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# Youth Character Strengths, Peer Victimization, and Well-Being: Understanding Associations between Positive Traits, Social Experiences, and Positive Psychological Outcomes

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Youth Character Strengths, Peer Victimization, and Well-Being:  
Understanding Associations between Positive Traits, Social Experiences, and Positive  
Psychological Outcomes

by

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A thesis submitted in partial fulfillment  
of the requirements for the degree of  
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## ABSTRACT

The advent of positive psychology has increased awareness of factors that lead individuals to thrive in life, allowing for a more comprehensive model of mental health service delivery. However, while measurement and understanding of character strengths and well-being have improved over the last decade, the interaction of these factors with social risk factors is not entirely understood. The current study analyzed an archival dataset consisting of self-report data from 425 high school students, to examine the extent to which high school students' specific character strengths (i.e., social competence, self-regulation, responsibility, and empathy) are associated with positive psychological outcomes (i.e., gratitude, life satisfaction, and hope), and moderate the relationships between positive psychological outcomes and relational and overt peer victimization. All measured character strengths were positively associated with life satisfaction and hope except for empathy, which was negatively associated with both in multivariate analyses. Social competence and self-regulation were positively associated with gratitude. Relational victimization (but not overt victimization) was inversely associated with life satisfaction and gratitude, and indirectly predicted hope as mediated by gratitude. Gratitude and hope predicted life satisfaction in both models, and served as partial mediators of character strengths and relational victimization. For overt victimization, social competence served as a protective factor and self-regulation served as a risk factor to gratitude. For relational victimization, self-regulation served as a protective factor to gratitude. Implications for research and practice are discussed.

## CHAPTER ONE

### INTRODUCTION

#### **Positive Psychology Framework**

Particularly within the past fifteen years, psychological research has partially shifted in focus from the treatment of psychopathology to the advancement of strengths and positive attributes (Seligman, 2000). While the treatment of psychopathology (i.e., mental illness) is still an important part of psychological practice (Peterson, 2006), a more balanced approach has emerged that incorporates attention to positive experience, traits, and institutions, along with the traditional goals of remediating distress, dysfunction, and danger. This paradigm shift is highlighted in Martin Seligman's (2000) introduction to the *American Psychologist's* special issue dedicated to positive psychology: "psychology is not just the study of pathology, weakness, and damage; it is also the study of strength and virtue" (Seligman, 2000, p. 7).

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

In school psychology, some researchers have argued for the adoption of a Dual Factor Model of mental health (Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008), which defines complete mental health as a state that is both absent of psychopathology and demonstrating psychological well-being (i.e., happiness). Students who have similar levels of psychopathology but different levels of wellness experience different outcomes (Suldo & Shaffer, 2008), indicating that researchers and practitioners oriented toward increasing the mental health of children and adults need to be mindful of wellness in addition to psychopathology. A review of

research findings regarding the Dual Factor Model can be found in Chapter Two of this document.

The current study operates within this framework, arguing that a positive psychological paradigm should not be separate from the study of psychopathology. Rather, positive psychological concepts including possible resilience factors (e.g., character strengths) and positive outcomes (e.g., happiness) are as worthy of attention as variables traditionally measured by psychologists (e.g., anxiety or trauma). For this reason, the current study examined both constructs associated with well-being (i.e., positive experiences and character strengths) as well as constructs associated with negative outcomes (i.e., peer victimization).

### **Positive Psychological States and Traits**

The current study examined positive experiences (i.e., gratitude, life satisfaction, and hope) as well as character strengths (i.e., social competence, self-regulation, responsibility, and empathy), and grouped them together according to whether they are psychological *states* or psychological *traits*. A psychological state is a temporary experience that results from a stimulus or biological event, whereas a psychological trait is stable over time. Park and Peterson (2006) argued that positive psychological traits (i.e., character strengths) have the maximum opportunity to impact an individual's life as they are stable over time, therefore the current study seeks to identify the way traits (i.e., stable personality characteristics) affect states (i.e., mental health outcomes), and not vice-versa.

This hypothesis also suggests that traits have a greater opportunity to positively impact a social context than vice-versa, as, for example, it is easier for an educator to teach a child a skill such as kindness than to change the neighborhood the child lives in. This is not to say that efforts should not be made to improve communities and social contexts; rather, a potentially

more plausible approach to increasing wellness may entail focusing on improving psychological traits (e.g., Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007a; Proctor, Tsukayama, Wood, Maltby, Eades & Linley, 2011). The potential to impact children's wellness in school through community improvement is important but beyond the scope of this study. Nevertheless, adverse social contexts such as peer victimization are a reality for many youth.

### **Prevalence and Influence of Peer Victimization**

Peer victimization (i.e., repeated acts of physical and relational aggression from peers; Graham, 2005) affects 10-14% of children in the U.S. (Craig et al, 2009; Rose, Espelage, Aragon, & Elliott, 2011) and is predictive of numerous academic, social, and mental health problems, including poor grades, social rejection, anxiety, depression, and low self-esteem (Glew et al., 2000), and is associated with suicidality (Klomek, Sourander, & Gould, 2010). Children who experience peer victimization are less likely to attend school (Juvonen et al. 2011) and experience lower levels of hope than their peers who are not victimized (Cole, Maxwell, Dukewich, & Yosick, 2010). Due to these detrimental outcomes associated with victimization, and because students in numerous social circumstances across demographic and social groups are affected (Nansel et al., 2001), it is an important topic to educators in all areas of the U.S.

### **Resilience Framework**

The experience of success and healthy development despite exposure to circumstances associated with negative outcomes is referred to as *resilience* (Masten, 2007). There are three models used in resilience research (e.g., Garmezy et al., 1984). The compensatory factor model of resilience postulates that a characteristic (such as a character strength) that has a positive influence on an outcome can override the negative influence of a negative experience. For example, if a child who is exposed to violence at home has a mentor, the risk factor (violence)

may be negated; this fits the compensatory model because mentorship also increases positive outcomes for children who are not exposed to violence. Conversely, some children do not have compensatory factors in their lives but the challenges they face motivate them to overcome a disadvantage. This example demonstrates the challenge model (Garmezy et al.), which only occurs if a child has the ability to overcome adversity without the help of others (Zimmerman & Arunkumar, 1994). The third model is called the protective factor model; children have personal or environmental characteristics that moderate the extent to which a risk factor produces a negative outcome (Garmezy et al); but the personal or environmental characteristics have a neutral effect on children who do not have risk. That is, within the protective-factor model, an asset (e.g., a bicycle helmet) is only redeemed in a threatening circumstance (e.g., a bicycle crash). In the absence of a bicycle crash, a helmet has no positive influence on the skull of its wearer. The current study was conceptualized as pertinent to the compensatory-factor model, as character strengths have been associated with positive outcomes in past research (e.g., Elias, 2004; Greenberg et al., 2003) and may also buffer youth from experiencing adverse outcomes in the face of a particular stressor, such as peer victimization. However, it is also possible that, in accordance with the protective factor model, character strengths may only moderate the relationship between victimization and mental health outcomes.

### **Purpose and Research Questions**

To shed light on the empirical relationships between peer victimization, positive indicators of well-being (positive states), and character strengths (positive traits) that may moderate links between peer victimization and positive psychological outcomes, this study examined the following research questions:

1. To what extent do character strengths (Responsibility, Self-Regulation, Social Competence, and Empathy) significantly associate with students' positive psychological outcomes, as indicated by:
  - a. Gratitude
  - b. Life Satisfaction
  - c. Hope?
2. To what extent does peer victimization associate with students' positive psychological outcomes, as indicated by:
  - a. Gratitude
  - b. Life Satisfaction
  - c. Hope?
3. Which character strengths (Responsibility, Self-Regulation, Social Competence, and Empathy) serve as resilience factors by protecting students who experience greater peer victimization from diminished positive psychological outcomes, as indicated by:
  - a. Gratitude
  - b. Life Satisfaction
  - c. Hope?

## **Hypotheses**

1. Based on literature reviewed in Chapter 2, it was hypothesized that all four character strengths (responsibility, self-regulation, social competence, and empathy) would be associated with higher life satisfaction, and social competence and empathy would be associated with higher gratitude and hope. Gratitude and hope were predicted to partially mediate the positive associations with life satisfaction.

2. Based on literature reviewed in Chapter 2, it was hypothesized that peer victimization (both overt and relational forms) would be associated with lower life satisfaction, gratitude, and hope. Gratitude and hope were predicted to partially mediate the negative association with life satisfaction.
3. Based on literature reviewed in Chapter 2, it was hypothesized that character strengths, specifically social competence and empathy, would moderate the relationship between peer victimization and life satisfaction, gratitude, and hope. Students with high social competence and empathy were not expected to experience suppressions in life satisfaction, gratitude, and hope that are associated with peer victimization.

### **Definition of Key Terms**

**Dual-Factor Model of mental health.** A conceptual model in which traditional indicators of poor mental health (e.g., anxiety or depression) are considered alongside indicators of positive psychological outcomes, such as life satisfaction (Greenspoon & Saklofske, 2001; Keyes, 2005; Suldo & Shaffer, 2008).

**Positive psychological outcomes.** In the current study, positive psychological outcomes refer to mental health as defined by positive indicators, namely life satisfaction, gratitude, and hope. As outcomes, these variables are considered to be psychological *states* akin to positive well-being.

**Gratitude.** A temporary cognitive and affective state resulting from experiencing positive events (Clore, Ortony, & Foss, 1987). This includes awareness that a desirable event has been experienced and attributing the positive event to an external source (Weiner, 1985).

**Life satisfaction.** The cognitive assertion that valuable conditions in one's life are met based on the criteria most important to the individual (Pavot & Diener, 1993). Distinct from

high positive affect and low negative affect (temporary emotions that most commonly reflect enjoyment level associated with one's current activity), life satisfaction entails a cognitive assessment that the criteria for a good life have been met (Suldo, Huebner, Friedrich, & Gilman, 2006).

**Hope.** Defined by Snyder and colleagues (1991) as "... a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy), and (b) pathways (planning to meet goals)" (p. 287). Based on this definition, hopeful individuals have clear goals (goals), the will and energy to pursue them (agency), and plans on how their goals will be attained (pathways).

**Character strengths.** Similar to character strengths as conceptualized by the Values in Action Project (VIA; Peterson & Seligman, 2004), character strengths in this study refer to positive personality traits that are sometimes referred to as social-emotional assets in the literature. In the current study, this term refers specifically to those traits that are relevant to school functioning and are measured by the Social Emotional Assets and Resilience Scales (SEARS; Merrell, Cohn, & Tom, 2011). The SEARS measures responsibility, self-regulation, social competence, and empathy (defined below). As predictor variables, these character strengths are considered to be psychological *traits*.

**Responsibility.** In part due to its compatibility with the items on the SEARS, in this study responsibility was defined in line with the definition advanced by the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2008): "making decisions based on consideration of ethical standards, safety concerns, appropriate social norms, respect for others, and likely consequences of various actions; applying decision-making skills to academic and

social situations; contributing to the well-being of one's school and community”  
(<http://www.casel.org/downloads/GuidelinesAug02.pdf>).

**Self-regulation.** This term refers to one's ability to inhibit impulsive or maladaptive responses before they occur (Liew, 2012).

**Social competence.** There are three criteria for social competence as typically discussed in the literature, namely *adaptive behavior* (i.e., ability to function independently as expected for one's age; Grossman, 1983), *social skills* (i.e., social behaviors that lead to desirable social outcomes; Merrell, 2007), and *peer relations* (i.e., extent to which one is accepted by their peers; Merrell, 2007). Social competence as measured by the SEARS does not include adaptive skills, therefore in the current study social competence refers only to students' social skills and self-reported social success (i.e., peer relations).

**Empathy.** The ability to understand (i.e., cognitive empathy) and tendency to feel (i.e., affective empathy) the emotional states of others (Davis, 1994; Duan & Hill, 1996). In this study, only cognitive empathy was measured, as items tapping affective empathy are not included on the SEARS-A.

**Peer victimization.** The term *victimization* refers broadly to when children endure repeated acts of overt and relational aggression (Crick & Grotpeter, 1995; Graham, 2005). Overt victimization refers to experiences of physical harm or verbal attacks from another individual, while relational victimization involves being excluded from social activities or experiencing attacks on one's ability to make or maintain friendships (Crick & Grotpeter).

**Resilience factor.** A trait of an individual that reduces the negative impact of adverse circumstances (Masten et al., 1991). In order for resilience to be demonstrated, there must be an event or circumstance that places an individual at risk of a negative outcome. The individual

demonstrates resilience when they succeed or thrive despite these circumstances that otherwise predict failure or maladjustment.

### **Contribution of Study to School Psychology Practice**

A meta-analysis by Merrell and colleagues (2008) found inconsistent effectiveness of programs that attempt to eliminate instances of bullying in the U.S., suggesting that with current technology, educators are not prepared to prevent all instances of bullying. Although related, bullying and victimization are not synonymous. Victimization refers to a victim's experience of endured or repeated aggression, while bullying refers to the behavior on the part of the perpetrator; the elimination of which is one possible way to address victimization. Given that bullying (and therefore victimization) appears likely to endure as a reality faced by a sizable minority (i.e., 10-14%; Craig et al, 2009; Rose, Espelage, Aragon, & Elliott, 2011) of students in the U.S., it may be more productive to focus on increasing the skills of all students in part to protect the functioning of those who are at risk for victimization. Educators in public schools are in an opportune position to address this issue, as most students who receive mental health services are treated within school (Farmer et al., 2003). If students are able to thrive despite experiencing aversive and unpleasant interactions with peers, eliminating bullying behavior may not be the only option in the effort to improve outcomes of victims. This does not mean that attempts to eliminate victimization should be abandoned, but that more students may experience well-being if victimized youth are resilient. Evidence already exists that increasing character strengths increases numerous positive outcomes (e.g., Gillham et al. 2011). If such strengths were to circumvent negative outcomes their utility as targets for intervention would be increased. Thus, this study examined a topic that may contribute to the rationale for facilitating all students' assets in part to prevent deleterious outcomes in the face of peer victimization.

## **Contribution of Study to Literature**

The current study investigated relationships between personality and environmental factors in terms of how they influence positive experiences, thus integrating positive psychological research threads (i.e., experiences, personality traits, and social context) that are often studied separately. Many of the positive personality traits investigated in this study have been studied in terms of how they relate to mental health (e.g., Burt, Obradovic, Long, & Masten, 2008); however, to date most of this research has focused on the traditional pathology conceptualization of mental health (and not well-being). Additionally, though the relationship between victimization and life-satisfaction has been studied (e.g., Martin, Huebner, & Valois, 2008), relationships with other indicators of well-being (e.g., gratitude and hope) are unknown. Furthermore, the possible moderating role of character strengths in the relationship between victimization and positive psychological outcomes has not been investigated. In addition to shedding light on these gaps in the literature, the conclusions drawn from this study inform future research for investigators seeking to use characteristics internal to victims of bullying to protect themselves from adverse circumstances, rather than expecting adversity to be eliminated.

## CHAPTER TWO

### LITERATURE REVIEW

#### **Overview of Positive Psychology Paradigm**

The field of positive psychology was formally organized in 1997 by Martin Seligman and Mihaly Csikszentmihalyi in order to expand the focus of psychology from that of solely fixing mental health problems to also understanding that which goes right in life (Linley, Joseph, Harrington, & Wood, 2006). Although the study of happiness and other positive aspects of life were pursued in other movements (e.g., humanistic psychology in the 1950's; Kristjansson, 2012), positive psychology was created to unite the study of happiness and other positive aspects of life under one research domain. Seligman (2000) divided the main ideas of positive psychology into three pillars: positive experiences (i.e., positive psychological outcomes), personality traits (i.e., character strengths), and social contexts, which are described in greater detail in the next sections. Since the debut of this movement over a decade ago, much research has been done with adults, with less emphasis on children; however, researchers (e.g., Huebner, 1991; McCullough, Emmons, & Tsang, 2002; Suldo & Shaffer, 2008) have also begun exploring these three pillars as they pertain to children. In this literature review, youth research will be used when available; otherwise, research with adults will be discussed.

**Positive Experience.** The first pillar of positive psychology, positive experience, refers to activities and resulting mood states that make life enjoyable. These include optimism, curiosity, gratitude, life satisfaction, and hope. The latter three experiences (i.e., gratitude, life

satisfaction, and hope) are particularly salient when measuring an individual's happiness because they capture positive emotions reflecting one's past, present, and future. While positive experiences are desirable in their own right (i.e., as outcomes), research has uncovered a multitude of benefits of happiness (Lyubomirsky, King, & Diener, 2005). For example, regarding happiness and creative problem solving, people in happy moods solve problems in more effective, creative, and diverse ways than people in neutral or negative moods (Fredrickson, 2001).

In order to integrate positive experience within the existing definition of mental health, researchers have postulated that complete mental health includes both the absence of psychopathology and the presence of positive experience (Greenspoon & Saklofske, 2001; Keyes, 2005; Suldo & Shaffer, 2008). This concept, dubbed the "Dual Factor Model" of mental health, has offered a perspective that may facilitate the incorporation of positive psychological research into mental health practice. This model appears particularly relevant to the school setting as students who experience complete mental health tend to experience greater academic success than students who are simply free from symptoms of psychological problems (Suldo & Shaffer, 2008). Positive experience has been most commonly operationalized as including the indicators of subjective well-being: high life satisfaction, high positive affect, and low negative affect.

Within the Dual Factor Model, the two factors of mental health (i.e., subjective well-being and psychopathology) combine to create four distinct groups: Complete Mental Health (high subjective well-being and low psychopathology), Vulnerable (low subjective well-being and low psychopathology), Symptomatic but Content (high subjective well-being and high psychopathology), and Troubled (low subjective well-being and high psychopathology; Suldo &

Shaffer, 2008). Research with early adolescents indicates that the Complete Mental Health group experiences the best physical health and highest academic and social functioning, while the Vulnerable group experiences lower academic self-concept, motivation, and values school less when compared to the Complete Mental Health group (Suldo & Shaffer). Such differences between two groups of students who do not experience psychopathology (i.e., the traditional factor considered solely in mental health determination) justify the exploration of indicators of positive emotional experiences (in addition to psychopathology) to most comprehensively understand youth mental health.

**Positive Personality Traits.** The second pillar, positive personality traits, pertains to dispositions that increase the likelihood of interpersonal and vocational success (Seligman, 2000). Also conceptualized as “character strengths” (the term used in this study), positive personality traits decrease the likelihood of trauma or negative adjustment (violence, depression, etc.) while simultaneously increasing the likelihood of positive outcomes such as interpersonal and school success (Park & Peterson, 2006). Park and Peterson argue that this second pillar of positive psychology occupies the most central role, as it enables access to positive experience and creates positive social groups out of positive individuals. That is, individuals with positive personality traits are more likely to exhibit happiness, and groups (e.g., a school) comprised of persons with positive personality traits are more likely to facilitate the positive psychological outcomes of other individuals within the group.

There are many ways to conceptualize character strengths. The Values in Action (VIA) project identified 24 ubiquitously valued traits that are considered beneficial in numerous cultures (Peterson & Seligman, 2004). Specifically, Park and Peterson (2006) identified six broad virtues, each of which are comprised of three to five character strengths: Wisdom (i.e.,

creativity, curiosity, open-mindedness, love of learning, and perspective), Courage (i.e., honesty, bravery, perseverance, zest), Humanity (i.e., kindness, love, and social intelligence), Justice (i.e., fairness, leadership, and teamwork), Temperance (i.e., forgiveness, modesty, prudence, and self-regulation) and Transcendence (i.e., appreciation of beauty, gratitude, hope, humor, and spirituality). Specific character strengths vary in level of importance during different stages of life. For instance, while gratitude and curiosity are strongly associated with positive outcomes in adulthood, social intelligence plays a larger role in adolescence (Park & Peterson).

In school, character strengths that facilitate prosocial behavior and successful learning environments are highly valued. To assess personal strengths of students in school, researchers seek to evaluate:

Emotional and behavioral competencies, skills, and characteristics that create a sense of personal accomplishment; contribute to satisfying relationships with family members, peers, and adults; enhance one's ability to deal with adversity and stress; and promote ones' (sic) personal and academic development. (Epstein & Sharma, 1998, pp. 3)

To achieve this end, Merrell, Cohn, and Tom (2011) created the Social Emotional Assets and Resilience Scales (SEARS), an assessment of four distinct constructs that represent individual strengths: Responsibility, Self-Regulation, Social Competence, and Empathy. One of the strengths assessed by Merrell et al. is directly included in the VIA strengths classification (i.e., self-regulation). Responsibility closely overlaps with the VIA strength of prudence (defined as "being careful about one's choices;" Park & Peterson, 2006, p. 67), while empathy and social competence both overlap with social intelligence (i.e., being aware of the motives and feelings of self and others; Park & Peterson). While the VIA strengths inventory allows for a more comprehensive profile of strengths, the SEARS was designed to match skills that can be

effectively taught through school-based social emotional curriculum (e.g., Strong Kids; Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007a), thus making it a practical assessment tool for research in schools. Additionally, the focus on four strengths instead of 24 makes the SEARS easier to utilize with a large number of students, as fewer items are required in a measure of only four constructs.

Prevention and intervention programs that focus on teaching such strengths (i.e., social emotional curricula) have created improvements in school attitudes, behavior, and performance (Zins, Weissberg, Wang, & Walberg, 2004). Improvement in school attitudes includes increased student motivation, coping, and sense of community. Behavioral outcomes include higher classroom participation and pro-social behavior, and fewer absences and suspensions. Performance outcomes include achievement scores across academic subjects and overall improvements in higher-level thinking. Such findings indicate that positive character traits are associated with positive outcomes, and suggest that positive character traits are amenable to intervention via such means as Social Emotional Learning (SEL) curricula.

There is some conceptual overlap between positive experiences and positive personality traits. For example, hope and gratitude have been discussed in the literature as both positive experiences and character strengths. When positive psychological constructs are “state-like,” or occur at one particular moment in time, they are considered positive experiences. On the other hand, when positive constructs are “trait-like” and are stable over time, they are considered character strengths (Park & Peterson, 2006). For example, a child who has an upcoming trip to an amusement park may experience high levels of hope, but hope may diminish after he or she finds out his or her favorite amusement park has been shut down. A child who is hopeful over time, however, may remain hopeful that another equally positive experience may come in the

future. In a similar vein, a child who receives a large sum of money from a relative may be grateful for the time being, but an individual who is consistently grateful for even the tiniest gestures offered by others is more likely to experience happiness over time (McCullough, Emmons, & Tsang, 2002). Despite these conceptual distinctions, character strengths that involve mood (i.e., gratitude and hope) involve durable access to positive experience, and are amenable to change (e.g., Emmons & McCullough, 2003; Vilaythong, Arnau, Rosen, & Mascaró, 2003), thus making them appropriate targets for intervention. For the purposes of the current study, trait-like gratitude and hope will be referred to as positive experiences because they are to be evaluated as outcomes.

**Positive Social Contexts.** The third pillar of positive psychology highlights the influence that the social context enacts upon the individuals within (Seligman, 2000). When this third pillar is applied to the school setting, several factors arise that potentially contribute to the development or hindrance of positive experience. Emotional warmth from teachers and peers, trust between classmates, and the perception that school is a psychologically safe environment are highly related to school satisfaction and positive adjustment (Baker & Maupin, 2009). In particular, successful peer relationships arise as an important factor in the overall positivity of a school climate (Wentzel, Baker, & Russell, 2006). Children who experience low peer acceptance generally experience more academic failure than those who experience higher acceptance (Wentzel, 2005). Furthermore, aggressive and withdrawn behaviors are more common in rejected children, while compliance and social behavior is more common in socially accepted children (Wentzel, 2005).

While the consideration of social problems and associated negative outcomes is important, the third pillar of positive psychology emphasizes that the development of positive

social circumstances is equally important. For example, healthy development (operationalized as social competence, life satisfaction, trust of others or authority, and civic engagement) has been predicted by positive relationships with peers, parents, and a strong community orientation in mid adolescence (O'Connor, 2011). This area of research reflects a more positive psychological approach to social context; the extent to which character strengths and positive experiences can improve negative social contexts is an important part of positive psychology. Accordingly, the extent to which teachers and students create safe environments with low peer victimization may be a concept of interest within the social context umbrella of positive psychology.

The three pillars of positive psychology have largely been studied as separate research threads (Seligman, 2000), yet there is a large degree of interaction between positive experience, personality traits, and social context. For example, social competence (a character strength) is often dependent on social context, as social skills that are viable in one scenario may be unacceptable in another (Wentzel, Baker, & Russell, 2006). Furthermore, perceived social support (positive social context) can protect students who are victimized (negative social context) from adverse experiences such as depression (Tanigawa, Furlong, Felix, & Sharkey, 2011).

The current study aligns with Park and Peterson's (2006) notion that character strengths are the most influential variables on the other two pillars because they grant access to positive experiences and contribute to positive social groups. As such, the proposed study seeks to evaluate the extent to which specific positive character strengths can influence positive experiences in spite of adverse social context (i.e., peer victimization). Within the first pillar, the proposed study will examine students' gratitude, life satisfaction and hope. In the second pillar, empathy, responsibility, self-regulation, and social competence will be examined. Finally, in

terms of social context, bullying and victimization research will be reviewed as it relates to mental health. While the current study does not investigate *positive* social contexts such as high teacher support, it seeks to investigate relationships between character strengths and positive psychological outcomes in consideration of adversity in the social context (i.e., peer victimization).

In the following literature review, the three pillars of positive psychology are described more fully in terms of how they relate to the current study. Within each pillar, the relevant constructs (e.g., gratitude, life satisfaction, and hope) are reviewed in terms of their definition, measurement, relationship with adaptive outcomes, and evidence for malleability via strategies for improving the construct. Gaps in the literature will be highlighted to provide a rationale for the purpose of the current study.

### **Positive Psychological Outcomes**

**Gratitude.** Gratitude is a positive experience that stems from satisfaction with the past. It involves two parts: acknowledging that a desirable event has been experienced and attributing the positive event to an external source (Weiner, 1985). Although gratitude can exist as a character trait (Park & Peterson, 2006), in terms of state-like positive experience, gratitude is often defined as a temporary cognitive and affective state resulting from positive events (Clore, Ortony, & Foss, 1987).

**Measurement.** Among children and adolescents, gratitude can be confounded with good manners (Bono & Froh, 2006); but there are a few assessment tool options currently available that reliably assess state or trait gratitude in youth. For example, Froh et al. (2011) confirmed that the uni-dimensional factor structure of the Gratitude Questionnaire-6 (GQ-6; a measure developed for use with adults) holds with an adolescent population (ages 10 to 19). The GQ-6, which is

assumed to capture trait-like gratitude, is the most frequently used measure of gratitude in published studies. State-like gratitude has been measured by asking students to rate affective terms (e.g., appreciative, grateful) in terms of how much they were felt in the past day, rated via Likert scales such as the Gratitude Adjective Checklist (McCullough, Emmons, & Tsang, 2002).

