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Parents as Reporters of Middle School Students' Subjective Well-Being

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by

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ABSTRACT

Historically, self-report has been the predominant method for assessing the subjective well-being of adolescents (SWB). Regarding the use of secondary reporters, especially parental/caregiver reports, in assessing adolescent SWB, there is a gap in the literature. Gaining a better understanding of how to best evaluate adolescent SWB can assist in the identification of adolescents who may be at risk for mental health concerns or who could benefit from increased well-being. It may also assist in the development of future interventions in positive psychology for adolescents. This validity study explored (1) What is the reliability of a newly developed parent report measure of child life satisfaction (SLSS-P), and existing measures of positive affect and negative affect (PANAS-C-10-P)? (2) To what extent does parent report of life satisfaction, positive affect, and negative affect (measured using the SLSS-P and PANAS-C-10-P) correspond with youth ratings of the same construct (measured using the SLSS and PANAS-C-10)? This study entailed a secondary analysis of data extracted from a larger study evaluating a school-based positive psychology intervention, wherein half of the sample was randomized to intervention and half to no-treatment control. Participants include 643 fifth through eighth-grade students from eight middle schools in two states (Florida and Massachusetts) and their caregivers (parent or guardian; one caregiver per participant). Youth and caregivers completed assessments of youth SWB at three time points in one school year—pre-intervention, post-intervention, and 4-month follow-up. Caregivers (one per student) of 420 to 514 of those students participated across time points. Values for Cronbach's alpha across raters at each time-point range from .77 to .90 (youth) and .76 to .92 (caregiver), with all values above .76, indicating strong internal

consistency for each measure of SWB. To evaluate the second research question, a correlational analysis was conducted between each primary study variable (SLSS and SLSS-P; PANAS-C-10 and PANAS-C-10-P) at each time point. Values for correlations across raters at each time point were statistically significant ($p < .01$) and ranged from .27 to .31 for life satisfaction, .13 to .20 for positive affect, and .20 to 27 for negative affect. In general, associations were largest in magnitude at the third time point, and for students in 6th grade. This study also found that caregivers tended to overestimate their middle school students' subjective well-being. In particular, the average caregiver ratings of adolescent life satisfaction and positive affect were significantly higher than student ratings of their own life satisfaction and positive affect, and caregiver ratings of adolescent negative affect was significantly lower than student ratings of their own negative affect. Integration of these findings with prior research, and implications for future research and practice, are discussed.

CHAPTER ONE:

INTRODUCTION

Background

Historically, mental health diagnosis has been decided by the presence of symptoms of disorders and associated undesirable consequences; when persons do not fulfill particular criteria, they are deemed not to need assistance and are therefore rarely sought out for intervention (Suldo & Doll, 2021). The focus has shifted and an alternative view of having complete mental health has developed; in this modern view, mental health is included by considering one's life overall. The modern attention to wellness includes the presence of positive physical and mental well-being, which goes further than just the absence of a disorder (Antaramin et al., 2010). Those with a positive mental health have greater levels of life satisfaction which can lead to positive outcomes within life course. Within the field of positive psychology, a large part of one's mental health is indicated by their perspectives on their subjective well-being (SWB). Well-being has been defined as including a person's positive emotions, engagement, relationships, meaning, and accomplishment (PERMA; Kern, Benson; Steinberg & Steinberg, 2016, as quoted in Suldo & Doll, 2021), and characterized by high levels of life satisfaction and increasing quantities of positive affect relative to negative affect (Oishi et al., 2009). The revised PERMA theory of well-being identifies more frequent positive feelings as one of the main qualities of flourishing, alongside the notions of involvement, connections, purpose, and accomplishment (Seligman, 2011). Regardless of how well-being is described, it

is typically made up of similar things. This provides some support for assessing student wellness with an emphasis on indicators of subjective well-being.

Adolescent Mental Health

Within adolescence many changes are occurring within their physical development, and they may be undergoing many life changes. Adolescence is a critical period in one's life during which many of the factors that will influence one's long-term well-being are acquired, solidified, or unlearned. The direct and indirect effects of the coronavirus pandemic and response on adolescent well-being have reinforced the importance of addressing and supporting adolescent well-being (Ross et al., 2020). This is a time in life where it is expected for adolescents to go through changes within their interactions with peers and family as they figure out the person they want to be. Many things could be impacting their mental health and overall SWB. Undergoing many changes at a time leaves room for vulnerability and the risk of development of concerns with one's mental health. Thus, it is important for researchers and practitioners to understand how to assess youth mental health and identify indicators that measure if an adolescent is mentally healthy. Then, such psychologists can figure out which adolescents need additional supports regardless of if they have any present diagnoses of mental illness.

Youth Subjective Well-Being

The subjective well-being of adolescents is distinct from that of adults and should be evaluated as such. The indicators of well-being can change over the course of a person's life, and it is essential to have a thorough understanding of which indicators may be more age relevant. Ross and colleagues (2020) explored indicators of adolescent well-being and proposed five domains of subjective and objective well-being measures: (1) Good health and optimal nutrition; (2) connectedness, positive values, and societal contribution; (3) safety and a supportive

environment; (4) learning, competence, education, skills, and employability; and (5) autonomy and resiliency. Additionally, in a final review of 94 articles, Avedissian and Alayan (2021) determined that autonomy, connectedness, optimism, and competency were defining features of adolescent well-being. This research implies the basic premise that adolescent well-being is influenced by a number of distinct variables. With the knowledge of the factors that are increasingly found to influence adolescent subjective well-being, it is important to add to the knowledge bases ways to accurately assess adolescent subjective well-being so that individuals experiencing a decrease in subjective well-being can be directed to interventions that may be targeted at influencing any of the aforementioned domains.

Assessment of Subjective Well-Being

There has been an increase in research looking at child and adolescent perceptions and evaluations of their own well-being. According to Ben-Arieh et al. (2014), the following elements need to be considered when analyzing youth and adolescent well-being: (i) their living circumstances and objective well-being indicators; (ii) their views, assessments, and life goals, including their subjective well-being (SWB); and (iii) the perceptions, assessments, and goals of other pertinent social actors (parents and teachers, among others). Navarro et al. (2017) suggest that adolescents within their study found well-being to be related to relationships with family and friends as important contributors to well-being, while also being tied to emotions and attitudes.

When assessing adolescent SWB, the most commonly used instruments assess life satisfaction from the youth perspective (Suldo, 2016). The literature has regularly pointed to using self-report measures to assess adolescent subjective well-being since they are seen as the experts on their own levels of life satisfaction. The Student's Life Satisfaction Scale (SLSS), Multidimensional Students' Life Satisfaction Scale (MSLSS), and Brief Multidimensional

Students' Life Satisfaction Scale (BMSLSS) are all well-validated measures that use self-report responses to assess adolescent well-being (Suldo, 2016). Some of these measures are discussed in greater depth later in this document. Beyond those self-report tools, there are few psychometric tools available (Navarro et al., 2017). There has been some research done on the use of multiple informants when assessing an adolescents SWB. When youth are at younger ages, they might not be able to describe internal feelings or concerns they have yet, and the use of parent or teacher report might be used to aid in evaluation of SWB. Collecting data from multiple informants like parents or teachers may lead to complications such as that they differ on their view of mental health concerns and what is perceived as typical or concerning (Aebi et al., 2017). Research has looked at whether we should use parents as an additional informant for assessment of psychological constructs of an internalizing nature. Aebi et al. (2017) found that when identifying or looking for any mental health problems, both self-report from the adolescent and a parent report were necessary. The addition of secondary informants in assessing adolescents' subjective well-being has been suggested in recent research, although it is not yet evident whether this is necessary for obtaining the most accurate picture of well-being.

Gaps Within the Literature

To date, a growing body of studies have highlighted the significance of gaining access to adolescents' SWB (Antaramin et al., 2010; Clark & Malecki, 2022; Ross et al., 2020; Suldo & Doll, 2021) but there is far less research on the most effective techniques to acquire this information. There are rating scales that have been demonstrated to be trustworthy and valid in the process of assessing adolescent well-being by self-reporting perspectives on life satisfaction and frequency of negative and positive affect, however there is a shortage of evidence available for the use of parents/caregivers as an informant regarding their child's subjective well-being

(SWB). The majority of research on adolescent SWB from a family perspective focuses on parental participation or the implications associated with family involvement in areas such as academic, home, and social life. However, the focus of these studies is not the accuracy of parents or caregivers in predicting adolescent SWB, but rather the effect of their involvement with academics, social life, or home life on adolescent SWB. It would be beneficial to add to the existing body of research a discussion of the several ways in which parents might be involved as a secondary source of information on adolescents' SWB.

Purpose and Research Questions

The purpose of this study was to conduct a validity study to explore the validity of a newly developed parent report measure of child life satisfaction. This study evaluated the extent to which parents are accurate reporters of youth subjective well-being when responding to the same construct. The study answered the following research questions: (1) What is the reliability of a newly developed parent report measure of child life satisfaction, and existing measures of positive affect and negative affect? (2) To what extent does parent report of life satisfaction, positive affect, and negative affect correspond with youth ratings of the same construct?

Contributions to the Literature

The results of this study add to the literature and help provide additional information regarding parents serving as an informant of youth mental health in reference to the youth's subjective well-being. Early adolescence is an optimal time to increase prevention efforts around development of adverse mental health conditions and outcomes that could occur later in lifespan. Having better insight into assessing youth well-being and mental health can help inform future positive psychology interventions and services. Other implications from the study could lead to future directions within the use of parents as an additional informant of youth mental health.

Further, this study can help validate a newly developed parent report measure that could potentially be used in the evaluation of future positive psychology interventions target towards adolescents.

Conceptual and Theoretical Framework

Dual-Factor Model of Mental Health

Traditionally, mental health focused on the development of psychological conditions. Being mentally healthy was previously viewed as having no mental health issues or concerns. As opposed to this, a dual-factor model of mental health takes into account both measurements of psychopathological symptoms and indicators of positive subjective well-being (SWB) to fully assess an individual's psychological adjustment in its whole (Antaramian et al., 2010). This model has been utilized in many positive psychology interventions and is thought to provide a more accurate view of one's mental health.

Case in point, Suldo and Shaffer (2008) investigated the utility of the dual-factor model of mental health in adolescence. Participants were 349 students from a middle school (grades 6-8). Positive and negative indices of mental health are not at different extremes of the same continuum. Specifically, not all students with severe psychopathology (30% of the sample) had low SWB; instead, nearly half of the high-psychopathology group (13% of the overall sample) had average to high SWB. That study's findings not only supported the existence of a dual-factor model of mental health, but also demonstrated its value by detecting disparities in functioning between each mental health group.

Definition of Key Terms

Positive Psychology

A branch of psychology that is primarily concerned with exploring and advancing wellness. The goal of positive psychology is to comprehend what factors, such as positive emotions, life meaning, character strengths, and positive relationships, contribute to life satisfaction (Seligman & Csikszentmihalyi, 2000).

Subjective Well-Being

Subjective well-being, also known as SWB, indexes how individuals evaluate the quality of their lives. Life satisfaction, the presence of frequent positive affect, and the relative absence of negative affect are often considered to be the three primary components of subjective well-being, or SWB (Diener, 2021).

Life Satisfaction

The cognitive evaluation of one's life in its entirety, which is regarded as one component of one's overall subjective wellbeing (Proctor & Linley, 2014).

Positive and Negative Affect

The term "positive and negative affect" describes an emotional aspect of subjective well-being which includes the feeling of positive emotions (such as joy and enthusiasm) and negative emotions (e.g., sadness, fear) and the frequency in which they occur (Antaramin et al., 2010).

Well-Being Promotion Program (WBPP)

The WBPP is a school-based positive psychology intervention designed to improve the subjective well-being of adolescents that was originally intended for implementation with small groups of adolescents over the course of 10 weekly sessions. Although initially created for use in middle schools, it has now been used at the elementary and secondary level. The program's

objective is to increase students' positive feelings about their past, present, and future. In addition to activities centered on gratitude, kindness, character strengths, optimistic thinking, and hope are also included. Along with the core sessions between students and interventionists, there is a caregiver session and weekly contacts with caregivers (Suldo, 2016).

Reliability

A description of the extent to which a specific test, procedure, or instrument (e.g., a questionnaire) will produce comparable results across situations, assuming nothing has changed (Roberts & Priest, 2006).

Validity

Examines the similarity between what is believed to be measured and what is intended to be measured (Roberts & Priest, 2006).

Delimitations

This study involves a secondary analysis of data collected within an ongoing evaluation of a positive psychology intervention (specifically, the Well-Being Promotion Program; Suldo, 2016). Because the WBPP is being evaluated as a Tier 2 (targeted) intervention, only students who reported low subjective well-being during a universal screening conducted early in the school are invited to participate, thereby limiting the full range of potential youth and family participants. Allowing for the data to be looked at and analyzed in a different way to provide additional information about the study population. Information from the Students Life Satisfaction Scale (SLSS) and Positive and Negative Affect Schedule – Child Form (PANAS-C-10) rating scales were analyzed to answer the research questions. Rating scales were collected from youth and one parent per youth. Further information regarding details about study methodology are discussed in chapter 3.

Limitations

External validity of the study may be at risk, since the data set only includes youth from middle school settings in two states and the results of the study may not be as applicable to other age ranges or settings. Further, ratings were obtained from only one caregiver per student, thus the agreement between caregivers in the same household about youth well-being is unknown. Another limitation of the study includes some missing parental / caregiver responses; researchers relied on electronic/digital data collection and thus could have excluded caregivers who were not responsive to email or phone requests to complete the survey. This especially could have been a barrier if families had reduced or no access to technology. Finally, data includes youth who participated within a positive psychology intervention as well as youth who did not and that may have impacted scores.

CHAPTER TWO:

LITERATURE REVIEW

This chapter will address the growth of the literature base around adolescent subjective well-being (SWB) as well as the correlates surrounding adolescent SWB. The bulk of the studies that offer information regarding SWB are quantitative in nature, hence the literature review mostly covers research from quantitative studies. This chapter will also discuss some of the variables that might serve as either facilitators or obstacles to positive SWB. It is critical to understand the associations between SWB and adolescent outcomes, in part to provide an empirically-based rationale for attending to youth SWB. Thus, sections of this chapter summarize the links between SWB and key adolescent problems such as mental health and psychological stress, as well as peer relationships, and academic success. Following that, the utilization of various informants in SWB assessment is explored. This study concentrated on using reports from caregivers/parents to assess their child's SWB. Thus, this chapter will provide information about the importance of parental involvement and ratings to get a complete picture of youth SWB. Then, potential challenges for youth SWB as indicated by parent report will be examined. The conclusion of the literature review will address gaps in the literature as well as the goals of the current investigation.

Defining Psychological Well-being Through Indicators of Wellness and Illness

Mental health in adolescents can be determined using both indicators of wellness and psychopathology. Going beyond the notion that well-being is merely the absence of meeting the criteria for pathology, Antaramin et al. (2010) conducted a quantitative study with 414 (54.2%)

females and 350 (45.8%) males that made up the sample of 373 (48.8%) 7th-graders and 391 (81.2%) 8th-graders. Four categories of mental health (psychological well-being) were identified based on youth levels of SWB and psychopathology. Many adolescents (67%) had average-to-high SWB and low internalizing and externalizing symptoms, indicating favorable mental health. About 8% of participants were vulnerable, displaying low levels of SWB and low psychopathology, which may be a profile for typically overlooked adolescents. In particular, traditional models of mental health assessment and services would deem these adolescents mentally healthy since they have few signs of psychopathology. The vulnerable youth reported low SWB, suggesting a worse subjective quality of life, compared to the favorable mental health group, indicated by high levels of SWB and low psychopathology. Seventeen percent of teens in this study were deemed symptomatic but content, meaning they had elevated psychopathology but expressed high life satisfaction and positive affect. The sample had 8% adolescents that rose more concern as these youth have clinically elevated symptoms of psychopathology *and* low quality of life.

Well-being is not simply the reverse of psychopathology, as these four groups show. Antaramin's (2010) research illustrated that 11% of teenagers with minimal psychopathology had low SWB, showing that excellent mental health is not the absence of symptoms. Moreover two-thirds of teens with substantial symptoms of psychopathology reported average-to-high SWB, demonstrating it is feasible to have a decent quality of life and frequent feelings of happiness despite the presence of clinical mental health concerns (Antaramin et al., 2010). The present study is grounded in a dual-factor model of mental health and proves its relevance to the school context by showing that students with different levels of SWB differ in their educational functioning (Antaramin et al., 2010; Suldo & Doll, 2021).

Further, in accordance with a dual-factor model of mental health across age groups, numerous studies on youth mental health emphasize the importance of investigating both psychopathology and subjective well-being (elementary, middle, high, and higher education). Suldo and Doll (2021) highlight how despite methodological differences within assessing well-being within a dual factor model, four groups of students are consistently identified based on the presence or absence of wellness and psychopathology, regardless of how studies categorized students based on study cut-off scores.

These domains are typically filled by the specified four groupings: (1) individuals having a comprehensive mental health profile, indicated by no psychopathology and positive emotional well-being; (2) a worrisome mental health profile marked by psychopathology and low reports of positive emotions; (3) a vulnerable mental health profile, a person who is experiencing persistent low levels of positive emotions and life satisfaction but does not fulfill psychopathology standards; and (4) individuals who are symptomatic yet content while experiencing psychopathology but provide positive life appraisals. In traditional mental health models, the latter two profiles are usually found to be the most underrepresented, highlighting the need of identifying these adolescents in order to provide appropriate care.

Clark and Malecki (2022) utilized a dual-factor model with a latent profile analysis (LPA) to assess the well-being of 404 adolescents in a middle school setting in grades 6-8th. Students completed the following measures: The Students Life Satisfaction Scale (SLSS), The Positive and Negative Affect Scale for Children (PANAS-C), The Youth Self-Report Form (YSR), The Short Grit Scale (Grit-S), The Academic Grit Scale (AGS), and The Implicit Theories of Intelligence Scale (ITTI). Researchers were interested in how identified profile membership would be predicted by demographic variables, academic achievement, general grit,

academic grit, and growth mindset. They found three mental health profiles that emerged: (1) complete mental health; students that had above average life satisfaction and affect, with below average internalizing and externalizing problems, 55% of the studies population fell into this profile, (2) 34% of the students were symptomatic but content; students with average to above average life satisfaction and affect along with above average internalizing and externalizing difficulties; and (3) the remaining group of students fell into the last profile of concerning youth; students with below-average life satisfaction and affect, above average internalizing and externalizing difficulties. This study's findings provide partial support for a dual-factor model of mental health; however, a vulnerable group was not identified. This trend was also seen in another recent study looking at mental health with a dual-factor model and LPA (Moore et al., 2019a). Although previous studies have found this vulnerable group (Antaramian et al., 2010, Suldo & Shaffer, 2008), Clark and Malecki (2022) have noted this discrepancy being potentially caused by the nature of LPA to classify cases by a similar response pattern; it may be that the vulnerable group did not exist in this population, but it does in the general population. Or that not enough adolescents that scored within that range could be placed in that group based on the study's parameters. Overall, study findings support that assessment of subjective well-being is associated with a more nuanced understanding of mental health, and when a dual-factor model is utilized in schoolwide screenings, a more comprehensive picture of a student's mental health is obtained. This expanded view of mental health as the dual presence of high subjective well-being and low psychopathology can influence a more strengths-based approach to mental health services for youth.

Adolescent Well-Being

Well-being may be best conceptualized as including positive feelings, engagement, relationships, meaning, and accomplishments, and reflected in high life satisfaction and more positive than negative effect (Suldo & Doll, 2021). A variety of favorable life outcomes, such as adaptive psychosocial functioning, improved interpersonal and social relationships, fewer behavioral issues, and a number of favorable school-related outcomes (e.g., increased student achievement, higher school satisfaction, perceived academic achievement, ability, and self-efficacy) are all advantages for adolescents who report higher levels of life satisfaction (Proctor & Linley, 2014). SWB is a key predictor of resilience in adolescence (Antaramin et al., 2010). Further, Avedissian and Alayan (2021) reported that adolescent well-being is associated with strong resilience and low risk-taking and delinquency. With increased resilience, individuals may be better able to navigate stressful situations and effectively adapt to and thrive in novel situations, and there is evidence that some resilience factors provide broad protection against the impacts of adverse experiences during childhood on the risk for psychopathology (Masten et al., 2021). Since adolescence is already a time when an individual undergoes numerous changes while also being at risk for unfavorable experiences, being more resilient is advantageous. Thus, efforts to promote subjective well-being can potentially boost resilience, which is paramount for adolescents.

