your rating for each item.

	Not Like My Client	A Little Like My Client	Mostly Like My Client	Very Much Like My Client
1. The child likes spending time with you, the counselor.	1	2	3	4
2. The child finds it hard to work with you on solving problems in his/her life.	1	2	3	4
3. The child considers you to be an ally.	1	2	3	4
4. The child works with you on solving his/her problems.	1	2	3	4
5. The child appears eager to have sessions end.	1	2	3	4
6. The child looks forward to counseling sessions.	1	2	3	4
7. The child feels that you spend too much time focusing on his/her problems/issues.	1	2	3	4
8. The child is resistant to coming to counseling.	1	2	3	4
9. The child uses his/her time with you to make changes in his/her life.	1	2	3	4
10. The child expresses positive emotion toward you, the counselor.	1	2	3	4
11. The child would rather not work on problems/issues in counseling.	1	2	3	4
12. The child is able to work well with you on dealing with his/her problems/issues.	1	2	3	4

Appendix G: Intervention Manual (continued)

Performing Acts of Kindness Record Form

	Day of the Week: _____	Date: _____
Acts of Kindness		

## Appendix G: Intervention Manual (continued)

### Classification of 24 Character Strengths

#### 1. **Wisdom and knowledge**—cognitive strengths in the acquisition and use of knowledge

- \_ *Creativity*: Thinking of novel and productive ways to do things
- \_ *Curiosity*: Taking an interest in all of ongoing experience
- \_ *Love of learning*: Mastering new skills, topics, and bodies of knowledge
- \_ *Open-mindedness*: Thinking things through and examining them from all sides
- \_ *Perspective*: Being able to provide wise counsel to others

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

- \_ *Authenticity*: Speaking the truth and presenting oneself in a genuine way
- \_ *Bravery*: Not shrinking from threat, challenge, difficulty, or pain
- \_ *Persistence*: Finishing what one starts
- \_ *Zest*: Approaching life with excitement and energy

#### 3. **Humanity**—interpersonal strengths that involve “tending and befriending” others

- \_ *Kindness*: Doing favors and good deeds for others
- \_ *Love*: Valuing close relations with others
- \_ *Social intelligence*: Being aware of the motives and feelings of self and others

#### 4. **Justice**—civic strengths that underlie healthy community life

- \_ *Fairness*: Treating all people the same according to notions of fairness and justice
- \_ *Leadership*: Organizing group activities and seeing that they happen
- \_ *Teamwork*: Working well as member of a group or team

#### 5. **Temperance**—strengths that protect against excess

- \_ *Forgiveness*: Forgiving those who have done wrong
- \_ *Modesty*: Letting one’s accomplishments speak for themselves
- \_ *Prudence*: Being careful about one’s choices; not saying or doing things that might later be regretted
- \_ *Self-regulation*: Regulating what one feels and does

#### 6. **Transcendence**—strengths that forge connections to the larger universe and provide meaning

- \_ *Appreciation of Beauty and Excellence*: Noticing and appreciating beauty, excellence, and/or skilled performance in all domains of life

## Appendix G: Intervention Manual (continued)

- \_ *Gratitude*: Being aware of and thankful for the good things that happen
- \_ *Hope*: Expecting the best and working to achieve it
- \_ *Humor*: Liking to laugh and tease; bringing smiles to other people
- \_ *Religiousness*: Having coherent beliefs about the higher purpose and meaning of life



**Appendix G: Intervention Manual (continued)**

**New Uses of My First Signature Strength**

<b>Signature Strength:</b>		
<b>Day of the Week</b>	<b>New Use</b>	<b>Feelings</b>

**Appendix G: Intervention Manual (continued)**

**New Uses of My Second Signature Strength**

<b>Signature Strength:</b>			
<b>Day of the Week</b>	<b>Life Domain</b>	<b>New Use</b>	<b>Feelings</b>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>

Appendix G: Intervention Manual (continued)

New Uses of My Third Signature Strength

Signature Strength:			
Day of the Week	Life Domain	New Use	Feelings
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>

Appendix G: Intervention Manual (continued)

New Uses of My Fourth Signature Strength

Signature Strength:			
Day of the Week	Life Domain	New Use	Feelings
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>
			<u>Savor:</u>

**Appendix G: Intervention Manual (continued)**

**New Uses of My Fifth Signature Strength**

<b>Signature Strength:</b>		
<b>Day of the Week</b>	<b>New Use</b>	<b>Feelings</b>