*Correlates.* Among samples of adults, state-like gratitude has been positively associated with increased happiness, pride, hope, and contentment (Overwalle, Mervielde, & De Schuyter, 1995) and is inversely correlated with contempt, jealousy, and hatred (Schimmack & Reisenzein, 1997). In adolescents, gratitude has been associated with life satisfaction, positive affect, optimism, and social support (Froh et al., 2009). Additionally, experimental research has suggested that inducing grateful emotions can increase positive affect, likelihood of engaging in prosocial behavior (e.g., helping someone in need), optimism, and physical health (Emmons & McCullough, 2003). In this way, gratitude simultaneously improves mood and interpersonal relationships (Bono & Froh, 2006).

Although much of this outcome research has been conducted with adults, some research with youth indicates significant correlations between gratitude and other indicators of positive functioning, such as perceived social support and optimism (Park & Peterson, 2006), and academic achievement and motivation to connect with the community (Froh, Emmons, Card, Bono, & Wilson, 2011). Gratitude has been found to predict life satisfaction over time (Gillham et al., 2011). Furthermore, experimental research suggested a possible causal link between gratitude and an emotional indicator of subjective well-being among adolescents (Froh, Kashdan, Ozimkowski, & Miller, 2009). Specifically, youth who delivered letters expressing gratitude experienced subsequent increases in gratitude (as measured by the GAC) and positive affect.

The expression of gratitude is highly valued in numerous cultures around the world (Emmons & Crumpler, 2000). According to McCullough, Kilpatrick, Emmons, and Larson (2001), when an individual expresses gratitude, three “moral” events take place. The recipient demonstrates that they value the source (i.e., moral barometer), the recipient encourages the giver’s future generous behavior (i.e., moral reinforcer), and the giver encourages the recipient to commit prosocial behavior in the future (i.e., moral motive). Due to its ability to facilitate positive social experiences for the giver (Tsang, 2006; Tsang 2007), the recipient (Clark, 1975), and even uninvolved people (Bartlett & Desteno, 2006), gratitude is likely an important outcome in a context as inherently social as school.

**Promoting gratitude.** Gratitude is a state typically induced by the receipt of something valued (McCullough et al., 2001). However, even if a child’s environment is not particularly giving, there are ways to increase gratitude. As discussed previously, gratitude in youth can be directly increased by engaging in grateful behaviors such as the letter-writing intervention, and this effect is even more powerful for children who experience low positive affect before the intervention (Froh, Kashdan, Ozimkowski, & Miller, 2009). Another effective way to increase gratitude is to encourage youth to make lists of positive events in their lives (Froh, Sefick, & Emmons, 2008). Given that gratitude is prone to change via intervention and is associated with numerous benefits, it is important to understand how it is affected by character strengths and social context.

**Life satisfaction.** Life satisfaction is the cognitive assertion that valuable conditions in one’s life are met based on the criteria most important to the individual (Pavot & Diener, 1993). Distinct from high positive affect and low negative affect (temporary emotions that most commonly reflect enjoyment level associated with one’s current activity), life satisfaction entails

a cognitive assessment that the criteria for a good life have been met (Suldo, Huebner, Freidrich, & Gilman, 2006).

**Measurement.** Self-report tools have been created to evaluate how satisfied individuals are with specific areas of life such as work, home, or school; other measures are concerned with satisfaction overall, or global life satisfaction (Suldo et al, 2006). Although there are currently many tools for assessing life satisfaction in multiple domains of life (see Proctor, Linley, & Maltby, 2008, for a review), the focus of the current study is on overall appraisals of life satisfaction, therefore only global measures are discussed in this section. The Students Life Satisfaction Scale (SLSS; Huebner, 1991) was developed to assess the life satisfaction of youth between the ages of 8 and 18. Youth indicate agreement with seven statements, such as “My life is better than most kids.” Another option for measuring global life satisfaction is the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS was developed for an adult population, but is often used with adolescents. The SWLS has five items (e.g., if I were to live my life over again I would change almost nothing) that are rated from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Frequent research with adults lead Diener to assert that individuals’ sum score on the SWLS places them into seven categories of life satisfaction: extremely dissatisfied (score of 5-9), dissatisfied (10-14), slightly dissatisfied (15-19), neutral (20), slightly satisfied (21-25), satisfied (26-30), and extremely satisfied (31-35).

**Correlates.** Global life satisfaction, most often measured by the SLSS or SWLS, is associated with a host of optimal outcomes in youth, including high self-efficacy (Huebner, Gilman, & Laughlin, 1999; Nevin, Carr, Shelvin, Dooley, & Breaden, 2005), optimism (Extremera, Duran, & Rey, 2007), locus of control (Gilman & Huebner, 2006), and extraversion (Heaven, 1989). Higher life satisfaction also co-occurs with more academic success (Gilman &

Huebner), though the relationship with academic achievement is moderate at best. Students with high life satisfaction are unlikely to have behavior problems in school (Valois, Paxton, Zullig, & Huebner, 2006), poor perceptions of their health, act in unhealthful ways, or experience restricted access to activities due to health problems (Piko, 2006; Suldo & Shaffer, 2008; Zullig, Valois, Huebner, & Yoon, 2005). In terms of social adjustment, students with high life satisfaction are more likely to perceive social support from children and adults (Gilman & Huebner, 2006; Suldo & Huebner, 2006), experience a sense of attachment to their school (Gilman, 2001), have positive peer relationships (Dew & Huebner, 1994), and experience low levels of victimization (Martin & Huebner, 2007).

**Promoting life satisfaction.** Two ways to increase life satisfaction have been discussed in the literature (Lyubomirsky, Sheldon, & Schkade, 2005): indirect approaches and direct approaches. To indirectly increase life satisfaction, individuals in a student's life can improve conditions in the environment (e.g., allow for participation in motivating extracurricular activities such as band or sports) or increase prosocial interactions and/or support from meaningful others (Suldo, Huebner, Savage, & Thalji, 2011). To directly increase life satisfaction, mental health professionals can attempt to improve the child's skills or behaviors. Researchers have found some support for adolescents' life satisfaction to be amenable to intervention (Suldo, Savage, & Mercer, in press), though direct approaches have mostly been studied with adults (Farrell, Valois, & Meyer, 2003; King, 2001).

**Hope.** The final positive experience to be studied in the current study is hope; defined by Snyder and colleagues (1991) as "... a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy), and (b) pathways (planning to meet goals)" (Snyder, Irving, & Anderson, 1991, p. 287). This seminal definition

indicates three main components. Specifically, hopeful individuals have clear goals (goals), the will and energy to pursue them (agency), and plans on how their goals will be attained (pathways). Hopeful individuals create two main types of goals: achieving positive outcomes and avoiding negative outcomes (Snyder, 2002). In this way, a hopeful student may have the motivation and a plan for guaranteeing a passing grade or preventing an unwanted breakup with a romantic partner. Much like life satisfaction, Snyder's concept of hope is not an affective state or trait, but rather reflects levels of thought. That is, hope provides access to positive emotions, but hope itself does not comprise a positive emotional state (Snyder). Hope delivers positive emotional states only when it involves the successful completion of goals, whereas failures are associated with negative emotional states (Snyder et al. 1996). High levels of hope are associated with frequent attempts to achieve goals, thus increasing the likelihood of success and positive emotional outcomes (Snyder, 1999). Further, high levels of hope (and life satisfaction) entail positive cognitive experiences.

**Measurement.** The most commonly used measure of hope in children is the Children's Hope Scale (CHS; Snyder et al., 1997). The CHS has six items that measure agency and pathways thinking. The CHS has been used frequently with children and adolescents, including high school students. Adolescents may also complete the Hope Scale (Snyder et al., 1991), which was developed for adults. The Hope Scale has twelve items split equally into three groups measuring agency (e.g., I energetically pursue my goals), pathways (e.g., I can think of many ways to get out of a jam), and arbitrary information (i.e., distracter questions).

**Correlates.** In low-income adolescents, pathways-thinking has been linked to numerous adaptive coping strategies, including problem solving, planning, and positive thinking (Roesch, Duangado, Vaughn, Aldridge, & Villodas, 2010). The protective nature of hope is illustrated in

by findings from a study with 132 fifth-grade, low-income students (Cedeno, Elias, Kelly, & Chu, 2010). Specific findings include that (a) students who experienced or witnessed violence experienced low self-concept, (b) students with high hope, as measured by the CHS, experienced higher self-concept, and (c) students with high hope who were exposed to and personally affected by school violence were less likely to experience reduced self-concept than their peers with low hope (Cedeno, Elias, Kelly, & Chu). High hope has also been found to predict life satisfaction over time among high school students (Gillham et al., 2011).

**Promoting hope.** Pathways thinking can be increased by teaching youth how to create achievable goals (e.g., small incremental goals instead of large goals) and how to create multiple solutions to the same problem such that failure of one approach does not preclude overall success (Snyder et al. 2001). Agency can be effectively improved by ensuring that students choose goals they see as important (e.g., by allowing them rather than adults to create their goals), base future goals on present performance, encouraging optimistic self-talk, and reflecting on past success (Snyder et al.). A recent study provided support for the efficacy of such hope-focused interventions provided to early adolescents at school (Marques, Lopez, & Pais-Ribero, 2011).

**Relationships between gratitude, life satisfaction, and hope.** Although gratitude and hope are positive psychological outcomes, they can also be fostered as character strengths (Park & Peterson, 2006). When conceptualized and targeted as such, both gratitude and hope have been associated with life satisfaction (Park, Peterson, & Seligman, 2004) and have been found to predict life satisfaction over time (Gillham et al., 2011; Park & Peterson, 2008). For this reason, when making hypotheses about the three positive outcomes examined in the current study, it is important to consider that hope and gratitude, in addition to being predicted by other factors (such as character strengths) may in turn contribute to variance in life satisfaction.

**Gaps in the literature.** While research on youth exposed to violence (Cedeno, Elias, Kelly, & Chu, 2010) indicated that trait-like hope (a character strength) can serve as a compensatory resilience factor, it is still unknown how hope as an outcome can be protected from aversive events (i.e., peer victimization) or be increased by other character strengths (e.g., social competence). Furthermore, while numerous VIA strengths are associated with life satisfaction (e.g., Gillham, 2011; Kashdan & Steger, 2007), it is not yet known whether character strengths that are targeted by school curricula have this relationship. Further, the interconnections between these constructs are less understood. Findings from some research have indicated that positive affect can be increased by both gratitude (Froh et al., 2009) and hope (Bailey, Eng, Frisch, & Snyder, 2007), while others have postulated that empathy may influence gratitude (Bono & McCullough, 2006). Greater understanding of the relationships between these experiences will facilitate greater understanding of how to achieve positive mental health.

### **Character Strengths: Assets and Resilience**

In part because strength-based assessment was seldom utilized before the most recent decade (Rhee, Furlong, Turner, & Harari, 2001), the literature in this area has yet to fully develop, but it is informed by results of intervention studies that target presumed strengths as well as correlational research with adults and youth. After a brief definition of assets and resilience, the definition and importance of each of the constructs in the SEARS will be provided. Since the SEARS is a new instrument and the constructs therein have not extensively been researched alongside well-being, research linking other strength-based assessment tools to life satisfaction will be discussed as well.

**Assets.** The term *asset* refers to the ability of a trait to provide access to positive outcomes. In the past ten years much research has been conducted using the VIA measure of

strengths with adults. These studies suggest that life satisfaction and happiness are predicted by strengths included under the categories of transcendence (e.g., hope), temperance (e.g., self-regulation), and intellect (e.g., open-mindedness; Gillham et al., 2011). Relationships have also been found between life satisfaction and curiosity (Kashdan & Steger, 2007), as well as with love, hope, and zest (Peterson, Ruch, Beermann, Park, & Seligman, 2007). Associations between assets and youth outcomes will be examined following the definition of resilience and the specific assets of focus in the current study.

**Resilience.** Increases in positive traits are important, but also of interest to researchers is the possibility that increasing social emotional skills can protect children from negative outcomes (Harlacher & Merrell, 2012). The ability to do well despite unfavorable circumstances is referred to as *resilience*; a concept long studied in the field of medicine that only emerged in behavioral sciences in the 1970s (Masten, 2007). In order to demonstrate resilience, an individual must be presented with a challenge or threatening circumstance that is overcome via a resilience factor (Masten et al, 1991). Therefore, for character strengths (e.g., empathy) to serve as resilience factors, they must protect the individual from some unwanted outcome (e.g., negative affect or reduced life satisfaction).

### **Social Emotional Assets and Resilience Curriculum**

Aside from strengths defined according to the VIA-Youth, other research has examined the targets of school-based social-emotional curricula. A social emotional curriculum is defined as a set of pedagogical practices oriented toward the goal of increasing students' ability to understand and regulate their emotions, make responsible decisions, deal with stressful situations, create meaningful relationships, and build an appreciation and understanding of the feelings of others (Collaborative for Academic, Social, and Emotional Learning [CASEL],

2008). A simultaneous intention is to circumvent negative outcomes by creating resilient and adaptable children (Greenberg et al., 2003). While the purpose of this paper is not to evaluate a social-emotional curriculum, a brief discussion of the topic is important as one specific curriculum provides a systematic way of targeting character strengths for intervention.

In order to increase character strengths of children and adolescents, Merrell and colleagues developed a series of social-emotional curricula for children of all ages termed *Strong Kids* (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007a, 2007b, 2007c; Merrell, Parisi, & Whitcomb, 2007). To measure the skills targeted in the *Strong Kids* curriculum, Merrell (2008) and Cohn (2011) conducted factor analyses to determine how positive personality traits could be grouped together for the purposes of psychological assessment. After extraneous or overlapping items were removed, four main factors emerged: social competence, self-regulation, responsibility, and empathy (Cohn, 2011; Merrell, 2008). A growing body of evidence suggests that the specific skills taught in social-emotional curricula (e.g., responsibility) are indeed assets, as they increase social emotional knowledge and coping strategies (Merrell et al., 2008; Marchant et al., 2010), academic achievement (Elias, 2004; Greenberg et al., 2003), and prosocial behavior (Caldarella, Christensen, Kramer, & Kronmiller, 2009). The *Strong Kids* curriculum has been demonstrated to improve the skills measured by the SEARS (Harlacher & Merrell, 2010). As resilience factors, social emotional curricula have successfully reduced internalizing behavior (Caldarella et al., 2009; Marchant et al., 2010). Some research has also indicated that social emotional curricula produce significant improvements of conduct problems (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2010). The fact that these curricula can impact each of the skills targeted by the SEARS means that these four strengths are practical choices for intervention, and thus understanding their associated benefits is important.

**Social competence.** Social competence refers to a complex and important skill set including three sub-areas, namely *adaptive behavior* (i.e., ability to function independently as expected for one's age; Grossman, 1983), *social skills* (i.e., social behaviors that lead to desirable social outcomes; Merrell, 2007), and *peer relations* (i.e., extent to which one is accepted by their peers; Merrell, 2007). Social competence as measured by the SEARS focuses primarily on the latter two aspects of the definition. Furthermore, while many components of adaptive behavior are related to social competence, this term also refers to a wide array of characteristics (e.g., proper use of a spoon or straw; Sparrow, Cicchetti, & Balla, 1989) that are not related to social competence and are beyond the scope of this study.

Social skills are necessary to access the interpersonal rewards of peer relations. Although the construct of peer relations is more of an outcome than a behavior, it is necessary to consider when determining an individual's competence because an individual with strong social skills who is not accepted by his or her peers does not necessarily have high social competence (Merrell et al., 2007). Therefore, to determine if social skills are sufficiently developed to provide access to social resources, it is important to measure them alongside peer relations. On the SEARS, examples of items measuring social skills include "I give compliments to other people" and "I am a good listener when other people have something to say," while peer relations are measured by items such as "Other people like me" (Merrell, Cohn, & Tom, 2011).

**Relationship to mental health.** Burt, Obradovic, Long, and Masten (2008) cite numerous examples of poor mental health affecting social competence (Hinshaw, 1992; Masten et al., 2005; Patterson, Reid, & Dishion, 1992), however it is also possible that social competence influences mental health (e.g., Cole, Martin, Powers, & Truglio, 1996), or that both are influenced by third variables such as a financial situation (Burt et al., 2008). Given that the

consequences of peer rejection can predict internalizing problems (Hymel, Rubin, Rowden, & Lemare, 1990), Burt et al. sought to clarify the relationships between mental health and social competence using structural equation modeling (SEM).

In their study, social competence was primarily measured via peer acceptance through peer, self, and parent report using interviews and the Revised Class Play peer nomination procedure (Gest et al., 2006). Internalizing and externalizing behavior were measured via the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983). To test the possibility that third variables had a significant impact on social competence or psychopathology, the authors also measured parenting quality, IQ, and SES. A cross-sectional sample (ages 8-12) was assessed across four time points, spanning a total of 20 years. Only the findings from analysis of the first two time points (i.e., youth and adolescence) are discussed because adult outcomes are beyond the scope of this study. Beginning with a parsimonious model that simply measured each variable as it predicted itself in future time points (e.g., Time 1 externalizing behavior predicting Time 2 externalizing behavior), the authors successively added parameters (e.g., Time 1 social competence predicting Time 2 internalizing behavior) until they identified a model with superior fit. The superior model showed baseline inverse correlations between social competence and internalizing/externalizing problems. Further, social competence in childhood predicted low adolescent internalizing problems. Although this model suggests that social competence influences psychopathology, a similar model has not yet been tested with positive experiences, which would be in line with calls to examine mental health comprehensively via a dual factor model that considers both subjective well-being and psychopathology.

**Self-regulation.** Although it is another complicated and vastly studied construct, self-regulation as measured in the current study (e.g., “I stay calm when there is a problem or an

argument,” SEARS; Merrell, Cohn, & Tom, 2010) best fits definitions that refer to “effortful control” (Liew, 2012). Therefore, only research pertaining to this relatively behavioral definition will be reviewed here. Liew concludes that children who are able to inhibit impulsive or maladaptive responses before they occur are viewed more positively by teachers and peers than those who act on these impulses (Blair, Denham, Kochanoff, & Whipple, 2004; Liew, Eisenberg, & Reiser, 2004; Olson, Sameroff, Kerr, Lopez, & Wellman, 2005). Additionally, children who can control their behavior experience higher academic achievement than those who do not (Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008). In addition to these social and academic benefits, self-regulation also has appeared to associate with mental health.

***Relationship to mental health.*** In the form of effortful control, self-regulation can buffer adolescents from developing externalizing problems in unstable family environments (Bakker, Ormel, Verhulst, & Oldehinkel, 2010). Additionally, children who reported experiencing fear and frustration on a personality measure did not experience subsequent internalizing or externalizing problems if they also reported high effortful control (Oldehinkel, Hartman, Ferdinand, Verhulst, & Ormel, 2007), suggesting that the ability to regulate one’s self (e.g., staying calm during arguments, thinking before action) may reduce mental health problems. Self-regulation as measured by the VIA inventory has been found to predict adolescent life satisfaction a over a two-year time period during 9<sup>th</sup> and 10<sup>th</sup> grade (Gillham et al., 2011).

**Responsibility.** A universal definition of responsibility is not available; however, CASEL defines responsibility as “making decisions based on consideration of ethical standards, safety concerns, appropriate social norms, respect for others, and likely consequences of various actions; applying decision-making skills to academic and social situations; contributing to the well-being of one’s school and community” (Haggerty, Elgin, & Woolley, 2011) Since this

definition is relatively compatible with the items on the SEARS (e.g., “I am good at making decisions” and “I think about my problems in ways that help;” Merrell, Cohn, & Tom, 2010), this is the preferred definition for the current study.

***Relationship to mental health.*** Interventions with early adolescents targeting some types of responsibility (i.e., respond to triggers of aggression in non-violent ways that entail acceptance of personal responsibility for the situation and social problem-solving) have been successful in decreasing discipline referrals (Farrell, Meyer, & White, 2001), have reduced provocations from peers and peer pressure to use drugs (Farrell, Valois, & Meyer, 2002), and have reduced referrals for violent behavior (Farrell, Meyer, Sullivan, & Kung, 2003). Although the effects have not yet been systematically evaluated, a curriculum has also been developed to increase responsibility and empowerment to reduce adolescent vulnerability to peer victimization (Wiseman, 2009). No studies to date have explicitly investigated the relationship between positive indicators of mental health and a general tendency towards high responsibility. The VIA construct of Prudence, which resembles responsibility, has been found to predict adolescent life satisfaction over the course of two years in 9<sup>th</sup> and 10<sup>th</sup> grade (Gillham et al., 2011).

***Empathy.*** A long history of use of this term in psychological research makes defining empathy a challenge (Redmond, 1989). However, for the purposes of this study, the most appropriate definition separates two elements of empathy: cognitive and emotional empathy (Davis, 1994; Duan & Hill, 1996). Cognitive empathy refers to an individual’s ability to take the perspective of another, while emotional (also referred to as affective) empathy refers to the extent to which one feels another’s emotions. The items on the SEARS-A measure cognitive empathy (e.g. “I am good at understanding the point of view of other people”), but not emotional or affective empathy.

***Relationship to mental health.*** Some research with youth has found that increasing empathy improves interpersonal functioning (Stephan & Finlay, 1999). Furthermore, Lazarus and Lazarus postulated that empathy is a necessary component for gratitude (1994), and empathy has been positively associated with prosocial adjustment characteristics, such as creating and maintaining friendships (Litvack-Miller et al., 1997). Regarding links to psychopathology, low empathy in adolescents has been associated with externalizing behaviors (Miller & Eisenberg, 1988), including aggression (Joliffe & Farrington, 2007), disruptive behavior disorders (de Wied, van Boxtel, Matthys, & Meeus, 2012), and callous-unemotional traits (de Wied et al.; Frick & Dickens, 2006). Adolescents high in empathy have been found to experience fewer internalizing problems and empathy can moderate the relationship between poor peer relations and internalizing/externalizing behavior (Gleason, Jensen-Campbell, & Ickes, 2009). Research has not yet evaluated the connection between empathy and life satisfaction in youth; however, caregivers of elderly adults have been found to report fewer depressive symptoms and higher life satisfaction if the caregivers have high cognitive empathy (Lee, Brennan, & Daly, 2001).

Despite this research on the possible psychological benefit of empathy, recent studies on “empathetic distress” suggest that individuals with high empathy may feel more negative emotions in the face of strains in social relationships (Smith & Rose, 2011). That is, when an individual with high emotional (or affective) empathy witnesses others in distress, they may internalize the feelings of distress even if they are not involved in the conflict. Smith and Rose assessed emotional empathy, therefore it is unclear whether cognitive empathy (as measured on the SEARS-A) will have the same effect. However, Smith and Rose also found that social perspective-taking, which is similar to cognitive empathy, increased the likelihood of

experiencing empathetic distress. Therefore it is important to anticipate the possibility that empathy will serve as an additional risk factor rather than a protective factor.

### **Other Assets/Strengths Predictive of Positive Psychological Outcomes**

Although there is limited research linking Strong Kids and the constructs measured in the SEARS to positive experiences, previously established measures of strengths, in particular the strengths in the Values in Action (VIA) classification system (Peterson & Seligman, 2004), have been linked to well-being to varying degrees. In general, strengths that involve getting closer to others or building friendships (e.g., social intelligence) are more highly associated with social success than self-oriented strengths (e.g., appreciation of beauty; Park & Peterson, 2008). Most of this strength-based research has been conducted with adults (Park & Peterson, 2006); however, adolescents have been increasingly included in this research thread. For example, Froh, Sefick, and Emmons (2008) found that transcendence-based interventions (e.g., focusing on humor and spirituality) increase life satisfaction with life and with school.

Heeding a call to measure strengths in a comprehensive fashion to avoid overlooking spurious relationships (Dahlsgaard, 2005), Gillham and colleagues (2011) evaluated the predictive power of the VIA survey in its entirety to detect unique relationships between strengths and well-being. In this study, 149 students in 9<sup>th</sup> grade completed the Revised Values in Action Survey (VIA-Youth; Park & Peterson, 2006) and the SLSS four times over two years. After conducting a principal components analysis, they collapsed the strengths into five factors: transcendence (e.g., humor), temperance (e.g., self-regulation), intellectual (learning related), other-directed (e.g., cooperation), and leadership (e.g., advising others). Strengths and life satisfaction were examined in three waves to minimize emphasis on spurious relationships. They identified strengths that predicted well-being in a mixed-model ANCOVA, then conducted a

backward stepwise procedure to detect strengths that predict life satisfaction while controlling for other strengths. Logistic regression analyses were used to determine whether strengths indicated in step 1 and step 2 could account for changes in life satisfaction over time. Gillham et al. found that in general, transcendence predicted SWB, but not vice versa. Transcendence, temperance, other-directed, and intellectual strengths were robust indicators of future life satisfaction, but only transcendence predicted life satisfaction while controlling for other strengths. These findings not only indicate the predictive validity of character strengths in youth, but also suggest that examining a portion of a strengths-based assessment (e.g., only one factor, such as temperance) can lead researchers to make erroneous conclusions. In the spirit of these findings, all of the constructs in the SEARS are planned to be analyzed simultaneously in the proposed study.

In addition to predicting life satisfaction, strengths have also been demonstrated to increase life satisfaction when targeted through strength-based interventions. Proctor and colleagues (2011) implemented an intervention called *Strengths Gym*, in which 319 students in 8<sup>th</sup> and 9<sup>th</sup> grade either attended their usual class schedule (control group) or took lessons and participated in activities that define and target each of the strengths in the VIA survey (treatment group). Life satisfaction was assessed via the SLSS once at baseline and again when the intervention terminated several months later. Compared to students in the control, students in the treatment group had significantly higher life satisfaction post-treatment, even after controlling for baseline life satisfaction.

In terms of resilience in school, one important risk factor to consider is victimization from peers. That is, while some children who experience victimization suffer from maladjustment, others do not (Juvonen & Graham, 2001), leading researchers to question what

differences might protect students from negative outcomes. Some protective factors arise in the home and community; for example, religiosity and family support reduce the likelihood of conduct problems in victimized youth (Perkins & Jones, 2004). However, these home and community factors may not always be easy to influence for school personnel, making the investigation of trainable skills that protect children a worthwhile investment. Among the skills assessed by the SEARS (i.e., social-competence, self-regulation, empathy, and responsibility), there is significant potential for mitigating risk. Self-regulation has been shown to buffer consequences associated with parent alcohol consumption (e.g., neglecting one's responsibilities) in the children of alcoholic parents (Pearson, D'Lima, & Kelley, 2011), and interventions that increase self-regulation result in decreased conduct problems as indicated by disciplinary referrals and suspensions (Wyman, Cross, Brown, Yu, Tu, & Eberly, 2010). Empathy is inversely associated with aggressive and criminal behavior (Joliffe & Farrington, 2004; Miller & Eisenberg, 1988), and is positively associated with forgiveness (McCullough et al., 1997). Despite the fact that some strengths have been shown to reduce negative outcomes in spite of risk (e.g., self-regulation protecting children of alcoholic parents), many of the variables have only been examined as assets (e.g., the general positive effect of empathy).