Additionally, high SWB has been associated with higher global self-esteem, academic self-efficacy, locus of control, and interpersonal interactions among persons with minimal psychopathology (Antaramin et al., 2010). There are numerous positive outcomes associated with adolescent well-being, and this chapter will elaborate on the correlates surrounding adolescent SWB in part to understands potential targets for interventions intended to improve

SWB. When assessing adolescent well-being, it has been agreed upon within literature that it is nearly impossible to determine a youth's SWB without asking them about it and discussions around it coming directly from them (Casas et al., 2013; Suldo, 2016). Thus, it can be expected that most measures of youth SWB have a component related to youth's own evaluation and report of their subjective well-being, inclusive of appraisals of life satisfaction and reports of frequency of various affective experiences.

Correlates of Adolescent Subjective Well-Being

Adolescence is a critical stage for developing strategies for addressing decreases in mental health as well as supports for boosting one's well-being. It may be critical to obtain insights from adolescents themselves on how they conceive their well-being. Navarro et al (2017) looked at adolescent subjective perceptions and evaluations of their well-being. Researchers believed that by examining both the descriptors of SWB and the perceived contributing factors (both positive and negative) stated by participants with lower and higher SWB scores, they would be able to come up with at least partially different explanations for what SWB is from a child's perspective. This information may be able to add to the literature in deepening the understanding of youths' SWB (Navarro et al., 2017). The findings of their study with 93 youth ages 10-15 indicate that relationships with family and friends have the biggest influence on adolescents' SWB. If these two associations are favorable, their well-being increases; if they are negative, it decreases. These results are in line with previous studies that highlight the importance of family and friends to adolescent SWB, as described next.

Family Correlates. Positive mental health is crucial to healthy growth, and this holds true for both having supportive interactions with parents and peers and feeling that you have enough support from close friends and family. Over and above adverse life conditions, adolescent

perceptions of parental participation, relationships with parents, and family functioning have the biggest influence on their degree of life satisfaction (Navarro et al., 2017; Proctor & Linley., 2017; Suldo, 2016). In connection with this, studies have demonstrated that there is significant SWB and mental distress transmission between parents and children, with the result that parental distress affects a child's life satisfaction and a child's life satisfaction influences the parent's pleasure (Powdthavee & Vignoles 2008).

Moreover, Joronen and Astedt-Kurki (2005) conducted a qualitative study with semi-structured interviews with 19 non-clinical teenagers in the seventh and ninth grades. Teenagers described familial contributions to their life satisfaction in terms of having a pleasant house, an emotionally warm environment, open communication, familial engagement, opportunities for external relationships, and a sense of personal importance in the family. Three themes appeared in relation to low life satisfaction: familial animosity, illness or death of a family member, and excessive dependency (Joronen & Astedt-Kurki, 2005). This finding further emphasizing the impact family involvement and circumstances can have on adolescent SWB.

Academic Correlates. To comprehend youth mental health, it is also thought to be crucial to discuss school-related correlates. Adolescents spend a large amount of waking time in school, and this context has a significant influence on the psychosocial development of adolescents. This influence includes the school environment as well as attachment to a school and its teachers. When looking at school-level correlates of student well-being, school climate, relationships within schools, and student personal academic success play an important role (Suldo, 2016). Navarro et al (2017) also found that regardless of age or SWB score, school appears to be a contributing factor to a reduction in well-being and that when academic performance declines, interpersonal conflicts and other maladaptive outcomes co-occur. Such findings highlight the

importance of adolescent life at school and how difficulties within the academic setting may negatively impact adolescent SWB. It is important to keep in mind that relationships with family and friends and people at school might be impacting students' overall appraisals of life satisfaction. Tian et al (2013) also found that adolescent school experiences relate to their overall perceived quality of life.

Moreover, Piko and Hamvai (2010) noted that being happy at school and attaining optimal academic achievement was related to overall well-being in both girls and boys in their sample of 881 high school students. Clark and Malecki (2022; study described in detail later) found that while academic achievement may not differentiate symptomatic yet content youth from those with a complete mental health profile, general and academic grit were linked to a higher likelihood of belonging to the optimal complete mental health profile (Clark & Malecki, 2022). Grit is thought to be a protective factor that leads to more adaptable behaviors and outcomes (Alan et al., 2019., as cited in Clark & Malecki, 2022). This study also yielded the unanticipated finding that higher achievement in their sample was associated with an increased likeliness of classification into the troubled profile rather than the complete mental health profile, which contradicts many previous studies that suggest the opposite (Antaramian et al., 2010; Kim et al., 2017; Moore et al., 2019; Suldo & Shaffer, 2008). The atypical finding that having high academic performance may be directly related to poor mental health may reflect that a demanding schedule tied to high-achieving coursework may cause significant distress to students. Scholars have repeatedly shown that adolescents pursuing this type of coursework report higher stress and internalizing concerns, according to Suldo and Shaunessy-Dedrick (2013). In any event, more research is needed to fully understand the experiences of high-achieving adolescents because research in this area is limited.

Outcomes Associated with Youth SWB

In an earlier cross-sectional study of adolescent SWB, Suldo and Huebner (2006) examined if elevated life satisfaction was connected with adaptive or maladaptive functioning. Six hundred ninety-eight adolescents in secondary school (grades 6 – 12) completed questionnaires designed to gauge their perspective on their subjective well-being. Based on their life satisfaction ratings, three groups of students were formed: extremely high (top 10%), medium (middle 25%), and very poor (lowest 10 percent). Students with extremely high life satisfaction outperformed students with average life satisfaction on all indices of adaptive psychosocial functioning (e.g., self-efficacy beliefs; interpersonal and social relationships) and had the lowest scores on all indicators of emotional and behavioral disorders. The findings support the notion that extremely high life satisfaction relates to favorable psychosocial functioning. Additionally, disparities in adjustment were shown by teenagers' judgments of their life satisfaction that were not captured by psychopathology criteria. Low life satisfaction has been associated to delinquency (e.g., school dropout, substance use), violence (e.g., fighting, carrying a weapon), and conduct disorder in elementary, middle, and high school adolescents (Huebner & Alderman, 1993; Maton, 1990; Valois et al., 2001; Zullig et al., 2001). The finding that adolescents with extremely low and average life satisfaction reported similar levels of teacher support, but that high teacher support distinguished students with extremely high life satisfaction, attests to the important role of school personnel in promoting optimal well-being in adolescence (Suldo & Huebner, 2006). Each set of students with higher levels of life satisfaction felt more able to handle emotional distress. No single characteristics were related with high or poor adolescent life satisfaction. Parental support, minimum anxiety and depression symptoms,

low neuroticism, and a sense of intellectual and emotional competence may all contribute to adolescent life satisfaction (Suldo & Huebner, 2006).

Correlates of SWB in Adults

Studies with samples older than children and adolescents confirm that life happiness is predicted by multiple factors (e.g., Diener & Seligman, 2002). Diener and colleagues (2018) replicated the Diener and Seligman (2002) study on extremely happy adults and reported comparable results. They studied individuals with low, medium, and high levels of SWB. They utilized data from the Gallup World Poll (GWP), which had 1,551,362 respondents from 166 countries over a 10-year period (2005-2015), representing more than 98% of the world's adult population. The GWP includes questions examining three aspects of SWB: life evaluation, positive emotions, and negative emotions. They averaged scores to develop a composite measure that served as the dependent variable in the study. Persons with high SWB were satisfied with life, optimistic about the future, and experienced more positive emotions than negative ones. The group with low SWB had very low scores for current and expected life satisfaction, as well as numerous negative and no positive feelings. Having basic requirements met (i.e., housing, food, and health) and having access to social resources were found to be two correlates of high subjective well-being. They emphasized that, to obtain a high level of satisfaction, it is advantageous not only to have favorable personal circumstances, but also to live in a society with strong social supports. Thus, even across age groups, happiness or well-being is influenced by a variety of correlates or conditions both internal and external.

In sum, the literature on predictors of life satisfaction among youth and adults supports that there exist multiple identifiable correlates that influence one's subjective well-being. Correlates with robust support for impacting one's well-being across the lifespan include a solid

support system, strong relationships, and basic needs being met. During adolescence, which is a formative time, they may learn more personalized ways to improve their well-being, while others may not develop these strategies independently. Knowledge of the common correlates informs the development of supports targeted at increasing adolescent well-being, particularly for those who may benefit from gains in SWB. Accordingly, there is a growing number of empirically-supported positive psychology interventions created for use with youth (Chuecas et al., 2021). Mendes de Oliveira and colleagues (2022) conducted a systematic review of school-based positive psychology interventions intended to improve children's well-being and identified fifteen research that matched their inclusion and exclusion criteria. They discovered that most interventions aimed at enhancing well-being focused on SWB components and provided short- and long-term outcomes. Psychologists interested in using and refining such interventions and supports need access to valid ways to access adolescent SWB before, during, and after interventions.

Measuring Youth Subjective Well-Being

Best practices in youth mental health assessment typically involves gaining data from many informants, including informed persons such as parents, teachers, or friends, as well as self-reports (Merrell et al., 2022). Such recommendations for multi-source, multi-setting data assessment stem from conceptualizing youth as potentially the individuals with the greatest awareness of their internal states, whereas informants such as parents and teachers may have the most accurate knowledge of how youth behave in relation to others when it comes to externalizing behaviors such as compliance and (minimal) aggression (Whitcomb, 2018). With regard to measuring subjective well-being, a primary indicator is life satisfaction and arguably

individuals are the most knowledgeable of their true perceptions of the quality of their live on the whole, in both children and adults (Gilligan & Huebner, 2002).

Self-Reports of Youth Subjective Well-Being

Most professionals use standardized self-report instruments that have been shown to accurately assess youths' SWB (Suldo, 2016). Subjective well-being is often determined by levels of life satisfaction (cognitive dimension of SWB) in combination with levels of positive and negative affect (emotional dimension of SWB). When assessing the emotional dimension, the 27-item Positive and Negative Affect Scale for Children (PANAS-C; Laurent et al., 1999) is commonly used. Even though a positive correlation exists between subjective life satisfaction and level of positive emotions, they are not interchangeable.

With respect to the cognitive dimension of SWB, there are three major approaches to measuring life satisfaction: global, general, and multidimensional. There are self-report measures that are commonly used to access youth life satisfaction in each approach. Regardless of approach, all life satisfaction measures are intended to distinguish between levels of life satisfaction ranging from high to low to neutral (Suldo, 2016).

In the absence of domains, global approaches ask about life satisfaction on the whole, resulting in respondents formulating responses to questions based on their own criteria (Suldo, 2016). The Students' Life Satisfaction Scale (SLSS; Huebner, 1991) is recommended for overall, global assessment of youth life satisfaction (Suldo, 2016). The SLSS is a seven-item self-report questionnaire designed for students ages eight to eighteen.

Questions in general approaches to assessing life satisfaction are based on a number of distinct domains that are unique from those of other measures. The total score is determined by the sum of responses on domain-specific questions (Suldo, 2016). The Personal Well-Being

Index in School Children (PWI-SC) developed by Cummins and Lau (2005) is an example of a general measure of life satisfaction. The PWI-SC is a self-report assessment that asks respondents to indicate life satisfaction within seven specific life domains (standard of living, health, achieving in life, relationships, safety, community connection, and future security). Responses fall on an 11-point Likert scale ranging from 0 (*very sad*) to 10 (*very happy*).

The multidimensional approach takes into account multiple domains, resulting in separate scores for each domain. The Multidimensional Students' Life Satisfaction Scale (MSLSS; Huebner, 1994) or the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003) are frequently used for a multidimensional approach. The original MSLSS was a 40-item self-report measure designed to assess adolescent perceptions of life satisfaction beyond evaluating their lives as a whole but being able to ascertain evaluations on major, specific domains of life satisfaction (Suldo, 2016). This assessment is intended for adolescents aged 8 to 18. The MSLSS offers a profile for each of five unique domains (i.e., school, family, friends, self, living environment). The MSLSS presents a multidimensional profile of an adolescent's life satisfaction judgement, with this information, practitioners can tailor treatments and assessments to specific areas (Suldo, 2016).

The BMSLSS was created to provide a reliable and valid measure of life satisfaction that is developmentally appropriate and can be completed in a short amount of time, allowing it to be used for screening or large-scale surveys (Suldo, 2016). The aforementioned measures have been supported by numerous empirical studies and are frequently combined with positive and negative affect assessments (e.g., PANAS-C) to accurately assess youth subjective well-being via self-report. Most studies that look at adolescent SWB have relied exclusively on self-report ratings of life satisfaction and affect (Cummins & Lau, 2005; Huebner, 1991; Seligson et al., 2003). While

the notion for this focus is evident in that youth should be included to get an accurate picture of SWB, it is not to say that they should be the only reporters when aiming to get the best depiction of overall well-being. Time and time again, research has shown that relationships have an impact on SWB and gathering additional informant information to gain a more comprehensive picture of youth mental health may be advantageous.

Informant Reports of Youth Subjective Well-Being

When examining life satisfaction and affect, informants such as parents and caregivers may provide a fuller picture of youth SWB. Dew and Huebner (1994) conducted a study to validate a self-report assessment of life satisfaction— the Student's Life Satisfaction Scale (SLSS; Huebner, 1991)— among adolescents, and used parental reports of youth life satisfaction and other scales to obtain a more comprehensive view of their participants' well-being. A total of 222 students from a rural school district in grades 8th, 10th, and 12th completed several measures of adolescent life satisfaction and related study measures. They filled out the Nowicki-Strickland Locus of Control-Short Form (LOCS-SF), the Self-Description Questionnaire (SDQ-II), the Perceived Life Satisfaction Scale (PLSS), and the Student's Life Satisfaction Scale (SLSS). In addition to completing the parent consent form, parents were asked to rate the statement "Overall, my child is satisfied with her/his life" with one of four ratings: never, sometimes, often, or almost always. Parents were instructed to select a response that best reflected their adolescent's level of global life satisfaction over the previous several weeks without consulting their child, and to return the response in a sealed envelope with the consent form.

Dew and Huebner's (1994) study yielded numerous notable results. They demonstrated that the SLSS items had desirable item-total correlations ranging from .49 to .73. The Cronbach

coefficient alpha was found to be .86. They also discovered that the SLSS converged with other self-report measures of well-being (i.e., PLSS, r = .58). They also discovered that parent ratings of youth life satisfaction correlated significantly with SLSS scores (r =.48), supporting the validity of the SLSS through a strong relationship with informant report. The findings of this study not only demonstrated that the SLSS is a reliable and valid self-report instrument appropriate for use with an adolescent population, but also demonstrated the use of parental report to validate scale findings and gain a more comprehensive view of adolescent life satisfaction.

A more recent study by Shoshani and Slone (2017) examined the efficacy of a positive psychology intervention in pre-school age youth using parental report in addition to youth self-report in assessing life satisfaction and affect. The sample included 315 preschoolers (153 girls, 162 boys) and 189 parents, youth ages ranged from 3 to 6.5 years, from a central city in northern Israel. The short version of the positive and negative affect scale for children (PANAS-C-10), the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS), and the affective situations test for empathy (FASTE) were used to measure well-being via self-report by the youth. Parents were requested to fill out questionnaires about their children via a Qualtrics platform; the study did not indicate specifics around if both parents were expected to put input into the responses, but they did note 86% of the parents filling out the surveys were mothers. They completed the Parent version of the 10-item positive and negative affect schedule for children (PANAS-C-P-10) as well as the Strengths and Difficulties Questionnaire (SDQ, Goodman et al., 1998), a 25-item self-report instrument used to assess a mental health disorder.

In this study, correlations between parent and child report of affect indicated a small positive correlation for positive affect r = .28. Another correlation was found for negative affect

r = .20. With respect to the sensitivity of these measures to detect change over time as a result of child participation in a positive psychology intervention, analyses of the self-report outcomes showed a significant interaction effect between intervention and time (pre- and post-intervention) on children's positive emotions (Cohen's d = .89), life satisfaction (Cohen's d = .67), and empathy (Cohen's d = .34), but not on negative emotions. Analyses of the parent-report data showed a similar pattern for children's positive emotions of time x intervention significant effect on positive emotions (Cohen's d = .81) with no significant interaction for negative emotions. While this study does not directly relate to the age group of interest to the proposed study, it does provide an example of the use of parental report in assessing positive and negative affect, and its findings provide support for the use of both parent and youth reports when assessing the same construct.

Different conclusions can be drawn from a correlational study completed by Lopez-Pérez and Wilson (2015), who explored the extent of parent-child agreement in the perception of their child's general happiness or well-being. Three hundred fifty-seven children and adolescents, ages 10-16, from Spain and a parent participated in the study. Ninety-eight percent of the parent population were mothers. They measured happiness by having parent and child complete the Oxford Happiness Questionnaire-Short Form (OHQ-SF) and the General Happiness Single-Item Scale (GHS-IS). Children within the study completed the measures in school and were instructed not to talk about the assessment details with their parents. They brought the OHS-SF and GHS-IS home to their parents; parents were instructed to complete the measures independently and not to discuss their responses regarding their report of their children's happiness and return them to the school in an envelope. The researchers discovered no significant correlations between parent and child happiness reports on the OHS-sf (r =.04, p =.51) or the GHS-IS (r =.02, p =.69), for

age bands of children (ages 10 – 11) or adolescents (ages 15-16). This study found that parents tended to overestimate the child's report level of happiness for the younger age group, and underestimate happiness levels for the older age group. Such findings suggest that parents may not always be informed reporters of their child's subjective well-being, and experiences of positive affect in particular.

While some researchers recommend using self-reports and ratings from knowledgeable others like parents, teachers, and friends to assess life satisfaction in children and adults, some studies have indicated no associations (Lopez-Pérez & Wilson, 2015) or a modest correlation between self and other ratings of subjective well-being (Gilligan & Huebner, 2002). Gillian and Huebner (2002) looked at the convergent and discriminant validity of adolescent domain specific life satisfaction reports with multiple reporters—in particular, parent report. Two hundred and sixty-six adolescents from grades 9th through 12th from two high schools were included in the study. Youth self-report of life satisfaction was assessed using the MSLSS-Adolescent version. Parents were asked to rate their adolescents' levels of satisfaction on the six dimensions contained within the MSLSS-A, by responding to seven written statements developed specifically for the study. Each parent-rating statement linked to a specific dimension of youth or global happiness. The responses were on a 5-point Likert scale. Parents were asked to envision themselves as their child and select the response that best characterized their adolescent's level of life satisfaction during the previous several weeks (Gilligan & Huebner, 2002). The correlations between self-report and parental report of SWB ranged from 0.30 to 0.37, with a median of 0.34, and were all statistically significant. The correlations across all the six domains were lower than findings found in other studies around parent-adolescent correspondence for global life satisfaction, indicating that it is possible that parents are less accurate at judging their teenagers'

relative degrees of happiness with highly differentiated specific contexts, such as inner experiences (e.g., life satisfaction domain judgments). However, more study is needed to determine the generalizability of this conclusion (Gilligan & Huebner, 2002).