## Appendix G: Intervention Manual (continued)

### Examples of Optimistic Thinking

Examples		Practice	
Good Events	Bad Events		
<i>Permanent</i>	<i>Temporary</i>	Event	Optimistic Thought
I made the goal because I'm talented in sports.	Even Beckham would have missed that one- I'll probably make the next goal I try for.	I was invited to the biggest party of the year.	
<i>Widespread</i>	<i>Specific</i>	My good friend hasn't called me back in days.	
I'm good at all of my classes because I'm smart.	I'm not good at math because Mr. Smith is an unfair teacher.	My parents increased my allowance.	
<i>Take Credit</i>	<i>Blame Other Sources</i>	My teacher said my science group did the best in the class.	
I won the contest because of my effort and talent in creative writing.	I lost the contest because I needed better materials to prepare myself.	I had to finish a giant assignment in three days and I got a C- on it.	

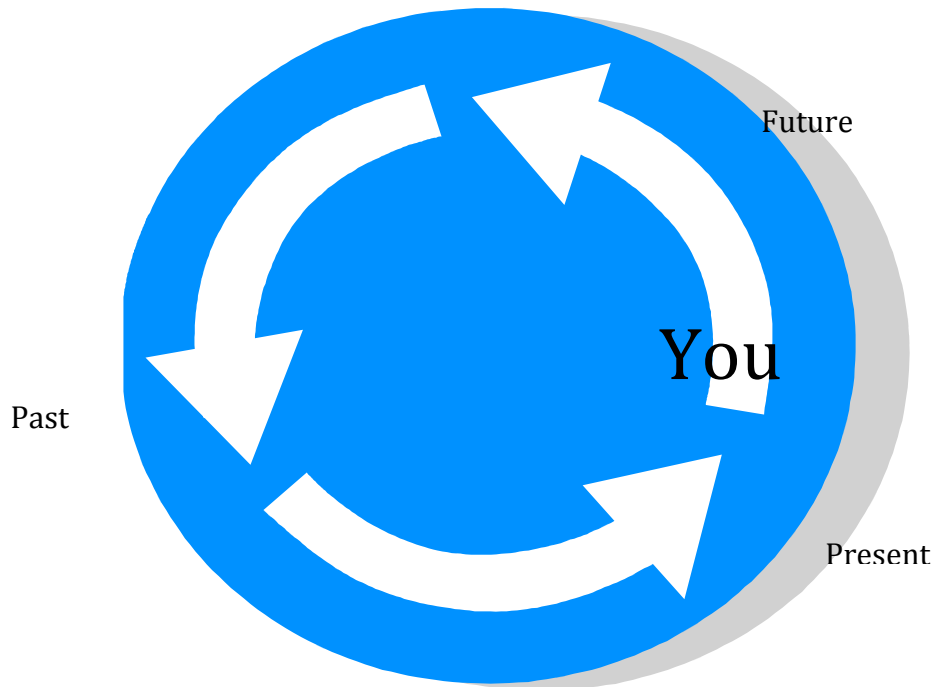
## Appendix G: Intervention Manual (continued)

### My Optimistic Thoughts

Date	Situation	Good or Bad Event	Optimistic Thought*

\*Optimistic thoughts for good events are widespread, permanent, and take credit. Optimistic thoughts for bad events are temporary, specific, and blame other sources.

## Happiness Flow Chart





Appendix G: Intervention Manual (continued)

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

Name: \_\_\_\_\_

**Wellness-Promotion Program Summary Sheet**

*When I want to feel more positive about my past:*

- Gratitude journal
  - 5 things I'm grateful for, write down 1 time each week
- Gratitude visit
  - Write a letter of thanks to someone who has been kind to me; read the letter to the person

*When I want to feel more positive about my daily life:*

- Do acts of kindness
  - 5 kind acts for other people in one day
- Use my signature character strengths
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- Savor your successes
  - Tell someone about it or absorb yourself (take a few minutes to focus on it)

*When I want to feel more positive about my future:*

- Optimistic thinking
  - View good situations as permanent, widespread, and take credit for it
  - View bad situations as temporary, specific, and blame other sources
- Hopeful thinking
  - Focus on goals and ways to achieve those goals

## Appendix G: Intervention Manual (continued)

### CEI-Child Evaluation (Kazdin, Siegel, & Bass, 1992)

Name: \_\_\_\_\_

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

**Instructions:** We are going to read some sentences about meeting with your counselor. After reading the sentence, you decide how much the sentence is like you. Let's try this example:

I like going to counseling.