**Gap in the literature.** Given the apparent malleability of intrapersonal strengths and their connection to mental health, including positive indicators of well-being, further exploration of how character strengths relate to positive psychological outcomes is important. While the constructs in the VIA survey have demonstrated powerful effects on life satisfaction, the length of the survey (i.e., 240 items) may preclude its use in some school settings where time for assessment is limited for large numbers of students. Furthermore, the large overlap between strengths targeted by the relatively brief SEARS and existing social-emotional curricula provide

an impetus to better understand how the skills therein predict positive experience. A comprehensive search of numerous scholarly databases and forward citations from seminal strengths-based articles did not yield a single investigation of the relationship between responsibility and life satisfaction. The ability of strengths to predict life satisfaction has been researched to the relative exclusion of other positive experience outcomes (i.e., hope and gratitude), thus examining these outcomes in relation to strengths is also important. Finally, although many of these strengths have been evaluated as increasing positive outcomes, information is limited regarding the extent to which they may protect against negative outcomes.

### **Peer Victimization**

As stated in the review of resilience literature by Zolkoski and Bullock (2012), resilience traits protect individuals from negative outcomes associated with risk. One environmental risk facing students today peer victimization, as between 10-14% of youth in the U.S. report being victimized by their peers (Craig et al, 2009; Rose, Espelage, Aragon, & Elliott, 2011). While bullying refers broadly to students committing acts of aggression over time, the term *victimization* refers broadly to when children are on the receiving end of repeated acts of overt and relational aggression (Crick & Grotpeter, 1995; Graham, 2005). Overt victimization refers to instances in which children experience physical harm or verbal attacks from another individual, while relational victimization involves being excluded from social activities or experiencing attacks on one's ability to make or maintain friendships (Crick & Grotpeter). In the following section, both overt and relational victimization will be described in terms of measurement, their unique impact on mental health, and gaps in the literature pertaining to well-being and resilience.

## **Overt and Relational Victimization**

In 1995, Crick and Grotpeter argued that there was a flaw in the long history of literature that contended that boys are generally more aggressive than girls (e.g., Block, 1983). Crick and Grotpeter argued that this assertion assumes that aggression can only refer to direct physical or verbal confrontations (i.e., overt relationships); however, if aggression includes attempts to damage others' ability to make or maintain relationships (i.e., relational aggression), female youth can also be seen as aggressive. To test this notion, the researchers used a peer nomination procedure to investigate the extent to which boys and girls exhibit overt and relational aggression. They found that, consistent with past literature, boys were much more overtly aggressive than girls (Crick & Grotpeter, 1995). However, they also found support for their hypothesis that girls were more relationally aggressive. The authors interpreted these findings as a sign that aggression is a means to acquire a goal perceived as relevant to the individual, with boys seeking physical dominance and girls seeking control over close, intimate connections with others. Since the publication of this seminal work, relational aggression has been widely studied along with similar constructs, indirect and social aggression (see Archer & Coyne, 2005, for a review). Although indirect, social, and relational aggression have slight differences, these constructs are alike in that they refer to discreet forms of aggression that are not as easily observed as traditional, or overt, aggression.

**Measurement.** There are numerous ways to assess social experiences, and the preferred methods depend in part on whether aggression (i.e., perpetrating) or victimization (i.e., receiving) is the variable in question. Since children normally seek to hide aggressive acts from adults, self-report is undesirable for assessing perpetrators (Archer & Coyne, 2005), and peer nomination procedures (i.e., when students rate their peers on aggressive behaviors) are preferred

(e.g., Crick & Grotpeter, 1995; Werner & Crick, 1999). Teacher reports are also used, but some researchers argue that students are more aware of aggressive activity than the adults in their lives (Björkqvist, Österman, & Kaukiainen, 1992). Although observations can achieve reliable results for younger children (Tapper & Boulton, 2002), the personnel required for such procedures precludes the assessment of large samples of youth. Self-report can be used with recipients of aggressive behavior, who are less likely to want to hide negative events from adults.

Specifically, Crick and Grotpeter created the Social Experiences Questionnaire (SEQ; 1996) for this purpose. The SEQ is a child self-report measure assessing the frequency with which children are victimized via overt and relational means. Students rate on a likert-scale from 1 (*never*) to 5 (*all the time*), the frequency with which they experience specific types of victimization. For scoring purposes, items are ranked from 0-4, so students who are never victimized are ranked 0).

Early research dichotomously identified students as victim or non-victim using cut-off scores, and found that less than 25% of adolescent students report sufficiently high frequency of SEQ items to be considered victimized (Crick & Bigbee, 1998). Other researchers have analyzed victimization via dichotomous (yes/no) survey questions (National Center for Educational Statistics, 2011; Tuerner, Finkelhor, Hamby, Shattuck, & Ormrod, 2011), which provides little information about frequency or intensity. For example, one study that sought to expand knowledge of victimization prevalence for students with disabilities assessed victimization with a single yes or no question about whether any victimization was experienced in the past year (Blake, Lund, Zhou, Kwok, & Benz, 2012). There is also little agreement over the degree or frequency of victimization that should qualify one to meet cut-off criteria (see Swearer, Siebecker, Johnsen-Frerichs, & Wang, 2010, for a review), thus making it difficult to decide where to draw the line between non-victimized and victimized youth. When analyzed

dichotomously with scores anchored from 1-5, cut-off scores have been set at 3.90 for relational victimization and 4.35 for overt victimization (Crick & Bigbee, 1998). When analyzed continuously anchored from 0-4 on the SEQ, adolescents have reported mean scores of 0.8 for relational victimization and 1.22 for overt victimization (Hoglund & Leadbeater, 2007). For the purposes of this study, results from the SEQ are best interpreted as continuous variables (extent of victimization), rather than dichotomous (whether one is victimized or not), as this may permit a more nuanced investigation of the experiences of the large number of students who report experiencing victimization occasionally, but to a minor degree (i.e., “almost never” but not “no/never”).

**Impact on functioning.** Two decades of research have established strong connections between victimization and mental health problems (Hawker & Boulton, 2000). Among youth, relational and overt peer victimization increase the risk of anxiety, depression, low self-esteem, social rejection, and academic difficulties (Glew et al., 2000), as well as suicidality (Komek et al., 2010). Of particular concern are youth who have low levels of hope, as they are more likely to experience suicidal ideation related to victimization (Terzi-Unsal & Kapci, 2005), particularly when they have low hope and perceive low social support from their peers (Bonnano & Hymel, 2010). Children who experience frequent victimization may develop a fear of school that reduces attendance, and therefore reduces academic achievement (Juvonen et al., 2011).

**Links with positive experiences.** Although the relationship between victimization and mental health problems is well established (Hawker & Boulton, 2000), as of this review, only 11 studies have examined victimization in relation to life satisfaction, only one examined victimization and hope, and none examined victimization and gratitude.

***Victimization and hope.*** In a sample of 886 students in 5<sup>th</sup> – 12<sup>th</sup> grade, You and colleagues (2008) found that non-victimized youth had higher hope (measured via the CHS) than victims. Victimization was assessed via the California Bully/Victim Scale, which was designed to measure overt and relational victimization and the power imbalance that exists in the relationship between bully and victim.

***Victimization and life satisfaction.*** Among the investigations of life satisfaction, nine found that victimization is predictive of reduced life satisfaction. In one of the earliest of these studies, Martin and Huebner (2007) sought to expand the psychological outcomes included in victimization research, which had historically only focused on negative aspects of mental health (e.g., anxiety and depression). To evaluate the impact of victimization on the SWB, and the possible moderating effect of prosocial experiences, Martin and Huebner administered the SEQ, the Positive and Negative Affect Scale- Children (PANAS-C; Laurent et al., 1999) and the Multidimensional Student's Life Satisfaction Scale (MSLSS; Huebner, 1994) to 571 middle school students in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade. Consistent with prior research, males were more likely to experience overt victimization; however, males in this sample were also more likely to experience relational victimization. Overt victimization predicted adverse outcomes in terms of life satisfaction and positive affect, and both overt and relational victimization were unique predictors of low negative affect. A moderating effect of prosocial experiences was not found, suggesting these associations were present regardless of a student's positive social interchanges.

In two similar studies, Kerr, Valois, Huebner, and Drane (2011) and Valois, Kerr, and Huebner (2013) looked specifically at how motives for bullying (i.e., on the part of the perpetrator) affected the influence on life satisfaction. In this study, neither relational nor overt victimization was explicitly targeted, as students were simply asked how often they were

victimized for various reasons (i.e., religion, race, gender, disability, or homosexuality) as a part of a larger Health Risk Behavior Questionnaire from which they extracted their data. With a sample of 1,324 high school students, the authors of the first study found that religious victimization was associated with reduced life satisfaction for males, whereas gender-related victimization was associated with low life satisfaction in black males and white females. Victimization related to sexual orientation was linked to low life satisfaction in males, race-related victimization was linked to low life satisfaction for white students and black females, and all groups showed a relationship between disability-related victimization and life satisfaction. In the second study, Valois and colleagues (2013) surveyed 1,253 middle school students with the same measures, finding that victimization incited by numerous causes was associated with reduced life satisfaction in their diverse sample. Specifically, black females experienced reduced life satisfaction from disability-related victimization, white females experienced reduced life satisfaction from victimization related to religion, disability, sexual orientation, gender, and race/ethnicity, and white males experienced reduced life satisfaction from race and disability related victimization. In another study examining victimization tied to specific participant traits, Blood and colleagues (2011) found a strong inverse relationship between victimization related to an impairment (namely, for stuttering) and satisfaction with life among 108 elementary school students.

Research has also been conducted on how electronic victimization, or cyber-bullying, affects student life satisfaction. Rather than evaluate relational and overt victimization, Moore, Huebner, and Hills (2012) asked 855 7<sup>th</sup> and 8<sup>th</sup> grade students general questions about bullying and fear of being bullied. Moore and colleagues found that, despite an insignificant correlation with global life satisfaction, victimization via the internet was associated with reduced

satisfaction in various domains of life (e.g., family and friends). In another investigation of cyber-related victimization, Sumter, Baumgartner, Valkenburg, and Peter (2012) examined longitudinal trajectories of students who experienced online and offline victimization, finding significant overlap between the global life satisfaction (measured via the SWLS) experiences of both groups. Namely, students whose exposure to victimization increased over time also experienced decreasing life satisfaction over time. Like Moore et al., Sumter and colleagues asked general questions about bullying and harassment rather than investigating overt and relational victimization explicitly. While the investigation of cyberbullying and multidimensional life satisfaction is important for understanding the full impact of victimization in youth, further exploration of this theme is beyond the scope of the present study.

Taking a slightly different approach to investigate the life satisfaction of bullies, victims, and youth uninvolved with aggression, Estévez, Murgu, and Musitu (2008) created discrete categories (i.e., using cut-off scores at the 75<sup>th</sup> percentile of aggression and victimization scales) to assign 1319 Spanish youth (ages 11-16) to one of four groups. The four groups (aggressors, pure victims, aggressive victims, and students not involved) were examined to determine between-group differences in levels of depressive symptoms, perceived stress, loneliness, and life satisfaction (measured via the SWLS). Statistically significant analysis of variance (ANOVA) tests were followed-up with Tamhane tests to differentiate which groups experienced differences in dependent variables. The researchers found that uninvolved youth had superior mental health in all areas, and pure victims and aggressive victims had the most severe depressive symptoms. All three involved groups had lower life satisfaction and higher perceived stress than uninvolved youth, but there were no significant differences between the involved groups. Of note, this study had more power than Martin and Huebner's sample (given a

somewhat larger distribution of victimized youth), thus perhaps making the relationship between victimization and life satisfaction easier to detect. However, the instrument used in this study did not differentiate between overt and relational victimization, precluding understanding of whether there was a unique influence of either form. In a similar study, Povedano, Estévez, Martínez, and Monreal (2012) created the same discrete categories and adjusted their analyses to compensate for the fact that the majority of youth were uninvolved with victimization. Povedano and colleagues found that aggressors ( $M = 13.23$ ) and victims ( $M = 13.03$ ) had similar levels of global life satisfaction (measured by a translated SWLS), which was higher than aggressor/victims ( $M = 12.85$ ) and lower than uninvolved youth ( $M = 15.1$ ). Aggressors and uninvolved youth had higher self-esteem than both types of victims, and aggressor/victims had the highest depressive symptoms, followed by victims and aggressors, who were higher than uninvolved youth. Interestingly, this study found that uninvolved youth and victims were more likely to be engaged with their community (i.e., participate in events or groups organized by people in their community) than both types of aggressors.

In addition to the work suggesting victimization influences life satisfaction, two studies found that low life satisfaction is predictive of increased victimization. The investigation of the potential bi-directionality of the relationship between life satisfaction and victimization was inspired in part by an experiment in which college students who were paired with partners characterized by low life satisfaction became aggressive and domineering (Furr & Funder, 1998). Martin, Huebner and Valois (2008) conducted a two wave longitudinal study to test the directionality of this relationship in youth. In their sample of 417 adolescents in grades 6-8, they found that low initial life satisfaction predicted higher relational victimization one year later, better than victimization was able to predict life satisfaction. The analysis may have been

underpowered given that, similar to previous research (Perry, Kusel, & Perry, 1988), relatively few students reported being victimized.

In a more complex investigation of life satisfaction and victimization, Jiménez, Musitu, Ramos, and Murgui (2009) attempted to integrate empirical links between victimization and numerous other characteristics. Citing prior research that linked parent communication (i.e., openness of communication with parents; “if I had problems, I would talk to my mother/father about them;” Jiménez et al., 2009, p. 963) to victimization, community involvement to victimization, and life satisfaction, social self-esteem, and loneliness to victimization, Jiménez and colleagues created and tested a structural model incorporating all of the above. Community integration was correlated positively with parental communication, life satisfaction, social self-esteem, and loneliness, and inversely with overt and relational victimization. Upon examining the relationships between the variables, the non-recursive model that best fit the data treated community involvement as an exogenous variable, parental communication and life satisfaction as mediators to social self-esteem and loneliness, and social self-esteem and loneliness as mediators to victimization. This model did not implicate life satisfaction as a direct predictor of victimization, but rather it integrated life satisfaction with interpersonal and community variables that theoretically affect its association with victimization. Given that 9 out of the 11 studies reviewed above indicated a relationship in the opposite direction (i.e., victimization affects life satisfaction), the proposed study will test a model that hypothesizes victimization may reduce life satisfaction.

**Interventions to combat victimization.** Generally, victimization interventions, including social skills training, tend to focus on perpetrators of bullying (Smokowski, & Kopasz, 2005) and factors external to the victim, as opposed to the victimization experiences of the

targeted youth. Although it is important to continue efforts to reduce bullying, educators have had much difficulty in eliminating bullying behavior, and meta-analytic research indicates that many efforts to reduce bullying have been unsuccessful (Merrell et al., 2008), perhaps due to the complexity of bullying behavior (Espelage, 2000). Additionally, even when bullying is stopped, it bears a residual psychological impact upon the victims for years (Rueger, Malecki, & Demaray, 2011). Espelage contends that these barriers do *not* mean that efforts to reduce bullying should be abandoned; however, they must be complemented with efforts to increase the resilience of victims. Case in point, Fox and Boulton (2003) tested a social skills program with victimized youth and found that it successfully increased students' self-esteem by the end of the program, even without eliminating victimization experiences. Yet-to-be-developed interventions that target those student strengths associated with positive outcomes may be similarly successful.

**Rationale for studying victimization in high school.** As students transition from middle school to high school, peer relationships become increasingly important relative to family and other relationships (Wigfield & Wagner, 2005). Compared to younger children, adolescents have much larger and more complicated social networks to navigate (Giordano, 1995), leading peer interactions to bear greater influence on their adjustment. Adolescents who do not have strong peer relationships report lower feelings of school fit, which in turn has been associated with lower engagement and achievement in school (Zimmer-Gembeck, Chipuer, Hanisch, Creed, & McGregor, 2006). Furthermore, isolation from peers often serves as one of the steps in high school students' disengagement from school, which places them at higher risk for dropout (Finn, 1989).

Recent research suggests that the nature of the relationships between victimization types and positive psychological outcomes (i.e., indicators of subjective well-being) may be unique in

the high school years. Whereas overt victimization has yielded unique effects on life satisfaction and affect within a middle school sample (Martin & Huebner, 2007), relational victimization (but not overt) uniquely predicted those outcomes among a high school sample (Suldo, Gelley, Roth, & Bateman, in press).

### **Summary and Gaps in the Literature**

In the past ten years, studies have found that the prevalence of victimization has decreased from 20% of youth affected (Olweus, 2001) to 10-14% (Craig et al, 2009; Rose, Espelage, Aragon, & Elliott, 2011). The fact that victimization may have diminished but has not been eradicated supports research suggesting that attempts to eliminate victimization have been unsuccessful. While this complicated issue continues to be addressed via intervention development, educators may benefit from testing the ability of positive personality traits to protect youth in the face of victimization. Although some character strengths promote youth life satisfaction (e.g., Froh Sefick, & Emmons, 2008), those included in the SEARS have as of yet only been associated with reduced mental health *problems*. Given that students with high character strengths (in particular, empathy and social competence) are generally successful at making and sustaining friendships (Adams, 1983; Litvack-Miller et al., 1997), and that students who participate in social emotional curricula experience reduced psychopathology (Caldarella et al., 2009; Marchant et al., 2010), it is possible that victimized youth will experience better positive psychological outcomes if they have high social-emotional strengths.

Although there is a small and growing body of research linking victimization to reduced life satisfaction, there is a paucity of such work with either hope or gratitude as possible outcomes of victimization. This is problematic because, while we are beginning to understand how victimization affects happiness in the present (i.e., life satisfaction), its influence on positive

psychological outcomes related to one's past (i.e., gratitude) and future (i.e., hope) experiences remains unknown. This cross-sectional study will investigate the extent to which social-emotional strengths relate to higher levels of positive psychological outcomes, the extent to which victimization is related to lower positive psychological outcomes, and the ability of social-emotional strengths to moderate the relationship between victimization and positive psychological outcomes. To do this, three models that integrate positive psychological outcomes with strengths, victimization, or both, will be described in the following chapter and tested in Chapter 4.

## CHAPTER THREE

### METHOD

This study is quantitative in nature and analyzed an archival dataset in order to determine associations between high school students' assets/strengths, positive psychological outcomes, and peer victimization. Observed Variable Path Modeling was used to examine models that represent hypothesized relationships between self-report data collected at a single time point. The following chapter describes the participants, the instruments used to assess the variables of interest, and the data analysis strategy.

#### Participants

The archival dataset was collected as part of a 3-wave longitudinal study of the development of mental health in high school students. Dr. Shannon Suldo (Professor, USF School Psychology Program) served as Principal Investigator (PI) of the larger study. This study focused exclusively on data collected at Wave 2 (winter of the 2011 – 2012 school year). At Wave 1, participants consisted of 500 adolescents (59% female) in grades 9 (43%), 10 (36%), and 11 (20%) from two large public high schools in the southeastern U.S. A total of 425 participants remained at Wave 2 (one year after Wave 1).

A description of sample demographic characteristics, by school, is provided in Table 1. At Wave 2, the sample was 44% Caucasian, 34% Hispanic, 8% African-American, 3% Asian, 10% multi-racial, and 2% other, and the students were in grades 9, 10, and 11. Forty-nine percent of the students were eligible for free and reduced lunch, proportionally represented by

each group (46% Caucasian, 38% Hispanic, 3% Asian, and 10% African American). The students lost to attrition between Waves 1 and 2 were no more likely to be of a particular gender, SES, or race/ethnicity group (see McMahan, 2012, and Chappel, 2012, for further details). At Wave 2, students were in grades 10, 11, 12.

Table 1

*Demographic Characteristics of Participants in Time 2 Sample*

Demographic Variable	School A ( <i>n</i> = 213) %	School B ( <i>n</i> = 212) %	Total Sample ( <i>N</i> = 425) %
<b>Gender</b>			
Male	35.68	43.40	39.53
Female	64.32	56.60	60.47
<b>Grade</b>			
10	55.71	33.49	44.63
11	36.67	34.45	35.56
12	7.62	32.06	19.81
<b>Ethnicity</b>			
American Indian	0.00	0.94	0.47
Asian	1.88	3.77	2.82
African American	7.98	7.08	7.53
Hispanic/Latino	27.70	42.25	35.06
White	53.05	34.43	43.76
Multi-Racial	8.45	10.38	9.41
Other	0.94	0.94	0.94
<b>Free or Reduced-Price Lunch</b>			
Eligible	49.77	48.57	49.17
Not Eligible	50.23	51.43	50.83
<b>Family Composition</b>			
Married Parents	44.60	39.81	42.22
Parents not Married	55.40	60.19	57.78

### **Instruments**

The demographics form was developed by the PI and used to collect the demographic data reported in Table 1, including grade level, age, gender, and socioeconomic status (SES).

The demographics form (see Appendix A) also provided sample items to provide familiarity with item format (e.g., Likert scale) used in the rest of the packet. Students completed this form at the

beginning of the study (i.e., at Wave 1). At Wave 2, participants completed two new items to provide additional information regarding family features: My biological parents are... (married, divorced, separated, never married, never married but living together, or widowed), and I live with my ... (mother and father, mother only, father only, mother and step-father [or partner], father and step-mother [or partner], grandparent(s), other relative [specify: \_\_\_\_], or other [specify: \_\_\_\_]).

**Student's Life Satisfaction Scale (SLSS; Huebner, 1991).** The SLSS (see Appendix B) is a measure of global life satisfaction in children and adolescents. Students rate 7 items (e.g., my life is just right) using a Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

When used with high school aged youth, the SLSS has strong internal consistency (alpha = .86; Dew & Huebner, 1994). Regarding validity, Huebner (1991) reports the SLSS has evidenced convergent validity with parent report ( $r = .48$ ) and with student self-report on the Perceived Life Satisfaction Scale ( $r = .58$ ). The SLSS demonstrated divergent validity ( $r = .05$ ) with the Children's Social Desirability scale- Short Form (CSD; Crandall & Crandall, 1965), suggesting that the measure is not confounded with social desirability.

**Children's Hope Scale (CHS; Snyder et al., 1997)** The CHS (see Appendix C) is a six-item self-report used to measure two forms of hope: agency (i.e., the motivation to pursue goals) and pathways (i.e., belief in the ability to achieve them) in children and adolescents. Students rate all items measuring both agency (e.g., I energetically pursue my goals) and pathways (e.g., I can think of many ways to get out of a jam) between 1 (*none of the time*) and 6 (*all of the time*).

Snyder et al. (1997) reported that scores from the CHS support a strong factor structure (items load on two constructs; Agency and Pathways), internal consistency (ranging between .90-.95 on the complete scale and for the two factors), concurrent validity with parent ratings of

child's hope (i.e.,  $r = .57$ ), and discriminant validity with measures of intelligence (i.e.,  $r = .04$  with Verbal IQ and Performance IQ, and  $.03$  with Full Scale IQ on the WISC-III; Weschler 1991). When used with high school students, the CHS shows convergence with the SLSS ( $r = .53$ ) and the Child and Adolescent Social Support Scale ( $r = .53$ ; Malecki, Demaray, & Elliot, 2000), as well as divergence with indicators of psychopathology as evidenced by Achenbach and Edelbrock's (1991) Youth Self-Report ( $r = -.32$  with both the externalizing and internalizing composites; Valle, Huebner, & Suldo, 2004). While the test-retest reliability is relatively low across long periods of time ( $.48$  after 30 days, as compared to  $.93$  over 2 days), the scale is designed to measure hope as a cognitive state, not a personality trait (Snyder, 2002).

**Gratitude Questionnaire – 6 (GQ-6; McCullough, Emmons, & Tsang, 2002).** The GQ-6 (see Appendix D) was originally developed for use with adults, but has recently demonstrated strong psychometric properties when used with adolescents (Froh et al., 2011). Six items (e.g., If I had to list everything that I felt thankful for, it would be a very long list) are completed by subjects using a Likert agreement scale, from 1 (*strongly disagree*) to 7 (*strongly agree*).

When used with youth (ages 10 to 19; Froh et al., 2011), internal consistency of items in the scale ranges between  $.70$  and  $.80$ , and convergent validity with other gratitude measures is moderate to high ( $r = .42$  with the Gratitude Adjective Checklist;  $r = .60$  with the Gratitude, Resentment, and Appreciation Test-short form). Thus, although the measure was originally designed for adults, it has also been used successfully with an adolescent population. The comparative fit index (CFI) resembles that of the GQ-6 when used with adults (CFI =  $.92$ ; Froh et al.).

**Social Emotional Assets and Resilience Scales – Adolescent Form. (SEARS-A;** Merrell, 2008). The SEARS-A (not included in the Appendix due to copyright restrictions) is a

35-item self-report measure of four constructs: Responsibility (e.g., I make good decisions), Self-Regulation (e.g., I stay in control when I'm angry), Social Competence (e.g., I make friends easily), and Empathy (e.g., I am good at understanding the point of view of other people). Students indicate Never, Sometimes, Often, or Always in response to each item.

When used with high school students, Cronbach's alpha for the composite score on the SEARS-A is .96. As the current study intends to analyze the scale scores, support for the reliability and validity of each factor is more relevant. A confirmatory factor analysis supported all four variables included in the scale, though oblique rotations were necessary because the variables in the scale are correlated ( $r = .36$  to  $.61$ ; Cohn, Merrell, Felver-Grant, Tom, & Endrulat, 2009). In particular, strong correlations have been identified between self-regulation and responsibility ( $r = 0.63$ ), social competence and empathy ( $r = 0.50$ ), and empathy and responsibility ( $r = 0.58$ ; Merrell, 2011). The manual reports strong internal stability scores for all factors: Self-Regulation ( $\alpha = .85$ ), Social Competence ( $\alpha = .84$ ), Empathy ( $\alpha = .85$ ), and Responsibility ( $\alpha = .80$ ). Test-retest reliability is strong at 2 weeks ( $r = .83$  for Self-Regulation,  $.88$  for Social Competence,  $.80$  for Empathy, and  $.83$  for Responsibility), 4 weeks ( $r = .77$  for Self-Regulation,  $.72$  for Social Competence,  $.78$  for Empathy, and  $.80$  for Responsibility), and 6 weeks ( $r = .81$  for Self-Regulation,  $.77$  for Social Competence,  $.68$  for Empathy, and  $.74$  for Responsibility). Additionally, the SEARS-A has demonstrated convergent validity with the Social Skills Rating Scale Adolescent Self-Report total score ( $r = .52$  for Self-Regulation,  $.58$  for Social Competence,  $.55$  for Empathy, and  $.46$  for Responsibility; Merrell, 2011). Of note, the items representing Empathy that were included in the SEARS-A are only indicative of cognitive empathy (i.e., understanding rather than experiencing others' emotions) and not reflective of affective empathy (Merrell, 2011).