Even though the findings of Gilligan and Huebner's (2002) study suggested that parents might not be in strong agreement with youth reports with respect to domain-specific aspects of life satisfaction, other research provides some additional support for the convergence of parent and youth reports of SWB. Case in point, Ebesutani et al. (2011) emphasized the significance of including parent reports to obtain a more accurate and comprehensive view of adolescents' SWB during assessments. They noted that previous research demonstrates the utility and accuracy of parents assessing internalizing symptoms in disorders such as anxiety and depression (Achenbach & Renscorla, 2001; Ebesutani et al., 2010; Rothbart et al., 2001). Additional data from the study by Ebesutani and colleagues (2011) supported getting parental perceptions of a child's positive and negative affect. This study included 606 child-parent dyads as participants. The students were in third through twelfth grades. They created the PANAS-C-P by modifying the PANAS-C in accordance with parent's views of their children. Children completed the PANAS-C and other study questions at school and then brought home the matching PANAS-C-P and other parent questionnaires. The study did not offer greater information on whether parents should complete forms collaboratively or independently. They discovered modest but statistically significant correlations between the NA and PA scales on the PANAS-C-P and PANAS-C, respectively (r =.20, p < .01, and r =.33, p < .01). They demonstrated that the PANAS-C-P NA scale could distinguish between youths with anxious and depressive concerns and those without. The PANAS-C-P NA scale also exhibited significant associations with parent- and child-reported anxiety and depression measures. Although the correlations between

parent and child reports were small, the trends were reliable (i.e., statistically significant) and the integration of parent-report perspective of youth PA and NA with youth self-report measures may provide a more complete picture of a child's affect.

Taken together, prior research on convergence of parent and youth reports of a youth's subjective well-being indicate that there are moderate correlations between self and parent reports of their child's affect, suggesting that parents can accurately report specific aspects of their child's affect. The research shows small correlations between evaluations regarding parental reports of youth life satisfaction. Although there are only a few studies to date that looked specifically at the correlations between parent and youth report of life satisfaction within middle school aged students. Further, these studies also utilize different methods in assessing youth life satisfaction and there are not many validated scales for parent assessment of youth life satisfaction. Thus, indicating the need for more recent studies examining the correlations between parent and youth reports of life satisfaction among middle school-aged youth as well as validation of measurements of parental report of youth life satisfaction. The objectives of the study were to evaluate the well-being of adolescents based on their global life satisfaction, with less domain specific measures. It makes sense that parents might not be the best reporters when it comes to highly specific internal feelings of adolescents because those feelings are largely based on personal firsthand accounts and experiences, which parents might not have insight onto or the ability to evaluate as accurately because they are not undergoing those experiences themselves. This study also evaluated convergence between parent and child reports of child affect in the developmental period of middle school.

Promoting a Comprehensive View of SWB

Overall, there have been studies published in the academic literature that demonstrate the significance of utilizing parents and other primary caregivers as secondary informants when evaluating the mental health of adolescents, and studies that demonstrate the compatibility between self-report and responses from multiple sources of information. Obtaining a report from an additional informant might also reduce reliance on scores that may be biased by students responding in a socially desired manner rather than identifying how they genuinely feel. Psychologists might gain a more comprehensive and accurate view of what is going on by gaining insight from an additional informant, such as a parent or caregiver.

Furthermore, youth may respond in a certain way without realizing what they are going through internally (i.e., somatic concerns, stomachache, fatigue, insomnia) that may affect their well-being due to underlying mental health concerns. Conversations about mental health concerns may not be discussed at home or with their peers. They may also be hesitant to report negative feelings to keep them from their parents or peers, but they may be unaware that their parents are already noticing their diminished affect and well-being. In that case, it may indicate that parents would be ideal secondary reports of their child's SWB, a finding that this study aims to investigate. Overall, there are numerous advantages to obtaining an additional report when assessing adolescent well-being, and there is a need for more research within the positive psychology field. In particular, there needs to be increased research looking at in what ways parent responses are related to youth responses when responding to questions within the same overall context.

Considering Multiple Sources of Data on Youth Mental Health

When employing several sources of information, there are numerous issues that are important to evaluate. Disagreements between many informants can generate significant uncertainty. Several variables contribute to informant disparities on mental health problems; nevertheless, certain mental health problems occur solely in specific contexts such as school and family contexts or peer relationships (Aebi et al., 2017). Second, informants (e.g., parents and adolescents) may have different feelings and understanding of mental health problems, as well as different ideas about what sorts of behaviors are appropriate (Aebi et al., 2017). For example, parents may be concerned about their teenager's seclusion, yet the adolescent regards their conduct as normal and views the parents' intrusiveness as the source of problems. Third, informant differences may arise because of appraisal mistakes about the prevalence and severity of behavioral, emotional, or cognitive disorders (Aebi et al., 2017). Aebi et al. (2017) investigated the ability of the Strength and Difficulties Questionnaire (SDQ; Goodman et al., 1998) parent and adolescent scales to predict mental health problems/disorders across different mental health categories. They recommended that practitioners involve both the adolescent and their parents in the process of identifying any mental health problems or illnesses (Aebi et al., 2017).

By including both adolescent and parent informants, practitioners can have a better overall view of youth life-satisfaction. Researchers in the Lopez-Perez and Wilson (2015) study noted that youth and parents in the clinic sample did not agree on the amount of anguish and impairment caused by mental health disorders. This is an important finding because if parents are disagreeing on levels of SWB it may be due to the difference in perception of how often maladaptive feelings are occurring and/or the significance that it is causing the youth.

It is also important to consider differences within report of SWB between parent and youth in their responses. Further analyses within the Lopez-Perez and Wilson (2015) study that was previously described earlier in the chapter revealed a discrepancy between parent and child responses. They ran a multivariate analysis (MANCOVA) on the mean scores for each measure and found main effects for age and reporter on both measures (OHS-SF, GHS-IS). They found that parents of children aged 10-11 reported higher levels of happiness when compared to their child's response. However, the opposite was found for youth aged 15 or 16. Findings showed that parents reported significantly lower levels of happiness when compared with their children. These findings may indicate parents having a positivity bias when assessing their child's well-being, perceiving them to be happier than they self-reported for youth aged 10-11. But for older youth aged 15-16, their parents underestimated their levels of happiness.

Findings from Lopez-Perez and Wilson (2015) highlight some potential considerations when utilizing parental informant data. Further, being unable to gauge a child's happiness appropriately may increase misunderstandings between parents and children/adolescents. The researchers posit that you should use more than one measure/informant report when assessing well-being because of this discrepancy—further highlighting the need for continued research to advance the knowledge about adolescent well-being and potentially improve parent-child relationships by promoting improvements to interventions.

Summary

It is evident within the literature review that the developmental period of adolescence is filled with potential changes in personal role, family dynamics, social relationships, and more that can potentially impact SWB. This is an excellent time for prevention efforts as well as early intervention among adolescents experiencing diminished SWB. As the literature on the dual-

factor model has posited, the absence of a mental illness does not equate to overall positive well-being. Well-being is influenced by differing factors in life; during adolescence, experiences within the school setting impact their well-being, we well as relationships with family and friends.

As a direct result of developments in assessing children's subjective well-being, there have been expansions in the capacity to evaluate adolescents' SWB. There are now validated measures of self-report life satisfaction that are appropriate for use with children and adolescents, including the SLSS (Huebner, 1991a, 199b), the MSLSS (Huebner et al., 2012), and the BMSLSS (Seligson et al., 2003). The literature also points to using multiple informants as helpful in identifying mental health concerns (Aebi et al., 2017; Ben-Arieh et al., 2014; Ebesutani et al., 2011; Shoshani & Slone., 2017). This study focused on using parents as informants of their child's SWB. Research has shown a moderate correlation between parent and youth reports of SWB on various measures (Dew & Huebner, 1994; Lopez-Perez & Wilson, 2015; Shoshani & Slone, 2017). There remains a gap in the research on measures for use by parent informants that have high reliability and convergent validity as indicated by high correlations with youth ratings of the same construct. This study answered the following questions:

(1) What is the reliability of a newly developed parent report measures of child life satisfaction, and existing measures of positive affect, and negative affect?

(2) To what extent does parent report of life satisfaction, positive affect, and negative affect correspond with youth ratings of the same construct?

CHAPTER THREE:

METHODS

This study assessed the reliability of a newly developed parent report measure of child life satisfaction, and recently advanced measures of parent report of child positive affect and negative affect. This study also explored the extent to which parent report of life satisfaction, positive affect, and negative affect correspond with youth ratings of the same constructs. The validation study used a cross-sectional correlational design (non-experimental). A secondary analysis was performed on data retrieved from a larger study funded by the Institute of Education Sciences, U.S. Department of Education (Grant R305A200035) that is currently being carried out by research teams within the Colleges of Education at the University of South Florida and the University of Massachusetts, Amherst, to evaluate the Well-Being Promotion Program (WBPP). The study was conducted by a graduate student at the University of South Florida, and is a component of the larger efficacy study. Participants in the larger study include adolescents in grades five through eight from local middle schools in each of their respective states (FL, MA), and their caregivers (one parent/guardian per youth participant). The pre-intervention, post-intervention, and follow-up data from youth and parent assessments of SWB were the main subjects of the study's investigation. This chapter includes descriptions of the participants, the environment, the instruments, the procedures, and the data analysis that were all be carried out as part of the study.

Participants

For the purpose of this research, archival data was obtained from the aforementioned evaluation of the Well-Being Promotion Program (WBPP) and examined. This researcher is an approved member of the study staff of the larger research team. I received the data from the lead investigator of the aforementioned study, who is also a faculty member in the School Psychology Program at the University of South Florida. The participants in the dataset include 643 students and their caregivers who were enrolled in grades fifth – eighth (*M* age = 12.12 years, *SD* = 1.05 years) attending one of the eight middle schools in the project (three located in the Southeastern United States, five located in the Northeastern United States). The larger study enrolls participants in three cohorts. Each cohort corresponds to a school year, except the first cohort was recruited across two school years (2020-21 and 2021-22) due to school closures associated with the COVID-19 pandemic. This thesis examined data from cohorts 1.1, 1.2, and 2, including the intervention and control groups, which includes students enrolled over a three-year period (2020-21, 2021-22, and 2022-23). For the current study, all students and caregivers with complete data on the variables of interest (life satisfaction, positive affect, negative affect, and parent report of the same constructs) at each time point (pre-intervention, post-intervention, and four month follow-up) were investigated. This decision was made to maximize sample sizes, which resulted in varied sample sizes in each time point respective to the complete data available. In order to protect the participants' privacy and retain their anonymity, I was not given their names or student identity numbers but instead had access to a de-identified dataset that includes only data from the variables per interest. Student demographic features are summarized in Table 1 and Table 2. Table 2 provides student demographic information for each school site included in the dataset examined. When study participants responded to the demographic survey,

they had the opportunity to select from a set of options and/or write a qualitative response for all items except gender. Upon review of the open-ended responses, the study team assigned them to the best fitting group, such as multiracial if a student wrote “Black and Puerto Rican”.

Participant Selection

The study's participants are parents and guardians who provided written agreement for their child and themselves to be included in the WBPP given as part of a research project (see Appendix A) and their children who provided written assent (see Appendix B). Parents who did not wish for their child to participate could decline and otherwise withhold consent. Youth invited to take part in the study were identified as having low subjective well-being following a universal screening conducted approximately one month after the start of the school year. The measures included in the screening include the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003), the Students Life Satisfaction Scale (SLSS; Huebner, 1991), and the Positive and Negative Affect Schedule for Children-10 items (PANAS-C-10; Ebesutani et al., 2012). Only students who were identified as being at risk due to reporting low levels of well-being were invited to participate in the study. In cohort 1.1, this was determined by establishing cut-off scores of BMSLSS < 5.0 or SLSS < 4.0, along with the presence of additional evidence indicating consistent responding. In cohorts 1.2 and 2, low well-being was based primarily on BMSLSS scores < 5.0 and consistent responding on the SLSS and PANAS-C-10. This study’s sample comprises all adolescents participating in cohorts 1.1, 1.2, and 2 of the study who reported low subjective well-being on pre-intervention screening measures, secured written consent and assent to take part in the intervention study, and subsequently completed baseline measures of subjective well-being (youth and parent report) prior to randomization.

Table 1:

Student Demographic Features

Demographic Variable	%
Grade (n=643)	
5th	7.2
6th	28.9
7th	32.5
8th	31.4
Gender (n=643)	
Female	55.1
Male	34.2
Non-Binary	6.5
Other gender identity	4.2
Hispanic, Latino, or Spanish Origin (n=643)	
Puerto Rican	13.1
Cuban	1.9
Mexican, Mexican American, Chicano	5.1
Another Hispanic, Latino, or Spanish Origin	8.9
Not applicable	71.1
Race/Ethnic Identity (n= 643)	
White	53.2
Hispanic	21.8
Black or African American	8.7
Asian	2.0
Multiracial, American Indian and Pacific Islanders	14.3
Father Education (n=643)	
8th grade of less	3.6
Some high school	9.2
High school/ GED	17.0
Some College	12.1
College	21.9
Masters Degree	11.4
Degree Beyond Masters Level	5.9
Mother Education (n=643)	
8th grade or less	2.2
Some High School	6.8
High school/ GED	14.0
Some College	9.2
College	26.6
Masters Degree	17.6
Degree beyond Masters level	7.8
Caregivers (*i.e., which adults student reports they live with*)	
Mother and Father	51.9

Table 1:
(Continued)

Demographic Variable	%
Mother Only	14.8
Father Only	2.5
Mother and Mother's Partner	10
Father and Father's Partner	2.5
Grandparent(s)	3.6
Equally Split across two households	9.2
Other family composition	5.6

Table 2:
Caregiver/ Parent Demographic Features at Baseline

Demographic Variable	%
Gender (n=519)	
Female	84.5
Male	14.2
Non-Binary	.01
Other gender identity	.003
Hispanic, Latino, or Spanish Origin (n=514)	
Puerto Rican	9.7
Cuban	1.4
Mexican, Mexican American, Chicano	3.5
Another Hispanic, Latino, or Spanish Origin	6.4
Not applicable	79.0
Race/Ethnic Identity (n= 514)	
White	83.1
Black or African American	11.9
Asian	2.3
American Indian/Alaska Native	1.2
Native Hawaiian or Other Pacific Islander	0.6
Other racial or ethnic identity	4.7
Relationship to Child (n = 519)	
Parent	92.5
Stepparent or Parent's Partner	1.2
Grandparent	3.9
Foster Parent	1.2
Other relationship	1.2

Note. Total percentage for race/ethnic identity exceeds 100% because respondents were able to select multiple response options.

Table 3:
Demographic Features of Students Participating Schools in Cohorts 1 and 2

				Race/Ethnicity (%)					%
School	N	Geographic Location	Location Type	White	Hispanic	African American	Asian	Multi-racial	FRM
A	1019	Southeastern	Small Suburb	53	27	13	.06	.06	75
B	872	Southeastern	Small Suburb	40	43	14	.03	.03	72
C	1,250	Southeastern	Small Suburb	41	33	15	.07	.07	40
D	669	Northeastern	Large Suburb	74	17	.03	.03	.03	
E	678	Northeastern	Large Suburb	71	19	.03	.03	.03	
F	536	Northeastern	Large Suburb	77	18	.02	.01	.01	38
G	514	Northeastern	Large Suburb	66	14	.07	.04	.04	44
H	372	Northeastern	Large Suburb	59	16	.07	.06	.06	30

Note. FRM =free or reduced-price school meals. All data obtained from NCES. Regular = elementary/secondary setting that does not specialize in special, vocational/technical, or alternative education.

Measures

Student Report

The Student Life Satisfaction Scale (SLSS). created by Huebner (1991), is a self-report measure intended for children in Grades 3 through 12, used to evaluate life satisfaction (see Appendix C). Seven broad statements about one's life are included in the SLSS (e.g., "I have what I want in life," "I would like to alter many things in my life"). Using a 6-point Likert scale with response options ranging from 1 (*strongly disagree*) to 6 (*strongly agree*), students evaluate their agreement with each statement. A total satisfaction score is yielded from reverse-scoring negatively phrased questions (items 3 and 4), aggregating individual item scores, and dividing by 7. Studies have shown that the SLSS possesses strong psychometric qualities. Prior research has produced coefficient alphas ranging from .82 to .89 in samples of 254 students with ages ranging

from 7-14, 329 children aged 8 to 14, 349 students in grades 6 to 8, and 42 students in grade 7 (Huebner, 1991; Roth et al., 2017; Suldo & Shaffer, 2008). Previous research with a sample of 254 youth in grades from third to eighth revealed a test–retest reliability of .74 over a 2-week period. Additionally, convergent validity of the SLSS has been supported by substantial correlations in the expected directions with other self-reported measures of SWB (Huebner, 1991).

Positive and Negative Affect Schedule for Children (PANAS-C). To measure students' affect, the PANAS-C (Laurent et al., 1999) can be employed. The scale consists of 27 questions divided into two subscales: Positive Affect and Negative Affect. The Positive Affect (PA) subscale has 12 items, including items such as active, proud, eager, and joyful. There are 15 items on the Negative Affect (NA) subscale, including items such as sad, anxious, humiliated, and lonely. On a 5-point Likert scale, respondents assess the intensity to which they have felt each emotion in the last several weeks, ranging from 1 (*very little or not at all*) to 5 (*tremendously or all of the time*). The PANAS-C instructions can also be changed to ask students to report on their positive and negative affect in the school context in order to measure school-related emotions.

The psychometric properties of the PANAS-C provide ample support that it is both trustworthy and valid. Previous research has shown that both subscales have high internal consistency, with alpha coefficients ranging from .87 to .90 for positive affect and from .87 to .94 for negative affect (Laurent et al., 1999). Evidence also supports the PANAS-C having convergent and discriminant validity. The Positive Affect subscale was highly inversely connected with the Children's Depression Inventory but only moderately negatively correlated with the Trait Anxiety scale of the State-Trait Anxiety Inventory for Children (STAIC;

Speilberger et al., 1973). Furthermore, the Negative Affect subscale was positively associated with other self-reported measures of sadness and anxiety (Laurent et al., 1999). Suldo and Shaffer (2008) reported alpha coefficients of .88 and .93 for the PANAS-C positive affect (PA) and negative affect (NA) scales, respectively. The PANAS-C measure is also frequently used in combination with other efforts to assess adolescent well-being.

The Shortened Positive and Negative Affect Schedule for Children (PANAS-C-10).

When time is limited, it may be more beneficial to have access to a shorter assessment, particularly when screening students or repeating a measure for instance for intervention evaluation purposes. Given the need for brief measures, Ebesutani and colleagues (2012) conducted a study in an effort to validate a shortened version of the PANAS-C and PANAS-C-P. A total of 799 children aged 6 to 18 years old and 553 parents comprised the study sample. The alpha coefficients for the reduced 5-item PA scale and the original 12-item PA scale for the PANAS-C (child version) were .86 and .89, respectively. Alpha coefficients for the shortened 5-item NA scale and original 15-item NA scale of the PANAS-C (child version) were .82 and .90 respectively. Given a good level of reliability was still evident with the use of only ten items across the two scales, the 10-item PANAS-C appears a particularly feasible option to use in school-based research and practice. Additionally, research indicates that the scale's abbreviated version provides useful information to aid in the differential diagnosis of mental health disorders (Ebesutani et al., 2012). For the aims of this study, the only two youth-report measures of subjective well-being to be utilized are the SLSS & PANAS-C-10.

Parent Report

The Shortened Positive and Negative Affect Schedule for Children Parent Version (PANAS-C-10). The PANAS-C-P is a 10-item assessment given to parents / caregivers who are

asked to evaluate the positive and negative affect displayed by their child. On a 5-point Likert scale, responses range from 1 (*very little*) to 5 (*extremely*). For example, the 10-item PANAS-C asked the child to rate how much they have felt each affect in the previous several weeks on a five-point Likert scale for each of the ten emotions: sad, glad, scared, miserable, cheerful, proud, afraid, joyous, mad, lively. Utilizing the original self-report items from the 10-item PANAS-C in the same order, but with updated instructions compatible with getting parental viewpoint, the 10-item PANAS-C-P asked parents to identify to what extent their child had felt those affects in the previous few weeks.

In an investigation conducted by Ebestutani and colleagues (2012), convergent and discriminant validity of the scale were examined. They administered the scales to 799 youth aged 6 to 18 and 553 parents; the shortened 5-item PA scale and the original 12-item PA scale of the PANAS-C-P (parent version) have alpha coefficients of 0.85 and 0.88, respectively. The shortened 5-item NA scale and the original 15-item NA scale of the PANAS-C-P (parent version) have alpha coefficients of 0.83 and 0.93, respectively.