Would you say that is:

**1**  
Not Like You
**2**  
A Little Like You
**3**  
Somewhat Like you
**4**  
Mostly Like You
**5**  
Very Much Like You

Here are the rest; remember there are no right or wrong answers, just how you feel

1	How much do you think you have learned from counseling?				
	1 nothing	2 a little	3 some	4 pretty much	5 a whole lot
2	How much did you learn about changing your actions and thoughts?				
	1 nothing	2 a little	3 some	4 pretty much	5 a whole lot
3	How much did you learn about increasing happiness?				
	1 nothing	2 a little	3 some	4 pretty much	5 a whole lot
4	How much did you learn about getting along with other people?				
	1 nothing	2 a little	3 some	4 pretty much	5 a whole lot
5	How much fun was it to be in counseling?				
	1 no fun at all	2 not very much fun	3 OK	4 quite a bit of fun	5 lots of fun
6	How much did you look forward to going to the counseling meetings?				
	1 didn't want to go to sessions at all	2 kind of didn't want to go	3 didn't look forward but didn't mind	4 looked forward to meetings	5 looked forward to meetings very much
7	When you were in the meetings, did you want them to be over quickly?				
	1 all the time	2 often	3 some of the time	4 liked being there	5 really liked it
8	How much did you like counseling?				
	1 didn't like it at all	2 sort of didn't like it	3 it was OK	4 liked it quite a bit	5 really liked it
9	How interesting were the meetings?				
	1 very boring	2 somewhat boring	3 neither interesting nor boring	4 usually pretty interesting	5 very interesting
10	Please rate how you felt about your counselors.				
	1 didn't like her at all	2 liked her a little	3 liked her some	4 liked her quite a bit	5 really liked her

### Appendix G: Intervention Manual (continued)

11	Please rate how much you think your counselors liked you.				
	1 didn't like me at all	2 liked me a little	3 liked me some	4 liked me quite a bit	5 really liked me
12	Are you able to use what you learned in counseling to help you in school?				
	1 no	2 a little	3 some	4 pretty much	5 very much
13	Are you able to use what you learned in counseling to help you become happier?				
	1 no	2 a little	3 some	4 pretty much	5 very much
14	Are you able to use what you learned in counseling in dealing with adults?				
	1 no	2 a little	3 some	4 pretty much	5 very much
15	Are you able to use what you learned in counseling in dealing with other children?				
	1 no	2 a little	3 some	4 pretty much	5 very much
16	How much have your thoughts and actions improved because you were in counseling?				
	1 not changed at all	2 a little	3 some	4 pretty much	5 a whole lot

**Appendix G: Intervention Manual (continued)**

*Your Thoughts on the USF Wellness-Promotion Program*

1. What do you feel are some of the most important things you learned in the program?

---

---

---

2. What did you like best about the program?

---

---

---

3. What did you like least about the program?

---

---

---

4. Which activities that you learned in the meetings are you likely to continue to do on your own?

“Me at my best” writing

Gratitude journal

Gratitude visit

Acts of kindness

Savoring

Using my signature strengths in new ways

Optimistic thinking

“Best possible self in the future” writing

None

5. What suggestions do you have to improve the program?

---

---

---

---

6. Any additional comments?

---

---

---

---



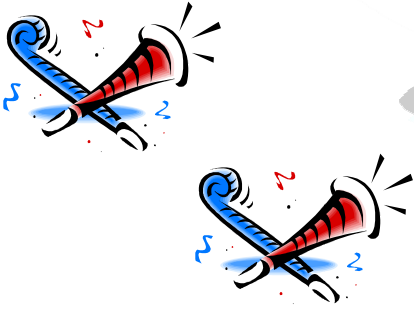
*Certificate of Completion*

*Congratulations to*



*for successfully completing the USF wellness-promotion program.*

*It has been a pleasure having you participate in group.*



# Week 1 Review

## My This Week? What Did Child Learn

This week we introduced the wellness-promotion intervention to your child by explaining the purpose of the group and confidentiality, and discussing what it means to be happy and why it is important. During the first session, we also completed an activity, “You at Your Best,” which asked your child to write about a time when they were at their best (e.g., did something very well, displayed a talent, created something), reflect on their story (e.g., remember feelings that day, identify the strengths they displayed in their story), and share their story and reflections with the group.