**Social Experiences Questionnaire.** (SEQ; Crick & Bigbee, 1998). The SEQ (see Appendix E) is a self-report measure with five items measuring overt victimization (e.g., threats of harm), five items measuring relational victimization (e.g., exclusion from a group), and five items measuring prosocial experiences (e.g., caring acts from others). Items on this self-report measure range from 1 (*never*) to 5 (*all the time*). Due to the focus of the current study on peer victimization, the items measuring prosocial experiences were excluded from analysis.

The authors report strong internal consistency for relational victimization (.86), and overt victimization items (.93; Crick & Bigbee, 1998). High test-retest reliability across four weeks ( $r = 0.90$ ; Crick & Grotpeter, 1996) suggests that the scores are stable over time. The victimization scales of the SEQ have demonstrated modest convergent validity with peer reports of overt ( $r = .31$  to  $.39$ ) and relational ( $r = .35$  to  $.39$ ) victimization (Crick & Bigbee, 1998).

## **Procedures**

**Setting.** The 425 students in the dataset were drawn from two high schools in a large district in the Southeastern U.S. The first school was located in a rural community and served 1,876 students. The second school was in an urban setting and served 2,282 students.

**Recruitment.** The University of South Florida Institutional Review Board and the participating school district approved the study in the Fall of 2010. At the beginning of the 2010-2011, research team members visited English and Homeroom classrooms to provide a verbal description of the study and pass out consent forms (Thalji, 2011). Parent consent forms (see Appendix F) were sent home by teachers with the assumption that approximately 50% would be returned. Before the forms were distributed, research team members explained the purpose of the study to the teachers. The students were offered prepaid movie tickets as incentive to participate, as well as entry into one of several raffles for a \$50 gift card (eligible to

any student who returned a consent form, whether or not their parents provided or declined permission to participate). School personnel collected consent forms and turned them in to the research team. During Wave 1, 515 out of 1980 students returned consent forms, yielding a response rate of 26%. Of the students who returned consent forms, 15 declined to participate due to either their parents not wishing for them to participate, limited English proficiency, or lack of interest in the study (see Thalji, 2011, for full details).

Students who had returned consent forms were gathered in an auditorium or cafeteria to fill out packets of measures relevant to research questions of interest to the PI. Students were gathered in groups of approximately 50-70 at a time and were informed that they were free to withdraw and the students were instructed to provide assent (see Appendix G) if they chose to continue. After each packet was turned in, a research team member inspected the packet to check for missing data, after which the student was provided with the incentive (i.e., a prepaid movie ticket).

Similar procedures were employed a year later in Wave 2 (i.e., the time point of the current study), with the assistance of the investigator of the current study (i.e., reading instructions, distributing/collecting packets, checking data, and providing incentives). However, in Wave 2 some rating scales were added to the survey packet (e.g., SEARS-A, CHS), and children were not asked to provide assent a second time. Additionally, as the demographic information had already been collected in Wave 1, the demographic survey was not administered again. Survey packets were counter-balanced in six different arrangements to circumvent order effects. Upon completion of the measure packet, each participant's survey packet was visually scanned by research team members, including the investigator of the current study, to check for any missing information. Students were directed to complete items skipped accidentally.

**Data entry.** The PI and a team of trained graduate students, including the author of the current study, entered the questionnaire responses into an SPSS database. Once data were entered, accuracy of values was checked via comparisons between every fifth questionnaire and the corresponding data row in SPSS. Any disagreements were corrected and followed by a data-check of the data row directly before and after the one containing an error. The team also checked data for values that exceeded the range of values possible on a given indicator (e.g., a 7 on a 1-6 scale). In all, initial data entry was verified at 99.94% accuracy at Wave 2 (Chappel, 2012).

### **Overview of Data Analysis Procedures**

**Descriptive analyses.** Descriptive data, including means, standard deviations, and normality were calculated before investigating the research hypotheses. All analyses were conducted using Statistical Analysis Software (SAS).

**Preliminary analyses.** Correlations among studied variables were analyzed and a confirmatory factor analysis was conducted to test the models used by the measurement tools (e.g., the four social-emotional assets on the SEARS-A). Subsequently, internal consistency (i.e., Cronbach's alpha) was calculated to determine reliability of each factor/scale. It was predicted that factor structures and alphas reported in prior research will also be found in the current study. These tests were also used to justify the composite variables used in the observed-variable path models to mitigate the risk of unforeseen measurement error.

**Path models.** Three models were tested with a recursive observed variable path model procedure in order to answer the following research questions:

1. To what extent do character strengths significantly associate with students' positive psychological outcomes?

2. To what extent does peer victimization associate with students' positive psychological outcomes?
3. Which character strengths serve as risk or resilience factors by moderating the relationship between peer victimization and positive psychological outcomes?

For each path model, composite variables were created to represent the factors on the measurement tools used in the study. Confirmatory Factor Analyses (CFA) were conducted to ensure the integrity of the composite variables analyzed in the study.

***Hypothesized model 1.*** Each of the four character strengths (Responsibility, Self-Regulation, Social Competence, and Empathy) will be significantly associated with students' positive psychological outcomes, as indicated by: gratitude, life satisfaction, and hope. In line with prior research (Froh et al., 2009; Gillham et al., 2011; Park & Peterson, 2008), higher gratitude and hope are also anticipated to contribute to higher life satisfaction, thus those pathways will also be included in the model. Based on findings that empathy can put students at risk for internalizing distress, it is possible that the relationship between empathy and life satisfaction will be negative (Smith & Rose, 2011).

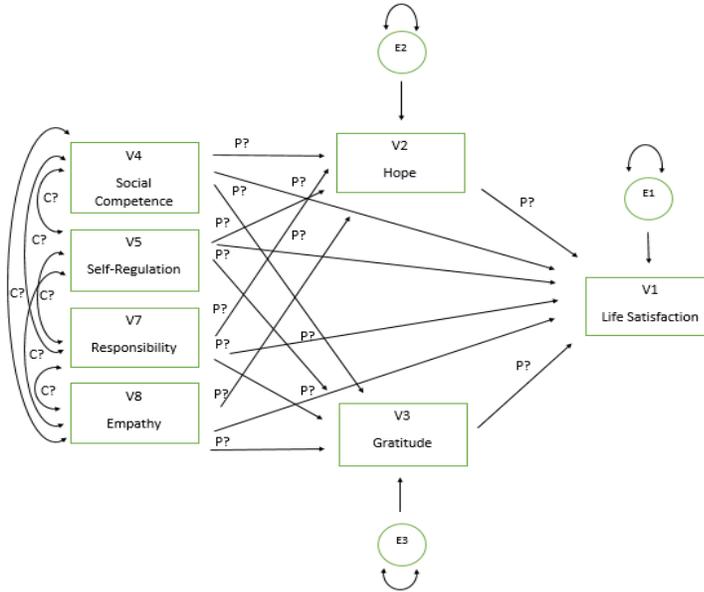


Figure 1. Recursive Observed Variable Path Model of Character Strengths and Positive Psychological Outcomes

**Hypothesized model 2.** Peer victimization (both overt and relational) will be associated with lower life satisfaction, and hope. Higher gratitude and hope are also anticipated to contribute to higher life satisfaction, thus those pathways will also be included in the model. Given that past research has indicated unique contributions of overt and relational victimization (Martin & Huebner, 2007; Suldo, Gelley, Roth, & Bateman, in press), both victimization forms will be analyzed separately rather than collapsing into a variable representing victimization overall. In a high school sample, relational victimization has been found to be a stronger predictor of life satisfaction than overt victimization (Suldo et al.), therefore an alternative model (Figure 2b) was prepared excluding a path between overt victimization and life satisfaction in case it did not yield a meaningful contribution.

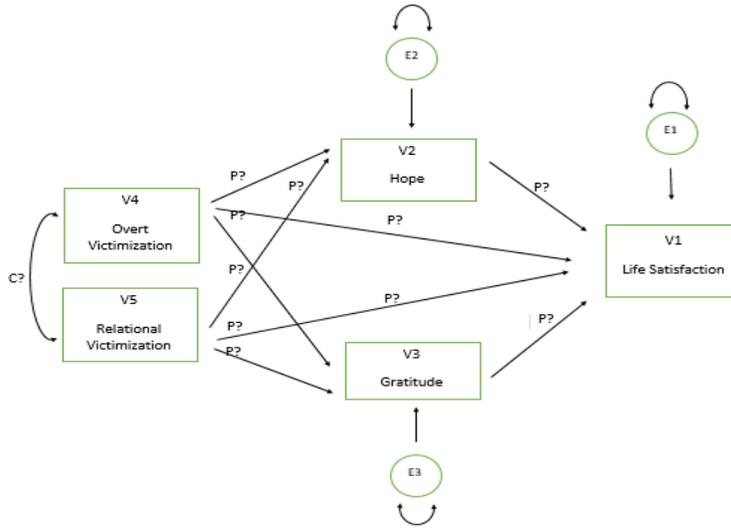


Figure 2a. Recursive Observed Variable Path Model of Victimization and Positive Psychological Outcomes

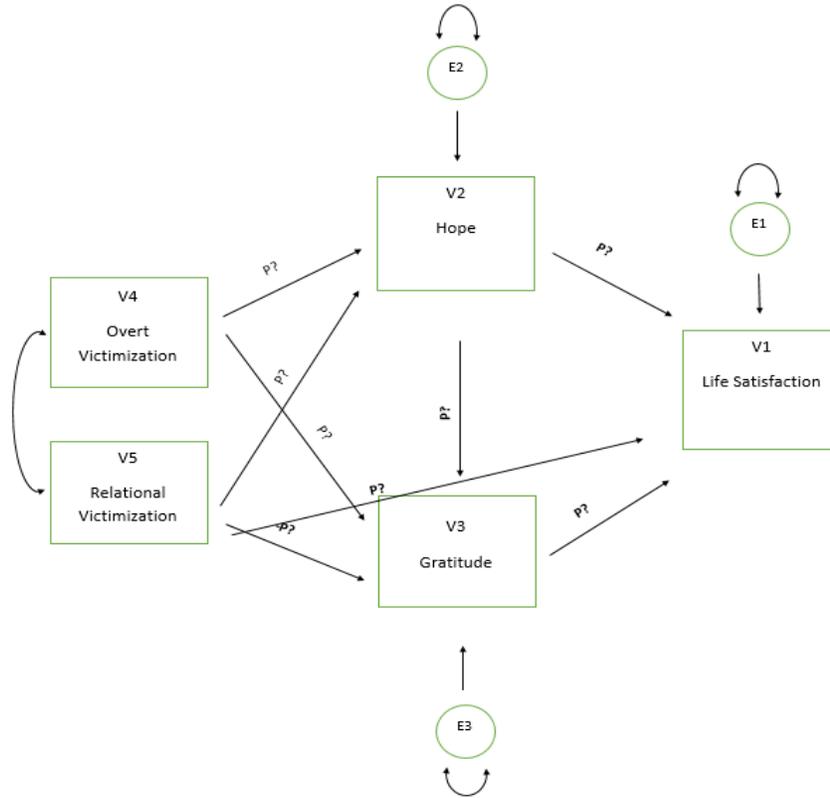


Figure 2b. Alternative Recursive Observed Variable Path Model of Victimization and Positive Psychological Outcomes

**Hypothesized model 3.** Responsibility, Self-Regulation, Social Competence, and Empathy will serve as resilience factors by protecting students who experience greater peer victimization from diminished positive psychological outcomes, as indicated by gratitude, life satisfaction, and hope.

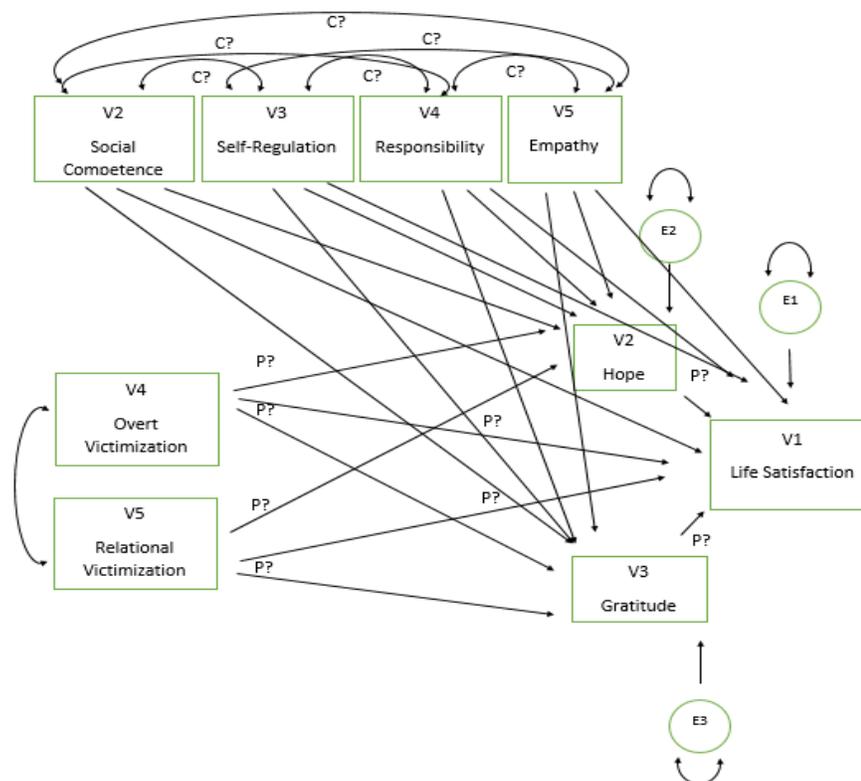


Figure 3a. Recursive Observed Variable Path Model of Strengths, Victimization, and Positive Psychological Outcomes: Main Effects

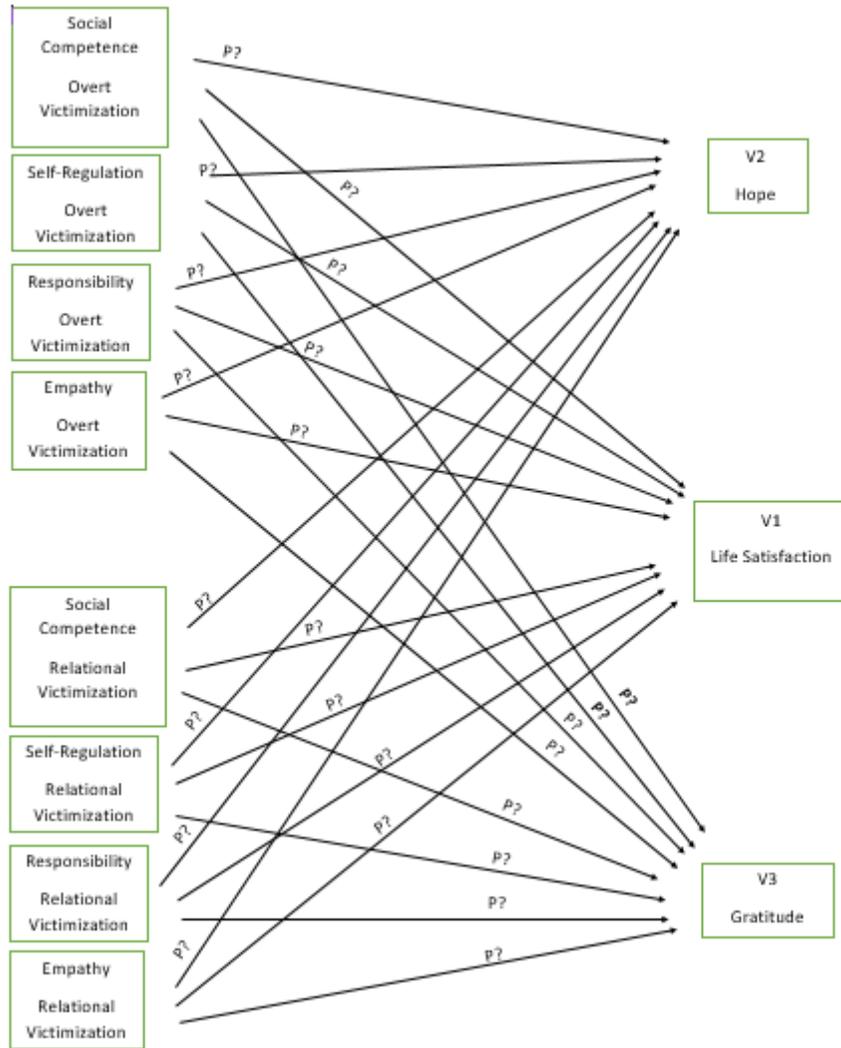


Figure 3b. Recursive Observed Variable Path Model of Strengths, Victimization, and Positive Psychological Outcomes: Moderating Relationships

The models in the proposed study analyzed observed variables (i.e., the individual factors in each scale) because it was predicted that analyses of the latent constructs they represent (e.g., positive experiences vs. gratitude, life satisfaction, and hope) would not provide an accurate picture of how the variables of interest interact. For example, given the diverse evidence bases among the variables of interest (e.g., numerous studies on life satisfaction and victimization and a paucity of work on hope and victimization), it is possible that these relationships will be

unidentical. Furthermore, given the semantic differences between the observed variables (e.g., little conceptual overlap between empathy and self-regulation), analyses between latent constructs may be less meaningful. The models analyzed in this study are overidentified (i.e., there are more known variable values than unknown values), meaning a goodness-of-fit analysis can be conducted.

Given that the majority of research on life satisfaction and victimization indicates life satisfaction as the dependent or predicted variable, and research on assets and resilience suggests they are predictive of mental health, the proposed models are recursive (i.e., path coefficients are only calculated going in one direction). Four indices were used to test the model's fit. First, a chi-square analysis was conducted to test if the data empirically differs significantly from the predicted model. Since the chi-square test statistic can be biased toward rejection based in the event of a large sample size, a standardized root mean-square residual (SRMR; Bentler, 1995) was also calculated because of its sensitivity to model misspecification and relative non-sensitivity to sample size bias. To assess whether the model may be more complicated than necessary to explain the data, a Root Mean Square Error of Approximation (RMSEA) test of parsimony was calculated. To test incremental fit, the Comparative Fit Index (CFI) was calculated. Path values were calculated via maximum likelihood estimation.

### **Ethical Considerations**

The research team responsible for conducting the larger project that includes this Wave 2 dataset took several steps to ensure the safety of the participants. The Institutional Review Boards (IRB) of both the University of South Florida (USF) and the participating school district approved the larger project that yielded the dataset that was analyzed in this study.

The youth participants' parents were informed of the nature of the study (i.e., outline of study/goals, risks and benefits) then provided consent for participation. Students provided written assent after members of the research team read aloud the information on the assent form to ensure understanding of their rights, confidentiality, study procedures and purpose, etc. Participants were told they could withdraw participation at any time without consequences. Compensation for participation in the study was matched to the level of required investment, thus circumventing any coercion to participate in the study.

Once collected, student data were de-identified and aggregated, and documents linking data to participants were placed in a locked filing cabinet where they remain. Only the PI and researchers approved by the USF IRB that are a part of the team are able to access the files with identifiable data. Student data were not shared with teachers or other students at the school.

## CHAPTER FOUR

### Results

#### Data Entry, Preparation, and Screening

After data from the larger study were entered into SPSS, data screening procedures yielded 227 errors out of 69,628 data points, for a total accuracy rate of 99.67% (as described in further detail in Thalji, 2012). Among the 265 participants that had at least one missing data point, the mean number of missing data points was 1.89, with the majority of missing data occurring on a measure not relevant to the present study. Only 3 participants had missing data points on the SEARS-S, a primary measure analyzed in this study. In light of the completeness of data on the measures analyzed in the present study, no participants were excluded due to unacceptable levels of missing data on the SEQ-S, SLSS, GQ-6, or the CHS, and only 3 participants were excluded from analyses involving the SEARS.

Survey items were combined into composite variables using Statistical Analysis Software 9.3 (SAS) to allow for observed variable path modeling between victimization, character strengths, and positive psychological outcomes rather than between individual survey items. The composite variables created reflected mean scores for life satisfaction, gratitude, hope, relational victimization, and overt victimization, and sum scores for the SEAR-S subscales of social competence, self-regulation, responsibility, and empathy. Sum (vs. mean) scores were created for the SEARS-A in line with scoring instructions in the manual, which could afford the researcher or interested reader to transform sum scores to standardized scores using norms available in the publisher's manual. Additional composite variables were made to examine

potential moderating relationships; both relational and overt victimization composites were multiplied by the composites variables reflecting social competence, self-regulation, responsibility, and empathy.

### **Preliminary and Descriptive Analyses**

Data were screened for missing values, outliers, and the satisfaction of normality assumptions. Three participants with missing data on the SEARS-A were deleted for the computation of multivariate normality; the observations were retained for all other analyses. Assumptions for univariate and multivariate normality were met (Chou & Bentler, 1995; Curran, West, & Finch, 1996) for all variables except overt victimization. Normality assumptions were also tested for the products of interactions between the character strengths and both types of victimization; these analyses indicated similar levels of non-normality. Skew and kurtosis for each variable and product can be found in Table 2. Due to the high level of kurtosis, fit indices were expected to be conservative, and path coefficients involving overt victimization were expected to be liberal. Furthermore, the skew and kurtosis reflect a restricted range of students who reported experiencing victimization, therefore separate analyses were not conducted for male and female students due to limited power. A natural log transformation improved the skew and kurtosis of overt and relational victimization, but only somewhat improved the interaction terms. The transformation did not change the conclusions drawn from primary analyses in the study, therefore the original (non-transformed) values were retained and used in all analyses reported in this chapter. Extreme values were not observed in the dataset for the variables analyzed in the study.

Table 2

*Descriptive Statistics*

Variable	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
<b>Predictor Variables in Original (Non-Transformed) Forms</b>							
Life Satisfaction	425	1.00	6.00	4.48	1.00	-0.58	-0.04
Hope	425	1.17	6.00	4.62	0.84	-0.76	0.52
Gratitude	425	1.67	7.00	5.77	1.03	-0.97	0.71
Relational Victimi- zation (RV)	425	1.00	5.00	1.52	0.68	1.77	3.38
Overt Victimization	425	1.00	5.00	1.34	0.60	2.62	8.07
Social Competence	423	2.00	30.00	19.6	6.16	-0.22	-0.50
Self-Regulation	424	4.00	24.00	13.32	4.66	0.30	-0.34
Responsibility	425	2.00	18.00	12.23	3.14	-0.13	-0.19
Empathy	425	6.00	33.00	23.48	5.82	-0.31	-0.46
<b>Interaction Terms</b>							
OV*Self-Regulation				17.52	9.34	2.11	6.73
OV*Social Competence				25.65	13.24	2.49	9.10
OV*Empathy				30.83	14.47	2.47	8.90
OV*Responsibility				16.06	7.31	2.04	5.76
RV*Self-Regulation				19.49	9.60	1.85	5.98
RV*Social Competence				28.76	13.81	1.70	4.00

Table 2 (continued)

RV*Empathy	35.06	16.84	1.67	3.34
RV*Responsibility	18.06	7.98	1.48	2.72
<b>Variables and Interaction Terms after Linear Transformations</b>				
OV			1.65	2.21
RV			.95	.05
OV*Self-Regulation			2.10	4.75
OV*Social Competence			2.24	5.6
OV*Empathy			1.93	3.9
OV*Responsibility			1.76	2.78
RV*Self-Regulation			1.40	2.2
RV*Social Competence			1.30	1.33
RV*Empathy			1.15	.70
RV*Responsibility			1.02	.249

*Note.* RV = Relational Victimization, OV = Overt Victimization

Correlations between all continuous predictor and outcome variables in the study are located in Table 3. Each character strength was positively correlated with gratitude, life satisfaction, and hope; both types of victimization were inversely correlated with all of the strengths and positive outcomes. Hope and gratitude were significantly correlated with each other and life satisfaction, and many of the character strengths were highly correlated with each other.

Table 3

*Correlations between Character Strengths, Victimization, and Positive Psychological Outcomes.*

Variable	LS	H	G	SR	SC	E	R	RV
Life Satisfaction	1.00							
Hope	.59**	1.00						
Gratitude	.63**	.67**	1.00					
Self-Regulation	.45**	.53**	.39**	1.00				
Social Competence	.48**	.49**	.45**	.49**	1.00			
Empathy	.22**	.30**	.38**	.50**	.69**	1.00		
Responsibility	.46**	.50**	.48**	.65**	.57**	.63**	1.00	
Relational Victimization	-.20**	-.20**	-.26**	-.10**	-.18**	-.17**	-.17**	1.00
Overt Victimization	-.29**	-.20**	-.31**	-.25*	-.26**	-.16**	-.25**	.66**

*Note.* LS = Life Satisfaction; H = Hope; G = Gratitude; SR = Self-Regulation; SC = Social Competence; E = Empathy; R = Responsibility; RV = Relational Victimization.

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

### Confirmatory Factor Analysis

In order to determine the relevance of all of the items in each measure, confirmatory factor analyses were conducted. Table 4 presents the fit indices for each of the models tested. The original model for the SEARS-A and the SEQ-S yielded unsatisfactory fit on all three of the descriptive indices used to evaluate the model. Due to strong correlations among redundant items in the SEARS-A and the SEQ-S, an alternative factor analysis was conducted that allowed the residuals of redundant items to co-vary, thereby improving model fit. Given that only items that were located within the same factor were allowed to covary, this model supports the utility

of the SEARS-A for measuring the composite factors; however, there may be smaller factors (e.g., extraversion for items 14 and 22) nested within the four strengths measured by the SEARS-A and within the three types of social experiences used on the SEQ-S. Since the composite factors were used in the path models (rather than individual items), this covariation procedure was not necessary nor applicable to the path models.

Table 4

*Fit Indices for Factor Analyses*

	SLSS	CHS	GQ-6	SEQ-S	SEQ-S (modified)	SEARS- A	SEARS-A (modified)
$\chi^2$	86.95	51.86	65.40	542.31	307.36	1964.71	1247.78
	(p < .01, df = 13)	(p < .01, df = 9)	(p < .01, df = 9)	(p < .01, df = 87)	(p < .01, df = 84)	(p < .01, df = 555)	(p < .01, df = 535)
SRMR	.03	.036	.04	.07	.06	.07	.061
RMSEA	.12	.11	.12	.11	.08	.07	.056
CFI	.96	.95	.95	.86	.93	.84	.90

*Note.* SLSS = Student's Life Satisfaction Scale; CHS = Children's Hope Scale; GQ-6 = Gratitude Questionnaire 6; SEQ-S = Social Experiences Questionnaire – Student; SEARS-A = Social Emotional Assets and Resilience Scales – Adolescent.