Kitt and colleagues (2021) used the 10-item PANAS-C and 10-item PANAS-C-P to assess outcomes in their study of the efficacy of socially assistive robots (SARs) as a possible method for combating the increase in childhood stress. Participants included seventy children ages 7 to 10 and one of their parents. In this study, the alpha coefficient for the 10-item PANAS-C PA scale was .82 and for the NA scale it was .73 at baseline. The 10-item PANAS-C-P had alpha values of .80 for the PA subscale and .71 for the NA subscale. At baseline, there was a small statistically significant correlation between self-reported PA scores and parent-reported PA scores, r (68) =.28, p = 0.020, providing some evidence of convergence between parent reports of their child's affect and the child's self-report. This study demonstrates how the PANAS-C-P

and PANAS-C can be utilized to measure positive and negative affect reliably while maintaining adequate internal consistency.

Crossman et al. (2018) also examined the influence of SARs on the mental health of children. Participants in this study were 87 children ages 6 to 9 and one of their parents. Positive and negative affect were measured using the 10-item PANAS-C and 10-item PANAS-C-P. At baseline, $\alpha = .81$ and .84 for the PA and NA scales, respectively, of the 10-item PANAS-C. At baseline, $\alpha = .81$ and .75 for the PA and NA scales, respectively, of the 10-item PANAS-C-P. Both studies (Crossman et al., 2018; Kitt et al., 2021) demonstrate the usefulness of employing both the shortened PANAS-C and PANAS-C-P to provide a fuller picture of the frequency of positive and negative affect in children.

Student Life Satisfaction Scale Parent Version (SLSS-P). The SLSS Parent Version (SLSS-P) is a modified version of Huebner's SLSS (1991). It is a seven-item questionnaire designed to be completed by parents who have a child in third through twelfth grades, to assess parental perceptions of youth life satisfaction. The SLSS-P was modified to include the original self-report questions in the same order, but with instructions slightly modified to be consistent with the parent's perspective. Responses to each of the seven items on the scale are rated on a 6-point Likert scale ranging from (1) *strongly disagree* to (6) *strongly agree*. For instance, the original question read "During the past few weeks... my life has been going well," and the student's self-report response would be based on where they fall on the Likert response scale. For the newly developed SLSS-P, the questions read, "During the past few weeks... My child thinks their life is going well," and parents are instructed to respond based on their perception of their child's life satisfaction on the same 1 to 6 response scale. One of this study's purposes is to contribute to the literature regarding the use of the SLSS-P by examining psychometric

properties of this newly developed measure; reliability and validity indices will be later reported in the results section.

Procedure

To identify students eligible for the larger study evaluating the WBPP, a combination of active and passive consent procedures were used to gain parent permission for children to participate in the universal screening of subjective well-being. The use of active or passive consent was based on district choice and school year in which the screening occurred. Students identified as reporting low subjective well-being during screening were invited to take part in the evaluation of the WBPP. These students met with members of the research team in private meetings and received a hard copy of the parent consent form that requested permission for the participation in the intervention study (Appendix A). Parents' signatures were required on a parental consent form that students were expected to bring home and bring back to school. The parent consent form gathered parent names and email addresses in order to distribute electronic questionnaires and pair adult respondents (i.e., parents/caregivers) with the data from their participating child). If a student did not provide a hard copy of the parent signed consent form, they also had the option to sign the form and provide parent contact information using DocuSign.

After students submitted the completed consent form or the study team received an electronically signed consent form, a study team member met with students in small groups to explain the study (written assent was required) and then assist students to complete the demographic surveys and other measures outlined previously in this chapter, which were administered electronically using REDcap.

After a student provided responses to the battery of self-report measures, the REDCap data management system triggered an email to the child participant's parent. This email

contained a link to a parent demographic survey, used to assess parental characteristics such as race/ethnicity, age, and gender (demographics). Subsequent pages of the online survey included measures to assess parent perspectives of their child's mental health, including the facets of subjective well-being to be examined in this thesis. Appendix D contains the demographic survey completed by parents, and Appendix C includes the demographic survey conducted by students.

This researcher had no control over the methods used to gather the data or the information contained in the used questionnaires or measures due to the archival nature of the data set. The broader study team took multiple steps to boost participant involvement, including by giving each child and parent a $5 or $10 gift card, respectively, for completing the electronic survey. To increase caregiver participation, study staff sent email reminders about the survey to be completed and called the parents' phone numbers to prompt for electronic survey completion and/or offered to administer the survey over the phone. Further, the emails and surveys were sent to caregivers in English and Spanish, and caregivers selected their preferred language upon receipt of the email. By addressing possible risks to validity during data collection and enhancing their capacity to draw valid conclusions, the researchers who gathered the data set demonstrated in their documentation that steps were taken. Regarding ethical considerations in data collection, the study team received IRB approval before any data collection procedures began (see Appendix I) and used a data collection system designed to protect participant privacy.

Analyses

The methodologist of the larger study provided this student researcher with a de-identified dataset that includes all items relevant to study questions. This researcher created composite scores and prepared the dataset for analysis. Preliminary analyses include descriptive

statistics to describe the study sample, including frequency counts of the study's primary demographic variables, distributions of measures, and any analysis of missing data. In addition, assumptions underlying correlation coefficients were evaluated. To respond to the research questions within the study, the following series of statistical analyses were carried out.

To assess research question (1) what is the reliability of a newly developed parent report measure of life satisfaction, and existing measures of positive affect, and negative affect? To assess reliability across raters, I calculated Cronbach's alpha and related statistics like item-to-total correlations to assess the reliability of the measure.

For the second research question (2) To what extent does parent report of life satisfaction, positive affect, and negative affect correspond with youth ratings of the same construct, I conducted a correlational analysis. Correlational coefficients were computed to test the following relationships, (1) parental report of life satisfaction with youth report of life satisfaction, (2) parent report of positive affect with youth report of positive affect, (3) parental report of negative affect with youth report of negative affect. A correlation coefficient, which has a value between -1 and +1, tells us how strongly and in what direction two variables are linearly related. The statistical significance was determined at an alpha level of .05.

CHAPTER FOUR:

RESULTS

This chapter presents findings from statistical analysis that were conducted to answer the study's research questions. Preliminary analyses are discussed first, including examination of missing data and descriptive statistics for each variable. Then, results related to the reliability and validity of a newly developed parent report measure are reported, followed by the correlations between parental and youth report of life satisfaction, positive and negative affect.

Preliminary Analyses

Preliminary Analyses included (1) assessing missing data, (2) creating composite scores, and (3) calculating descriptive statistics for each variable.

Missing Data

Of the 643 students who provided SWB data at baseline, 610 students also provided SWB data at post intervention (94.87% return rate). Of the 610 students that provided SWB data at post intervention, 595 also provided data at four month follow up (97.54% return rate). Of the 643 students who provided self-report SWB data at baseline, 514 students had complete data from caregivers on parent report of life satisfaction (79.8% caregiver participation). Of the 643 students who provided self-report SWB data at baseline, 513 students had complete data from caregivers on parent report of affect. Of the 514 student and parent dyads providing data at baseline for life satisfaction, 429 dyads also provided life satisfaction data at post intervention (83.46% return rate). Of the 513 student and parent dyads providing data at baseline for affect, 428 dyads also provided affect data at post intervention (83.43% return rate). Of the 429 student

and parent dyads that provided data at post intervention, 422 dyads completed life satisfaction data at four month follow up (98.37% return rate). Of the 428 student and parent dyads that provided data at post intervention for affect, 420 also completed data at four month follow up (98,13% return rate). Examination of demographic features and SWB mean scores for the 129 students with missing parent-report level data somewhere within the dataset yielded no distinguishing characteristics. Demographic features of students with self-report data only versus students with complete caregiver data as well were similar with regard to grade and gender (see Table 4). Some differences between groups were found for Latine origin (more Puerto Rican and fewer Cuban students in the sample with caregiver data) and race (more White and fewer Hispanic students in the sample with caregiver data). Mean SWB scores were similar between groups with regard to student report of life satisfaction and negative affect at baseline, whereas students in the sample with caregiver data had somewhat higher positive affect (see Table 5).

Table 4:

Demographic Features of Students with Self-Report Data Only versus Students with Complete Parent Data and Student Self-Report Data

Demographic Variable	% Incomplete (n=129)	% Complete (n=514)		
Variable			X^2	*p*
Grade			4.44	.218
5th	6.2	7.4		
6th	36.4	27.0		
7th	29.5	33.3		
8th	27.9	32.3		
Gender			.143	.986
Female	55.8	54.9		
Male	33.3	34.4		
Non-Binary	7.0	6.4		
Other gender identity	3.9	4.3		
Hispanic, Latino, or Spanish Origin			13.20	.010
Puerto Rican	58.9	74.1		
Cuban	20.2	11.3		
Mexican, Mexican American. Chicano	1.6	1.9		
Another Hispanic, Latino, or Spanish Origin	7.8	4.5		
Not Applicable	11.6	8.2		
Race/Ethnic Identity			15.66	.004
White	38.8	56.8		

Table 4:
(Continued)

Variable			X^2	*p*
Hispanic	31.0	19.5		
Black	8.5	8.8		
Asian	3.1	1.8		
Multiracial, American Indian, Pacific Islanders	18.6	13.2		

Table 5:
Baseline (Time 1) Subjective Well-Being Scores of Students with Complete Self-Report Data versus Baseline (Time 1) Subjective Well-Being Scores of Students with Complete Parent Data

	Complete Data; Student and Caregiver Ratings (n = 513-514)		*Incomplete Data; Student Ratings Only (n = 129-130)*				
Variable	*M*	*SD*	*M*	*SD*	*t*	*df*	*p*
SLSS	*3.36*	*0.96*	*3.26*	*1.02*	*-1.05*	*641*	*.148*
PANAS-C-10-PA	*2.66*	*0.82*	*2.51*	*0.87*	*-1.82*	*641*	*.034*
PANAS-C-10-NA	*2.50*	*0.86*	*2.40*	*0.88*	*-1.30*	*641*	*.097*
SLSS-P	*4.02*	*1.02*					
PANAS-C-10-PA-P	*3.34*	*0.84*					
PANAS-C-10-NA-P	*1.96*	*0.72*					

Note. Comparisons cannot be made at the parent level in this dataset as it does not include data solely from parents. Complete data consists of information from both student and parent reports, while incomplete data only includes student self-report.

Summary Scores

To create the composite life satisfaction for students, items 3 and 4 on the SLSS (Appendix E) were reverse scored, and the average score for items 1, 2, 5, 6, 7, and reflected items 3 and 4 was calculated. The same process was utilized for creating composite scores for life satisfaction for parental report items 3 and 4 on the SLSS (Appendix G) were reverse scored, and the average score for items 1, 2, 5, 6, 7, and reflected items 3 and 4 was calculated. To create the composite score of positive affect for students, items 2,5,6,8, and 10 on the PANAS-C-10 (Appendix F) were averaged to create a total score. The exact process was utilized for creating composite scores for the caregiver report of positive affect, items 2,5,6,8, and 10 on the PANAS-

C-10-P (Appendix H) were averaged to create a total score. When the composite score was created for negative affect for student's items 1,3,4,7, and 9 on the PANAS-C-10 (Appendix F) were averaged to create a total score and was calculated. The composite score for caregiver report of negative affect utilized the same items 1,3,4,7, and 9 on the PANAS-C-10-P (Appendix H) were averaged to create a total score and was calculated.

Descriptive Statistics

Descriptive statistics were computed for each variable at three different time points: baseline/pre-intervention (time 1), post-intervention (time 2), and 4-6 month follow up (time 3). Means, standard deviations, minimum and maximum values, and skewness and kurtosis values are displayed in Table 6. All variables had approximately normal distributions across timepoints, defined by skewness and kurtosis values ranging from -1.5 to +1.5. A visual review of mean scores for life satisfaction indicates that at each time point, students reported lower mean scores on the SLSS (range: 3.34 to 3.71) than their caregivers rated them on the SPSS-P (range: 4.02 to 4.28). For positive affect, at each time point students reported lower mean scores on the PANAS-C-10-PA (range: 2.63 to 3.00) than their caregivers rated them on the PANAS-C-10-PA-P (range: 3.34 to 3.43). For negative affect, at each time point students reported higher mean scores on the PANAS-C-10-NA (range: 2.45 to 2.48) than their caregivers rated them on the PANAS-C-10-NA-P (range: 1.80 to 1.96).

Table 6:

Descriptive Statistics for Subjective Well-Being Indicators

Variable	*n*	*M*	*SD*	Min	Max	*Sk*	*Ku*
				Time 1			
Subjective Well Being (Student)							
Life Satisfaction	643	3.34	.97	1.0	6.0	0.154	-0.160
Positive Affect	643	2.63	.84	1.0	5.0	0.398	-0.131
Negative Affect	643	2.48	.86	1.0	5.0	0.479	-0.407
Subjective Well Being (Caregiver)							
Life Satisfaction	514	4.02	1.02	1.0	6.0	-0.318	-0.361
Positive Affect	513	3.34	.84	1.0	5.0	0.006	-0.676
Negative Affect	513	1.96	.72	1.0	5.0	0.992	1.099
				Time 2			
Subjective Well Being (Student)							
Life Satisfaction	610	3.59	1.05	1.0	6.0	-0.069	-0.358
Positive Affect	610	2.88	0.94	1.0	5.0	-.305	-0.462
Negative Affect	610	2.48	0.93	1.0	5.0	0.471	-0.361
Subjective Well Being (Caregiver)							
Life Satisfaction	429	4.18	0.99	1.3	6.0	-0.398	-0.243
Positive Affect	428	3.40	0.82	1.2	5.0	-0.248	-0.503
Negative Affect	428	1.80	0.65	1.0	4.0	0.938	0.422
				Time 3			
Subjective Well Being (Student)							
Life Satisfaction	595	3.71	1.11	1.0	6.0	-0.234	-0.354
Positive Affect	595	3.00	0.96	1.0	5.0	0.170	-0.436
Negative Affect	595	2.45	0.95	1.0	5.0	0.511	-0.204
Subjective Well Being (Caregiver)							

Table 6:
(Continued)

Variable	*n*	*M*	*SD*	Min	Max	*Sk*	*Ku*
Life Satisfaction	422	4.28	0.96	1.7	6.0	-0.327	-0.517
Positive Affect	420	3.43	0.84	1.0	5.0	-0.323	-0.266
Negative Affect	420	1.79	0.65	1.0	4.0	0.902	0.488

Note. M=mean. SD=standard deviation. Min=minimum value. Max=maximum value. Sk=skewness. Ku=Kurtosis.

Descriptive statistics were also evaluated across student grade levels within the sample that had student and caregiver data available. Descriptive were explored across all grades (5, 6, 7, and 8) for each primary study variable (SLSS, SLSSP, PANAS-C-10 PA/NA, and PANAS-C-10 PA-P/NA-P). Mean scores across grades levels for SLSS ranged from 3.28 to 3.43 at Time 1, from 3.57 to 3.67 at Time 2, and from 3.66 to 3.84 at Time 3 (See Table 7). Mean scores across grade levels for the SLSS-P ranged from 3.85 to 4.24 at Time 1, from 4.10 to 4.25 at Time 2, and 4.25 to 4.37 at Time 3 (See table 8).

Mean scores across grades levels for PANAS-C-10-PA ranged from 2.28 to 2.75 at Time 1, from 2.80 to 2.93 at Time 2, and from 3.00 to 3.41 at Time 3 (See table 9). Mean scores across grade levels for the PANAS-C-10-PA-P ranged from 3.11 to 3.54 at Time 1, from 3.23 to 3.61 at Time 2, and 3.33 to 3.56 at Time 3 (See table 10).

Mean scores across grades levels for PANAS-C-10-NA ranged from 2.52 to 2.62 at Time 1, from 2.44 to 2.71 at Time 2, and from 2.40 to 2.43 at Time 3 (See table 11). Mean scores across grade levels for the PANAS-C-10-NA-P ranged from 1.91 to 2.20 at Time 1, from 1.74 to 1.98 at Time 2, and 1.77 to 1.80 at Time 3 (See table 12).

Table 7:
SLSS Descriptive Scores by Grade Level Across Timepoints

Variable	Time 1			Time 2			Time 3		
SLSS	n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
5th	35	3.41	1.03	35	3.60	1.13	31	3.70	1.17
6th	139	3.34	0.93	121	3.67	1.04	108	3.81	1.06
7th	170	3.28	0.97	129	3.67	1.08	136	3.84	1.13
8th	166	3.43	0.95	139	3.57	0.98	142	3.66	1.02

Table 8:
SLSS-P Descriptive Scores by Grade Level Across Timepoints

Variable	Time 1			Time 2			Time 3		
SLSS-P	n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
5th	35	4.11	1.02	35	4.24	0.91	31	4.32	0.99
6th	139	4.24	1.04	121	4.25	1.06	108	4.37	1.04
7th	170	4.00	1.00	129	4.18	0.91	136	4.28	0.88
8th	166	3.85	1.00	139	4.10	1.00	142	4.25	0.94

Table 9:
PANAS-C-10 (PA) Descriptive Scores by Grade Level Across Timepoints

Variable	Time 1			Time 2			Time 3		
PANAS-C-10 (PA)	n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
5th	38	2.75	0.89	35	2.88	1.06	31	3.41	1.11
6th	139	2.28	0.83	121	2.92	0.82	108	3.08	0.80
7th	170	2.53	0.77	129	2.93	0.89	136	3.00	0.93
8th	166	2.67	0.85	139	2.80	0.92	142	3.00	0.92

Table 10:
PANAS-C-10 (PA-P) Descriptive Scores by Grade Level Across Timepoints

Variable	Time 1			Time 2			Time 3		
PANAS-C-10 (PA-P)	n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
5th	38	3.49	0.82	35	3.61	0.76	31	3.56	0.92
6th	139	3.54	0.81	121	3.50	0.79	108	3.50	0.84
7th	170	3.34	0.82	129	3.42	0.80	136	3.46	0.83
8th	166	3.11	0.85	139	3.23	0.86	142	3.33	0.85

Table 11:
PANAS-C-10 (NA) Descriptive Scores by Grade Level Across Timepoints

Variable	Time 1			Time 2			Time 3		
PANAS-C-10 (NA)	n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
5th	38	2.62	0.97	35	2.71	1.01	31	2.43	1.03
6th	139	2.52	0.90	121	2.50	0.91	108	2.42	0.97
7th	170	2.57	0.82	129	2.44	0.92	136	2.43	0.96
8th	166	2.40	0.82	139	2.44	0.88	142	2.40	0.83

Table 12:
PANAS-C-10 (NA-P) Descriptive Scores by Grade Level Across Timepoints

Variable	Time 1			Time 2			Time 3		
PANAS-C-10 (NA-P)	n	*M*	*SD*	n	*M*	*SD*	n	*M*	*SD*
5th	38	2.20	0.82	35	1.98	0.78	31	1.80	0.70
6th	139	1.91	0.74	121	1.74	0.65	108	1.80	0.67
7th	170	2.00	0.65	129	1.89	0.68	136	1.77	0.62
8th	166	1.94	0.74	139	1.75	0.59	142	1.78	0.62

One sample t-tests were also conducted to further examine the relationship between parent/caregiver report of indicators of subjective well-being with youth report of subjective well-being and the following was found. Parents significantly reported higher mean scores on life satisfaction (See Tables 7 & 8); Timepoint 1, t (513) = -12.66, $p < .001$; Timepoint 2, t (424) = - 9.18, $p < .001$; Timepoint 3, t (418) = - 9.32, $p < .001$. Parents/caregivers also significantly reported higher mean scores on positive affect at Timepoint 1 & Timepoint 2, t (512) = -14.27, $p < .001$, t (423) = -9.40, $p < .001$ with most congruency at Timepoint 3 (See Tables 9 & 10), t (416) = -7.12, $p < .001$. Further, parents/caregivers significantly reported lower mean scores on negative affect (See Tables 11 & 12); Timepoint 1, t (512) = 12.27, $p < .001$; Timepoint 2, t (423) = 13.69, $p < .001$; Timepoint 3, t (416) = 13.23, $p < .001$.