### Homework Activities

- **Week 1:** Your child was asked to further expand on their “You at Your Best Story” by re-reading their story and reflecting on their identified strengths each night, then adding more details and length to the story.

### What Can I Do?

Encourage your child to share their “You at Your Best” story with you and reflect with them on their story. If you would like, take the time to write your own “You at Your Best” story and share it with your child as well.

# Week 2 Review

## What Did My Child Learn This Week?

This week we introduced the concept of gratitude to your child. We discussed what gratitude is and why it is important for happiness, your child rated their current levels of gratitude, and your child created a gratitude journal to record things in their life that they are grateful for.

## Homework Activities

- **Week 2:** Each night before bed, your child was asked to spend five minutes writing down at least five things in life that they are grateful for. Your child will be asked to share 2-3 of the responses they recorded in their journals during our next meeting.

## What Can I Do?

You can make gratitude journaling a part of your entire family's routine. You might choose to sit with your child and their siblings (if you have more than one child) each night before bedtime and journal together. You can also share the things you are grateful for with each other. Discuss what similarities and differences you notice!

# Week 3 Review

## What Learn This Week?

## Did My Child

During the third session, we continued our work with gratitude. We introduced gratitude visits to your child, which involve writing a letter of gratitude to a person who has been particularly kind to them in the past, but whom was never properly thanked, then personally delivering the letter to that person. We also discussed the connection between feeling grateful and engaging in gratitude-based activities and happiness.

## Homework Activities

- **Week 3:** Your child was asked to enact their gratitude visit and write in their gratitude journals at least one night, OR if this is not possible (e.g., the person identified is not able to meet with in person), your child was asked to just continue journaling.

## What Can I Do?

Discuss details of the gratitude visit with your child, and if possible help facilitate the visit. If you would like, plan a gratitude visit of your own. You and your child can discuss how completion of this activity makes you feel. If you have incorporated gratitude journaling into your family routine, continue engaging in this activity!



# Week 4 Review

## What Did My Child Learn This Week?

During the fourth session, we introduced the character strength of kindness to your child. We discussed kindness as a virtue and how kindness relates to happiness, and estimated the frequency that your child currently engages in acts of kindness.

## Homework Activities

- **Week 4:** Your child was asked to perform five acts of kindness during one day prior to the next session, and record these on their “Acts of Kindness Record Form.” Your child will be asked to share 2-3 of the kind acts they performed and related feelings with the group at the beginning of the next session.

## What Can I Do?

Discuss the importance of acting kindly toward others with your child and how being kind influences how you feel. Engage in acts of kindness alongside your child and reflect on the experiences together. How does engaging in acts of kindness make you feel? What other ways can you incorporate kindness into your daily lives?

# Week 5 Review

## What Did My Child Learn This Week?

During the fifth session, we introduced your child to character strengths. We began with a discussion about what character strengths and virtues are, and in particular reviewed a classification system of 24 character strengths. Next, your child generated a list of what they perceived their top 5 character strengths to be. This was followed by a discussion of how using character strengths relates to happiness.

## Homework Activities

- **Week 5:** Your child was asked to continue performing acts of kindness. Again, your child was asked to perform five acts of kindness during one day prior to the next session, and record these on their “Acts of Kindness Record Form.” Your child was asked to share 2-3 of the kind acts they performed and feelings with the group at the beginning of the sixth session.

## What Can I Do?

Continue to designate one day of the week to perform acts of kindness alongside your child. Discuss how this has impacted you and your child’s feelings and happiness. Additionally, you can think about your own strengths, generate your own list of your perceived top 5 strengths, and share this with your child. Compare and contrast what your perceived strengths are with your child’s.

# Week 6 Review

## What Did My Child Learn This Week?

During the sixth session, we objectively identified your child's signature strengths using an online survey and discussed these strengths and how they compare to what they perceived to be their strengths in the last session.

## Homework Activities

- **Week 6:** Your child was asked to identify one of their top 5 signature strengths to use in new ways each day of the upcoming week. We brainstormed ideas together and they wrote these down on their "New Uses of My First Signature Strength" record form. Your child was asked to write down the feelings they had after they used their signature strength each day, and note any new or different ways to use the strength during the week. Additionally, your child was given the choice of either continuing to perform acts of kindness, OR continue gratitude journaling.