Figures 4-8 present the findings from several confirmatory factor analyses. The path coefficients from the constructs (e.g. life satisfaction) to the items (e.g., “My life is going well”) indicate the extent to which the item loaded on the factor. The parenthetical numbers next to each item indicate the item number on the scale. Figure 7 includes all three composites on the Social Experiences Questionnaire – Student, although prosocial experiences were not examined in this study. This was done to ascertain whether any items from the other two factors cross-

loaded in such a way that they were better explained by low levels of prosocial experiences. None of the items on the measures evaluated in this study cross-loaded onto different factors; however, several items in the SEARS-A (Figure 8) were highly correlated, leading to poor model fit. The model was improved when items were allowed to covary with similarly worded items. Items that were allowed to covary are indicated numerically in italics, following the parenthetical item numbers (starting from the lower number) and are indicated pictorially by curved arrows.

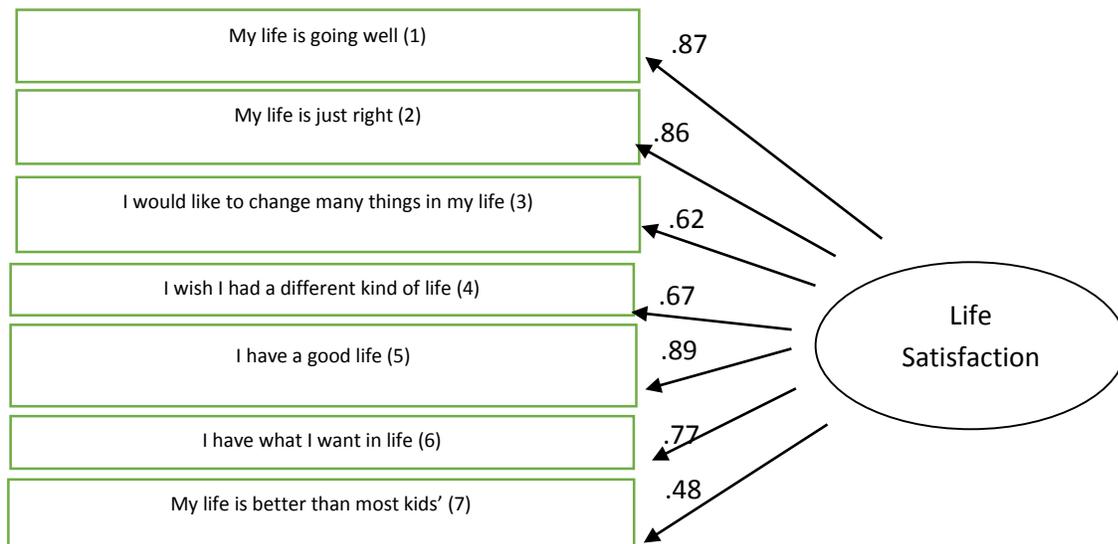


Figure 4. Factor Structure of the Student's Life Satisfaction Scale

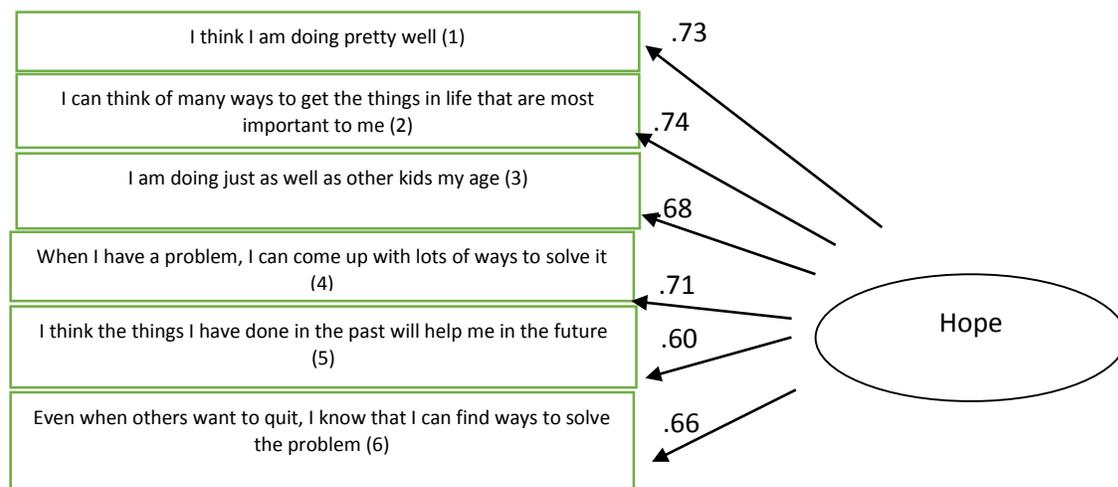


Figure 5. Factor Structure of the Children's Hope Scale

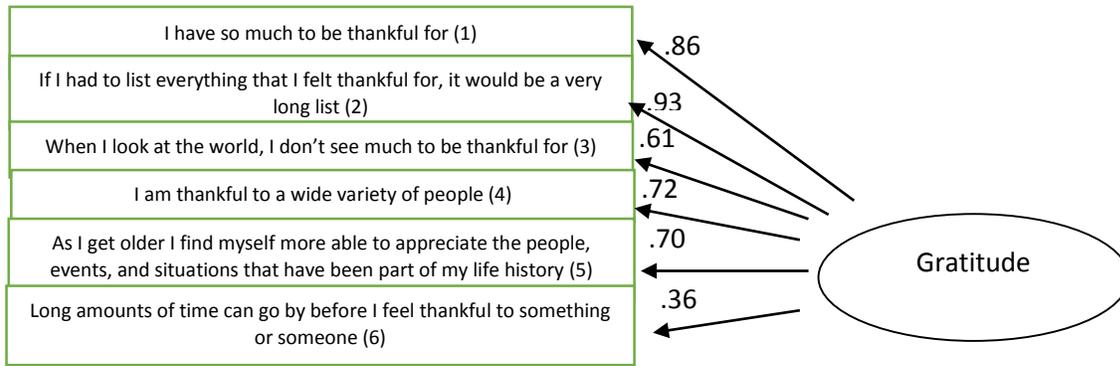


Figure 6. Factor Structure of the Gratitude Questionnaire-

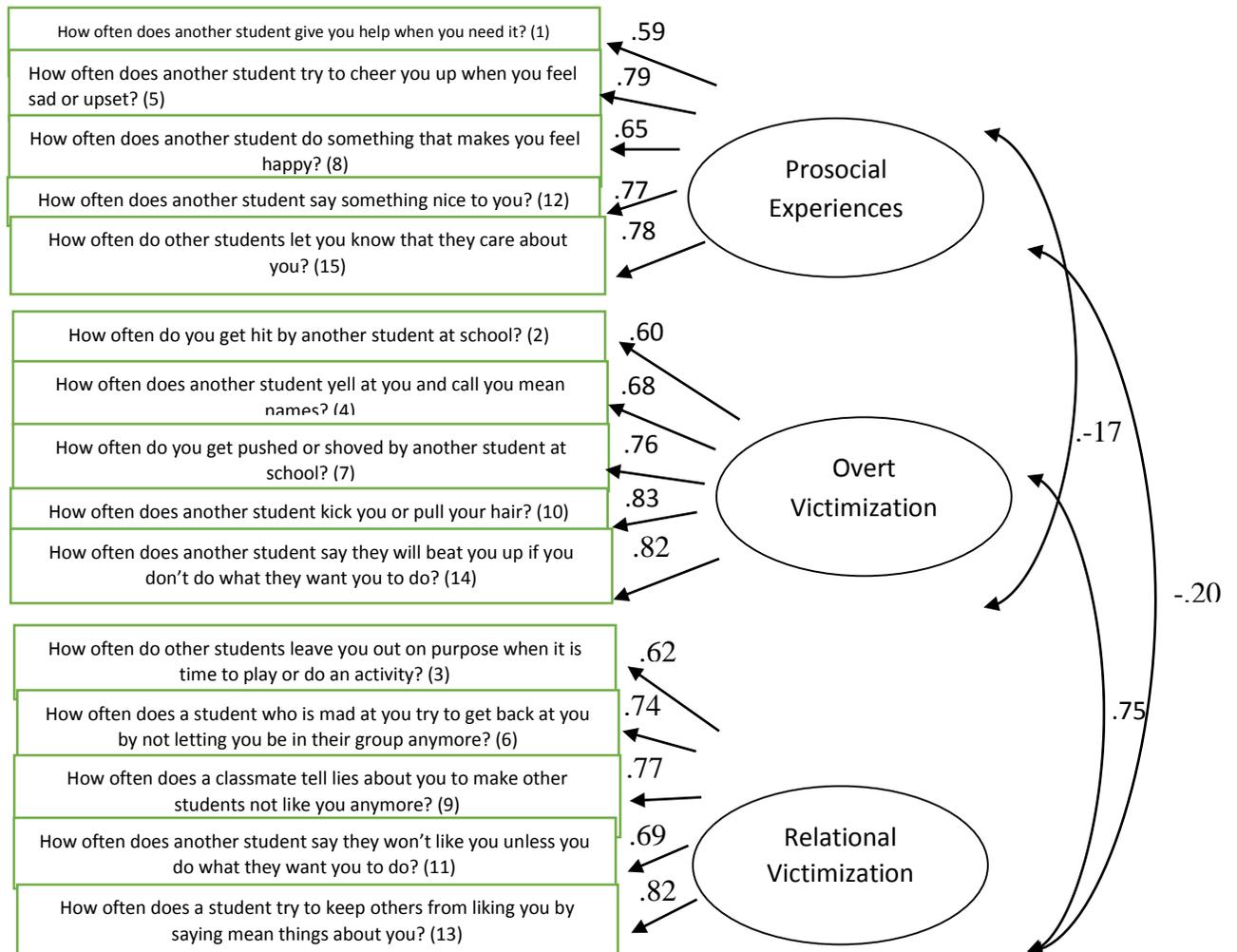


Figure 7. Factor Structure of the Social Experiences Questionnaire – Student Version

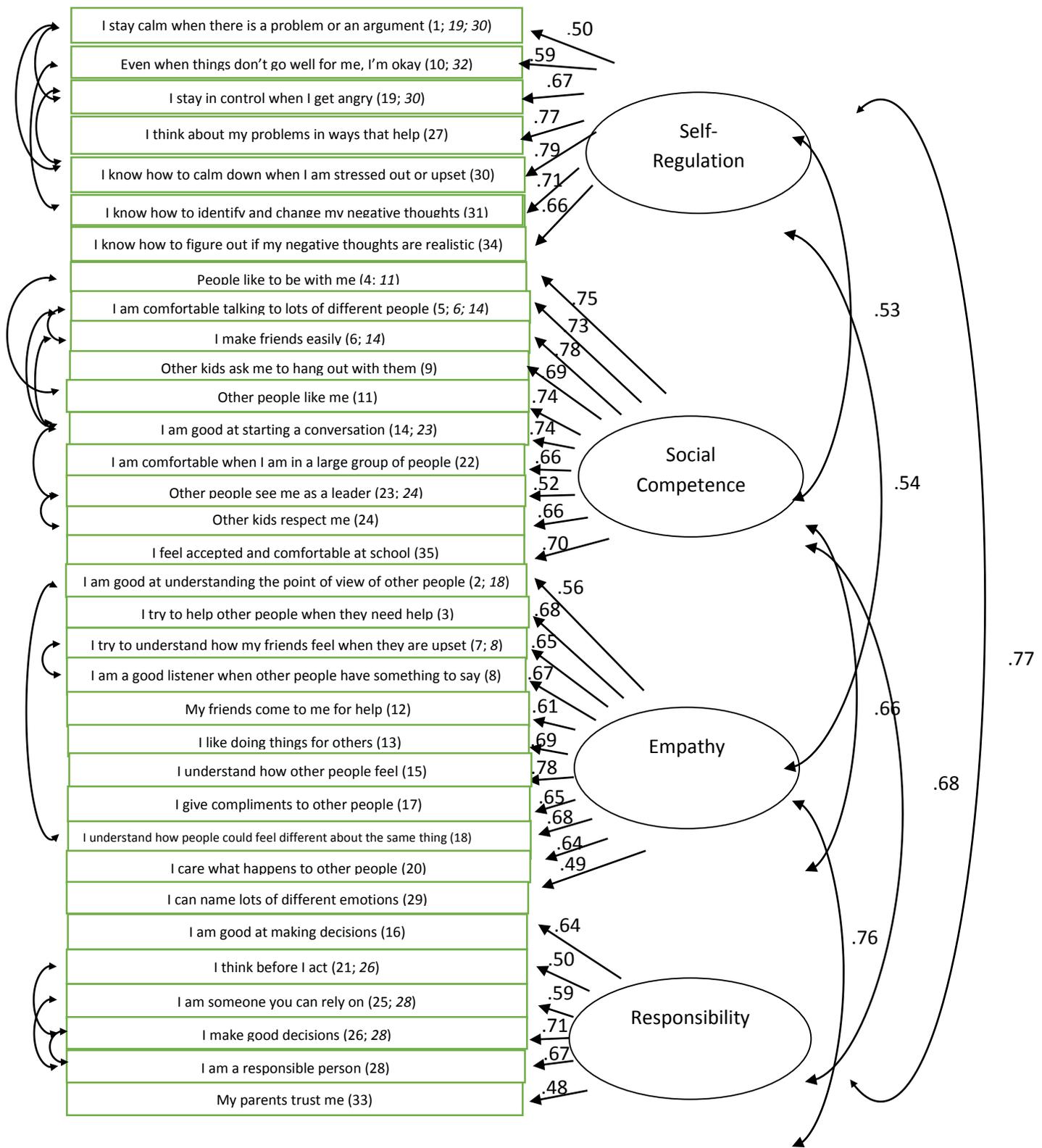


Figure 8. Factor Structure of the Social Emotional Assets and Resilience Scales – Adolescent

## Reliability

In order to determine the internal consistency of each composite variable analyzed in this study, Cronbach's alpha was calculated. As indicated in Table 5, all of the measures showed moderate to strong reliability ( $\alpha = .76-90$ ).

Table 5

*Reliability for Variables Measured in the Study*

	LS	H	G	OV	RV	SR	SC	E	R
Cronbach's $\alpha$	.90	.84	.85	.85	.84	.86	.90	.88	.76

*Note.* LS = Life Satisfaction; H = Hope; G = Gratitude; SR = Self-Regulation; SC = Social Competence; E = Empathy; R = Responsibility; OV = Overt Victimization; RV = Relational Victimization.

## Results for Path Models

**Research question 1.** Which character strengths (Responsibility, Self-Regulation, Social Competence, and Empathy) are significantly associated (directly and indirectly) with students' positive psychological outcomes, as indicated by gratitude, life satisfaction, and hope?

**Hypothesized model 1.** Each of the four character strengths (Responsibility, Self-Regulation, Social Competence, and Empathy) will be significantly associated with students' positive psychological outcomes, as indicated by: gratitude, life satisfaction, and hope. Gratitude and hope will be significantly associated with life satisfaction. Gratitude and hope will also mediate the relationship between all four character strengths and life satisfaction.

**Fit indices.** Table 5 displays the levels of fit found in the first model that was tested using the PROC CALIS procedure in SAS 9.3. A chi-squared significance test revealed a significant discrepancy between the estimated model and the actual values, however the model yielded

satisfactory fit on the SRMR and the CFI indices. The high RMSEA value indicates that the data could be represented in a more parsimonious way. This is due to the high number of predicted paths, which resulted in the model only having one degree of freedom.

Table 6

*Fit Indices for Model 1: Character Strengths and Positive Psychological Outcomes*

	Chi-squared	<i>p</i>	SRMR	RMSEA	CFI
Model 1: Character Strengths and Positive Psychological Outcomes	53.21	.0001	.04	.35	.96

As indicated in Figure 9, social competence and responsibility were significantly associated with greater gratitude, life satisfaction and hope. Self-regulation was associated with greater life satisfaction and hope, but not gratitude. In contrast to the positive association found in the bivariate correlational analysis, empathy had no relationship with gratitude and was significantly associated with *reduced* life satisfaction and hope, effects in the opposite direction as hypothesized. The model predicted 28% of the variance of gratitude, 53% of the variance of life satisfaction, and 36% of the variance of hope. Gratitude and hope were both significantly associated with increased life satisfaction. Indirect effects on life satisfaction were significant for social competence ( $b = .165, p < .001$ ) self-regulation ( $b = .094, p < .001$ ), and responsibility ( $b = .175, p < .001$ ). Among these indirect effects, gratitude mediated the influence of social competence ( $b = .094$ ) and responsibility ( $b = .111$ ). Hope mediated the influence of social competence ( $b = .071$ ), self-regulation ( $b = .058$ ), and responsibility ( $b = .064$ ).

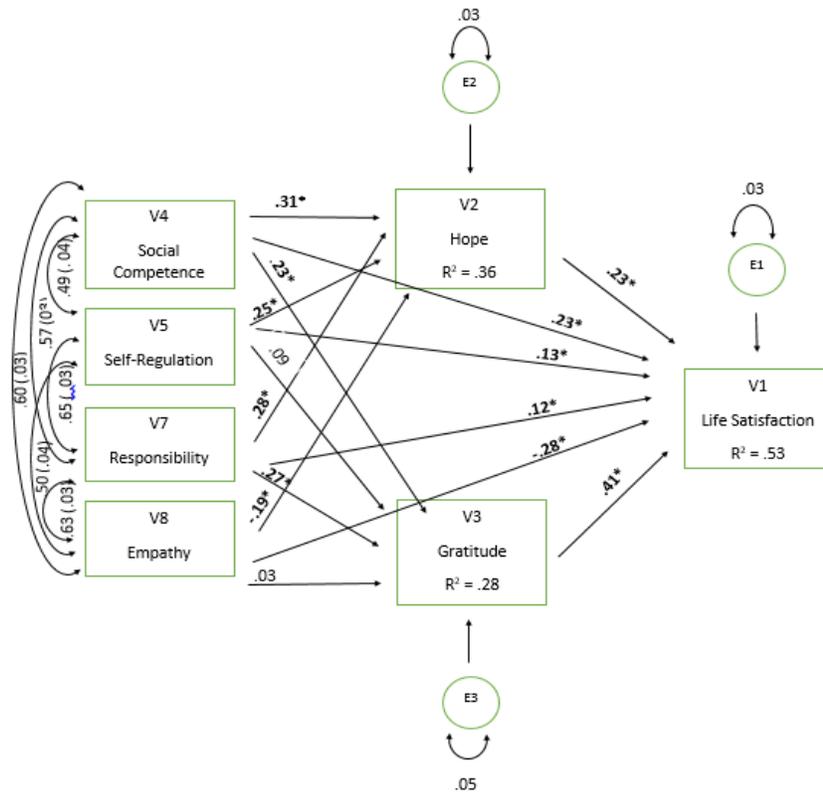


Figure 9. Relationships between character strengths and positive psychological outcomes.

**Research question 2.** To what extent does peer victimization associate with students' positive psychological outcomes, as indicated by gratitude, life satisfaction, and hope?

**Hypothesized model 2.** Peer victimization (both overt and relational) will be associated with lower life satisfaction, and hope. In line with prior research (Froh et al., 2009; Gillham et al., 2011; Park & Peterson, 2008), higher gratitude and hope are also anticipated to contribute to higher life satisfaction, thus those pathways were included in the model. Given that past research has indicated unique contributions of overt and relational victimization (Martin & Huebner, 2007; Suldo, Gellay, Roth, & Bateman, in press), both victimization forms were analyzed separately rather than collapsing into a composite variable representing victimization overall.

**Fit indices.** In addition to a statistically significant chi-squared, Model 2 had poor fit based on the descriptive indices SRMR, RMSEA, and CFI. Due to poor fit of the originally hypothesized model and absent an a priori alternative model, a path was dropped between overt victimization and life satisfaction based on Suldo et al's (in press) finding that this relationship is not observed in high school youth. Additionally, based on findings by McCullough, Emmons, and Tsang (2002), a path was added between hope and gratitude. After the modifications were made to Model 2, the model achieved satisfactory fit based on the SRMR, RMSEA, and CFI. Although there may be a relationship between hope and gratitude in the first model, adding a path without subtracting one would lead to just-identification, which would make fit estimation impossible. Absent a rationale for dropping paths in the first model, the path between gratitude and hope was only added in this second model.

Table 7

*Fit Indices for Model 2: Victimization and Positive Psychological Outcomes*

	Chi-squared	<i>P</i>	SRMR	RMSEA	CFI
Model 2: Victimization and Positive Psychological Outcomes	123.48	.0001	.14	.54	.83
Model 2 (modified)	2.16	.14	.01	.05	.99

As indicated in Figure 10, relational victimization was significantly associated with reduced life satisfaction and gratitude. Relational victimization did not significantly predict hope, and overt victimization did not significantly predict gratitude or hope. The model predicted 49% of the variance of life satisfaction, 5% of the variance of hope, and 33% of the variance of gratitude. Gratitude and hope were significantly associated with life satisfaction, and

hope was significantly associated with gratitude. The indirect effect of relational victimization on hope was significant ( $b = -.123, p < .001$ ), indicating a mediating relationship of gratitude ( $b = -.112$ ). The indirect effect of relational victimization on life satisfaction was also significant ( $b = -.139, p < .001$ ), indicating a partial mediating relationship of gratitude ( $b = -.112$ ). Relational victimization had no direct effect on hope, but associated indirectly through gratitude ( $b = -.13, p < .05$ ).

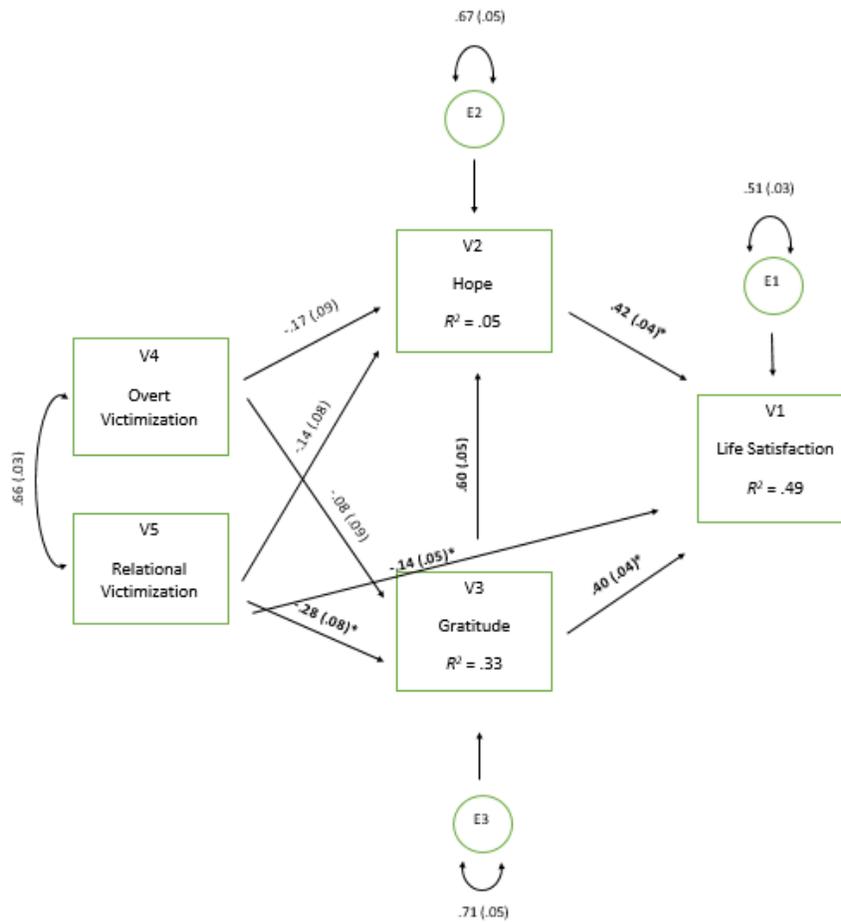


Figure 10. Relationships between victimization and positive psychological outcomes.

**Research question 3.** Which character strengths (Responsibility, Self-Regulation, Social Competence, and Empathy) serve as resilience factors by protecting students who experience greater peer victimization from diminished positive psychological outcomes, as indicated by gratitude, life satisfaction, and hope?

**Hypothesized model 3.** Each of the four character strengths (Responsibility, Self-Regulation, Social Competence, and Empathy) will serve as resilience factors by protecting students who experience greater peer victimization from diminished positive psychological outcomes, as indicated by gratitude, life satisfaction, and hope.

**Fit indices.** Table 7 displays the levels of fit found in the third model. A chi-squared significance test revealed a significant discrepancy between the estimated model and the actual values, however the model yielded satisfactory fit on the SRMR and the CFI indices. The high RMSEA in this model indicated that the relationships could be explained in a more parsimonious way. This is due to the high number of predicted paths, due to which the model only has one degree of freedom.

Table 8

*Fit Indices for Model 3: Moderating Relationships between Character Strengths, Victimization, and Positive Psychological Outcomes*

	Chi-squared	<i>p</i>	SRMR	RMSEA	CFI
Model 3: Moderating Relationships	50.83	.0001	.02	.34	.99

The direct effects in Model 3 are presented in Figure 11; moderating effects are provided in Figure 12 for increased readability. Social competence was significantly associated with hope and life satisfaction, responsibility was significantly associated with life satisfaction, and

empathy was inversely associated with life satisfaction. Relational victimization was inversely associated with hope and gratitude.

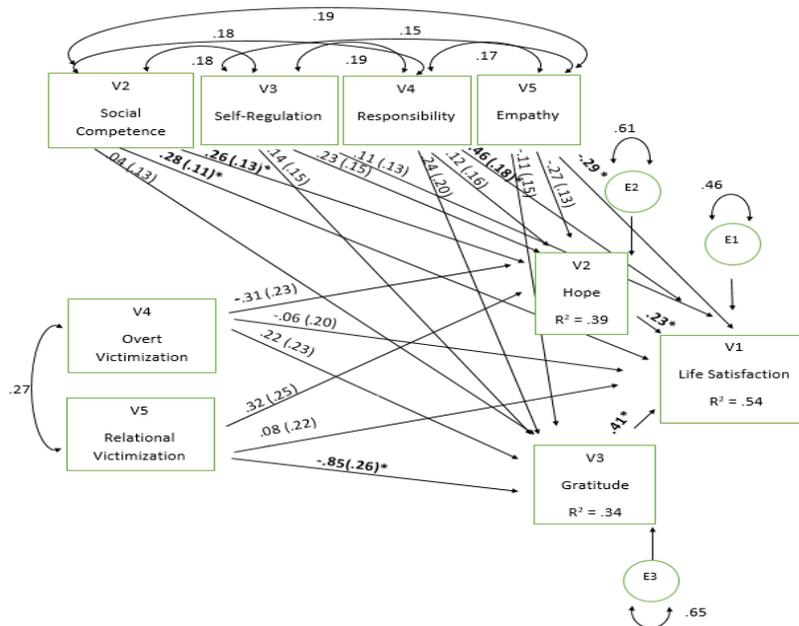


Figure 11. Direct relationships between character strengths, victimization, and positive psychological outcomes.