Reliability of SWB Measures (Question 1)

The internal consistency of each measure was examined to assess reliability of a newly created parent-report measure of life satisfaction and existing measures of positive and negative affect. Cronbach's alpha was calculated for all measures at time point 1 (baseline), timepoint 2 (post intervention), and timepoint 3 (4 month follow up). As shown in Table 8, all alpha coefficients fell in the acceptable range at all time points with a coefficient of .70 or above (Nunally, 1978).

Item-to-total correlations were calculated at each timepoint to further evaluate the psychometric properties of each research measure (SLSS, SLSS-P, PANAS-C-10, PANAS-C-10-P). Analysis assessed the contribution of each individual item to the overall constructs. The results for each time point are presented in Tables 14, 15, and 16 retrospectivity.

Table 13:
Cronbach's Alpha for Measures in Study

Measure	Number of items	Internal Consistency [α (n)]		
		Time 1	Time 2	Time 3
SLSS	7	.863(643)	.866(610)	.888(595)
SLSS-P	7	.888(513)	.891(429)	.882(421)
PANAS-C-10 (PA)	5	.857(643)	.889(610)	.901(595)
PANAS-C-10 (NA)	5	.769(643)	.812(610)	.834(595)
PANAS-C-10 (PA-P)	5	.901(513)	.909(428)	.917(420)
PANAS-C-10 (NA-P)	5	.773(513)	.763(428)	.779(420)

Note. SLSS=Student Life Satisfaction Scale. SLSS-P= Parent Report Student Life Satisfaction Scale. PANAS-C= Positive and Negative Affect Scale for Children. PA= Positive Affect. NA= Negative Affect. PANAS-C(P)= Parent Report Positive and Negative Affect Scale for Children.

The findings for the SLSS scores across time points reveal varying degrees of association between each item and the total score of the measure. The aforementioned scores ranged from .393 to .806 with some items exhibiting more of a robust item-to-total correlation like Item 5 which at time point 3 had a score of .806. While some items were found to have a weaker association with the total score, for example item 7 at time point 1 with a score of .393. The item-to-total correlations remained consistent throughout different time points within the measure, as shown in Tables 14, 15, and 16. The overall scale demonstrated satisfactory internal consistency across time points with a Cronbach's alpha of .84, .87, and .89 respectively (See Table 13).

The results for the SLSS-P scores across time points also displayed varying degrees of association between each item and the total score of the measure. Scores ranged from .478 to

.777. Across time points item-to-total correlations remained stable across items within the measure (see Tables 14, 15, and 16). The overall scale demonstrated satisfactory internal consistency across time points with a Cronbach's alpha of .89, .89, and .88 respectively (See Table 13).

Item-to-total correlations for the PANAS-C-10 (positive affect; PA) ranged from .578 to .819 with some items having a more robust alignment to the construct. Scores remained in this range across timepoints. The overall PA scale demonstrated satisfactory internal consistency across time points with a Cronbach's alpha of .86, .89, and .90 respectively (See Table 13). Correlations for the PANAS-C-10 (negative affect; NA) ranged from .474 to .654 across time points. Similar to the positive affect scale, scores remained consistent across time points. The PANAS-C-10 (NA) has satisfactory internal consistency throughout the study with Cronbach's alpha scores of .77, .81, and .83, retrospectively (See Table 13).

The caregiver report for the PANAS-C-10 (PA-P) displayed higher item-to-total correlations across timepoints in comparison to the youth report. Scores ranged from .683 to .856. Scores remained consistent across time points for items on the scale (See Tables 14,15, and 16). Cronbach's alpha for the scale was .90, .90, and .92, retrospectively (See Table 13). Caregiver report for the PANAS-C-10 (NA-P) displayed varying degrees of association between each item and the total score of the measure. Item-to-total correlations were lower for this scale across time points in comparison to other measures within the study. Scores ranged from .479 to .620. This suggests more items had weaker associations with the construct. All items had scores lower than .6 across time points aside from item 1 at timepoint 3 with a score of .620. Yet, the overall scale demonstrated satisfactory internal consistency across all time points with a Cronbach's alpha of .77, .76. and .78, retrospectively (Refer to Table 13).

Across-Time Reliability

In addition to internal consistency, another form of reliability comes from support for temporal stability. Temporal stability was examined by reviewing correlational data across baseline within the entire sample and when considering the subsample of students and caregivers in the control group. When examining temporal stability for student self-report of life satisfaction, correlations between baseline and post-intervention ranged from .56 to .71 (see Table 17). Scores between post-intervention and four month follow up ranged from .66 to .71 (see Table 17). Across parent report of life satisfaction, correlations between baseline and post-intervention ranged from .63 to .73 (see Table 18). Correlations between post-intervention and four month follow up ranged from .68 to .73 (see Table 18).

Temporal stability was also examined for a subset of the data only considering student and parent report data within the control group; because these students did not take part in any school-based intervention targeting subjective well-being, these scores were not expected to change much over time. For the control group, baseline data for student's correlations to post-intervention ranged from .54 to .69 (see Table 19). Upon examining data from post-intervention to four month follow up, correlations from student level data ranged from .67 to .69 (see Table 19). Further, correlations from baseline data and post-intervention with parental report ranged from .60 to .74 (see Table 20). Correlations ranged from .68 to .74 when looking at data from post-intervention to four month follow up (see Table 20).

Table 14:

Item-To-Total Correlations Time Point 1

Scale	Item Number	Item Description	Item-To-Total Correlation
SLSS			
	1	My life is going well	.721
	2	My life is just right	.712
	3	I would like to change many things in my life	.516
	4	I wish I had a different kind of life	.536
	5	I have a good life	.709
	6	I have what I want in life	.594
	7	My life is better than most kids	.393
SLSS-P			
	1	My Child thinks their life is going well	.751
	2	My Child thinks their life is just right	.796
	3	My child would like to change many things in their life	.504
	4	My child wishes they had a different kind of life	.666
	5	My child thinks they have a good life	.784
	6	My child thinks they have what they want in life	.760
	7	My child thinks their life is better than most kids	.568
PANAS-PA			
	1	Happy	.670
	2	Cheerful	.678
	3	Proud	.578
	4	Joyful	.770
	5	Lively	.673
PANAS-NA			
	1	Sad	.559
	2	Scared	.580
	3	Miserable	.486
	4	Afraid	.608
	5	Mad	.474
PANAS-PA-P			
	1	Happy	.763
	2	Cheerful	.812
	3	Proud	.686
	4	Joyful	.824
	5	Lively	.706
PANAS-NA-P			
	1	Sad	.580
	2	Scared	.550
	3	Miserable	.546
	4	Afraid	.558
	5	Mad	.503

Note. SLSS= Student Life Satisfaction Survey. SLSS-P= Parent Report Student Life Satisfaction Survey. PANAS-PA= Positive Affect Scale Student Report. PANAS-NA= Negative Affect Scale Student Report. PANAS-PA-P= Positive Affect Scale Parent Report. PANAS-NA-P= Negative Affect Scale Parent Report.

Table 15:

Item-To-Total Correlations Time Point 2

Scale	Item Number	Item Description	Item-To-Total Correlation
SLSS			
	1	My life is going well	.783
	2	My life is just right	.751
	3	I would like to change many things in my life	.498
	4	I wish I had a different kind of life	.600
	5	I have a good life	.777
	6	I have what I want in life	.620
	7	My life is better than most kids	.502
SLSS-P			
	1	My Child thinks their life is going well	.757
	2	My Child thinks their life is just right	.770
	3	My child would like to change many things in their life	.610
	4	My child wishes they had a different kind of life	.692
	5	My child thinks they have a good life	.782
	6	My child thinks they have what they want in life	.776
	7	My child thinks their life is better than most kids	.492
PANAS-PA			
	1	Happy	.715
	2	Cheerful	.754
	3	Proud	.683
	4	Joyful	.819
	5	Lively	.695
PANAS-NA			
	1	Sad	.619
	2	Scared	.641
	3	Miserable	.580
	4	Afraid	.619
	5	Mad	.547
PANAS-PA-P			
	1	Happy	.787
	2	Cheerful	.809
	3	Proud	.701
	4	Joyful	.844
	5	Lively	.729
PANAS-NA-P			
	1	Sad	.557
	2	Scared	.543
	3	Miserable	.577
	4	Afraid	.528
	5	Mad	.479

Note. SLSS= Student Life Satisfaction Survey. SLSS-P= Parent Report Student Life Satisfaction Survey. PANAS-PA= Positive Affect Scale Student Report. PANAS-NA= Negative Affect Scale Student Report. PANAS-PA-P= Positive Affect Scale Parent Report. PANAS-NA-P= Negative Affect Scale Parent Report.

Table 16:

Item-To-Total Correlations Time Point 3

Scale	Item Number	Item Description	Item-To-Total Correlation
SLSS			
	1	My life is going well	.787
	2	My life is just right	.790
	3	I would like to change many things in my life	.519
	4	I wish I had a different kind of life	.633
	5	I have a good life	.806
	6	I have what I want in life	.719
	7	My life is better than most kids	.564
SLSS-P			
	1	My Child thinks their life is going well	.746
	2	My Child thinks their life is just right	.777
	3	My child would like to change many things in their life	.614
	4	My child wishes they had a different kind of life	.635
	5	My child thinks they have a good life	.755
	6	My child thinks they have what they want in life	.745
	7	My child thinks their life is better than most kids	.478
PANAS-PA			
	1	Happy	.736
	2	Cheerful	.790
	3	Proud	.725
	4	Joyful	.812
	5	Lively	.715
PANAS-NA			
	1	Sad	.654
	2	Scared	.651
	3	Miserable	.651
	4	Afraid	.639
	5	Mad	.583
PANAS-PA-P			
	1	Happy	.805
	2	Cheerful	.830
	3	Proud	.695
	4	Joyful	.856
	5	Lively	.779
PANAS-NA-P			
	1	Sad	.620
	2	Scared	.545
	3	Miserable	.581
	4	Afraid	.541
	5	Mad	.497

Note. SLSS= Student Life Satisfaction Survey. SLSS-P= Parent Report Student Life Satisfaction Survey. PANAS-PA= Positive Affect Scale Student Report. PANAS-NA= Negative Affect Scale Student Report. PANAS-PA-P= Positive Affect Scale Parent Report. PANAS-NA-P= Negative Affect Scale Parent Report.

Table 17:
Temporal Stability of SLSS across Timepoints for Full Sample (Intervention and Control Groups)

Variable	n	SLSS-T1	SLSS2-T2	SLSS- T3
SLSS- T1	643	1		
SLSS- T2	610	.664**	1	
SLSS- T3	595	.556**	.713**	1

Note. Analysis used all data available for SLSS. *$p < .05$, **$p < .01$. T1 = Time 1 (pre-intervention). T2 = Time 2 (post-intervention). T3 = Time 3 (4-month follow-up).

Table 18:
Temporal Stability of SLSS-P across Timepoints for Full Sample (Intervention and Control Groups)

Variable	n	SLSS-P-T1	SLSS-P-T2	SLSSP-3-T3
SLSS-P- T1	514	1		
SLSS-P- T2	393	.675**	1	
SLSS-P- T3	388	.627**	.733**	1

Note. Analysis used all data available for SLSS-P. *$p < .05$, **$p < .01$. T1 = Time 1 (pre-intervention). T2 = Time 2 (post-intervention). T3 = Time 3 (4-month follow-up).

Table 19:
Temporal Stability of SLSS across Timepoints for Control Group

Variable	n	SLSS-T1	SLSS- T2	SLSS- T3
SLSS- T1	316	1		
SLSS- T2	300	.667**	1	
SLSS- T3	292	.538**	.685**	1

Note. Analysis only used data from the control group that was available for SLSS. *$p < .05$, **$p < .01$. T1 = Time 1 (pre-intervention). T2 = Time 2 (post-intervention). T3 = Time 3 (4-month follow-up).

Table 20:
Temporal Stability of SLSS-P across Timepoints for Control Group

Variable	n	SLSS-P-T1	SLSS-P-T2	SLSS-P-T3
SLSS-P- T1	255	1		
SLSS-P- T2	201	.680**	1	
SLSS-P- T3	199	.604**	.741**	1

Note. Analysis only used data from the control group that was available for SLSS-P. *$p < .05$, **$p < .01$. T1 = Time 1 (pre-intervention). T2 = Time 2 (post-intervention). T3 = Time 3 (4-month follow-up).

Correlations Between Parent/Caregiver Report and Student Self-Report (Question 2)

Tables 21, 22, and 23 present correlations among measures of SWB for student and caregiver report. At time point 1 (baseline/pre-intervention), there was a small statistically significant correlation between student report of life satisfaction and caregiver report of life satisfaction ($r = .28$, $p < .01$). Further there were small statistically significant correlations between caregiver and youth report of positive and negative affect ($r = .16$ and .20, respectively; $p < .01$). At time point 2, there was a small statistically significant correlation between student report of life satisfaction and caregiver report of life satisfaction ($r = .27$, $p < .01$). Further there were small statistically significant correlations between caregiver and youth report of positive and negative affect ($r = .13$ and .21, respectively; $p < .01$). At time point 3, there was a small statistically significant correlation between student report of life satisfaction and caregiver report of life satisfaction ($r = .31$, $p < .01$). Further there were small statistically significant correlations between caregiver and youth report of positive and negative affect ($r = .20$ and .27, respectively; $p < .01$). Across the three time points, the average r for life satisfaction was .29 (range: .27 to .31), the average r for positive affect was .16 (range: .13 to .20) and the average r for negative affect was .23 (range: .20 to .27).

Table 21:
Correlations Among Student and Parent/Caregiver Report of Subjective Well-Being at Time 1

Variable	n	1	2	3	4	5	6
1. Life satisfaction	514	-					
2. Positive Affect	513	.512**	-				
3. Negative Affect	513	-.463**	-.136**	-			
4. Life Satisfaction (Parent Report)	514	.275**	.128**	-.144**	-		
5. Positive Affect (Parent Report)	513	.209**	.164**	-.115**	.667**	-	
6. Negative Affect (Parent Report)	513	-.167**	-.083	.196**	-.553**	-.444**	-

Note. Analysis used all data available for each indicator of SWB. Sample sizes were 514 participants and 513 participants for life satisfaction and affect respectively. *$p < .05$, **$p < .01$

Table 22:
Correlations Among Student and Parent/Caregiver Report of Subjective Well-Being at Time 2

Variable	n	1	2	3	4	5	6
1. Life satisfaction	424	-					
2. Positive Affect	424	.597**	-				
3. Negative Affect	424	-.564**	-.275**	-			
4. Life Satisfaction (Parent Report)	424	.267**	.138**	-.205**	-		
5. Positive Affect (Parent Report)	424	.150**	.127**	-.065	.681**	-	

Table 22:
(Continued)

Variable	n	1	2	3	4	5	6
1. Negative Affect (Parent Report)	424	-.187**	-.089	.206**	-.610**	-.512**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 23:
Correlations Among Student and Parent/Caregiver Report of Subjective Well-Being at Time 3

Variable	n	1	2	3	4	5	6
1. Life satisfaction	417	-					
2. Positive Affect	417	.529**	-				
3. Negative Affect	417	-.473**	-.120*	-			
4. Life Satisfaction (Parent Report)	417	.313**	.154**	-.192**	-		
5. Positive Affect (Parent Report)	417	.252**	.205**	-.138**	.671**	-	
6. Negative Affect (Parent Report)	417	-.260**	-.152**	.265**	-.566**	-.472**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Associations by Grade Level

Correlations were examined with grade level data at each of the time points. Considering data from Time 1 (see Tables 24-27) starting with the primary variables within the 5th grade participants, scores for life satisfaction had a moderate to large correlation between youth and caregiver report (r =.45, p < .01). Weak nonsignificant correlations were found for positive affect between youth and caregiver report (r =.16, p = 0.33) and small correlations were found for negative affect (r =.35, p < .05). Participants in 6th grade had moderate to large correlations between youth and parental report of life satisfaction (r =.44, p < .01). Weak nonsignificant correlations were found for positive affect (r =.12, p = 0.17), whereas a small significant correlation was found for negative affect between parent and student report (r = .25 p< .01). Among 7th grade students, a small significant correlation between parent and student report of life satisfaction was found (r =.19, p < .05). Weak nonsignificant correlations were found between parent and youth report of positive and negative affect respectively (r =.14, p =0.06; r = .14, p =0.08). Within the 8th grade students, a small significant correlation was found (r =.20, p < .01) for life satisfaction and positive affect (r =.20, p < .01). A small nonsignificant correlation was found between youth and parent report of negative affect (r =.15, p = 0.05). In sum, at Time 1, the magnitude of the associations between student and parent report of life satisfaction appeared somewhat larger for students in grades 5 and 6 (r = .44 - .45) as compared to students in grades 7 and 8 (r = .19 - .20). Associations between student and parent report of positive affect were consistently small and not statistically significant for students in grades 5 – 7 (r = .12 to .16) but were statistically significant for students in grade 8 (r = .20). Variability across grade levels was also found with regard to agreement on youth negative affect, with significant correlations for 5th and 6th grade students (r = .25 to .35) but no significant associations for 7th

and 8th grade students at timepoint 1 (r = .13 to .15; see Tables 24-27). Considering data from Time 2 (post-intervention; see Tables 28-31) starting with the primary variables within the 5th grade participants, scores for life satisfaction had a weak nonsignificant correlation between youth and caregiver report (r =.05, p = 0.77). Weak nonsignificant correlations were found for positive and negative affect between youth and caregiver report (r =.21, p = 0.24; r =.09, p = 0.60). Participants in 6th grade had moderate correlations between youth and parental report of life satisfaction (r =.41, p < .01). A weak nonsignificant correlation was found for positive affect (r =.06, p = 0.50), whereas there was a small significant correlation for negative affect between parent and student report (r = .27, p< .01). Among 7th grade students a small significant correlation between parent and student report of life satisfaction was found (r =.20, p < .05). Weak nonsignificant correlations were found between parent and youth report of positive and negative affect, respectively (r =.07, p = 0.41; r= .16, p = 0.71). Within the 8th grade students, small significant correlations were found between youth and parent report of life satisfaction (r =.25, p < .01), positive affect (r =.18, p < .05), and negative affect (r =.24, p < .05). In sum, at Time 2, the magnitude of the associations between student and parent report of life satisfaction appears to be largest for students in grade 6 (r= .41) as compared to students in grades 5, 7, and 8 (r = .05 - .25). Associations between student and parent report of positive affect were consistently small and not statistically significant for students in grades 5-7 (r = . 06 - .21) but were statistically significant for students in grade 8 (r =.18). Variability across grade levels was also found with regard to agreement on youth negative affect, with significant correlations for 6th and 8th grade students (r = .27 to .24) but no significant associations for 5th and 7th grade students at timepoint 2 (r = .09 to .16; see Tables 28-31).