## What Can I Do?

You can take the adult version of the survey that your child completed to identify your top signature strengths. Visit [www.authentic happiness.org](http://www.authentic happiness.org), register to make a free online account, then complete the "VIA Survey of Character Strengths," which can be located under the Questionnaires tab. If you have other children, encourage them to complete the "VIA Strengths for Children" survey as well. Compare and contrast your strengths with your children's. Plan out ways to use one of your signature strengths in new ways throughout the course of the week and reflect on these experiences with your child/children. How does using your personal strengths make you feel? What about your child?

# Week 7 Review

## What Did My Child Learn This Week?

During the seventh session, we continued our work with character strengths. We explored and planned for ways to use your child's signature strengths in new ways across life domains (e.g., school, friendships, family). Each child wrote down ideas on the "New Uses of My Second Signature Strength" record form, as well as days of the week they can use their strength in the identified ways. We also discussed savoring, particularly in relation to strategies for savoring identified signature strengths.

## Homework Activities

- **Week 7:** Your child was asked to carry out the use of their chosen signature strength in new ways each day of the upcoming week across life domains as they prepared in their "New Uses of My Second Signature Strength" record form. He/she was also asked to write down their feelings after using their strength each day and how they chose to savor the experience. Additionally, your child was asked to continue performing acts of kindness, OR to continue gratitude journaling.

## What Can I Do?

Plan new ways to use one of your signature strengths in new ways across life domains alongside your child. Both you and your child can share the feelings associated with using your strength in novel ways and the impact of the experiences on your lives. Brainstorm with your child about new ways that both of you can use your signature strengths across life domains. Take a small amount of time to savor your strengths by talking with your child about how much you enjoy your respective strengths. Also, take a few moments to think about how you have used your strengths and actively make a memory of this experience to reflect on at a later time.

# Week 8 Review

## What Did My Child Learn This Week?

During the eighth session, the concept of optimism was introduced to your child. We discussed what optimism is and asked your child to rate his/her own current level of optimism. Additionally, we introduced ways to think more optimistically and provided your child the opportunity to practice thinking optimistically. Finally, we had a discussion about the value of being an optimistic person.

## Homework Activities

- **Week 8:** Your child was asked to use optimistic thinking one time each day until the next session and note the situation and their thoughts on their “My Optimistic Thoughts” record form. Additionally, they were asked to choose a new signature strength to use in a new way each day and complete the “Uses of My Third Signature Strength” record form.

## What Can I Do?

Have your child explain to you what optimistic thinking means in his/her own words. Model optimistic thinking for your child and reflect together on how thinking optimistically makes you feel in comparison to the way you normally think. Give an example of a time that optimistic thinking helped you deal with a difficult situation. Praise your child when you notice them being optimistic!

# Week 9 Review

## What Did My Child Learn This Week?

During the ninth session, we introduced the concept of hope to your child. We discussed what hope is and asked your child to rate their current levels of hope. We also discussed how hope might impact happiness. Additionally, your child participated in an activity called “Best Possible Self in the Future,” which involved them taking a few minutes to imagine their future life once they have worked hard to achieve their goals and then writing about this image of their future self.

## Homework Activities

- **Week 9:** Your child was asked to further elaborate on their “Best Possible Self in the Future” writing by reviewing their story each night and adding new thoughts and ideas, and/or making revisions to what they had already written. Additionally, your child was asked to continue: 1) gratitude journaling, 2) acts of kindness, 3) using signature strengths in new ways, OR 4) optimistic thinking.

## What Can I Do?

Consider completing your own “Best Possible Self in the Future” activity and share this with your child. Together, you can identify new goals and paths to reaching these goals. Describe a time that you set a goal for yourself, made a plan to achieve your goal, and carried out the plan. Share how reaching your goal made you feel.

# Week 10 Review

## What Did My Child Learn This Week?

During the tenth meeting, we reviewed and reflected on the content covered throughout the course of the Wellness-Promotion Program. We asked your child to reflect on the activities they plan on continuing in the future and to reflect on the progress they have made since the beginning of the program.

## What Can I Do?

Ask your child to share his/her reflection of growth with you. Let your child know the positive changes you have recognized in him/her since the beginning of the intervention. Brainstorm and plan out ways that you both can continue engaging in activities learned throughout the Wellness-Promotion Program in the future. Hold each other accountable for following through with these plans!