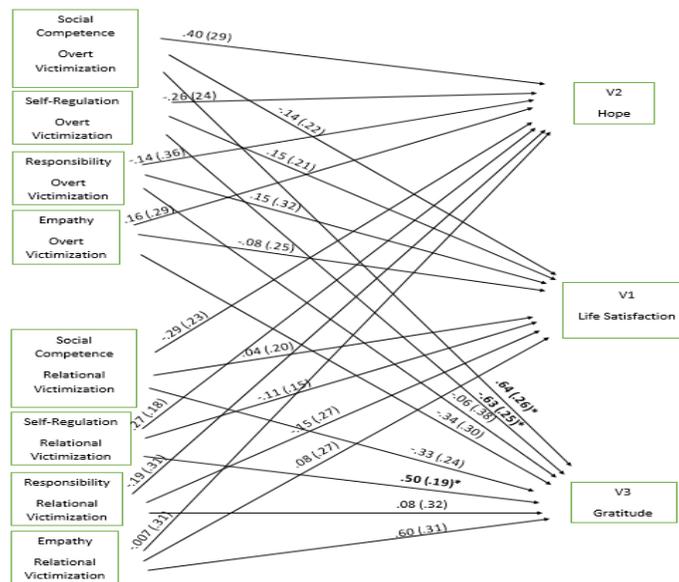


Figure 12. Moderating relationships between character strengths, victimization, and positive psychological outcomes.

To understand the nature of the three significant interaction terms that emerged (see Figure 12), the influence of victimization on gratitude was graphed as a function of student level of the character strength (low and high; one standard deviation above or below the mean). The relationship between *overt* victimization and gratitude was moderated by social competence and self-regulation. The moderating effect of self-regulation on overt victimization was negative. Specifically, after controlling for the main effects of these and other predictors (see Figure 11), high self-regulation introduced a negative influence of overt victimization on gratitude. As depicted in Figure 13, this pattern suggests that for students who experience overt victimization, high self-regulation is a risk factor for diminished gratitude.

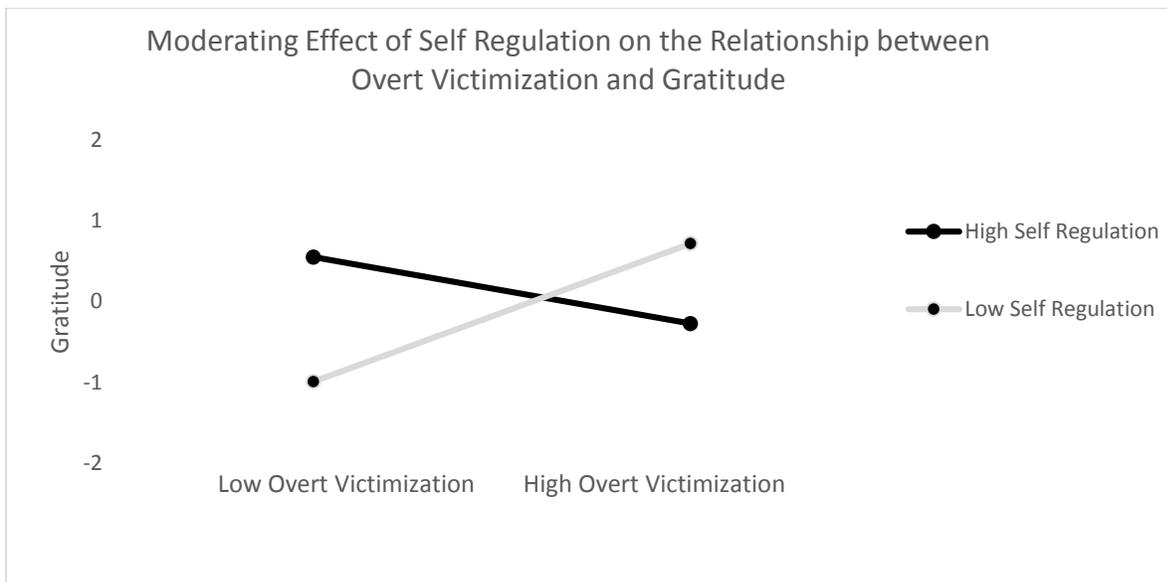


Figure 13. Moderation of Self-Regulation on the Relationship between Overt Victimization and Gratitude

As presented in Figure 12 and depicted in Figure 14, high social competence introduced a positive influence of overt victimization. This pattern suggests that for students who experience overt victimization, high social competence is a protective factor with regard to the outcome of

gratitude. Conversely, low levels of social competence may place students who experience overt victimization at risk for diminished gratitude.

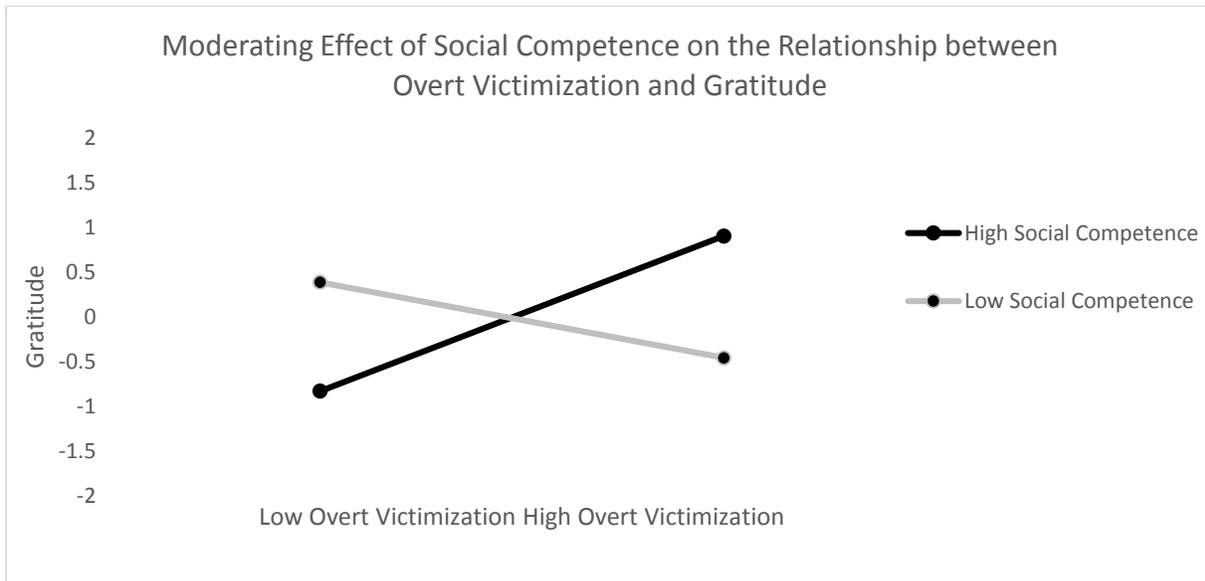


Figure 14. Moderation of Social Competence on the Relationship between Overt Victimization and Gratitude

As presented in Figure 12 and depicted in Figure 15, the relationship between *relational* victimization and gratitude was moderated by self-regulation. The positive direction of the effect suggested that the inverse association between relational victimization and gratitude was not as pronounced under high levels of self-regulation. For students with no/low experiences of relational victimization, gratitude was high regardless of personal level of self-regulation. High self-regulation functioned as a protective factor for those students who did experience relational victimization; low levels of gratitude were reported only for those relationally victimized youth who had low self-regulation.

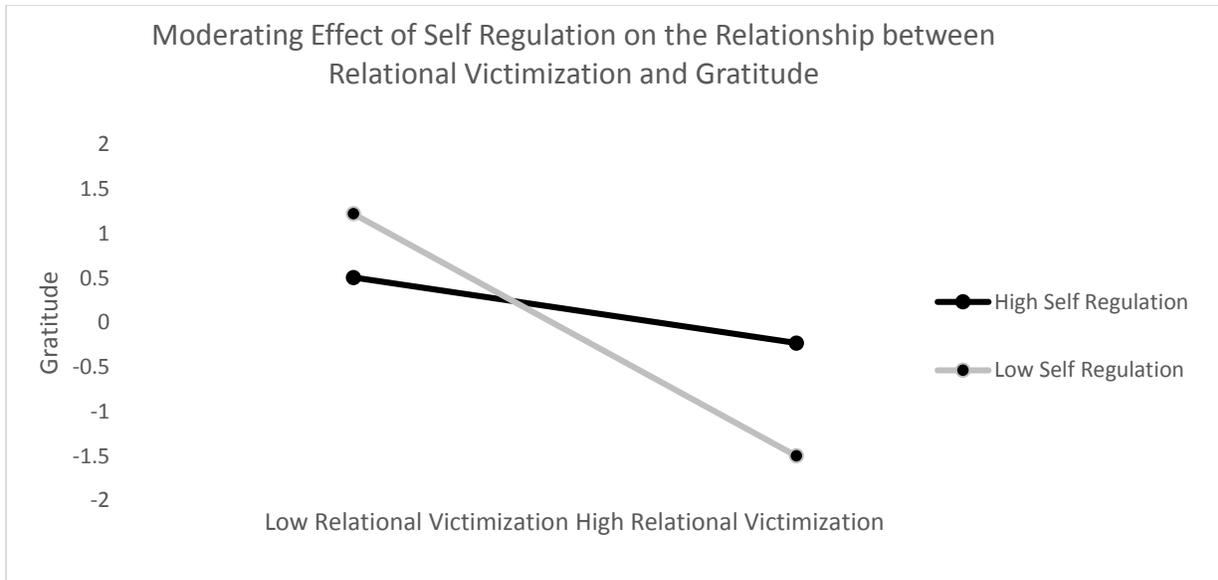


Figure 15. Moderation of Self-Regulation on the Relationship between Relational Victimization and Gratitude

## CHAPTER FIVE

### Discussion

The current study investigated relationships between character strengths, peer victimization, and positive psychological outcomes, ultimately through examining associations that emerged in three path models. The first research question examined the extent to which social competence, self-regulation, responsibility, and empathy were associated with gratitude, life satisfaction, and hope. The second research question investigated the extent to which overt and relational peer victimization were associated with gratitude, life satisfaction, and hope. The third and final research question investigated the extent to which the aforementioned character strengths moderated the relationship between peer victimization and the three indicators of positive psychological outcomes.

In this chapter the results from the current study, organized by research question, are summarized and interpreted based on their contribution to existing literature. Significant findings both in support of and contrary to previous findings are discussed first, followed by implications of the results. Finally, limitations and recommendations for future research are discussed.

#### **Character Strengths and Positive Psychological Outcomes**

The first research question examined which of the four character strengths were associated with gratitude, life satisfaction, and hope, directly and indirectly. The findings from this study indicate that character strengths as indicated by the SEARS serve as significant predictors of gratitude, life satisfaction, and hope. These data provide support for the potential

value of character strengths for predicting higher positive psychological outcomes, thus expanding on previous research that found links between certain character strengths and life satisfaction (e.g., Kashdan & Steger, 2007). The following pages include a summary of the findings related to each character strength, as well as similarities and differences compared and contrasted with previous research.

**Social competence.** As indicated by the first path model, social competence was significantly associated with gratitude ( $b = .23$ ), life satisfaction ( $b = .23$ ), and hope ( $b = .31$ ), and was indirectly associated with life satisfaction ( $b = .17$ ). As this construct reflects a combination of social skills (i.e., ability) and peer relations (i.e., perceived status with peers), the relationship between social competence and positive psychological outcomes is not surprising. Previous research indicated correlational (Burt et al., 2008) and directional (Cole et al., 1996) relationships between social competence and mental health problems; however, this model is the first to find that social competence is related to positive indicators of mental health.

**Self-regulation.** As indicated by the first path model, self-regulation predicted higher levels of life satisfaction ( $b = .13$ ) and hope ( $b = .25$ ) and was indirectly related to life satisfaction ( $b = .09$ ); however, life satisfaction was not related to gratitude. Previous investigations have found a positive relationship between self-regulation and life satisfaction (Gillham et al., 2011) and a negative relationship with externalizing problems (Bakker et al., 2010). This study is the first to identify a relationship between self-regulation and hope. Given the goal-directed and perseverant nature of hope as measured in this study, it is possible that students who are more in control of their actions are more likely to faithfully pursue and achieve goals, leading to higher feelings of hope. It is possible that self-regulation did not predict gratitude because it is not as clearly relevant to feelings about the past. That is, considering that self-regulation is focused on

present behavior and gratitude is focused on the past, self-regulation may be a strength that is not pertinent to achieving high levels of gratitude.

**Empathy.** As indicated by the first path model, empathy was inversely associated with life satisfaction ( $b = -.28$ ) and hope ( $b = -.19$ ). This is in contrast to positive bivariate associations yielded in the current study, as well as previous research that found a positive influence of empathy on reducing internalizing problems (Gleason et al., 2009). The majority of research on the positive influence of empathy on mental health concerns the prediction of antisocial or externalizing behavior based on *low* empathy (e.g., de Wied et al., 2012; Joliffe & Farrington, 2007; Miller & Eisenberg, 1988), thus the phenomenon suggested by findings in the current study may be distinct from the relationship between high empathy and positive experience. Of note, this negative unique influence of empathy on life satisfaction and hope is consistent with recent research on a phenomenon dubbed “empathetic distress” (Smith & Rose, 2011), wherein individuals with high empathy take on the emotional burden of those around them, which may cause personal symptoms of psychological distress or reduced well-being. Although a link between empathy and increased internalizing distress has been previously reported in the literature, this study is the first to suggest a similar deleterious relationship with positive indicators of mental health (albeit only after controlling for the influence of other strengths in multivariate predictive analyses).

**Responsibility.** As indicated by the first path model, responsibility was significantly associated with gratitude ( $b = .27$ ), life satisfaction ( $b = .12$ ) and hope ( $b = .28$ ), and was indirectly related to life satisfaction ( $b = .17$ ). Although research has established a link between the semantically similar strength *prudence* and life satisfaction (Gillham et al., 2011), research on responsibility and mental health has focused on deterring externalizing problems (Farrell et al.

2001; Farrell et al. 2003). Responsibility on the SEARS measures students' abilities to make good decisions and exhibit dependable behavior, which may lead to more success, thus setting the stage for increased positive mood related to past successes, current life circumstances that result from success, the likelihood of future goal attainment, and perhaps enhanced social relationships associated with compliant and trustworthy behavior. This potential mediation is speculative, however, as potential mediators like instrumental success (e.g., GPA) and social relationship quality were not analyzed in this study.

### **Mediating Role of Gratitude and Hope**

**Gratitude.** Gratitude had a significant relationship with life satisfaction ( $b = .41$ ), and was significantly associated with social competence ( $b = .23$ ) and responsibility ( $b = .27$ ). The significant indirect effects in the model between responsibility ( $b = .18, p < .05$ ) and social competence ( $b = .17, p < .05$ ) on life satisfaction indicate a partial mediating relationship through gratitude. Gratitude mediated the effects of social competence ( $b = .094$ ) and responsibility ( $b = .111$ ) on life satisfaction. This mediating finding is only preliminary, however. Although there has been previous research indicating a directional relationship of gratitude and hope predicting life satisfaction (Gillham et al., 2011; Park & Peterson, 2008), the evidence presented here is both correlational and cross-sectional, thus precluding directional interpretations in this sample.

**Hope.** Hope also had a significant relationship with life satisfaction ( $b = .23$ ), and was significantly associated with social competence ( $b = .31$ ), self-regulation ( $b = .25$ ), responsibility ( $b = .28$ ), and empathy ( $b = -.19$ ). As stated above, the significant indirect effects in the model between self-regulation ( $b = .09, p < .05$ ), responsibility ( $b = .18, p < .05$ ), and social competence ( $b = .17, p < .05$ ) on life satisfaction were in part due to the mediating influence of hope.

Specifically, hope mediated the influence of social competence ( $b = .071$ ), self-regulation ( $b = .058$ ), and responsibility ( $b = .064$ ). In the case of all but empathy, additional effects of character strengths on life satisfaction are extended to include possible additive, positive effects on hope which, in turn, is associated with greater life satisfaction. For empathy, its inverse association with hope may serve to further effect reduced life satisfaction, although the non-significant indirect effect of empathy on life satisfaction found in this study does not support this hypothesis. Of note, neither hope nor gratitude fully explained the influence of any strength on life satisfaction, supporting the direct ties between students' strengths and an ultimate outcome indicator of well-being. However, the substantial mediating influence of gratitude and hope suggests that positive psychological outcomes should not be studied in isolation, as they may have additive effects that warrant their combined consideration.

### **Peer Victimization and Positive Psychological Outcomes**

The second research question in this study lies in the deeper exploration of the influence of peer victimization on positive psychological outcomes. Since overt and relational victimization are not experienced to the same extent by all individuals (Crick and Grotpeter, 1995) and some research suggests that students' life satisfaction is affected differently (Martin & Huebner, 2007), these two forms of victimization will be discussed separately.

**Relational victimization.** In this study it was predicted that relational victimization would be negatively associated with all three positive psychological outcomes. This hypothesis was partially supported by the results of the second path model, as relational victimization was significantly associated with gratitude ( $b = -.14$ ) and even more so life satisfaction ( $b = -.34$ ) in the path model. A significant indirect effect ( $b = -.13, p < .05$ ) indicated that relational victimization was also associated with hope through links with gratitude. These findings are

consistent with findings by Martin and Huebner (2007), Estévez et al. (2008), and Sumter et al. (2012) regarding significant ties between victimization and life satisfaction. However, this is the first empirical study to find that relational victimization is associated with reduced gratitude, albeit in the context of a smaller unique relationship. In the original model relational victimization also predicted hope; however, the first model had poor fit which was rectified by adding a correlation between hope and gratitude. In the second model, this relationship was no longer significant, suggesting that the association between relational victimization and hope is better explained by gratitude. Thus, rather than supporting previous findings that victimization predicts reduced hope (You et al., 2008), findings in the current study suggest that relational victimization may be related to hope indirectly via its relationship with gratitude rather than influence hope directly. Although there is an established directionality between victimization and negative indicators of mental health (Hawker & Boulton, 2000), the current study is cross-sectional and therefore does not resolve questions about the potential bidirectional relationship between victimization and life satisfaction (e.g., Martin et al. 2008).

**Overt victimization.** According to the second path model, overt victimization did not yield unique associations with gratitude, life satisfaction, or hope after concurrent relationships with relational victimization were considered. This finding is contrary to what Martin and Huebner (2007) found, but consistent with Suldo, Gelley, Roth, and Bateman (in press) who analyzed an earlier wave of the archival dataset examined in the current study. This study recruited older students than those recruited by Martin and Huebner, therefore this difference may be due to the increasing role of peer relationships as students get older (Wigfield & Wagner, 2005). It is also possible that as students mature, they experience less overt victimization and more relational victimization. In this study, overt victimization was highly skewed with most

participants reporting almost no experiences of it. Therefore, it is possible that in a group of adolescents where overt victimization is more prevalent, the relationship between overt victimization and positive psychological outcomes would be different.

**Gratitude.** Gratitude was significantly associated with life satisfaction ( $b = .40$ ), and was predicted by relational victimization ( $b = -.28$ ). Given the significant indirect relationship indicated by the second path model, these findings indicate an additional indirect relationship mediated through gratitude, such that students who perceive relational victimization are more likely to have diminished gratitude which, in turns, co-occurs with diminished life satisfaction.

**Hope.** Hope was significantly associated with life satisfaction ( $b = .42$ ). Unlike gratitude, hope was not associated with overt or relational victimization, therefore it did not appear to serve as a mediating variable between victimization and life satisfaction. Although past research has suggested that victimization is particularly devastating for individuals with low hope (Terzi-Unsal & Kapci, 2005), there has not been a linear relationship between victimization and reduced hope established in the literature, nor was it found in this study. However, most students reported experiencing low levels of victimization and thus the limited variability in the problem may have been insufficient to influence hope. In other words, in a sample where overt victimization is more prevalent, it is possible that it would influence hope in a way that could not be captured in this study.

### **Character Strengths Moderating the Link between Victimization and Positive Psychological Outcomes**

Each strength was expected to serve as a *compensatory* resilience factor (i.e., to have a positive direct effect *and* a positive moderating effect on outcomes). However, this study did not find support for the majority of the hypothesized moderating relationships between strengths,

victimization, and well-being. While the model had satisfactory fit, most of the significant path coefficients remained in direct relationships (Figure 11) such as between social competence and life satisfaction. Gratitude was the only outcome for which some character strengths served as a moderating variable. For gratitude, three significant moderating relationships emerged, two in the direction of strengths as protective factors and the other identifying a strength as a risk factor.

One of the few moderating relationships that occurred was found between overt victimization and gratitude, moderated by self-regulation; this negative relationship suggests that for students who had high self-regulation, overt victimization was inversely associated with gratitude. As such, self-regulation created a negative relationship between two variables that were unrelated in previous models, and suggests self-regulation as a risk factor for diminished gratitude in the face of *overt* victimization. In contrast, social competence served as a protective factor associated with increased gratitude even for students with high levels of perceived overt victimization. While the introspection that accompanies self-regulation may increase rumination over stressful events, social competence is accompanied by social success (i.e., the peer relations component measures how much peers like the student), which may explain why students with high social competence had higher gratitude despite the existence of social stressors (i.e., victimization). That is, with friends and successful social relationships, students may have plenty to be grateful for even if a subset of individuals is treating them poorly.

Self-regulation functioned as a protective factor with regard to the gratitude levels of students who experienced *relational* forms of peer victimization. Specifically, the negative direct effect of relational victimization on gratitude was not present under high levels of self-regulation. This protective role of self-regulation in the context of relational victimization is consistent with previous studies that found self-regulation protected student mental health from the negative

influences of family instability (Bakker et al., 2010) as well as frustration and fear (Oldehinkel et al., 2007). It is not clear why self-regulation serves as a risk factor in the face of *overt* victimization but as a protective factor in the face of *relational* victimization.

Past research has indicated that empathy can serve as a protective factor, preventing victimized youth from experiencing internalizing distress (Gleason, et al., 2009). Such a protective function of empathy was not identified in the current study that operationalized mental health as positive psychological outcomes (vs. psychopathology); instead, in this study empathy had a negative unique influence on mental health as indicated by life satisfaction and hope. In general, findings in this study did not provide much consistency with the literature that has found a protective influence of some character strengths on mental health outcomes, with the exception of gratitude.

### **Implications for Practice**

The predictive power of social competence, self-regulation, and responsibility for gratitude, life satisfaction, and hope, suggests that the mental health benefits of character strengths extend beyond their own benefits (e.g., being responsible), improving internalizing problems (e.g., Gest et al., 2006), and co-occurring with life satisfaction (e.g., Kashdan & Steger, 2007) to improving hope and gratitude as well. These findings add an additional incentive for social-emotional curricula that target character strengths. There is a host of benefits seen in students who have high gratitude, life satisfaction and hope; life satisfaction is associated with school attachment (Gilman, 2001) and positive peer relationships (Dew & Huebner, 1994), while gratitude and hope are associated with increased prosocial behavior, optimism, and physical health (Emmons & McCullough, 2003) and increased problem solving, planning, and positive thinking (Roesch et al., 2010), respectively. Given these and other benefits associated with

positive psychological outcomes, facilitating their development in school-age youth is important. As a method for increasing these outcomes, character strengths serve as a particularly attractive approach because they are associated with their own host of academic and interpersonal benefits. This study also provides support for the use of the SEARS as a strengths-based measure, which has important implications for school-based personnel. The SEARS is a quick and easy to use measure (i.e., takes around 10 minutes to fill out, as opposed to the 45-minute VIA that includes nearly 200 questions) and includes strengths that are of particular importance in school. That is, while bravery and appreciation of beauty are valuable strengths, the context of school (e.g., numerous distractions, large groups of students corralled by few teachers) makes conduct-related strengths such as self-regulation and responsibility practical intervention targets for teachers and school staff.

On the other hand, not all character strengths appear to relate to better positive psychological outcomes. In addition to predicting internalizing distress, the unique effect of empathy (i.e., what is left in empathy after controlling for its overlap with other strengths such as social competence) may also be a risk factor for life satisfaction. Given the importance of empathy in forming positive relationships (Litvack-Miller et al., 1997), these findings are not grounds for abandoning the instruction of empathy; rather, teachers and psychologists may be wise to monitor for possible negative emotional side-effects to programs that teach empathy. The ability to predict such reactions could be instrumental in effectively addressing emotional reactions as they arise from empathetic distress.

An effective method for facilitating the development of social competence, self-regulation, and responsibility is the adoption or inclusion of social skills curricula, which can be taught at the universal (Tier 1) or secondary intervention (Tier 2) levels. Merrell et al.'s (2007)

Strong Kids and Strong Teens curricula and Second Step (Frey, Hirschstein, & Guzzo, 2000) are examples of evidence-based social skills programs designed to increasing the aforementioned character strengths, as well as prosocial behavior and mental health. Both programs involve short (20-45 minute) modules which are delivered once or twice weekly and can be implemented by school psychologists, counselors, or classroom teachers. Another effective way to increase self-regulation is through interventions for problem-solving skills, such as the Anger Control Training module in the Prepare curriculum (Goldstein, 1999). This particular program is particularly effective for emotional self-regulation, as the Stop and Think steps include the identification of emotional cues that lead to anger and strategies for calming oneself. Although these programs can effectively increase student social skills in isolation (Grossman et al., 1997), findings from a recent meta-analysis indicate that there is a small but significant benefit to involving parents in social skills training as well (Kaminski, Valle, Filene, & Boyle, 2008).

This study also found support for the individual recognition of overt and relational victimization, as their association with positive psychological outcomes was not identical. The lack of a direct relationship between overt victimization and life satisfaction, gratitude, and hope, may reflect the increasing importance and salience of social relationships in a high school population. Research with younger students found that overt victimization was more detrimental than relational victimization in terms of associations with life satisfaction (Martin & Huebner, 2007). It is unclear why overt victimization only had a negative influence on gratitude for students with higher self-regulation, but one possible explanation is that students high in self-regulation may be more self-conscious. Students who self-reflect frequently have been found to show more self-consciousness (both public and private) than their peers (Silvia & Phillips, 2011), and given that self-reflection is an element of self-regulation, students with high self-

regulation may reflect more on overtly embarrassing or harmful events than their peers, thus leading to reduced levels of gratitude.