Table 24:

Correlations Among Fifth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 1

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	5	31	-					
2. Positive Affect	5	31	.582**	-				
3. Negative Affect	5	31	-.329*	-.112	-			
4. Life Satisfaction (Parent Report)	5	31	.453**	.165	-.464**	-		
5. Positive Affect (Parent Report)	5	31	.380*	.161	-.165	.603**	-	
6. Negative Affect (Parent Report)	5	31	-.121	.147	.350*	-.601**	-.486**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 25:

Correlations Among Sixth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 1

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	6	139	-					
2. Positive Affect	6	139	.516**	-				
3. Negative Affect	6	139	-.429**	-.080	-			
4. Life Satisfaction (Parent Report)	6	139	.444**	.213*	-.205*	-		
5. Positive Affect (Parent Report)	6	139	.241**	.118	-.114	.640**	-	

Table 25:
(Continued)

Variable	Grade	n	1	2	3	4	5	6
1. Negative Affect (Parent Report)	6	139	-.290**	-.241**	.247**	-.564**	-.508**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 26:
Correlations Among Seventh Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 1

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	7	170	-					
2. Positive Affect	7	170	.484**	-				
3. Negative Affect	7	170	-.477**	-.186*	-			
4. Life Satisfaction (Parent Report)	7	170	.192*	.028	-.027	-		
5. Positive Affect (Parent Report)	7	170	.260**	.143	-.126	.664**	-	
6. Negative Affect (Parent Report)	7	170	-.179*	-.014	.135	-.480**	-.437**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 27:

Correlations Among Eighth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 1

Variable	Grade	n	1	2	3	4	5	6
7. Life satisfaction	8	166	-					
8. Positive Affect	8	166	.522**	-				
9. Negative Affect	8	166	-.514**	-.144	-			
10. Life Satisfaction (Parent Report)	8	166	.199*	.116	-.153*	-		
11. Positive Affect (Parent Report)	8	166	.128	.204**	-.147	.681**	-	
12. Negative Affect (Parent Report)	8	166	-.074	-.074	.152	-.629**	-.436**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 28:

Correlations Among Fifth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 2

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	5	35	-					
2. Positive Affect	5	35	.564**	-				
3. Negative Affect	5	35	-.366*	-.030	-			
4. Life Satisfaction (Parent Report)	5	35	.052	.015	-.152	-		
5. Positive Affect (Parent Report)	5	35	.105	.206	.051	.677**	-	
6. Negative Affect (Parent Report)	5	35	.060	-.009	.092	-.551**	-.679**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 29:

Correlations Among Sixth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 2

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	6	121	-					
2. Positive Affect	6	121	.617**	-				
3. Negative Affect	6	121	-.543**	-.171	-			
4. Life Satisfaction (Parent Report)	6	121	.412**	.198*	-.331**	-		
5. Positive Affect (Parent Report)	6	121	.213*	.062	-.250**	.624**	-	

Table 29:
(Continued)

Variable	Grade	n	1	2	3	4	5	6
1. Negative Affect (Parent Report)	6	121	-.336**	-.169	.265**	-.593**	-.487**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 30:
Correlations Among Seventh Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 2

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	7	129	-					
2. Positive Affect	7	129	.619**	-				
3. Negative Affect	7	129	-.590**	-.390**	-			
4. Life Satisfaction (Parent Report)	7	129	.196*	.055	-.113	-		
5. Positive Affect (Parent Report)	7	129	.136	.073	.025	.687**	-	
6. Negative Affect (Parent Report)	7	129	-.117	.032	.159	-.613**	-.501**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 31:

Correlations Among Eighth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 2

Variable	Grade	n	1	2	3	4	5	6
1. Life Satisfaction	8	139	-					
2. Positive Affect	8	139	.571**	-				
3. Negative Affect	8	139	-.629**	-.337**	-			
4. Life Satisfaction (Parent Report)	8	139	.246**	.182*	-.196*	-		
5. Positive Affect (Parent Report)	8	139	.115	.181*	-.053	.731**	-	
6. Negative Affect (Parent Report)	8	139	-.221**	-.193*	.238**	-.684**	-.569**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Considering data from Time 3 (4-month follow-up; see Tables 32-35) starting with the primary variables within the 5th grade participants, correlations between youth and caregiver report of student life satisfaction, positive affect, and negative affect were weak and not statistically significant: r =.26, p = 0.17; r =.18, p = 0.34; r =.27, p =0.15, respectively. Participants in 6th grade had a moderate correlation between youth and parental report of life satisfaction (r =.46, p < .01), and small significant correlations for positive affect (r =.22, p < .05) and negative affect (r = .26, p< .01). Among 7th grade students, a small significant correlation between parent and student report of life satisfaction was found (r =.30, p < .05). Weak nonsignificant correlation were found between parent and youth report of positive and negative affect (r =.15, p = 0.09; r = .11, p = 0.21, respectively). Within the 8th grade students, small significant correlations were found between parent and student report of life satisfaction (r =.31, p < .01), positive affect (r =.29, p < .05), and negative affect (r =.27, p < .05). In sum, at Time 3, the magnitude of the associations between student and parent report of life satisfaction were consistently statistically significant for students in grades 6-8 (r = .30 - .46) but not statistically significant for students in 5th grade (r = .26). Associations between student and parental report of positive affect were consistently small and statistically significant for students in grades 6 and 8 (r = .22 - .29) but not statistically significant for students in grades in 5 and 7 (r = .15 to .18). Variability across grade levels was also found with regard to agreement on youth negative affect, with significant correlations for 6th and 8th grade students (r = .26 to .27) but no significant associations for 5th and 7th grade students at timepoint 3 (r = .27 to .21; see Tables 32-35).

Table 32:

Correlations Among Fifth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 3

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	5	31	-					
2. Positive Affect	5	31	.418*	-				
3. Negative Affect	5	31	-.254	-.445*	-			
4. Life Satisfaction (Parent Report)	5	31	.255	.109	-.324	-		
5. Positive Affect (Parent Report)	5	31	.199	.177	-.310	.816**	-	
6. Negative Affect (Parent Report)	5	31	.000	-.189	.267	-.572**	-.487**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 33:

Correlations Among Sixth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 3

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	6	108	-					
2. Positive Affect	6	108	.508**	-				
3. Negative Affect	6	108	-.555**	-.202*	-			
4. Life Satisfaction (Parent Report)	6	108	.455**	.249**	-.312**	-		
5. Positive Affect (Parent Report)	6	108	.330**	.217*	-.290**	.716**	-	
6. Negative Affect (Parent Report)	6	108	-.322**	-.293**	.260**	-.672**	-.517**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 34:

Correlations Among Seventh Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 3

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	7	136	-					
2. Positive Affect	7	136	.625**	-				
3. Negative Affect	7	136	-.560**	-.246**	-			
4. Life Satisfaction (Parent Report)	7	136	.296**	.213*	-.225**	-		
5. Positive Affect (Parent Report)	7	136	.106	.146	-.136	.623**	-	
6. Negative Affect (Parent Report)	7	136	-.072	.002	.109	-.593**	-.456**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

Table 35:

Correlations Among Eighth Grade Student and Parent/Caregiver Report of Subjective Well-Being at Time 3

Variable	Grade	n	1	2	3	4	5	6
1. Life satisfaction	8	142	-					
2. Positive Affect	8	142	.546**	-				
3. Negative Affect	8	142	-.540**	-.287**	-			
4. Life Satisfaction (Parent Report)	8	142	.313**	.233**	-.292**	-		
5. Positive Affect (Parent Report)	8	142	.184*	.288**	-.068	.633**	-	
6. Negative Affect (Parent Report)	8	142	-.149	-.071	.266**	-.566**	-.392**	-

Note. Analysis used all data available for each indicator of SWB. *$p < .05$, **$p < .01$

CHAPTER FIVE:

DISCUSSION

The current study used student self-report and parent report of youth subjective well-being (SWB) data to examine the congruence between reports from parent/caregivers and middle school aged youth across three timepoints. In addition, this study examined the reliability of a newly developed parent report measure of child life satisfaction and existing measures of positive and negative affect. Key findings are summarized below, including their implications for future research and school-based services, as well as potential limitations and directions for future research.

Key Findings

Question 1: Reliability of SWB Measures

The study's first aim was to establish the reliability of (a) a newly developed parent report measure of life satisfaction, and (b) existing measures of positive and negative affect. To explore this, internal consistency within each measure was examined at multiple survey administrations (time points). Cronbach's alpha scores for all primary study variables were calculated: SLSS, SLSS-P, PANAS-C-10 (PA), PANAS-C-10 (NA), PANAS-C-10 (PA-P), PANAS-C-10 (NA-P). The researcher considered any Cronbach's alpha scores above 0.70 to indicate strong internal consistency, consistent with Taber's (2018) recommendation. Across all measures, each obtained an alpha coefficient above 0.70 across all time points. For the newly developed parent report measure SLSS-P, the alpha scores were above 0.80 across all time points. These scores indicate that the adapted version of the SLSS for parent/caregiver reports has good internal consistency

reliability among the items. Existing measures of positive and negative affect also displayed strong internal consistency within this study sample, with the lowest alpha value being .86 for positive affect (pre-intervention) and .77 for negative affect (preintervention). This provides support for internal consistency reliability of a newly developed parent report measure of youth SWB and existing measures of positive and negative affect.

Further, temporal stability was examined to assess the across time reliability of the SLSS-P. Scores were looked at for the entire study sample and for a subset of the participants in the control group as to remove from consideration any impacts from participation in the intervention as a potential factor in stability. Temporal stability of student self-reported life satisfaction was assessed by assessing correlations between baseline and post-intervention, which varied from .56 to .71. Post-intervention scores and the four-month follow up ranged from .66 to .71. Parent-reported life satisfaction correlations between baseline and post-intervention ranged from .63 to .73, and correlations between post-intervention and four-month follow-up varied from .68 to .73. Loewenthal (1996) suggested that reliability estimates 0.6 and above may be considered acceptable for measures with fewer than ten items.

When controlling for students within the intervention group by only exploring the control group, support for temporal stability was still evident for the SLSS and SLSSP. For the control group, the correlation between data at baseline data and post-intervention for student report was .67. Upon examining data from post-intervention to four month follow up, correlations from student level were .69 . Further, correlations from baseline data and post-intervention with parental report were .68. The correlation when looking at data from post-intervention to four month follow up was .73. Parental report of data in the control group displayed higher stability across time. One possible reason for the participants in this dataset overall do not exceed .70 may

be because measurements for latent variables such as well-being or psychopathology may have an expected level of instability due to outside factors and the natural fluctuation of moods throughout the school year. Thus, indications of 'lower' stability might be due to the nature of measuring concepts like SWB over time. In addition, the participants reported on indicators of life satisfaction across several months in this study: at baseline, post-intervention (approximately three months from random assignment and the start of intervention groups), and then finally for a four month follow up. The span of time reflecting months rather than weeks between time points may have influenced the consistency of scores over time. Overall, when exploring across time reliability the SLSS and SLSS-P held up to being a reliable measure. These findings are consistent with Gilman & Huebner's (1997) study examining the temporal stability of the SLSS in middle school aged youth, based on a four-week interval their study yielded a correlation coefficient of .64.

Question 2: Correspondence Between Parents/Caregiver Report and Student Self-Report

The second goal of the study was to investigate the connections between student and parent/caregiver assessments of well-being (SWB) by analyzing the congruence between scores on measures of life satisfaction, positive affect, and negative affect. Over time, there were some statistically significant correlations between parent/caregiver and youth reports of SWB that were small in magnitude, suggesting that parents may be reliable sources of information about their children's well-being. Specifically, there were small yet significant and consistent correlations between all primary study variables, including life satisfaction and positive and negative affect. These findings with respect to magnitude and statistical significance of associations are consistent with prior research on the convergence between self-report and

secondary reports, particularly from parents/caregivers (Ebesutani et al., 2011; Shoshani & Slone, 2017).

The findings in the current study also revealed that parents overestimated the frequency of their children's positive emotions and overall life satisfaction while underestimating the frequency of their negative emotions. This pattern of overestimation was also identified in the Lopez Perez and Wilson (2015) study, which also focused on middle school students. Other variables may impact the measurement of life satisfaction and could explain these discrepancies. For instance, parental support may influence the accuracy of parents' reported subjective well-being (SWB). According to Perez-Fuentes et al. (2019), parental support - including acceptance, open communication, and emotional expression – is a crucial predictor of youth life satisfaction. Therefore, it is plausible that the perceived level of parental support and actual support provided by parents could affect students' and parents' reporting of the youth SWB.

Furthermore, the highest concordance between scores for parent/caregiver and youth report for all three indicators of SWB for the full sample was observed during the four-month follow-up, which could be attributed to participants' increased familiarity with completing the measure. Additionally, it is worth noting that repeated completion of the measures may have led parents and caregivers to be more attentive to their students' well-being throughout the study, potentially impacting the accuracy of scores.

Contributions to Literature

The results of this study contribute to the literature base in several ways. First, the literature of existing published studies contains only a handful of studies that utilized parents/caregivers as secondary reporters when it comes to measuring youth SWB. The results of this study provide additional insight into the utilization of parents/caregivers serving as

informants of youth mental health in reference to youth wellness, and the potential of gathering caregiver input to help provide a more complete picture of overall well-being for a given student. Results of this study indicate that parents/caregivers may be able to reliably report on student SWB, and yield estimates of youth well-being that converge in the correct direction with youth self-report. These results suggest that secondary reporters are beneficial in assessing SWB when combined with youth self-reports. Previous studies found similar results identifying small but statistically significant correlations between reporters (Lopez-Perez & Wilson, 2015). However, the current findings diverge from an early student that suggested that ratings of life satisfaction are moderately correlated (Dew & Huebner, 1994). This discrepancy may reflect Dew and Huebner's choice to use a single nonvalidated item to measure parental report of student SWB as opposed to a broader measure that had been previously validated. The difference suggests that with a more detailed measure, there may be less observed convergence, indicating that a validated and detailed measure is preferable when assessing student SWB. Further, the participant sample in Dew and Huebner's sample comprised older adolescents (grades 8th, 10th, and 12th), which contrasts with this study sample, which utilized younger adolescents.

Secondly, this study advances a newly developed parent report measure of global life satisfaction that parallels a measure of youth report of life satisfaction with a long history of successful use. Findings from the current study provide initial evidence of reliability of the parent report version of the SLSS, potentially paving the way for this parent-report measure to be utilized in research such as the evaluation of positive psychology interventions targeted towards adolescents. The literature needs to be more extensive for utilization of evidence-based parent report measures of life satisfaction.

Third, findings from this study add to the literature base for support regarding the utilization of parents/caregivers as secondary reporters of affect; results indicated small, significant correlations between affect reports from student self-reports and parent/caregiver reports. Similar results were found in other studies exploring the convergence between student self-report and parental report of the same construct (Ebesutani et al., 2011; Shoshani & Slone, 2017), adding to the trustworthiness of the conclusion that researchers and practitioners might expect small but positive associations between caregiver and youth reports of youth experiences of positive and negative emotions.

Implications for Research and School-Based Services

The results of the current study have several implications for school-based mental health services. First, the results highlight the potential utility of obtaining secondary reports for student SWB. There are several measures of SWB examining self-report data, such as the SLSS (Huebner, 1991a, 199b), the MSLSS (Huebner et al., 2012), and the BMSLSS (Seligson et al., 2003). Utilizing parental/caregiver reported data can be beneficial when supporting mental health needs, intervention, and assessment. Results from this study provided initial support for the reliability of a newly developed measure of student SWB via parent/caregiver reporting (SLSS-P). Practitioners may choose to prioritize self-report SWB for screening and progress monitoring as historically youth themselves have been seen as the experts in understanding their SWB. Practitioners may wish to prioritize parent report for a secondary informant as there has been evidence of convergence (Dew & Huebner, 1994; Lopez-Perez & Wilson, 2015; Shoshani & Slone, 2017) however, practitioners should keep in mind that scores may differ and to utilize that discrepancy to inform parent collaboration. This information could be utilized to inform the extent of expectations parents/caregivers possess for their child's mental well-being. This

information might help practitioners in personalizing the manner in which they communicate about the well-being of children. Parents or caregivers may occasionally be taken aback when they discover that their young ones are facing a decline in their overall well-being and mental health. They could feel a sense of surprise, thinking that they have overlooked something or should have been more observant of the changes occurring in their children. Practitioners can provide assistance in demonstrating that research has repeatedly indicated a small correlation between parents and children in terms of markers of subjective well-being (SWB), so this parent is likely in good company! Moreover, this can be utilized to highlight the subjective nature of well-being indicators and the potential for students to provide a more precise depiction of their internal well-being. Researchers may also be interested in utilizing secondary reporter data for assessing SWB in their evaluation of positive psychology interventions or related work.

Second, even if the correlation between parent/caregiver report of SWB and student self-report is small in magnitude, this information is still valuable. Providing that information to families regarding youth and family estimate of youth SWB can provide insight on the youth's actual/perceived level of well-being and the general trend for parents to overestimate levels of SWB. This may improve family and school collaboration within mental health interventions by indicating the need to have more explicit conversations regarding mental well-being going beyond indicators of psychopathology or externalizing symptoms. Researchers can also use information from caregiver report/observation of youth well-being to inform inclusion criteria for various interventions or service delivery, potentially identifying students who may not report low SWB for whatever reason.

Third, the results from this study and the indication of parents tending to overestimate levels of life satisfaction and positive affect highlight the importance of youth voice in

identifying students for consideration for mental health supports within schools. The participants within this study were all found to have room for growth in their SWB during a schoolwide screening of youth report of SWB, yet the mean scores provided by parents/caregivers within the sample indicated youth to have at least positive levels of well-being. If consideration for services relied heavily on parental report of youth wellness and concerns, this may reduce access for students to receive needed services. With this consideration of caregiver tendency to overestimate adolescent wellness, we may be able to ensure more students receive access to care.

Limitations

Findings and implications of this study must be considered along with its limitations. Firstly, the external validity of this study might be at risk due to the study sample being restricted to the population in the larger intervention study, including youth from middle school settings in two states. Further, all students within this dataset were already experiencing some level of decline in subjective well-being, as indicated by low student ratings of SWB during a universal screening. Correlations between informants may look different with a sample of youth with average to high reports of subjective well-being, and within a sample representing the full range of scores on self-report subjective well-being measures. Secondly, the dataset utilized to explore the primary research questions included youth who completed a positive psychology intervention before data was measured again at the second and third time points. This may have influenced the congruency between scores, although no major differences were found upon examination of convergence between datasets (i.e., the full sample vs. the sample restricted to the control group). Third, the parent/caregiver reported data is only from one parent/caregiver, for instance a mother only without regard to the perceptions of a mother's partner or a grandparent in the home. The adult rater who was asked to participate was not a deliberate sample of mothers, fathers,

grandparents, legal guardians, etc., but instead simply the caregiver at home who completed the consent form indicating permission for their child to participate in the larger study. There is no way to control for the different perceptions parents/caregivers may have of their youth and who may have been the more accurate reporter. Fourth, only three measures were utilized to assess student subjective well-being. Within positive psychology, high subjective well-being is often conceptualized as being compromised of life satisfaction, a high frequency of positive affect, and a relatively low frequency of negative affect. Perhaps using more measures of flourishing, quality of life, and happiness to provide a full range of SWB scores may have impacted study findings.

Future Directions

The current findings shed light on a few areas of need for future research. First, it may be beneficial to examine and identify predictors of convergence in ratings (e.g., parent-child communication, student-rated parental support, etc.). Additional studies could explore the dissonance between parent/caregiver reports and youth reports of SWB indicators. For example, researchers can investigate what may lead caregivers to overestimate positive emotional experiences or underestimate negative emotional experiences. Researchers can also examine how SWB scores converge outside a subset focused on youth identified for positive psychology interventions due to low life satisfaction. Future studies could explore the convergence between scores on subjective well-being for an older sample concentrating on high school-aged students, and contrast findings with associations yielded among samples in the same community at younger years. Previous studies have found moderate correlations between parent and youth report at older ages (Dew & Huebner,1994) and others have found weak correlations between reports at younger age groups (Lopez-perez & Wilson, 2015) and this study displayed variability

across timepoints for level in converge across age groups. Further clarification on the congruence between scores influenced by student grade level would enhance the existing literature.

Third, future studies can expand upon the literature base regarding the utilization of parent/caregiver report measures in additional assessment practices for identification and outcome assessment within positive psychology interventions. Future studies can also look at a sample size that does not include any active participants in interventions to increase generalizability to typical sample of youth. This could help determine if involvement in school-based mental health services impacted convergence scores. For instance, do students have more conversations with parents/caregivers around mental health when involved in mental health services, potentially aiding the convergence of SWB indicators? Are convergence scores low even when discussions are had explicitly about mental well-being? Answering these questions can help promote the use of school-based mental health services and efforts to increase family and school collaboration by helping strengthen student and family relationships.