# Check-In Meeting 1

## CHECK-IN MEETING 1

### What Did My Child Do This Week?

During this first check-in meeting, we reviewed and reflected on the content covered previously throughout the course of the program. We asked your child to reflect on and share the activities that he or she has continued since we ended our weekly meetings. We also asked him or her to reflect on the progress made through participating in the program, and/or since the program ended. Additionally, we reviewed gratitude, specifically gratitude journals, and how keeping a gratitude journal relates to positive feelings and happiness.

### What Can I Do?

Continue to engage in activities learned throughout the program as a family, such as:

- Gratitude journals
- Gratitude visits
- Performing acts of kindness
- Using character strengths in new ways
- Savoring
- Optimistic thinking
- Hopeful and goal-directed thinking

Problem-solve together to overcome any obstacles that have prevented you from continuing to engage in activities intended to increase your happiness. Share reflections of growth with your child, both the growth you have seen in him or her and personal growth you notice in yourself. Help your child enact his or her personal plan to continue gratitude journaling.



# Check-In Meeting 2

## CHECK-IN MEETING 2

### What Did My Child Do This Week?

During this final check-in meeting, we reviewed your child's progress since the last meeting with gratitude journals. We also briefly reviewed the content previously learned throughout the course of the program before spending time reviewing signature strengths and optimistic thinking in more depth. In small groups, we had your child brainstorm new uses of a fifth signature strength and plan out ways to use signature strengths at school, at home, and with friends. Finally, we practiced optimistic thinking as a large group and discussed how optimistic thinking can be used in a variety of good and bad situations to feel happier.

### What Can I Do?

Continue to engage in activities learned throughout the program as a family, such as:

- Gratitude journals
- Gratitude visits
- Performing acts of kindness
- Using character strengths in new ways
- Savoring
- Optimistic thinking
- Hopeful and goal-directed thinking

Problem-solve together to overcome any obstacles that have prevented you from continuing to engage in activities intended to increase your happiness. Share reflections of growth with your child, both the growth you have seen in him or her and personal growth you notice in yourself. Help your child enact his or her preferred activities learned in the Wellness-Promotion Program.

## Appendix H: Student Demographics Form

ID # \_\_\_\_\_ Fall 2013

Birthdate \_\_\_\_ - \_\_\_\_ - \_\_\_\_  
(month) (day) (year)

PLEASE READ EACH QUESTION AND CIRCLE THE BEST ANSWER TO EACH ITEM:

1. My gender is:                      Boy                      Girl
2. Do you receive free or reduced lunch?    Yes                      No
3. Are you of Hispanic, Latino, or Spanish origin?
  - a. No, not of Hispanic, Latino, or Spanish origin
  - b. Yes, Mexican American, Chicano
  - c. Yes, Puerto Rican
  - d. Yes, Cuban
  - e. Yes, another Hispanic, Latino, or Spanish origin (please specify): \_\_\_\_\_
4. My race/ethnic identity is (Circle all that apply):
  - a. White
  - b. Black or African American
  - c. Asian
  - d. American Indian/Alaska Native
  - e. Native Hawaiian or Other Pacific Islander
  - f. Other (please specify): \_\_\_\_\_
5. My biological parents are:
  - a. Married
  - b. Divorced
  - c. Separated
  - d. Never married
  - e. Never married but living together
  - f. Widowed
6. I live with my:
  - a. Mother and Father
  - b. Mother only
  - c. Father only
  - d. Mother and Stepfather
  - e. Father and Stepmother
  - f. Grandparent(s)
  - g. Other relative: \_\_\_\_\_
  - h. Other: \_\_\_\_\_

**Appendix H: Student Demographics Form (continued)**

	<b>Very Much Worse</b>	<b>Worse</b>	<b>Slightly Worse</b>	<b>The Same</b>	<b>Slightly Improved</b>	<b>Improved</b>	<b>Very Much Improved</b>
1. How much do you expect to improve your happiness by the end of this year if you are assigned to take part in the wellness-promotion program <u>this year</u> ?	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
2. How much do you expect to improve your happiness by the end of this year if you are assigned to <u>wait</u> and take part in the wellness-promotion program <u>next year</u> ?	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

## Appendix I: Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS)

We would like to know what thoughts about life you've had during the past several weeks. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with life. In answering each statement, circle a number from (1) to (7) where (1) indicates you feel terrible about that area of life and (7) indicates you are delighted with that area of life.