### **Limitations**

Due to high kurtosis in relational and overt victimization, fit indices may be conservative, and path coefficients may be liberal. That is, although the indicators of fit are credible, paths involving overt and relational victimization may show significance due to error. Particularly for paths involving overt victimization (both direct and moderated), results should be interpreted cautiously. Furthermore, the skewed nature of overt victimization in this sample (with most students reporting very low values) suggests that this dataset may not be sensitive to phenomena involving overt victimization, and given the small subset of students who reported experiencing victimization, further dividing the sample by gender was not feasible in this study, thus precluding the examination of gender differences. Another limitation pertained to the measurement of cognitive empathy, which was not expected to be negatively associated with the outcomes in this study. Considering that cognitive and affective empathy are correlated with each other (Joliffe & Farrington, 2006) and that this study could not control for affective empathy (which is not measured by the SEARS), the negative relationship may be due to the inability to separate cognitive empathy from affective empathy. The multicollinearity among the strengths examined in the current study made it challenging to examine their independent contribution to student outcomes. Empathy was highly correlated with social competence ( $r = .69$ ); thus once the influence of social competence was controlled for, any positive role of empathy (i.e., as found in bivariate correlations) may have been removed from the model, leaving the remainder of cognitive empathy that may overlap primarily with its affective counterpart. Finally, although some of the relationships investigated in this study have had

previous evidence of directionality (e.g., Proctor et al., 2011), the relationships in this study represent correlations among cross-sectional data. Therefore, the results of this study cannot be used to indicate directional relationships and must be interpreted as correlations.

### **Future Directions**

Future directions for this research include the investigation of the nature of the negative relationship between empathy and positive psychological outcomes. For example, the longitudinal study of students in social-emotional curricula that include empathy could reveal whether increased empathy *causes* improvements (as suggested by the results of the current study's bivariate analyses) or detriments (as suggested by the results of the current study's multivariate predictive models) in internalizing distress and life satisfaction. An intervention study would have marked advantages, as it is not possible to include all relevant variables in a model, thus making it difficult to appreciate the true nature of the relationships between the variables in this study. An intervention study that manipulates the strengths as intervention targets would provide a clearer glimpse of the relationships between strengths and outcomes. Since the present study was correlational, the question also remains whether social-emotional curricula or relational victimization actually cause positive psychological variables to improve, or if positive psychological outcomes have a hand in predicting these character strengths or social experiences. Research on strengths-based interventions could indicate causality, and longitudinal research could suggest directionality of victimization.

This study used a confirmatory approach which either supported or rejected the hypothesized models, and avoided iterative model building to avoid increasing the risk of a Type 1 error. However, upon rejection of most of the hypothesized relationships in the third (i.e., moderator) model in this study, researchers interested in improving the model may benefit from

taking a more exploratory approach. Future researchers may also wish to investigate the potential influence of overt victimization in a sample where it is more prevalent, as the null results in this study may have been due to the relative insignificance of the problem. This study found that gratitude and hope, which serve as both mental health outcomes (as states) and character strengths (as traits) had a strong role in predicting life satisfaction, in some cases subsuming suspected predictive power of other variables. For example, considering that gratitude predicted hope better than overt victimization, it may be important to examine positive psychological outcomes together rather than in isolation. This holistic approach would prevent the interpretation of spurious relationships and aid researchers in better understanding the influence of victimization on mental health. Finally, given the limited utility of the strengths investigated in this study for moderating the relationship between victimization and positive psychological outcomes, researchers may also choose to examine other variables that may better serve as moderators. Such future studies should also include outcomes beyond life satisfaction, such as full assessment of subjective well-being (e.g., indicators of positive affect)

## **Conclusions**

At the bivariate level, all character strengths measured by the SEARS are associated with greater life satisfaction, gratitude, and hope. When analyzed simultaneously, three of the four strengths assessed by the SEARS (all but empathy) exerted unique positive effects on positive states. This adds additional support to their importance as targets for positive psychology interventions in high school-age youth. Relational victimization uniquely predicts reduced life satisfaction and gratitude, and indirectly influences hope as mediated by gratitude. Overt victimization may not be as salient of a social stressor as relational victimization in high school-age youth; however, due to the low levels of overt victimization in this study, this interpretation

should be taken with caution. Relational victimization is not only associated with increased internalizing distress, but also reductions of positive indicators of mental health. This calls additional attention to the importance of managing victimization in schools, or preparing youth who experience victimization to survive despite experiences of victimization.

In terms of protective factors, only social competence served as an unambiguous protective factor in this study, as it associated with increased gratitude even in the face of overt victimization. Although self-regulation served a similar protective role against relational victimization, it served as a risk factor for students who experienced overt victimization. These findings highlight social competence as a particularly powerful character strength, not only for increasing positive outcomes, but for preparing youth to thrive despite adverse social experiences. Empathy had a negative unique influence on life satisfaction and hope; however, it is still an important character strength for positive social development and prosocial behavior (Litvack-Miller et al., 1997; Stephen & Finlay, 1999). High school age youth with high levels of empathy may benefit from instruction on how to deal with the emotional “cost of caring.”

## REFERENCES

- Achenbach, T. M., & Edelbrock, C. (1983). Child behavior checklist. *Burlington, Vt.: University Associates in Psychiatry.*
- Baker, J. A., & Maupin, A.N. (2009). School satisfaction and children's positive school adjustment. In Gilman, R., Huebner, E. S., & Furlong, M. J. (Eds.) *Handbook of Positive Psychology in Schools* (189-196). New York, NY, US: Routledge/Taylor & Francis Group.
- Bakker, M. P., Ormel, J., Verhulst, F. C., & Oldehinkel, A. J. (2011). Adolescent family adversity and mental health problems: the role of adaptive self-regulation capacities. The TRAILS study. *Journal of Abnormal Child Psychology*, 39(3), 341-350.
- Bailey, T. C., Eng, W., Frisch, M. B., & Snyder†, C. R. (2007). Hope and optimism as related to life satisfaction. *The Journal of Positive Psychology*, 2(3), 168-175.
- Bartlett, M. Y., & DeSteno, D. (2006). Gratitude and prosocial behavior: Helping when it costs you. *Psychological Science*, 17, 319-325. doi: 10.1111/j.1467-9280.2006.01705.x
- Blair, K. A., Denham, S. A., Kochanoff, A., & Whipple, B. (2004). Playing it cool: Temperament, emotion regulation, and social behavior in preschoolers. *Journal of School Psychology*, 42(6), 419-443. doi: 10.1016/j.jsp.2004.10.002
- Blake, J. J., Lund, E. M., Zhou, Q., Kwok, O. M., & Benz, M. R. (2012). National prevalence rates of bully victimization among students with disabilities in the United States. *School Psychology Quarterly*, 27(4), 210.

- Bonanno, R. A., & Hymel, S. (2010). Beyond hurt feelings: Investigating why some victims of bullying are at greater risk for suicidal ideation. *Merrill-Palmer Quarterly*, 56(3), 420-440. doi: 10.1353/mpq.0.0051
- Bono, G., & Froh, J. (2009). Benefits to students and schools. In R. Gilman, E. S., Huebner, & M. J. Furlong (Eds.) *Handbook of Positive Psychology in Schools* (77-87). New York, NY, US: Routledge/Taylor & Francis Group.
- Bono, G., & McCullough, M. E. (2006). Positive responses to benefit and harm: Bringing forgiveness and gratitude into cognitive psychotherapy. *Journal of Cognitive Psychotherapy*, 20(2), 147-158.
- Burt, K. B., Obradović, J., Long, J. D., & Masten, A. S. (2008). The interplay of social competence and psychopathology over 20 years: Testing transactional and cascade models. *Child Development*, 79(2), 359-374. doi: 10.1111/j.1467-8624.2007.01130.x
- Caldarella, P., Christensen, L., Kramer, T. J., & Kronmiller, K. (2009). Promoting social and emotional learning in second grade students: A study of the Strong Start curriculum. *Early Childhood Education Journal*, 37(1), 51-56. doi: 10.1007/s10643-009-0321-4
- Cedeno, L. A., Elias, M. J., Kelly, S., & Chu, B. C. (2010). School Violence, Adjustment, and the Influence of Hope on Low-Income, African American Youth. *American Journal of Orthopsychiatry*, 80(2), 213-226. doi: 10.1111/j.1939-0025.2010.01025.x
- Chou, C., & Bentler, P. M. (1995). Estimates and tests in structural equation modeling. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 37–55). Thousand Oaks, CA: Sage.

- Clark, R. D. (1975). The effects of reinforcement, punishment, and dependency on helping behavior. *Personality and Social Psychology Bulletin*, 1, 596-599.  
doi: 10.1177/014616727500100410
- Clore, G. L., Ortony, A., & Foss, M. A. (1987). The psychological foundations of the affective lexicon. *Journal of Personality and Social Psychology*, 53, 751-766.
- Cohn, B. P. (2011). Innovations in strength-based social-emotional assessment: Factor analysis, psychometric analysis, and cross-informant comparisons with the SEARS-T. *Unpublished Dissertation*.
- Cohn, B., Merrell, K. W., Felver-Grant, J., Tom, K., & Endrulat, N. R. (2009). Strength-based assessment of social and emotional functioning: Sears-c and sears-a. In *meeting of the National Association of School Psychologists Boston, MA*.
- Coie, J. D., & Dodge, K. A. (1998). Aggression and antisocial behavior. In N. Eisenberg (Ed.), *Handbook of child psychology: Vol. 3. Social, Emotional, and Personality Development* (5th ed., pp. 779 – 862). New York: Wiley.
- Cole, D. A., Maxwell, M., Dukewich, T. L., & Yosick, R. (2010). Targeted peer victimization and the construction of positive and negative self-cognitions: Connections to depressive symptoms in children. *Journal of Clinical Child and Adolescent Psychology*, 39(3), 421-435. doi: 10.1080/15374411003691776
- Collaborative for Academic Social, and Emotional Learning (CASEL). (2008). Guidelines for social and emotional learning: High quality programs for school and life success. Retrieved August 29, 2008, from <http://www.casel.org/downloads/GuidelinesAug02.pdf>.
- Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton, B., ... & Pickett, W. (2009). A cross-national profile of bullying and victimization among

- adolescents in 40 countries. *International Journal of Public Health*, 54(2), 216-224. doi: 10.1007/s00038-009-5413-9
- Crandall, V.C., & Crandall, V.J. (1965). A Children's Social Desirability Questionnaire. *Journal of Consulting Psychology*, 29, 27-36.
- Crick, N. R., & Bigbee, M. A. (1998). Relational and overt form of peer victimization: Multi-informant approach. *Journal of Consulting and Clinical Psychology*, 66, 337-347.
- Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology*, 8(02), 367-380.
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological methods*, 1(1), 16.
- Dahlsgaard, K. K. (2005). Is virtue more than its own reward? Character strengths and their relation to well-being in a prospective longitudinal study of middle school-aged adolescents. *Unpublished Dissertation*.
- Davis, M. H. (1994). *Empathy: A social psychological approach*. Madison, WI: Brown and Benchmark.
- Desjardins, T., Yeung Thompson, R. S., Sukhawathanakul, P., Leadbeater, B. J., & MacDonald, S. W. (2013). Factor structure of the Social Experience Questionnaire across time, sex, and grade among early elementary school children. *Psychological Assessment*, 25(4), 1058.
- De Wied, M., Van Boxtel, A., Matthys, W., & Meeus, W. (2012). Verbal, facial and autonomic responses to empathy-eliciting film clips by disruptive male adolescents with high versus low callous-unemotional traits. *Journal of Abnormal Child Psychology*, 40(2), 211-223. doi: 0.1007/s10802-011-9557-8

- Dew, T., & Huebner, E. S. (1994). Adolescents' perceived quality of life: An exploratory investigation. *Journal of School Psychology, 33*, 185-199. doi: 10.1016/0022-4405(94)90010-8
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71-75.
- Duan, C., & Hill, C. E. (1996). The current state of empathy research. *Journal of Counseling Psychology, 43*, 261-274. doi: 10.1037/0022-0167.43.3.261
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development, 82*(1), 405-432. doi: 10.1111/j.1467-8624.2010.01564.x
- Elias, M. J. (2004). The connection between social-emotional learning and learning disabilities: Implications for intervention. *Learning Disability Quarterly, 53*-63.
- Emmons, R. A., & Crumpler, C. A. (2000). Gratitude as a human strength: Appraising the evidence. *Journal of Social and Clinical Psychology, 19*(1), 56-69. doi: 10.1521/jscp.2000.19.1.56
- 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. doi: 10.1037/0022-3514.84.2.377
- Epstein, M. H., & Sharma, J. M. (1998). *Behavioral and Emotional Rating Scale: A Strength-Based Approach to Assessment: Examiner's Manual*. Austin, TX: Pro-Ed.
- Extremera, N., Duran, A., & Rey, L. (2007). Perceived emotional support and optimism-pessimism: Analyzing their role in predicting psychological adjustment among

- adolescents. *Personality and Individual Differences*, 42, 1069-1079. doi:  
10.1016/j.paid.2006.09.014
- Farmer, E. M., Burns, B. J., Philip, S. D., Angold, A., & Costello, E. J. (2003). Pathways into and through mental health services for children and adolescents. *Psychiatric Services*, 54, 60-67. doi: 10.1176/appi.ps.54.1.60
- Farrell, A. D., Meyer, A. L., Sullivan, T. N., & Kung, E. M. (2003). Evaluation of the Responding in Peaceful and Positive Ways (RIPP) seventh grade violence prevention curriculum. *Journal of Child and Family Studies*, 12(1), 101-120. doi: 1062-1024/03/0300-0101/0
- Farrell, A. D., Meyer, A. L., & White, K. S. (2001). Evaluation of Responding in Peaceful and Positive Ways (RIPP): A school-based prevention program for reducing violence among urban adolescents. *Journal of Clinical Child Psychology*, 30(4), 451-463. doi: 10.1207/S15374424JCCP3004\_02
- Farrell, A. D., Valois, R. F., & Meyer, A. L. (2002). Evaluation of the RIPP-6 violence prevention program at a rural middle school. *American Journal of Health Education*, 33(3), 167-172. doi: 10.1080/19325037.2002.10604733
- Farrell, A., Valois, R. F., & Meyer, A. L. (2003). Impact of the RIPP violence prevention program on rural middle school students. *Journal of Primary Prevention*, 24, 143-167. doi: 10.1023/A:1025992328395
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117-142. doi:10.2307/1170412

- Fox, C., & Boulton, M. (2003). Evaluating the effectiveness of a social skills training (SST) programme for victims of bullying. *Educational Research, 45*(3), 231-247. doi: 10.1080/0013188032000137238
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American psychologist, 56*(3), 218. doi: 10.1037/0003-066X.56.3.218
- Frey, K. S., Hirschstein, M. K., & Guzzo, B. A. (2000). Second step preventing aggression by promoting social competence. *Journal of Emotional and Behavioral Disorders, 8*(2), 102-112.
- Frick, P. J., Stickle, T. R., Dandreaux, D. M., Farrell, J. M., & Kimonis, E. R. (2005). Callous-unemotional traits in predicting the severity and stability of conduct problems and delinquency. *Journal of Abnormal Child Psychology, 33*(4), 471-487. doi: 10.1007/s10648-005-5728-9
- Froh, J. J., Emmons, R. A., Card, N. A., Bono, G., & Wilson, J. (2011). Gratitude and the reduced costs of materialism in adolescents. *Journal of Happiness Studies, 12*, 289–302. doi: 10.1007/s10902-010-9195-9
- Froh, J. J., Fan, J., Emmons, R. A., Bono, G., Huebner, E. S., & Watkins, P. (2011). Measuring gratitude in youth: Assessing the psychometric properties of adult gratitude scales in children and adolescents. *Psychological Assessment, 23*(2), 311. doi: 10.1037/a0021590
- 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*, 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*(2), 213-233. doi: 10.1016/j.jsp.2007.03.005
- Froh, J. J., Yurkewicz, C., & Kashdan, T. B. (2009). Gratitude and subjective well-being in early adolescence: Examining gender differences. *Journal of Adolescence, 32*(3), 633-650. doi:10.1016/j.adolescence.2008.06.006
- Garnezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development, 97*-111.
- Gest, S. D., Sesma, A., Masten, A. S., & Tellegen, A. (2006). Childhood peer reputation as a predictor of competence and symptoms 10 years later. *Journal of Abnormal Child Psychology, 34*, 509 – 526. doi: 10.1007/s10802-006-9029-8
- 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.  
<http://dx.doi.org/10.1080/17439760.2010.536773>
- Gilman, R., & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence, 35*(3), 293-301. doi: 10.1007/s10964-006-9036-7
- Giordano, P. C. (1995). The wider circle of friends in adolescence. *American Journal Of Sociology, 101*(3), 661-697. doi:10.1086/230756

- Gleason, K. A., Jensen-Campbell, L. A., & Ickes, W. (2009). The role of empathic accuracy in adolescents' peer relations and adjustment. *Personality and Social Psychology Bulletin*, 35(8), 997-1011. doi: 10.1177/0146167209336605
- Glew, G., Rivara, F., & Feudtner, C., (2000). Bullying: Children hurting children. *Pediatrics in Review*, 21(6), 183-190.
- Goldstein, A. P. (1999). *The prepare curriculum: Teaching prosocial competencies*. Research Press.
- Graham, S. (2005). Attributions and peer harassment. *Social Behavior and Communication in Biological and Artificial Systems*, 6(1), 119-130. doi: [10.1075/is.6.1.09gra](https://doi.org/10.1075/is.6.1.09gra)
- Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnick, H., et al. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58(6-7), 466-474. doi: 10.1037/0003-066X.58.6-7.466
- Greenspoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective well-being and psychopathology. *Social Indicators Research*, 54(1), 81-108. doi: 10.1023/A:1007219227883
- Grossman, H. J. (Ed.) (1983). *Classification in Mental Retardation*. Washington, DC: American Association on Mental Deficiency.
- Grossman, D. C., Neckerman, H. J., Koepsell, T. D., Liu, P. Y., Asher, K. N., Beland, K., ... & Rivara, F. P. (1997). Effectiveness of a violence prevention curriculum among children in elementary school: A randomized controlled trial. *Jama*, 277(20), 1605-1611.

- Haggerty, K., Elgin, J., & Woolley, A. (2011). Social-emotional learning assessment measures for middle school youth. *Social Development Research Group. University of Washington: Raikes Foundation.*
- Harlacher, J. E., & Merrell, K. W. (2010). Social and emotional learning as a universal level of student support: Evaluating the follow-up effect of strong kids on social and emotional outcomes. *Journal of Applied School Psychology, 26*(3), 212-229. doi: 10.1080/15377903.2010.495903
- Heaven, P.C.L. (1989). Extraversion, neuroticism and satisfaction with life among adolescents. *Personality and Individual Differences, 10*, 489-492. doi: 10.1016/0191-8869(89)90029-9
- Hawker, D. S., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal Child Psychology and Psychiatry, 41*(4), 441-455. doi: 10.1111/1469-7610.00629
- Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms. *Psychological Bulletin, 111*, 127 – 155. doi: 10.1037/0033-2909.111.1.127
- Hoglund, W. L., & Leadbeater, B. J. (2007). Managing threat: Do social-cognitive processes mediate the link between peer victimization and adjustment problems in early adolescence? *Journal of Research on Adolescence, 17*(3), 525-540. doi:10.1111/j.1532-7795.2007.00533.x
- Huebner, E. S. (1991). Initial development of the student's life satisfaction scale. *School Psychology International, 12*(3), 231-240. doi: 10.1007/s11482-007-9026-2

- Huebner, E. S., Gilman, R., & Laughlin, J. E. (1999). A multi-method investigation of the multidimensionality of children's well-being reports: Discriminant validity of life satisfaction and self-esteem. *Social Indicators Research*, *46*(1), 1-22. doi: 10.1023/A:1006821510832
- Hymel, S., Rubin, K. H., Rowden, L., & LeMare, L. (1990). Children's peer relationships: Longitudinal prediction of internalizing and externalizing problems from middle to late childhood. *Child Development*, *61*, 2004 – 2021.
- Jolliffe, D., & Farrington, D. P. (2007). Examining the relationship between low empathy and self-reported offending. *Legal and Criminological Psychology*, *12*(2), 265-286. doi: 10.1348/135532506X147413
- Juvonen, J., & Graham, S. (2001). *Peer Harassment in School: The plight of the vulnerable and victimized*. New York, NY, US: Guilford Press.
- Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of abnormal child psychology*, *36*(4), 567-589.
- Kashdan, T. B., & Steger, M. F. (2007). Curiosity and pathways to well-being and meaning in life: Traits, states, and everyday behaviors. *Motivation and Emotion*, *31*(3), 159-173. doi: 10.1007/s11031-007-9068-7.
- Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, *73*, 539–548. doi: 10.1037/0022-006X.73.3.539
- King, L. A. (2001). The hard road to the good life: The happy, mature person. *Journal of Humanistic Psychology*, *41*(1), 51-72. doi: 10.1177/0022167801411005

- Klomek, A. B., Sourander, A., & Gould, M. (2010). The association of suicide and bullying in childhood to young adulthood: A review of cross-sectional and longitudinal research findings. *La Revue Canadienne de Psychiatrie*, 55(5), 282-288.
- Kristjánsson, K. (2012). Positive Psychology and Positive Education: Old Wine in New Bottles? *Educational Psychologist*, 47(2), 86-105. doi: 10.1080/00461520.2011.610678
- Lazarus, R. S., & Lazarus, B. N. (1994). *Passion and Reason: Making Sense of our Emotions*. New York: Oxford University Press.
- Lee, H. S., Brennan, P. F., Daly, B. J. (2001). Relationship of empathy to appraisal, depression, life satisfaction, and physical health in informal caregivers of older adults. *Research in Nursing & Health*, 24(1), 44-56. doi: 10.1002/1098-240X(200102)24:1<44::AID-NUR1006>3.0.CO;2-S
- Liew, J. (2012). Effortful control, executive functions, and education: Bringing self-regulatory and social-emotional competencies to the table. *Child Development Perspectives*, 6(2), 105-111. doi: 10.1111/j.1750-8606.2011.00196.x
- Liew, J., Eisenberg, N., & Reiser, M. (2004). Preschoolers' effortful control and negative emotionality, immediate reactions to disappointment, and quality of social functioning. *Journal of Experimental Child Psychology*, 89(4), 298-319. doi: 10.1016/j.jecp.2004.06.004
- Linley, P., Joseph, S., Harrington, S., & Wood, A. M. (2006). Positive psychology: Past, present, and (possible) future. *The Journal of Positive Psychology*, 1(1), 3-16. doi: 10.1080/17439760500372796

- Litvack-Miller, W., McDougall, D., Romney, D.M., 1997. The structure of empathy during middle childhood and its relationship to prosocial behavior. *Genetic Social and General Psychology Monographs*, 123, 303–324.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803. doi: 10.1037/0033-2909.131.6.803
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9(2), 111. doi: 10.1037/1089-2680.9.2.111
- Malecki, C. K., Demaray, M. K., & Elliot, S. N. (2000). *A working manual on the development of the Child and Adolescent Social Support Scale*. Dekalb, IL: Northern Illinois University.
- Marchant, M., Brown, M., Caldarella, P., Young, E. (2010). Effects of Strong Kids curriculum on students with internalizing behaviors: A pilot study. *Journal of Evidence-Based Practices for Schools*, 11(2), 123-143.
- Marques, S. C., Lopez, S. J., & Pais-Ribero, 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
- Martin, K. M., & Huebner, E. S. (2007). Peer victimization and prosocial experiences and emotional well-being of middle school students. *Psychology in the Schools*, 44(2), 199-208. doi: 10.1002/pits.20216

- Masten AS. 2007. Resilience in developing systems: progress and promise as the fourth wave rises. *Developmental Psychopathology*, 19(3), 921–30. doi: 10.1017/S0954579407000442
- Masten, A., Best, K. M., & Garmezy, N. (1991). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425–444. doi: 10.1017/S0954579400005812
- Masten, A. S., Roisman, G. I., Long, J. D., Burt, K. B., Obradovic, J., Riley, J. R., et al. (2005). Developmental cascades: Linking academic achievement and externalizing and internalizing symptoms over 20 years. *Developmental Psychology*, 41, 733 – 74. doi: 10.1037/0012-1649.41.5.733
- McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin*, 127, 249-266. doi: 10.1037//0033-2909.127.2.249
- 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. doi: 10.1037//0022-3514.82.1.112
- Merrell, K. W. (2008). Social and emotional assets and resiliency scales (SEARS). Eugene: School psychology program, University of Oregon.
- Merrell, K. W. (2011). *Social and Emotional Assets and Resilience Scales (SEARS)*. Lutz, FL: Psychological Assessment Resources.
- Merrell, K. W., Carrizales, D. C., Feuerborn, L., Gueldner, B. A., & Tran, O. K. (2007a). *Strong Kids—Grades 3–5: A Social-Emotional Learning Curriculum*. Baltimore: Paul H. Brookes Publishing.