Summary

The present study illustrates the alignment between parent/caregiver and student self-assessment of subjective well-being for middle school aged youth. Additionally, this study provided a full examination of the psychometric properties of a recently created parent report measure of life satisfaction, and existing measures of positive and negative affect. There was generally low but reliable (statistically significant) convergence between the ratings from youth and caregivers, with associations that were higher in magnitude for life satisfaction as compared to affect. The scores showed notable consistency across three different time points. These findings indicate that parents/caregivers can play a role as additional sources of information in

assessing subjective well-being among adolescents. This research delves into the use of secondary reporters to measure SWB, showcasing a newly developed parent/caregiver report measure and its potential applicability to comprehensive assessment of youth wellness in school-based mental health services.

REFERENCES

Achenbach, T. M., Dumenci, L., & Rescorla, L. A. (2001). Ratings of relations between DSM-IV diagnostic categories and items of the CBCL/6-18, TRF, and YSR. *Burlington, VT: University of Vermont*, 1-9.

Aebi, M., Kuhn, C., Banaschewski, T., Grimmer, Y., Poustka, L., Steinhausen, H. C., & Goodman, R. (2017). The contribution of parent and youth information to identify mental health disorders or problems in adolescents. *Child and adolescent psychiatry and mental health*, *11*(1), 1-12. DOI 10.1186/s13034-017-0160-9

Alan, S., Boneva, T., & Ertac, S. (2019). Ever failed, try again, succeed better: Results from a randomized educational intervention on grit. *The Quarterly Journal of Economics*, *134*(3), 1121-1162. https://doi.org/10.1093/qje/qjz006

Antaramian, S. P., Huebner, E. S., Hills, K. J., & Valois, R. F. (2010). A dual-factor model of mental health: Toward a more comprehensive understanding of youth functioning. *American Journal of Orthopsychiatry, 80*(4), 462 - 472. DOI: 10.1111/j.1939-0025.2010.01049.x

Avedissian, T., & Alayan, N. (2021). Adolescent well-being: A concept analysis. *International journal of mental health nursing*, *30*(2), 357-367. https://doi.org/10.1111/inm.12833

Ben-Arieh, A., Casas, F., Frones, I. & Korbin, J.E. (2014) Multifaceted concept of child well-being. In: *Handbook of Child Well-Being. Theory, Indicators, Measures and Policies* (eds A. Ben-Arieh, I. Frones, F. Casas & J.E. Korbin), pp. 1–27. Springer, Springer Science Business Media Dordrecht, the Netherlands. DOI 10.1007/978-90-481-9063-8_134

Casas, F., González, M., Navarro, D. & Aligué, M. (2013). Children as advisers of their researchers: assuming a different status for children. *Child Indicators Research, 6,* 193–212. DOI 10.1007/s12187-012-9168-0

Chuecas, M. J., Alfaro, J., Benavente, M., & Ditzel, L. (2022). A systematic narrative review of subjective well-being promotion intervention programs in the school setting. *Review of Education*, *10*(1), e3345. https://doi.org/10.1002/rev3.3345

Clark, K. N., & Malecki, C. K. (2022). Adolescent mental health profiles through a latent dual-factor approach. *Journal of School Psychology*, *91*, 112-128. https://doi.org/10.1016/j.jsp.2022.01.003

Crossman, M. K., Kazdin, A. E., & Kitt, E. R. (2018). The influence of a socially assistive robot on mood, anxiety, and arousal in children. *Professional Psychology: Research and Practice*, *49*(1), 48-56. https://doi.org/10.1037/pro0000177

Cummins, R. A., & Lau, A. (2005). Personal wellbeing index–school children. *Melbourne: School of Psychology, Deakin University.*

Csikszentmihalyi, M., & Seligman, M. (2000). Positive psychology. *American psychologist*, *55*(1), 5-14. DOI: 10.1037//003-066X.55.1.5

Dew, T., & Huebner, E. S. (1994). Adolescents' perceived quality of life: An exploratory investigation. *Journal of School psychology*, *32*(2), 185-199.

Diener, E. (2021). Subjective well-being in cross-cultural perspective. In *Key issues in cross-cultural psychology* (pp. 319-330). Garland Science.

Diener, E., Seligman, M. E., Choi, H., & Oishi, S. (2018). Happiest people revisited. *Perspectives on Psychological Science*, *13*(2), 176-184. DOI: 10.1177//1745691617697077

Diener, E. & Seligman, M.E.P. Seligman. (2002). Very happy people, *Psychological Science, 31*(1), 81–84.

Ebesutani, C., Okamura, K., Higa-McMillan, C., & Chorpita, B. F. (2011). A psychometric analysis of the Positive and Negative Affect Schedule for Children–Parent Version in a school sample. *Psychological assessment*, *23*(2), 406-416. DOI: 10.1037/a0022057

Ebesutani, C., Regan, J., Smith, A., Reise, S., Higa-McMillan, C., & Chorpita, B. F. (2012). The 10-item positive and negative affect schedule for children, child and parent shortened versions: application of item response theory for more efficient assessment. *Journal of Psychopathology and behavioral Assessment*, *34*(2), 191-203. DOI 10.1007/s10862-011-9273-2

Gilman, R., & Huebner, E. S. (1997). Children's reports of their life satisfaction: Convergence across raters, time and response formats. *School Psychology International*, *18*(3), 229-243.

Gilligan, T. D., & Huebner, E. S. (2002). Multidimensional life satisfaction reports of adolescents: A multitrait–multimethod study. Personality and Individual differences, 32(7), 1149-1155. https://doi.org/10.1016/S0191-8869(00)00196-3

Goodman, R., Meltzer, H., & Bailey, V. (1998). The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European child & adolescent psychiatry*, *7*(3), 125-130.

Huebner, E. S. (1991a). Initial development of the student's life satisfaction scale. *School Psychology International*, *12*(3), 231-240.

Huebner, E. S. (1991b). Further validation of the Students' Life Satisfaction Scale: The independence of satisfaction and affect ratings. *Journal of Psychoeducational Assessment*, *9*(4), 363-368.

Huebner, E. S., Zullig, K. J., & Saha, R. (2012). Factor structure and reliability of an abbreviated version of the Multidimensional Students' Life Satisfaction Scale. *Child Indicators Research*, *5*(4), 651-657. DOI 10.1007/s12187-012-9140-z

Huebner, E.S. and G.L. Alderman: 1993, Convergent and discriminant validation of a children's life satisfaction scale: Its relationship to self- and teacher-reported psychological problems and school functioning, Social Indicators Research 30, pp. 71–82.

Joronen, K., & Åstedt-Kurki, P. (2005). Familial contribution to adolescent subjective well-being. International Journal of Nursing Practice, 11(3), 125-133. https://doi.org/10.1111/j.1440-172X.2005.00509.x

Kim, E. K., Dowdy, E., Furlong, M. J., & You, S. (2017). Mental health profiles and quality of life among Korean adolescents. *School Psychology International*, *38*(1), 98-116. DOI: 10.1177/0143034316682296

Kitt, E. R., Crossman, M. K., Matijczak, A., Burns, G. B., & Kazdin, A. E. (2021). Evaluating the Role of a Socially Assistive Robot in Children's Mental Health Care. *Journal of child and family studies*, *30*(7), 1722-1735. https://doi.org/10.1007/s10826-021-01977-5

Laurent, J., Catanzaro, J., Joiner, T. E., Rudolph, K., Potter, K. I., Lambert, S., et al. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. Psychological Assessment, 11, 326–338.

Loewenthal, K. M. (1996). *An introduction to psychological tests and scales*. London: UCL Press Limited. https://doi.org/10.4324/9781315561387

López-Pérez, B., & Wilson, E. L. (2015). Parent–child discrepancies in the assessment of children's and adolescents' happiness. *Journal of experimental child psychology*, *139*, 249-255. http://dx.doi.org/10.1016/j.jecp.2015.06.006

Masten, A. S., Lucke, C. M., Nelson, K. M., & Stallworthy, I. C. (2021). Resilience in development and psychopathology: Multisystem perspectives. *Annual Review of Clinical Psychology*, *17*, 521-549. https://doi.org/10.1146/annurev-clinpsy-081219-120307

Maton, K.I. (1990). Meaningful involvement in instrumental activity and well-being: Studies of older adolescents and at-risk urban teenagers. American Journal of Community Psychology 18, pp. 297–320.

Mendes de Oliveira, C., Santos Almeida, C. R., & Hofheinz Giacomoni, C. (2022). School-Based Positive Psychology Interventions that Promote Well-Being in Children: A Systematic Review. *Child Indicators Research*, 1-18. https://doi.org/10.1007/s12187-022-09935-3

Merrell, K. W., Ervin, R. A., & Peacock, G. G. (2011). *School psychology for the 21st century: Foundations and practices*. Guilford Press.

Moore, S. A., Dowdy, E., Nylund-Gibson, K., & Furlong, M. J. (2019). A latent transition analysis of the longitudinal stability of dual-factor mental health in adolescence. *Journal of school psychology*, *73*, 56-73. https://doi.org/10.1016/j.jsp.2019.03.003

Navarro, D., Montserrat, C., Malo, S., Gonzàlez, M., Casas, F., & Crous, G. (2017). Subjective well-being: what do adolescents say?. Child & Family Social Work, 22(1), 175-184. https://doi.org/10.1111/cfs.12215

Oishi, S., Diener, E., Lucas, R. E., & Suh, E. M. (2009). Cross-cultural variations in predictors of life satisfaction: Perspectives from needs and values. In *Culture and well-being* (pp. 109-127). Springer, Dordrecht.

Piko, B. F., & Hamvai, C. (2010). Parent, school and peer-related correlates of adolescents' life satisfaction. Children and Youth Services Review, 32(10), 1479-1482. https://doi.org/10.1016/j.childyouth.2010.07.007

Proctor, C., & Linley, P. A. (2014). Life satisfaction in youth. Increasing psychological well-being in clinical and educational settings, 199-215. DOI 10.1007/978-94-017-8669-0_13

Powdthavee, N., & Vignoles, A. (2008). Mental health of parents and life satisfaction of children: A within-family analysis of intergenerational transmission of well-being. Social Indicators Research, 88(3), 397-422. DOI 10.1007/s11205-007-9223-2

Roberts, P., & Priest, H. (2006). Reliability and validity in research. *Nursing standard*, *20*(44), 41-46.

Ross, D. A., Hinton, R., Melles-Brewer, M., Engel, D., Zeck, W., Fagan, L., ... & Mohan, A. (2020). Adolescent well-being: A definition and conceptual framework. *Journal of Adolescent Health*, *67*(4), 472-476. doi: 10.1016/j.jadohealth.2020.06.042

Roth, R. A., Suldo, S. M., & Ferron, J. M. (2017). Improving middle school students' subjective well-being: Efficacy of a multicomponent positive psychology intervention targeting small groups of youth. *School Psychology Review*, *46*(1), 21-41. https://doi.org/10.1080/02796015.2017.12087610

Rothbart, M. K., Ahadi, S. A., Hershey, K. L., & Fisher, P. (2001). Investigations of temperament at three to seven years: The Children's Behavior Questionnaire. *Child development*, *72*(5), 1394-1408. https://doi.org/10.1111/1467-8624.00355

Seligson, J.L., E.S. Huebner and R.F. Valois: 2003, Preliminary validation of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS), Social Indicators Research 61, 121–145.

Shoshani, A., & Slone, M. (2017). Positive education for young children: effects of a positive psychology intervention for preschool children on subjective well-being and learning behaviors. *Frontiers in psychology*, *8*, 1866, 1-11. https://doi.org/10.3389/fpsyg.2017.01866

Spielberger, C. D., Edwards, C. D., Montouri, J., & Lushene, R. (1973). State-trait anxiety inventory for children. https://doi.org/10.1037/t06497-000

Suldo, S. M. (2016). *Promoting student happiness: Positive psychology interventions in schools*. New York: Guilford Press.

Suldo, S. M., & Doll, B. (2021). Conceptualizing youth mental health through a dual-factor model. *Fostering the emotional well-being of our youth: A school-based approach*, 20-39.

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., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. School Psychology Review, 37(1), 52-68. https://doi.org/10.1080/02796015.2008.12087908

Suldo, S. M., & Shaunessy-Dedrick, E. (2013). The psychosocial functioning of high school students in academically rigorous programs. *Psychology in the Schools*, *50*(8), 823-843. https://doi.org/10.1002/pits.21708

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, *48*, 1273-1296. DOI 10.1007/s11165-016-9602-2

Tian, L., Chen, H., & Huebner, E. S. (2014). The longitudinal relationships between basic psychological needs satisfaction at school and school-related subjective well-being in adolescents. Social Indicators Research, 119(1), 353-372. DOI 10.1007/s11205-013-0495-4

Valois, R.F., K.J. Zullig, E.S. Huebner and J.W. Drane: 2001, Relationship between life satisfaction and violent behaviors among adolescents, American Journal of Health Behavior 25, pp. 353–366.

Whitcomb, S.A. (2018). Behavioral, Social, and Emotional Assessment of Children and Adolescents, 5th Edition. New York, N.Y.: Routledge. ISBN: 1138814393

Zullig, K.J., R.F. Valois, E.S. Huebner, J.E. Oeltmann and W.J. Drane: 2001, Relationship between perceived life satisfaction and adolescent substance abuse, Journal of Adolescent Health 29, pp. 279–288. https://doi.org/10.1016/S1054-139X(01)00269-5

APPENDICES

Appendix A: Parent Consent Form

Dear Parent or Guardian:

This letter tells you about a study called "Promoting Well-Being in Middle School Students." The study is being done at your child's school by researchers from the University of South Florida (USF) and the University of Massachusetts Amherst (UMass). The research team is called Project SOAR, which stands for Strengths, Optimism, Achievement, and Relationships. We are doing this study to evaluate the Well-Being Promotion Program (WBPP). The WBPP is a program offered at school to increase personal well-being. Greater well-being, in turn, enhances students' readiness to learn and academic success. Earlier in the school year, your child took part in a screening to examine students' emotional well-being (life satisfaction, and frequency of positive and negative moods). The next step in this project is to offer extra support to students whose survey responses indicate room for growth in well-being; some students will participate in the WBPP this year and others the next year. This study will determine the effect of the WBPP on students' emotional well-being and school performance. The following information is shared to help you and your child decide whether you would like to join the research study.

- ✓ Who We Are: Project SOAR is led by USF and UMass Professors Shannon Suldo and Sarah Fefer. Our research team includes graduate students and school psychologists from our Colleges of Education. We are doing the study in collaboration with the district and school administrators to ensure the study provides information that will be helpful to students, educators, and families.
- ✓ Why We are Requesting You and Your Child's Participation: We are doing this study to evaluate a promising program created to increase middle school students' emotional well-being. Findings from the study will help educators know more about activities that increase well-being in youth, and how well-being links to school success. The study is funded by the Institute of Education Sciences. We are requesting your child's participation because of their responses on a recent survey of emotional well-being. Your child's responses indicated room for growth in their life satisfaction. This is not unusual, most youth are not fully satisfied with their life across multiple domains. Your child is invited to take part in the WBPP that is intended to increase students' well-being, including from "mostly satisfied" to "delighted" with life. You are being asked to participate because you are one of the child's parents, caregivers, or legal guardians.
- ✓ What Your Child's Participation Requires: Children with permission to participate will be randomly assigned to one of two groups: *program now* and *program later*. There is a 50/50 chance of being assigned to either group. Students in the *program now* group will begin the WBPP in the next few weeks. Students in the *program later* group will be offered the WBPP or other positive activities that promote life satisfaction the next school year, after this study ends. Note: students in both groups will still receive existing supports provided by the school.

  All students in the *program now* and *program later* groups will be asked to complete several surveys on four occasions over two years: near the beginning, middle, and end of this school year, and the middle of the next school year. These surveys will ask about your child's attitudes towards learning, classroom behavior, personal strengths, relationships, and emotional well-being (life satisfaction, as well as emotional and behavioral problems). Completion of surveys is expected to take about 45-60 minutes on each occasion. On each of these four occasions, one of your child's teachers will be asked to independently and privately complete short surveys about your child's behavior at school.

  Additionally, students in the *program now* group will participate in the WBPP, and be invited to participate in two 30-minute interviews to provide feedback on the program and their use of various skills learned in the meetings. The WBPP starts with 10 weekly meetings. Your school's mental health team will meet with small groups of students once per week for 30-45 minutes. Meetings will consist of lessons about ways of thinking and behaving that are related to emotional well-being. Students will complete activities intended to evoke positive moods and strengthen relationships and complete homework to practice these activities. After the 10 weekly meetings, students will take part in follow-up meetings about once per month, up to five meetings, to review topics and activities learned earlier.

  All research activities (survey completion, WBPP meetings, and feedback) will be during regular school hours and scheduled to be minimally disruptive to your child's academic course schedule. In the event of student absences or a school closure, your child may complete portions of the study online using technology arranged with the school for meetings and/or survey completion. In total, participation will take no more than 4 hours for students in the *program later* group and 15 hours for students in the *program now* group during the study period. All but one hour of that time will be during this school year, and the remaining hour will be during next school year.

  Another part of participation involves a confidential review of your child's school records. District employees will provide the research team with your child's: demographic features (gender; race/ethnicity; eligibility for discounted school meals; identification as an English Language Learner or a student with an exceptionality; date of birth); district student ID number; student email address (district assigned account); as well as student academic achievement (grades in each course, and scores on district/state assessments of academic skills) and school behavior (attendance, number of office referrals) during the two year study period and the year prior.
- ✓ What Your Participation Requires: For all students (*program now* and *program later* groups), one parent/caregiver per child participant will be asked to complete brief surveys of your child's behavior on four occasions over two years: near the beginning, middle, and end of this school year, and the middle of the next school year. These surveys will ask about your child's emotional well-being (life satisfaction, as well as emotional and behavioral problems) as demonstrated at home. Completion of the surveys is expected to take about 15 minutes on each occasion.

If your child is assigned to the *program now* group, you will be asked to attend one 30-minute information meeting about the WBPP in the next few weeks. There will be multiple times and options for how to attend this meeting, such as in person at your child's school, join a remote meeting electronically, or watch a pre-recorded session online. We will provide food and childcare at in-person meetings. The time, date, and location options for the meeting will be shared with you through the contact method you provide on the next page. In this meeting for families, we will describe the WBPP activities and answer any questions. You will be asked to share feedback on the meeting after you participate. Throughout the program, you will receive one-page handouts that describe what your child did during each meeting at school, in order to support your child in practicing the WBPP activities at home. It should take about 15 minutes per week to review and discuss the handout with your child. When your child has finished the 10 weekly meetings, we will ask you to complete a 30-minute survey to gather your feedback on the WBPP and your use of activities at home.

All research activities (survey completion, family information meeting, and feedback) will be at your convenience, outside or during school hours based on your preference. Surveys will be completed online with links sent through email; surveys can be completed in hard copy (paper-and-pencil) or over the phone upon request. In total, participation will take no more than 1 hour for parents of students in the *program later* group and 4.5 hours for parents of students in the *program now* group during the study period. All but 15 minutes of that time will be during this school year, and the remaining 15 minutes will be during next school year.