	<b>Terrible</b>	<b>Unhappy</b>	<b>Mostly Dissatisfied</b>	<b>Mixed (About Equally Satisfied and Dissatisfied)</b>	<b>Mostly Satisfied</b>	<b>Pleased</b>	<b>Delighted</b>
1. I would describe my satisfaction with my family life as:	1	2	3	4	5	6	7
2. I would describe my satisfaction with my friendships as:	1	2	3	4	5	6	7
3. I would describe my satisfaction with my school experience as:	1	2	3	4	5	6	7
4. I would describe my satisfaction with myself as:	1	2	3	4	5	6	7
5. I would describe my satisfaction with where I live as:	1	2	3	4	5	6	7
6. I would describe my satisfaction with my whole life as:	1	2	3	4	5	6	7

### Appendix J: Students' Life Satisfaction Scale (SLSS)

We would like to know what thoughts about life you've had during the past several weeks. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with life. In answering each statement, circle a number from (1) to (6) where (1) indicates you **strongly disagree** with the statement and (6) indicates you **strongly agree** with the statement.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. My life is going well	1	2	3	4	5	6
2. My life is just right	1	2	3	4	5	6
3. I would like to change many things in my life	1	2	3	4	5	6
4. I wish I had a different kind of life	1	2	3	4	5	6
5. I have a good life	1	2	3	4	5	6
6. I have what I want in life	1	2	3	4	5	6
7. My life is better than most kids'	1	2	3	4	5	6

### Appendix K: Positive and Negative Affect Scale for Children (PANAS-C)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent you have felt this way during the past few weeks.

<i>Feeling or emotion:</i>	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
1. Interested	1	2	3	4	5
2. Sad	1	2	3	4	5
3. Frightened	1	2	3	4	5
4. Excited	1	2	3	4	5
5. Ashamed	1	2	3	4	5
6. Upset	1	2	3	4	5
7. Happy	1	2	3	4	5
8. Strong	1	2	3	4	5
9. Nervous	1	2	3	4	5
10. Guilty	1	2	3	4	5
11. Energetic	1	2	3	4	5
12. Scared	1	2	3	4	5
13. Calm	1	2	3	4	5
14. Miserable	1	2	3	4	5
15. Jittery	1	2	3	4	5
16. Cheerful	1	2	3	4	5
17. Active	1	2	3	4	5
18. Proud	1	2	3	4	5
19. Afraid	1	2	3	4	5
20. Joyful	1	2	3	4	5
21. Lonely	1	2	3	4	5
22. Mad	1	2	3	4	5
23. Disgusted	1	2	3	4	5
24. Delighted	1	2	3	4	5
25. Blue	1	2	3	4	5
26. Gloomy	1	2	3	4	5
27. Lively	1	2	3	4	5

## Appendix L: Institutional Review Board Letter of Approval



RESEARCH INTEGRITY AND COMPLIANCE  
Institutional Review Boards, FWA No. 00001669  
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799  
(813) 974-5638 • FAX (813) 974-7091

12/2/2013

Rachel Roth, BS  
Psychological and Social  
Foundations 4202 East Fowler  
Avenue  
EDU 105, Suite 380  
Tampa, FL 33620

RE: **Full Board Approval for Initial Review**

IRB#: Pro00015094

Title: Improving Middle School Students' Subjective Well-Being: Efficacy of a Multi-Component Positive Psychology Intervention Targeting Small Groups of Youth and Parents

**Study Approval Period: 11/15/2013 to 11/15/2014**

Dear Dr. Roth:

On 11/15/2013, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents outlined below.

**Approved Item(s):**

**Protocol Document(s):**

[Roth Dissertation Proposal FINAL Revisions from Proposal Meeting 10-11-13.docx](#) [Student Recruitment Script Revised 11-23-13 5.8 reading level.pdf](#)

**Consent/Assent Document(s)\*:**

[Parent Consent](#)

[Letter Final.docx.pdf](#) [Student](#)

[Assent Form.docx.pdf](#)

## Appendix L: Institutional Review Board Letter of Approval (continued)

\*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s).

Per CFR 45 Part 46, Subpart D, this research involving children was approved under the minimal risk category 45 CFR 46.404: Research not involving greater than minimal risk

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,



John Schinka, Ph.D., Chairperson  
USF Institutional Review Board