- Merrell, K. W., Carrizales, D. C., Feuerborn, L., Gueldner, B. A., & Tran, O. K. (2007b). *Strong Kids—Grades 6–8: A Social-Emotional Learning Curriculum*. Baltimore: Paul H. Brookes Publishing.
- Merrell, K. W., Carrizales, D. C., Feuerborn, L., Gueldner, B. A., & Tran, O. K. (2007c). *Strong Teens—Grades 9–12: A Social-Emotional Learning Curriculum*. Baltimore: Paul H. Brookes Publishing.
- Merrell, K. W., Cohn, B. P., & Tom, K. M. (2011). Development and Validation of a Teacher Report Measure for Assessing Social-Emotional Strengths of Children and Adolescents. *School Psychology Review, 40*(2), 226-241.
- Merrell, K. W., Gueldner, B. A., Ross, S. W., Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly, 23*(1), 26-42. doi: 10.1037/1045-3830.23.1.26
- Merrell, K. W., Parisi, D. M., & Whitcomb, S. A. (2007). *Strong Start grades K-2: A social and emotional learning curriculum*. Baltimore, MD: Paul H Brookes Publishing.
- Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological bulletin, 103*(3), 324.
- Nansel, T.R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and Association with Psychosocial Adjustment. *The Journal of the American Medical Association, 285*(16), 2094-2100. doi: 10.1001/jama.285.16.2094
- National Center for Educational Statistics, U.S. Department of Education. (2011). Student reports of bullying and cyber-bullying: Results from the 2009 School Crime Supplement

- to the National Crime Victimization Survey. Web Tables (NCES 2011–336). Retrieved from <http://nces.Ed.gov/pubs2011/2011336.pdf>
- Nevin, S., Carr, A., Shevlin, M., Dooley, B., & Breaden, C. (2005). Factors related to well-being in Irish adolescents. *The Irish Journal of Psychology*, 26(3-4), 123-136. doi: 10.1080/03033910.2005.10446215
- O Connor, M. (2011). Predictors of positive development in emerging adulthood. *Journal of Youth and Adolescence*, 40(7), 860-874.
- Oldehinkel, A. J., Hartman, C. A., Ferdinand, R. F., Verhulst, F. C., Ormel, J. (2007). Effortful control as modifier of the association between negative emotionality and adolescents. *Development and Psychopathology*, 19(2), 523. doi: 10.1017/S0954579407070253
- Olson, S. L., Sameroff, A. J., Kerr, D. C., Lopez, N. L., & Wellman, H. M. (2005). Developmental foundations of externalizing problems in young children: The role of effortful control. *Development and Psychopathology*, 17(1), 25-45. doi: 10.1017/S0954579405050029
- Olweus, D. (2001) Peer harassment: A critical analysis and some important issues. In Juvonen, J., & Graham, S. (Eds.), *Peer Harassment in School* (pp. 3-20). New York, NY, US: Guilford Publications.
- Overwalle, F. V., Mervielde, I., & Schuyter, J. D. (1995). Structural modelling of the relationships between attributional dimensions, emotions, and performance of college freshmen. *Cognition & Emotion*, 9(1), 59-85. doi: 10.1080/02699939508408965
- Park, N., & Peterson, C. (2008). Positive psychology and character strengths: Application to strengths-based school counseling. *Professional School Counseling*, 12(2), 85-92. DOI: 10.1521/jscp.23.5.603.50748.

- 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(6), 891-909. doi: 10.1016/j.adolescence.2006.04.011
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). A social interactional approach, Vol. 4: Antisocial boys. Eugene, OR: Castaglia.
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment*, 5(2), 164-172.
- Peterson, C. (2006). *A Primer in Positive Psychology*. Oxford University Press.
- Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. (2007). Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology*, 2(3), 149-156. DOI: 10.1080/17439760701228938.
- Peterson, C., & Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Handbook and Classification*. New York: Oxford University Press/Washington, DC: American Psychological Association.
- Piko, B. F. (2006). Burnout, role conflict, job satisfaction and psychosocial health among Hungarian health care staff: A questionnaire survey. *International Journal of Nursing Studies*, 43(3), 311-318. doi: 10.1016/j.ijnurstu.2005.05.003
- Proctor, C., Alex Linley, P., & Maltby, J. (2009). Youth life satisfaction measures: A review. *The Journal of Positive Psychology*, 4(2), 128-144. doi: 10.1080/17439760802650816
- Proctor, C., Tsukayama, E., Wood, A. M., Maltby J., Eades J., & Linley, 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.  
<http://dx.doi.org/10.1080/17439760.2011.594079>
- Redmond, M. V. (1989). The functions of empathy in human relations. *Human Relations*, 42, 593-605. doi: 10.1177/001872678904200703
- Rhee, S., Furlong, M., Turner, J., & Harari, I. (2001). Integrating strength-based perspectives in psychoeducational evaluations. *The California School Psychologist*, 6, 5-17.
- Romer, N., & Merrell, K. W. (2013). Temporal Stability of Strength-Based Assessments Test-Retest Reliability of Student and Teacher Reports. *Assessment for Effective Intervention*, 38(3), 185-191. doi: 10.1177/1534508412444955
- Roesch, S. C., Duangado, K. M., Vaughn, A. A., Aldridge, A. A., & Villodas, F. (2010). Dispositional hope and the propensity to cope: A daily diary assessment of minority adolescents. *Cultural Diversity and Ethnic Minority Psychology*, 16(2), 191. doi: 10.1037/a0016114
- Rose, C. A., Espelage, D. L., Aragon, S. R., & Elliott, J. (2011). Bullying and victimization among students in special education and general education curricula. *Exceptionality Education International*, 21(2 & 3), 2-14.
- Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2011). Stability of peer victimization in early adolescence: Effects of timing and duration. *Journal of School Psychology*, 49(4), 443-464. doi: 10.1016/j.jsp.2011.04.005
- Salmivalli, C., & Isaacs, J. (2005). Prospective Relations Among Victimization, Rejection, Friendlessness, and Children's Self-and Peer-Perceptions. *Child Development*, 76(6), 1161-1171.

- Schimmack, U., & Reisenzein, R. (1997). Cognitive processes involved in similarity judgments of emotions. *Journal of Personality and Social Psychology*, 73(4), 645. doi: 10.1037/0022-3514.73.4.645
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American Psychologist*, 55(1), 5.
- Silvia, P. J., & Phillips, A. G. (2011). Evaluating self-reflection and insight as self-conscious traits. *Personality And Individual Differences*, 50(2), 234-237. doi:10.1016/j.paid.2010.09.035
- Smith, R. L., & Rose, A. J. (2011). The “cost of caring” in youth’s friendships: Considering associations among social perspective taking, co-rumination, and empathetic distress. *Developmental Psychology*, 47(6), 1792-1803. Doi: 10.1037/a0025309
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13(4), 249-275.
- Snyder, C. R. (1999). Hope, goal blocking thoughts, and test-related anxieties. *Psychological Reports*, 84, 206–208. doi: 10.2466/PR0.84.1.206-208
- 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. doi: 10.1093/jpepsy/22.3.399
- Snyder, C. R., Irving, L. M., & Anderson, J. R. (1991). *Hope and Health*. Pergamon Press.
- Snyder, C. R., Sympson, S. C., Michael, S.T., & Cheavens, J. (2000). Optimism and hope constructs: Variants on a positive expectancy theme. In E. C. Chang (Ed.), *Optimism & Pessimism: Implications for Theory, Research, and Practice* (pp. 101-125). Washington, DC: American Psychological Association.

- Snyder, C. R., Sympson, S. C., Ybasco, F. C., & Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the State Hope Scale. *Journal of Personality and Social Psychology*, 70, 321–335. doi: 10.1037/0022-3514.70.2.321
- Sparrow, S. S., Cicchetti, D. V., & Balla, D. A. (1989). Vineland Adaptive Behavior Scales. *Major Psychological Assessment Instruments*, 2, 199-231.
- Stephan, W. G., & Finlay, K. (1999). The role of empathy in improving intergroup relations. *Journal of Social Issues*, 55(4), 729-743. doi: 10.1111/0022-4537.00144
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review*, 37, 52–68.
- Suldo, S. M., & Huebner, E. S. (2006). Is extremely high life satisfaction during adolescence advantageous? *Social Indicators Research*, 78(2), 179-203. doi: 10.1007/s11205-005-8208-2
- Suldo, S. M., Huebner, E. S., Savage, J., & Thalji, A. (2011). Promoting subjective well-being. In M. Bray & T. Kehle (Eds.), *Oxford Handbook of School Psychology* (pp.504-522). New York: Oxford University Press.
- Suldo, S. M., Huebner, E. S., Freidrich, A., & Gilman, R. (2009). Life satisfaction. In Gilman, R., Huebner, E. S., & Furlong, M. J. (Eds.) *Handbook of Positive Psychology in Schools* (27-35). New York, NY, US: Routledge/Taylor & Francis Group.
- Swearer, S. M., Siebecker, A. B., Johnsen-Frerichs, L. A., & Wang, C. (2010). Assessment of bullying/victimization: The problem of comparability across studies and across methodologies. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of Bullying in Schools: An International Perspective*. New York: Routledge.

- Tanigawa, D., Furlong, M. J., Felix, E. D., & Sharkey, J. D. (2011). The Protective Role of Perceived Social Support against the Manifestation of Depressive Symptoms in Peer Victims. *Journal of School Violence, 10*(4), 393-412. doi: 10.1080/15388220.2011.602614
- Terzi-Unsal, S., & Kapci, E G. (2005). Risk factors for suicidal behavior: Psychosocial risk models with Turkish adolescents. *Social Behavior and Personality, 33*, 593-607. doi: 10.2224/sbp.2005.33.6.593
- Thalji, A. L. (2012). A Dual-Factor Model of Mental Health in High School Students: Group Characteristics and Social Functioning. *Unpublished Dissertation*.
- Tsang, J. (2006). Gratitude and prosocial behavior: An experimental test of gratitude. *Cognition and Emotion, 20*, 138-148. doi: 10.1080/02699930500172341
- Tsang, J. (2007). Gratitude for small and large favors: A behavioral test. *Journal of Positive Psychology, 2*, 157-167. doi: 10.1080/17439760701229019
- Turner, H. A., Finkelhor, D., Hamby, S. L., Shattuck, A., & Ormrod, R. K. (2011). Specifying type and location of peer victimization in a national sample of children and youth. *Journal of Youth and Adolescence, 40*(8), 1052-1067.
- Valiente, C., Lemery-Chalfant, K., Swanson, J., & Reiser, M. (2008). Prediction of children's academic competence from their effortful control, relationships, and classroom participation. *Journal of Educational Psychology, 100*(1), 67-77. Doi:10.1037/0022-0663.100.1.67.
- Valois, R. F., Paxton, R. J., Zullig, K. J., & Huebner, E. J. (2006). Life satisfaction and violent behaviours among middle school students. *Journal of Child and Family Studies, 15*, 695-707. <http://dx.doi.org/10.1007/s10826-006-9043-z>

- Valois, R. F., Kerr, J. C., & Huebner, E. S. (2012): Peer Victimization and Perceived Life Satisfaction Among Early Adolescents in the United States. *American Journal of Health Education, 43:5*, 258-268. DOI: 10.1080/19325037.2012.10599244.
- Vilaythong, A. P., Arnau, R. C., Rosen, D. H., & Mascaro, N. (2003). Humor and hope: Can humor increase hope? *Humor, 16(1)*, 79-90. doi: 10.1515/humr.2003.006
- Walker, L. J., & Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. *Developmental Psychology, 34*, 403-419. doi: 10.1037/0012-1649.34.3.403
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*, 548–573. doi: 10.1037/0033-295X.92.4.548
- Wentzel, K., Baker, S., & Russell, S. (2009). Peer relationships and positive adjustment at school. In Gilman R., Huebner, E., & Furlong, M. J. (Eds.). *Handbook of Positive Psychology in Schools* (229-243). New York, NY, US: Routledge/Taylor & Francis Group.
- Wechsler, D. (1991). *Wechsler Intelligence Scale for Children*. (3<sup>rd</sup> ed.) San Antonio, TX: The Psychological Corporation/Harcourt Brace Jovanovich.
- Wigfield, A., & Wagner, A. L. (2005). Competence, motivation, and identity development during adolescence. *Handbook of Competence and Motivation*, 222-239.
- Wilkins-Shurmer A., O’Callaghan M.J., Najman J.M. (2003). Association of bullying with adolescent health-related quality of life. *Journal of Pediatrics and Child Health, 39*, 436-441. doi: 10.1046/j.1440-1754.2003.00184.x
- Wiseman, R. (2009). *Owning Up Curriculum: Empowering Adolescents to Confront Social Cruelty, Bullying, and Injustice*. Champaign, IL: Research Press

- You, S., Furlong, M. J., Felix, E., Sharkey, J. D., Tanigawa, D., & Green, J. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools, 45*(5), 446-460. doi:10.1002/pits.20308
- Zimmerman, M. A., & Arunkumar, R. (1994). Resiliency research: Implications for schools and policy. *Social Policy Report, 8*(4), 1-17.
- Zimmer-Gembeck, M. J., Chipuer, H. M., Hanisch, M., Creed, P. A., & McGregor, L. (2006). Relationships at school and stage-environment fit as resources for adolescent engagement and achievement. *Journal of Adolescence, 29*(6), 911-933.
- Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). *Building Academic Success on Social and Emotional Learning: What Does the Research Say?* New York: Teachers College Press.

## APPENDICES

## Appendix A: Demographics Form

(Modified to fit in current document)

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PLEASE READ EACH QUESTION AND CIRCLE ONE ANSWER PER QUESTION:

1. I am in grade:                    9      10      11
  2. My gender is:                    Male                  Female
  3. Do you receive free or reduced-price school lunch?      Yes                  No
  4. Are you of Hispanic, Latino, or Spanish origin?
    - a. **No**, not of Hispanic, Latino, or Spanish origin
    - b. Yes, Mexican, Mexican American, Chicano
    - c. Yes, Puerto Rican
    - d. Yes, Cuban
    - e. Yes, another Hispanic, Latino, or Spanish origin (*please specify*): \_\_\_\_\_
  5. What is your race? (*circle all that apply*)
    - a. White
    - b. Black or African American
    - c. American Indian or Alaska Native
    - d. Asian
    - e. Native Hawaiian and Other Pacific Islander
    - f. Other (*please specify*): \_\_\_\_\_
  6. My biological parents are:
    - a. Married
    - b. Divorced
    - c. Separated
    - d. Never married
    - e. Never married but living together
    - f. Widowed
  7. I live with my:
    - a. Mother and Father
    - b. Mother only
    - c. Father only
    - d. Mother and Step-father (or partner)
    - e. Father and Step-mother (or partner)
    - f. Grandparent(s)
    - g. Other relative (*please specify*): \_\_\_\_\_
    - h. Other (*please specify*): \_\_\_\_\_
  8. My father's highest education level is:
    - a. 8<sup>th</sup> grade or less
    - b. Some high school, did not complete
    - c. High school diploma/GED
    - d. Some college, did not complete
    - e. College/university degree
    - f. Master's degree
    - g. Doctoral level degree (Ph.D, M.D.) or other degree beyond Master's level
  9. My mother's highest education level is:
    - a. 8<sup>th</sup> grade or less
    - b. Some high school, did not complete
    - c. High school diploma/GED
    - d. Some college, did not complete
    - e. College/university degree
    - f. Master's degree
    - g. Doctoral level degree (Ph.D, M.D.) or other degree beyond Master's level
-

## Appendix A (Continued)

Sample Questions:

	Never	Almost Never	Sometimes	Almost All of the	All of the Time
1. I go to the beach	1	2	3	4	5

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
2. Going to the beach is fun	1	2	3	4	5	6

## Appendix B: Student's Life Satisfaction Scale

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 C: Children's Hope Scale

The 6 sentences below describe how children think about themselves and how they do things in general. For each sentence, please think about how you are in most situations. Circle the number that describes you best. For example, circle **1** if it describes you "none of the time." Or, if you are this way "all of the time," circle **6**.

	None of the Time	A Little of the Time	Some of the Time	A Lot of the Time	Most of the Time	All of the Time
1. I think I am doing pretty well.	1	2	3	4	5	6
2. I can think of many ways to get the things in life that are most important to me.	1	2	3	4	5	6
3. I am doing just as well as other kids my age.	1	2	3	4	5	6
4. When I have a problem, I can come up with lots of ways to solve it.	1	2	3	4	5	6
5. I think the things I have done in the past will help me in the future.	1	2	3	4	5	6
6. Even when others want to quit, I know that I can find ways to solve the problem.	1	2	3	4	5	6

## Appendix D: Gratitude Scale – 6

Circle a number from (1) to (7) where (1) indicates you **strongly disagree** with the statement and (7) indicates you **strongly agree** with the statement. It is important to know what you REALLY think, so please answer the question the way you really feel, not how you think you should.

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. I have so much in life to be thankful for	1	2	3	4	5	6	7
2. If I had to list everything that I felt thankful for, it would be a very long list	1	2	3	4	5	6	7
3. When I look at the world, I don't see much to be thankful for	1	2	3	4	5	6	7
4. I am thankful to a wide variety of people	1	2	3	4	5	6	7
5. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history	1	2	3	4	5	6	7
6. Long amounts of time can go by before I feel thankful to something or someone	1	2	3	4	5	6	7

## Appendix E: Social Experiences Questionnaire

Here is a list of things that sometimes happen to students your age (teens) at school. How often do they happen to you at school?

	Never	Almost Never	Sometimes	Almost All the Time	All the Time
1. How often does another student give you help when you need it?	1	2	3	4	5
2. How often do you get hit by another student at school?	1	2	3	4	5
3. How often do other students leave you out on purpose when it is time to play or do an activity?	1	2	3	4	5
4. How often does another student yell at you and call you mean names?	1	2	3	4	5
5. How often does another student try to cheer you up when you feel sad or upset?	1	2	3	4	5
6. How often does a student who is mad at you try to get back at you by not letting you be in their group anymore?	1	2	3	4	5
7. How often do you get pushed or shoved by another student at school?	1	2	3	4	5
8. How often does another student do something that makes you feel happy?	1	2	3	4	5
9. How often does a classmate tell lies about you to make other students not like you anymore?	1	2	3	4	5
10. How often does another student kick you or pull your hair?	1	2	3	4	5
11. How often does another student say they won't like you unless you do what they want you to do?	1	2	3	4	5
12. How often does another student say something nice to you?	1	2	3	4	5
13. How often does a student try to keep others from liking you by saying mean things about you?	1	2	3	4	5
14. How often does another student say they will beat you up if you don't do what they want you to do?	1	2	3	4	5
15. How often do other students let you know that they care about you?	1	2	3	4	5

## Appendix F: Parent Consent Letter

(Modified to fit in current document)

Parent Consent Form

Dear Parent or Caregiver:

This letter provides information about a research study that will be conducted in your high school by investigators from the University of South Florida. We are conducting the study to determine the links between students' psychological wellness and their school performance, physical health, social relationships, and sense of self.

- ✓ **Who We Are:** The research team is led by Shannon Suldo, Ph.D., a professor in the School Psychology Program at the University of South Florida (USF). Several graduate students in the USF College of Education are also on the team. We are planning the study in cooperation with the principal of your child's school to make sure that the study provides information that will be useful to the school.
- ✓ **Why We are Requesting Your Child's Participation:** This study is being conducted as part of a project entitled, "Subjective Well-Being of High School Students." Your child is being asked to participate because he or she is a student at a high school within Hillsborough County Public Schools (HCPS).
- ✓ **Why Your Child Should Participate:** We need to learn more about what leads to happiness and health during the teenage years! The information that we collect from students may help increase our overall awareness of the importance of monitoring students' happiness during adolescence. In addition, group-level results of the study will be shared with the teachers and administrators at your high school in order to increase their knowledge of the relationship between specific school experiences and psychological wellness in students. Please note neither you nor your child will be paid for your child's participation in the study. However, all students who participate in the study will be entered into a drawing for one of several gift certificates.
- ✓ **What Participation Requires:** If your child is given permission to participate in the study, he or she will be asked to complete several paper-and-pencil questionnaires. These surveys will ask about your child's thoughts, behaviors, and attitudes towards him/herself, school, teachers, classmates, family, and life in general. The surveys will also ask about your child's physical health and involvement in after-school activities. Completion is expected to take your child between 45 and 60 minutes. We will administer the questionnaires during regular school hours, to large groups of students who have parent permission to participate. Participation will occur during one class period this school year. If your child is enrolled in a HCPS high school next year, he or she will be asked to complete the same surveys again so that we can examine change over time. In addition to completing surveys, a small number of students selected due to their specific mental health profile will be asked to participate in one brief (30 minutes or less) interview. The interview will occur during regular school hours and consist of us asking students additional questions about the thoughts and behaviors that affect their happiness. In total, participation will take about 60 to 90 minutes of your child's time each year for the next two years. Another part of participation involves a review of your child's school records. Under the supervision of school administrators, we will retrieve the following information about your child: grade point average, FCAT scores, attendance, and discipline referrals. Finally, one of your child's teachers will be asked to complete a rating scale about your child's behavior at school.

## Appendix F (Continued)

- ✓ Please Note: Your decision to allow your child to participate in this research study must be completely voluntary. You are free to allow your child to participate in this research study or to withdraw him or her at any time. Your decision to participate, not to participate, or to withdraw participation at any point during the study will in no way affect your child's student status, his or her grades, or your relationship with HCPS, USF, or any other party.
- ✓ Confidentiality of Your Child's Responses: There is minimal risk to your child for participating in this research. We will be present during administration of the questionnaires in order to provide assistance to your child if he or she has any questions or concerns. Additionally, school guidance counselors will be available to students in the unlikely event that your child becomes emotionally distressed while completing the measures. 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. 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, information from school records) will be destroyed in four years. Please note that although your child's specific responses on the questionnaires will not be shared with school staff, if your child indicates that he or she intends to harm him or herself, we will contact district mental health counselors to ensure your child's safety.
- ✓ What We'll Do With Your Child's Responses: We plan to use the information from this study to inform educators and psychologists about the relationships between students' psychological wellness (particularly their subjective well-being, also referred to as happiness) and optimal development with respect to academic achievement, physical health, social relations, identify formation, and engagement in meaningful activities. 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 study, you may contact a member of the Division of Research Compliance of the USF at (813) 974-9343.
- ✓ Want Your Child to Participate? To permit your child to participate in this study, please complete the attached consent form and have your child turn it in to his or her designated teacher.

## Appendix F (Continued)

Sincerely,

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

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 of child

\_\_\_\_\_

Signature of parent of child  
taking part in the study

\_\_\_\_\_

Printed name of parent

\_\_\_\_\_

Date

## Appendix G: Student Assent Letter

### *Student Assent Form*

Today you will be asked to take part in a research study by filling out several surveys. Our goal in conducting the study is to determine the links between students' psychological wellness and their school performance, physical health, social relationships, and sense of self.

- ✓ Who We Are: The research team is led by Shannon Suldo, Ph.D., a professor in the School Psychology Program at the University of South Florida (USF). Several graduate students in the USF College of Education are also on the team. We are working with your principal to make sure this study will be helpful to your school.
- ✓ Why We Are Asking You to Take Part in the Study: This study is part of a project called, "Subjective Well-Being of High School Students." You are being asked to take part because you are a student at a high school within Hillsborough County Public Schools (HCPS).
- ✓ Why You Should Take Part in the Study: We need to learn more about what leads to happiness and health during the teenage years! The information that we collect may help us better understand why we should monitor students' happiness. In addition, results from the study will be shared with your high school to show them how happiness is related to school grades and behavior, physical health, social relationships, and identity. You will not be paid for taking part in the study.
- ✓ Filling Out the Surveys: These surveys will ask you about your thoughts, behaviors, and attitudes towards school, family, and life in general. The surveys will also ask about your physical health and after-school activities. It will probably take between 45 and 60 minutes to fill out the surveys. We will also ask you to complete these surveys again one year from now. A few months later, some students will be asked to participate in one brief (30 minutes or less) interview. If you take part in the interview, we will ask you additional questions about thoughts and behaviors that influence your happiness.
- ✓ What Else Will Happen if You Are in the Study: If you choose to take part in the study, we will look at some of your school records- grades, discipline record, attendance, and FCAT scores. We will gather this information under the guidance of school administrators.
- ✓ Please Note: Your involvement in this study is voluntary (your choice). By signing this form, you are agreeing to take part in this study. Your decision to take part, not to take part, or to stop taking part in the study at any time will not affect your student status or your grades; you will not be punished in any way. If you choose not to take part, it will not affect your relationship with HCPS, USF, or anyone else.

## Appendix G (Continued)

- ✓ Privacy of Your Responses: Your school guidance counselors are also on hand in case you become upset. Your privacy and research records will be kept confidential (private, secret) to the extent of the law. People approved to do research at USF, people who work for the Department of Health and Human Services, the USF Institutional Review Board, and its staff, and other individuals acting on behalf of USF may look at the records from this research project. However, your individual responses will not be shared with people in the school system or anyone other than us and our research assistants. Your completed surveys will be given a code number to protect the privacy of your responses. Only we will have the ability to open the locked file cabinet stored at USF that will contain: (1) all records linking code numbers to names, and (2) all information gathered from school records. All records from the study (completed surveys, information from school records) will be destroyed four years after the study is done. Again, your specific responses will not be shared with school staff. However, if you respond on the surveys that you plan to harm yourself, we will let district counselors know in order to make sure you are safe.
- ✓ What We'll Do With Your Responses: We plan to use the information from this study to let others know about how students' happiness is related to school grades, physical health, social relationships, identity development, and engagement in meaningful activities. The results of this study may be published. However, your responses will be combined with other students' responses in the publication. The published results will not include your name or any other information that would identify you.
- ✓ Questions? If you have any questions about this research study, please raise your hand now or at any point during the study. Also, you may contact us later at (813) 974-2223 (Dr. Suldo). If you have questions about your rights as a person who is taking part in a research study, contact a member of the Division of Research Compliance of the USF at (813) 974-9343. Also call the Florida Department of Health, Review Council for Human Subjects at 1-850-245-4585 or toll free at 1-866-433-2775.

Thank you for taking the time to take part in this study.

Sincerely,

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

## Appendix G (Continued)

---

### Assent to Take Part in this Research Study

I give my permission to take part in this study. I understand that this is research. I have received a copy of this letter and assent form.

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

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

\_\_\_\_\_  
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

\_\_\_\_\_  
Printed name of person

\_\_\_\_\_  
Date obtaining consent

## Appendix H: IRB Approval



DIVISION OF RESEARCH INTEGRITY AND COMPLIANCE  
Institutional Review Boards, FWA No. 00001669  
12901 Bruce B. Donner Bldg., 1120035 • Tampa, FL 33610-7399  
(813) 974-5633 • FAX (813) 974-5633

September 8, 2010

Shannon Suldo, PhD  
Psychological and Social Foundations  
4202 East Fowler Ave., EDU 105

RE: **Expedited Approval** for Initial Review  
IRB#: Pro00001693  
Title: Predictive Utility of a Dual-Factor Model of Adolescent Psychological Well-Being

Dear Shannon Suldo:

On 9/7/2010 the Institutional Review Board (IRB) reviewed and **APPROVED** the above referenced protocol. Please note that your approval for this study will expire on 9-7-11.

Approved Items:

Protocol Document(s):

<a href="#">Study Protocol</a>	8/10/2010 9:18 AM	0.04
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Study involves children and falls under 45 CFR 46.404: Research not involving more than minimal risk.

Consent/Assent Document(s):

<a href="#">Parent Consent.pdf</a>	9/8/2010 10:28 AM	0.01
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<a href="#">Student assent.pdf</a>	9/8/2010 10:28 AM	0.01
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<a href="#">Teacher consent.pdf</a>	9/8/2010 10:28 AM	0.01
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It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:

(5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).

## Appendix H (Continued)

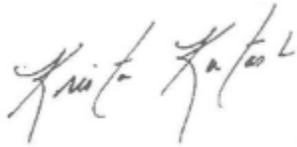
(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note, the informed consent/assent documents are valid during the period indicated by the official, IRB-Approval stamp located on the form. Valid consent must be documented on a copy of the most recently IRB-approved consent form.

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 813-974-9343.

Sincerely,



Krista Kutash, PhD, Chairperson  
USF Institutional Review Board

Cc: Various Menzel, CCRP  
USF IRB Professional Staff