- ✓ Why You and Your Child Should Participate: The WBPP is intended to help students develop skills linked to personal well-being, as well as social and academic success. Prior studies with middle school students found participation in the WBPP caused gains in life satisfaction and positive feelings, and reductions in negative feelings. Thus, your child may experience an increase in well-being due to taking part in the WBPP. More research evidence for the effectiveness of activities to increase well-being may allow children in the future to take part in such programs at school. Group-level results of the study will be shared with school counselors, teachers, and leaders, to increase their knowledge of activities that promote student well-being. Please note you and your child will not be paid for participation in the study. However, all students who return this permission form will receive a small gift in the form of a school supply (even if you indicate your child can not participate). All students who complete the surveys about their thoughts, feelings, and behaviors will receive a $5 gift card or gift of the same value after each time they complete surveys (up to four occasions). Students in the *program now* group who provide feedback on the WBPP will receive a $5 gift card or gift of the same value each time they provide feedback in an interview (up to two occasions). All parents who provide ratings of their child's emotional well-being will receive a $10 gift card after each time they complete surveys (up to four occasions). Parents of students in the *program now* group who provide feedback on the WBPP will receive a $25 gift card.
- ✓ Please Note: You and your child's participation is voluntary. You are free to allow your child to participate in this research study or to withdraw them at any time. Your child has the right to withdraw their assent or discontinue participation at any time without penalty. If your child indicates a wish to discontinue, you will be contacted to be kept aware of your child's participation. Any decision to participate, not participate, or withdraw participation at any point during the study will in no way affect your child's student status, their grades, or your relationship with your child's school, school district, USF/UMass, or any other party. Your child does not have to participate in any part of this research. You or your child have the right to inspect the survey instruments before they are administered, if a request is made within a reasonable amount of time. The surveys will be available at your school prior to the survey administration.
- ✓ Confidentiality of Responses and Study Risks: This research is considered minimal risk. Minimal risk means that study risks are the same as the risks you face in daily life. There are no known additional risks to those who take part in this study. Your child will receive no guaranteed benefits by participating in this research study. Your and 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. However, your and your child's individual responses will not be shared with school system personnel or anyone other than us and our research assistants. Your child will be assigned a study code number to protect the privacy of information from students, parents/caregivers, teachers, and school records. Only approved study staff will have access to the password-protected files and locked file cabinets stored at USF/UMass that will contain records linking code numbers to participants' names, and data gathered from school records. Your child's responses during some research activities will be digitally audio recorded, and then assigned the study code number to protect the confidentiality of their statements. Consenting for your child to participate in this project also indicates your consent for your child to be audio recorded. For students in the *program now* group, we cannot guarantee that what your child says during group meetings will not be repeated by other students who take part in the same group. But, we will encourage children to respect privacy and not repeat what is said in the meetings to others. No names will be attached to stored surveys or audio files. All records from the study will be destroyed five years after the study is completed. These records include completed surveys, activity forms completed during group meetings, and information from students' school records. A de-identified version of the electronic dataset that includes your de-identified records could be used for secondary analyses in future research studies conducted by USF/UMass and by other investigators. Your and your child's specific responses and comments will not be shared with school staff. However, if you or your child indicate that your child intends to harm themself or someone else, we will contact your school counselor or other district mental health staff. Those individuals will follow district procedures for ensuring the safety of

your child and others and follow up with parents and guardians about concerns for student well-being. Please note that if you, your child, or your child's teacher complete portions of the study online (such as complete surveys electronically), it is possible, although unlikely, that unauthorized individuals could gain access to responses. Confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of information sent via the Internet. However, your participation in this study using electronic surveys or meeting methods involves risks similar to a person's everyday use of the Internet. Please note that due to the COVID-19 pandemic, face-to-face interactions with study staff may pose a risk of transmission of the novel coronavirus. Study staff will adhere to all district health and safety measures for individuals entering schools, such as use of facial coverings.

✓ What We'll Do With Your and Your Child's Responses: We plan to use information from this study to determine the effectiveness of school programs intended to increase student well-being. Study findings will inform educators about activities that promote emotional well-being in middle school students, and the link between well-being and school success. Results from data collected during this study may be published. However, the data obtained from you and your child will be combined with data from other people in the publication. We expect a total of about 1170 children and 1340 adults (parents, teachers, and school mental health staff) will take part in this study across Florida and Massachusetts schools. The published results will not include any information that would in any way identify you or your child.

✓ Questions? If you have questions about this study, contact Dr. Suldo at (813) 974-2223 or Dr. Fefer at (413) 545-0211. If you have questions about your rights as a person who is taking part in a research study, contact a member of the USF Division of Research Integrity and Compliance at (813) 974-5638. Refer to Study # 001065.

✓ Want to Participate? To permit you and your child to take part in this study, check "YES" and complete the consent form below (titled "Consent to Participate… in this Research Study"). Provide your contact information (phone numbers, email address, how to reach you via text). If you complete the form electronically via DocuSign, download and keep a digital form for your records. If you complete the form in hard copy, ***have your child return the green paper with the completed form to their designated teacher.*** Sign and keep the other copy of this letter (on gold paper) for your records.

Sincerely,

Shannon Suldo, Ph.D. (Professor)
School Psychology Program, College of Education
University of South Florida

Sarah Fefer, Ph.D. (Associate Professor)
School Psychology Program, College of Education
University of Massachusetts Amherst

Consent to Participate and Parental Permission for My Child to Participate in this Research Study

☐ YES, I freely give my consent to take part and give permission for my child (_____) to take part in this study. I understand that by signing this form I am agreeing to take part and to let my child take part in research. I have received a copy of this form for my records.

☐ NO, I do not give permission for my child (_____) to take part in this study.

_____ _____ _____
Signature of parent **Printed name of parent** **Date**

If you checked "YES" above to permit your child to take part in the study, please provide the information requested below:

_____ _____ _____
Printed name of child **Child's date of birth** **Parent email address(s)**

Parent phone numbers: (cell/text): _____ (home or office): _____

Preferred method of communication, to get weekly updates on the Well-Being Promotion Program? *Check all that apply:*
____ text ____ phone call ____ email ____ other (describe: _____)

Do you want to attend a **parent information meeting** about the Well-Being Promotion Program? **What format** do you prefer?
____ yes (in person, face-to-face) ____ yes (remote: live online meeting) ____ yes (remote: pre-recorded video)
____ yes, other (describe: _____) ____ no

If yes for an in-person *or* live online information meeting, what **time of day** do you prefer?
____ morning ____ afternoon (during school hours) ____ afternoon (after school hours) ____ evening (6pm or later)

Preferred language for communication: ___English ___Spanish ___other (describe: _____)
Preferred language for parent information meeting: ___English ___Spanish ___other (describe: _____)

(Portion for USF or UMass to complete): **Statement of Person Obtaining Informed Consent**

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

_____ _____ _____
Signature of person obtaining consent Printed name of person obtaining consent Date

Appendix B: Student Assent Form

Assent of Children to Participate in Research

Study # 001065

Title of study: Promoting Well-Being in Middle School Students

Why am I being asked to take part in this research?

You are being asked to take part in a research study about a school-based program that may increase middle school students' emotional well-being. This is important because students with high well-being often get higher grades, get along better with people, and have positive attitudes about school. You are being asked to take part in this research study because your responses to the well-being screening you did earlier in the school year showed you have some room for growth in life satisfaction. This is not unusual; most students are not fully satisfied with their life across multiple areas. If you take part in this study, you will be one of about 100 students at this school. We expect about 1170 students at middle schools from two states (Florida and Massachusetts) to take part.

Who is doing this study?

The people in charge of this study are Dr. Shannon Suldo (University of South Florida) and Dr. Sarah Fefer (University of Massachusetts). However, other research staff will be involved and can act on behalf of the people in charge.

What is the purpose of this study?

By doing this study, we hope to learn how well a program called the "Well-Being Promotion Program" works to increase middle school students' emotional well-being and success in school.

Where is the study going to take place and how long will it last?

The study will take place at your middle school. The Well-Being Promotion Program is a 10-week program, in which we will meet with small groups of students once a week during the school day. These meetings will take about 45 minutes. We will do activities that teach you ways to think and act that come from the science of happiness. We will practice grateful thinking. We will do nice things for others. And we will find out our personal strengths. After the program is done, small groups will meet about once per month to review activities.

We will randomly pick half of the students to start the Well-Being Promotion Program *now*, during this school year. The other half of the students will be offered the program *later*, during the second half of the next school year. If you are in the *program now* group, this school year you will spend about 10 hours of time in program activities (13 meetings, each about 45 minutes long). At 2 more visits this school year, you will be asked to tell us your thoughts about the program. Each of those visits will take about 30 minutes.

All students- in the *program now* or *program later* groups- will be asked to participate in 4 visits to complete surveys about your thoughts, feelings, and behavior. Each visit will take about 45-60 minutes (3 visits this school year, 1 visit next school year). Your answers on surveys will be kept private unless you are in danger. If you are in danger, we will have to get help to make sure you stay safe. During the same time as these 4 visits, we will ask one parent/caregiver and one teacher to complete surveys about your behavior at home or school.

The total amount of time you will be asked to volunteer for this study is 4 hours over the next year and a half if you are in the *program later* group, and 15 hours over the next year and a half if you are in the *program now* group. For all students, we will look at your grades, test scores, attendance, and referrals to the office. Along with the information from the surveys, this helps us know how students change over time.

What things might happen if you participate?

To the best of our knowledge, your participation in this study will not harm you. Although we have made every effort to try and make sure this doesn't happen, it is possible that some questions on the surveys may upset you. If so, we will tell the school counselor or psychologist, as that person may be able to help you. In addition to the things that we have already talked about, you may experience something unpleasant that we do not know about at this time. Because of the COVID-19 pandemic, in-person interactions with any extra people may increase your risk of getting the novel coronavirus. The researchers from USF/UMass who visit your school will follow health and safety measures required by your district and USF/UMass. However, we cannot guarantee that you will not be exposed to the virus.

Is there benefit to me for participating?

We cannot promise that you will receive benefit from taking part in this research study. However, some people have experienced increases in life satisfaction and better relationships when they take part in the Well-Being Promotion Program.

What other choices do I have if I do not participate?
You do not have to participate in this research study.

Do I have to take part in this study?
You should talk with your parent, guardian, or other caregiver about taking part in this study. If you do not want to take part in the study, that is your decision. Your decision to take part or not take part will not affect your school grades or your relationships with any one from your school or USF/UMass. You should only take part in this study if you want to volunteer.

Will I receive any compensation for taking part in this study?
You will receive $5 gift cards or gifts worth that much 4 to 6 times for taking part in this study. Specifically, you will receive a $5 gift card or gift of the same value after each time you complete the surveys about your current thoughts, feelings, and behaviors, up to 4 times. If you are in the *program now* group, you can receive the $5 gift card or gift each time you tell us your thoughts about the Well-Being Promotion Program, up to 2 times. If you stop participating before the study is over, the payment you receive will be based on the amount of time you were in the study.

Who will see the information about me?
Your survey responses will be private. Your information will be added to the information from other people taking part in the study so no one will know who you are. But, if you tell us you plan to hurt yourself or someone else, we'll have to let someone at school know in order to keep you safe. When you take part in the Well-Being Promotion Program, the researchers will do everything we can to make sure what you say in the group meetings is kept confidential. However, we cannot promise that other students in your same group will keep what you say to themselves. We will remind students to respect the privacy of your fellow participants and not repeat what is said in the group to others.

Can I change my mind and quit?
If you decide to take part in the study you still have the right to change your mind later. No one will think badly of you if you decide to stop participating. Also, the people who are running this study may need for you to stop. If this happens, they will tell you when to stop and why. If you stop taking part in the study, the people who are running this study will tell your parents/caregivers so that your they know what you are doing at school.

What if I have questions?
You can ask questions about this study at any time. You can talk with your parents, caregivers, or other adults about this study. You can talk with the person who is asking you to volunteer by calling Dr. Suldo at (813) 849-8213 or Dr. Fefer at (413) 545-0211. If you think of other questions later, you can ask them. If you have questions about your rights as a research participant you can also call the USF IRB at (813) 974-5638 or contact the IRB by email at RSCH-IRB@usf.edu.

Assent to Participate

I understand what the person conducting this study is asking me to do. I have thought about this and agree to take part in this study. I have been given a copy of this form.

_____ _____
Name of person agreeing to take part in the study Date

Signature of child agreeing to take part in the study: _____

_____ _____
Printed name & Signature of person providing Information (assent) to subject Date

Appendix C: Student Demographic Form

GENERAL QUESTIONS ABOUT YOU

My school is in the state of:	[redacted]
My school name is:	
My school name is:	
Student ID assigned by School District:	
Student ID assigned by School District:	
I am in grade:	◯ 5 ◯ 6 ◯ 7 ◯ 8
My age is: ◯ 9 ◯ 10 ◯ 11 ◯ 12 ◯ 13 ◯ 14 ◯ 15 ◯ 16 ◯ 17 ◯ 18	
Birthdate:	
My gender is:	◯ Female ◯ Male ◯ Non-binary ◯ Other
Are you of Hispanic, Latino, or Spanish origin?	◯ No, not of Hispanic, Latino, or Spanish origin ◯ Yes, Puerto Rican ◯ Yes, Cuban ◯ Yes, Mexican, Mexican American, Chicano ◯ Yes, another Hispanic, Latino, or Spanish origin
My race/ethnic identity is: (select all that apply):	☐ White ☐ Black or African American ☐ Asian ☐ American Indian/Alaska Native ☐ Native Hawaiian or Other Pacific Islander ☐ Other
Please specify:	

My parents/caregivers are:

- ◯ Married
- ◯ Divorced
- ◯ Separated
- ◯ Never married
- ◯ Never married but living together
- ◯ Widowed
- ◯ Other

Please specify:

_____

Which adult(s) do you live with most of the time?

- ◯ Mother and Father
- ◯ Mother only
- ◯ Father only
- ◯ Mother and Mother's Partner
- ◯ Father and Father's Partner
- ◯ Grandparent(s)
- ◯ Equally split across two households
- ◯ Other

Please specify:

_____

One of my parent/caregiver's (for example, father's) highest education level is:

- ◯ 8th grade or less
- ◯ Some high school, did not complete
- ◯ High school diploma/GED
- ◯ Some college, did not complete
- ◯ College/university degree
- ◯ Master's degree
- ◯ Doctoral level degree (Ph.D, M.D.) or other degree beyond Master's level
- ◯ Not Applicable

My other parent/caregiver's (for example, mother's) highest education level is:

- ◯ 8th grade or less
- ◯ Some high school, did not complete
- ◯ High school diploma/GED
- ◯ Some college, did not complete
- ◯ College/university degree
- ◯ Master's degree
- ◯ Doctoral level degree (Ph.D, M.D.) or other degree beyond Master's level
- ◯ Not Applicable

	Very Much Worse	Worse	Slightly Worse	The Same	Slightly Improved	Improved	Very Much Improved
How much do you expect to improve your happiness by the end of this year if you are assigned to take part in the Well-Being Promotion Program this year?	◯	◯	◯	◯	◯	◯	◯

Appendix D: Parent Demographic Form

BACKGROUND INFORMATION ABOUT PARENT OF MIDDLE SCHOOL STUDENT

Thank you for agreeing to take part in the research project! Please complete the items below about yourself.

My child attends:

◯ T
Pas
Nor
Mid
◯ R
FL
◯ W
◯ W
◯ M

Current School Year:

◯ 2020-2021 ◯ 2021-2022 ◯ 2022-2023 ◯ 2023-2024 ◯ 2024-2025

Child Date of Birth

_____

Parent/Caregiver First Name

_____

Parent/Caregiver Last Name

_____

My relation to the child (choose what best describes you):

◯ Parent
◯ Step Parent or Parent's Partner
◯ Grandparent
◯ Foster Parent
◯ Other

Please specify:

_____

My Gender:

◯ Female
◯ Male
◯ Non-binary
◯ Other

My Age:

_____

Are you of Hispanic, Latino, or Spanish origin?

◯ No, not of Hispanic, Latino, or Spanish origin
◯ Yes, Puerto Rican
◯ Yes, Cuban
◯ Yes, Mexican, Mexican American, Chicano
◯ Yes, another Hispanic, Latino, or Spanish origin

What is your race? (select all that apply)

☐ White
☐ Black or African American
☐ American Indian or Alaska Native
☐ Asian
☐ Native Hawaiian and Other Pacific Islander
☐ Other

Please specify:

_____

Appendix E: Student-Report Measure: SLSS

QUESTIONS ABOUT YOUR SATISFACTION WITH LIFE

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, indicate how much you strongly disagree to strongly agree with the statement.

During the past several weeks...

		Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
1)	My life is going well	○	○	○	○	○	○
2)	My life is just right	○	○	○	○	○	○
3)	I would like to change many things in my life	○	○	○	○	○	○
4)	I wish I had a different kind of life	○	○	○	○	○	○
5)	I have a good life	○	○	○	○	○	○
6)	I have what I want in life	○	○	○	○	○	○
7)	My life is better than most kids'	○	○	○	○	○	○

Appendix F: Student-Report Measure: PANAS-C-10

PANAS-C-10

This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent you have felt this way in the past few weeks.

Feeling or emotion:	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
1. Sad	1	2	3	4	5
2. Happy	1	2	3	4	5
3. Scared	1	2	3	4	5
4. Miserable	1	2	3	4	5
5. Cheerful	1	2	3	4	5
6. Proud	1	2	3	4	5
7. Afraid	1	2	3	4	5
8. Joyful	1	2	3	4	5
9. Mad	1	2	3	4	5
10. Lively	1	2	3	4	5

Appendix G: Parent Report Measure: SLSS-P

Questions about Your Child's Satisfaction with Life

We would like to know your perspective on your child's satisfaction with life during the past several weeks. In answering each statement, indicate how much you strongly disagree to strongly agree with the statement.

During the past several weeks...

	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
1. My child thinks their life is going well.	○	○	○	○	○	○
2. My child thinks their life is just right.	○	○	○	○	○	○
3. My child would like to change many things in their life.	○	○	○	○	○	○
4. My child wishes that they had a different kind of life.	○	○	○	○	○	○
5. My child thinks they have a good life.	○	○	○	○	○	○
6. My child thinks they have what they want in life.	○	○	○	○	○	○
7. My child thinks their life is better than most kids'.	○	○	○	○	○	○

Appendix H: Parent Report Measure: PANAS-P-10

Questions about Your Child's Feelings

This scale has a number of words that describe different feelings and emotions. Read each item and then choose the best answer next to that word. Indicate to what extent your child has felt this way during the past few weeks. There are no right or wrong answers.

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
1. Sad	○	○	○	○	○
2. Happy	○	○	○	○	○
3. Scared	○	○	○	○	○
4. Miserable	○	○	○	○	○
5. Cheerful	○	○	○	○	○
6. Proud	○	○	○	○	○
7. Afraid	○	○	○	○	○
8. Joyful	○	○	○	○	○
9. Mad	○	○	○	○	○
10.Lively	○	○	○	○	○

Appendix I: IRB Approval

UNIVERSITY of SOUTH FLORIDA

MSS APPROVAL

July 7, 2020

Shannon Suldo
4202 East Fowler Ave., EDU 105
Tampa, FL 33620

Dear Dr. Shannon Suldo:

On 7/6/2020, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY001065
Review Type:	Expedited 5, 6, 7
Title:	Efficacy of a Selective Intervention to Improve Middle School Students' Subjective Well-Being
Funding:	Institute of Education Sciences
IND, IDE, or HDE:	None
Approved Protocol and Consent(s)/Assent(s):	• Study Protocol_Clean; • Parent Combined Consent and Permission Form 6-26-20.pdf; • Parent Permission for Student Screening_6-26-20.pdf; • School Coordinator Consent Form 6-26-20.pdf; • School Mental Health Provider Consent Form 6-26-20.pdf; • Student Assent for Intervention Evaluation_6-26-20.pdf; • Student Assent for Screening_6-26-20.pdf; • Teacher Consent Form 6-26-20.pdf; Approved study documents can be found under the 'Documents' tab in the main study workspace. Use the stamped consent found under the 'Last Finalized' column under the 'Documents' tab.

This research involving children as participants was approved under 45 CFR 46.404: Research not involving greater than minimal risk to children is presented.

Requirements for Assent and/or Permission by Parents or Guardians: 45 CFR 46.408 Permission of one parent is sufficient. Assent will be obtained as outlined in the IRB application.

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This approval covers research activities conducted only at USF. All other sites engaged in the research must receive site specific approval prior to research activities beginning at their site.

Within 30 days of the anniversary date of study approval, confirm your research is ongoing by clicking Confirm Ongoing Research in BullsIRB, or if your research is complete, submit a study closure request in BullsIRB by clicking Create Modification/CR.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103) including, in particular, the reporting requirements outlined in the section titled "What are my obligations after IRB approval?" The overall PI is responsible for ensuring timely reporting of events that occur at all sites.

Sincerely,

Jennifer Walker
IRB Research Compliance Administrator