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Improving the Subjective Well-Being of Autistic Youth Utilizing a Positive Psychology Intervention

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by

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ABSTRACT

This study utilized a single-case multiple-baseline design to analyze the effects of a ten-week multi-component positive psychology intervention, the Well-Being Promotion Program, on the subjective well-being of autistic youth. This thesis addressed a gap in the literature regarding the effectiveness of positive psychology interventions when administered to autistic middle schoolers. Three autistic middle schoolers participated in this single-case design study. Dynamic decision-making was used to stagger intervention implementation across the three participants. Life satisfaction and positive/negative affect data were collected via a Qualtrics survey that was administered twice per week. Through visual analysis and Baseline Corrected Tau calculations, it was found that two out of the three participants reported gains in life satisfaction, and changes in positive/negative affect varied. Upon intervention completion, participants shared their thoughts regarding the Well-Being Promotion Program (i.e., usefulness, recommendations for change, acceptability) in an individual interview in order to report their experiences in part with the intent for the research team to make the intervention more accessible and useful for autistic youth in the future. Sentiments included experiencing benefits from engaging in positive activities such as gratitude journaling and experiencing positive changes upon engaging in the Well-Being Promotion Program, with no consistent recommendations for change. Accommodations such as breaks, access to reinforcers upon session completion, access to fidgets, choices for completing positive activities, and advanced notice on schedule changes should likely be maintained when delivering the intervention to autistic youth through individual counseling.

CHAPTER ONE:

INTRODUCTION

Background Information

Early adolescence (ages 9-14) is a developmental period during which youth undergo many changes (i.e., physical maturation, entering/exiting middle school) in a short period of time (Oberle et al., 2010). In addition to undergoing these sometimes challenging changes, adolescents have been shown to consistently report lower levels of subjective well-being (SWB, i.e., happiness) when compared to younger children (Proctor et al., 2009). More recently, Casas and Gonzalez-Carrasco (2019) found that SWB tends to decline around the time youth turn ten years old. Similarly, it has been found that across countries, life satisfaction, on average, tends to decrease as youth transition from elementary to middle school and then to high school (Cavallo et al., 2015). Furthermore, youth with mild disabilities have been shown to report lower levels of life satisfaction, specifically in the domain of friendships, when compared to their typically developing peers (Brantley et al., 2002). The literature to date has shown the promise of providing positive psychology interventions (PPIs) to adolescents in general (Tejada-Gallardo et al., 2020). For example, in a meta-analysis, Tejada-Gallardo and colleagues (2020) found a significant small effect size for SWB, psychological well-being, and effects on depression symptoms; effects on psychological well-being and depression were observed to be significant over time. Providing these positive psychology interventions during early adolescence allows for a preventative approach to improving SWB before youth go on to high school.

Life satisfaction is a vital component of SWB with high life satisfaction in youth identified as a buffer against negative effects such as stress and psychopathology, which are likely to occur in middle adolescence (Proctor et al., 2009). Reported predictors of higher life satisfaction in youth include 1) positive perceptions of parental support, 2) high-quality peer relationships, 3) self-esteem, and 4) positive perceptions of academic performance (Martin & Huebner, 2007; Neto, 2001; Oberle et al., 2010; Suldo et al., 2008). On the other hand, low life satisfaction in youth has been a reported predictor of 1) decreased support from caregivers, 2) decreased engagement in the school setting, 3) decreased positive peer interactions, and 4) increased peer victimization (Lewis et al., 2011; Martin & Huebner, 2007; Saha et al., 2010). Therefore, by improving the life satisfaction of youth, practitioners have an opportunity to improve youth's SWB while potentially buffering against 1) symptoms of stress and psychopathology, 3) low levels of parental support, 3) decreased academic engagement, 4) decreased positive peer interactions, and 5) peer victimization.

Autism Spectrum Disorder (ASD) is a neurodevelopmental divergence mainly characterized by impairments in social behaviors and restricted interests that may make it difficult to form meaningful relationships (Beauchaine & Hinshaw, 2017; CDC, 2021). The latest recorded prevalence of autistic youth was in 2016, when one in every 54 children were identified as autistic (Maenner et al., 2020). While the prevalence of autistic youth has consistently increased through the years, there has been a lack of research assessing the SWB and life satisfaction of autistic youth as well as possible effective PPIs.

As aforementioned, a growing literature supports the notion that PPIs can improve the SWB of children and adolescents (Tejada-Gallardo et al., 2020). A PPI that has shown promise in improving the SWB of youth is the Well-Being Promotion Program (WBPP; Suldo, 2016).

The WBPP is a multi-target, multi-component PPI that consists of ten, 30-45 minute small-group sessions with youth that aim to target factors that align with positive feelings in the past, present, and future. The WBPP has been found to be an effective PPI when provided to small groups of middle school students in general education (Roth et al., 2017). However, there is a gap in the literature regarding the effectiveness, acceptability, and usefulness of PPIs when used with autistic youth.

Overview of Key Terms

Autism Spectrum Disorder (ASD)

The American Psychiatric Association (APA; 2013) has defined autism as a neurodevelopmental disorder in which symptoms present early on in individuals causing impairments in development and daily functioning. Autistic individuals have been found to have difficulties in the realms of social skills and exhibit restrictive and/or repetitive patterns in behaviors, interests, and/or activities (APA, 2013). However, autistic individuals can vary in their symptomology, which is why the term 'spectrum' is used. For example, expressive and receptive verbal skills vary across autistic individuals. While the identification of autism has historically been more prevalent in boys when compared to girls, autism has been shown to occur in individuals across various racial, ethnic, and socioeconomic backgrounds. In 2017, it was estimated that 5,437,988 adults (2.21% of the U.S. population) were identified as being autistic (Dietz et al., 2020).

Subjective Well-Being

SWB has been constitutively defined as a combination of cognitive and emotional constructs such as life satisfaction and the frequency with which one experiences positive and/or negative feelings (Diener, 2009). More specifically, high SWB has been defined as

"experiencing high levels of pleasant emotions and moods, low levels of negative emotions and moods, and high life satisfaction" (Diener, 2009, p. 229).

Life Satisfaction

Life Satisfaction is a key construct within the construct of SWB. Diener (1984) has constitutively defined life satisfaction as a cognitive judgment of one's perceived quality of life. This cognitive judgment can be towards one's life as a whole or specific domains of one's life such as family, friends, or school (Diener, 1984).

Dual-Factor Model

Although psychopathology and mental health used to be conceptualized as falling under the same dimension, Greenspoon and Saklofske (2001) examined if the two could be separated. Psychopathology has been defined as a variation in the degree to which youth experience mental health disorders (Greenspoon & Saklofske, 2001). On the other hand, mental health has been defined as a variation in the degree to which youth experience the presence of SWB (Greenspoon & Saklofske, 2001). The dual-factor model of mental health can be broken down into four sections 1) both low psychopathology and low mental health (*Vulnerable*), 2) both high psychopathology and high mental health (*Symptomatic but content*), 3) both high psychopathology and low mental health (*Troubled*), or 4) both low psychopathology and high mental health (*Complete mental health*). Table 1 presents the dual-factor model and the mental health classifications associated with levels of psychopathology and SWB. Since research has shown that autistic youth are at an increased risk for experiencing psychopathology (i.e., anxiety and depression), improving the mental health of autistic youth might involve moving them from being troubled to being symptomatic but content or having complete mental health (Simonoff et al., 2008).

Table 1

Mental Health Classification within the Dual-Factor Model

Levels of Psychopathology	Levels of SWB	
	Average to High	Low
Elevated	Symptomatic but content	Troubled
Low	Complete mental health	Vulnerable

Note. SWB= Subjective well-being

Statement of the Problem

Early research in positive psychology involved examinations of the life satisfaction and/or SWB of typically developing youth (Proctor et al., 2009), youth with physical disabilities (Gilman et al., 2004), and youth with intellectual disabilities (Bramston et al., 2002). More recently, Franke et al. (2018) assessed life satisfaction in 46 autistic adolescents and compared life satisfaction scores on the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003). The results showed that typically developing youth reported higher rates of life satisfaction across the domains of family, friends, and self than autistic youth (Franke et al., 2018). Further, autistic youth reported lower total life satisfaction when compared to their typically developing counterparts (Franke et al., 2018). Although such studies have explored life satisfaction and SWB in autistic individuals, there is a gap regarding appropriate PPIs to improve the SWB of autistic adolescents. Results from studies such as Franke et al. (2018) have demonstrated the need to identify strategies to increase SWB in autistic adolescents.

Purpose of the Study

Due to the gap in the literature focusing on interventions to increase SWB in autistic youth, this thesis examined the effectiveness, acceptability, and usefulness of the WBPP when utilized to support autistic adolescents. Much is unknown about the effectiveness, usefulness, and acceptability of PPIs on autistic youth. Since PPIs tend to include activities such as the

strengthening of relationships, autistic youth may find the social components of PPIs to be a barrier. The research questions this thesis aimed to answer were:

1) What is the impact of the WBPP on the SWB of autistic youth who participate in the intervention?
2) To what extent do autistic youth find the Well-Being Promotion Program (WBPP) to be acceptable and useful?
3) What are the barriers of the WBPP as perceived by autistic youth?

Findings are intended to make the WBPP more accessible and useful to autistic youth.

Contributions to the Literature

This thesis aimed to fill a gap in the literature regarding the effectiveness of a PPI with young autistic adolescents. From a practical standpoint, if the WBPP does show to improve SWB in autistic youth, practitioners can utilize the WBPP to attempt to improve the SWB of autistic youth in school or clinical settings. Secondly, this thesis allowed for early autistic adolescents to advocate for the recommendations for change they would like to see within the WBPP to increase its accessibility and practicality for autistic youth in the future.

Limitations

The WBPP is a language-heavy PPI that includes abstract concepts such as gratitude, optimism, and hope. For the purpose of this study, inclusion criteria required autistic youth to be enrolled in general education classrooms. Therefore, the study was not able to provide the WBPP to autistic participants in need of more support, for example, through self-contained classrooms. This is a limitation since many autistic youth are in self-contained classrooms and could benefit from PPIs.

CHAPTER TWO:

REVIEW OF THE LITERATURE

In order to better understand the purpose of positive psychology interventions, topics such as SWB and the dual-factor model will be discussed in the following paragraphs. In continuation, a summary of the literature on the relationships between mental health and youth outcomes, including academic grades, physical health, social adjustment, and identity development will be provided. Then, ASD identification practices and symptomology will be reviewed. For example, the SWB of autistic youth will be discussed, including assessment, average levels of SWB indicators, correlates of SWB, and possible interventions. Finally, the WBPP procedures, components, and session topics will be explained.

Positive Psychology Overview

Rather than focusing on mental illnesses such as anxiety and depression, positive psychology focuses on promoting well-being and individuals' ability to thrive regardless of possible mental illness. Positive psychology allows for individuals to have access to tools that increase their well-being in a preventative manner instead of waiting to seek supports after symptoms of distress appear. Terms such as SWB or life satisfaction are indicators of how one feels about one's life in the past, present, and/or future. For example, someone who reports high SWB may be satisfied with their quality of life. More specifically, students who report high SWB may feel they are utilizing their strengths and are satisfied across domains such as school, family, and friends. To relate the importance of positive psychology to autistic youth, it is important to note that autistic youth have traditionally been made aware of their weaknesses (i.e.,

trouble communicating) rather than their strengths. Perspectives of autistic youth can pivot as the field of positive psychology allows autistic youth to be made aware of their strengths and the positive features in their lives. Since SWB is a main topic within the positive psychology field, indications of SWB will be discussed next.

Subjective Well-Being

Different constructs, such as cognition, affect, and life satisfaction, have been used to indicate SWB (Galinha & Pais-Ribeiro, 2011). Researchers have found that cognitive aspects of SWB are associated with environmental variables such as the location one lives in or one's support system, while affective aspects of SWB are associated with individual (personality) variables such as extraversion and/or openness (Schimmack et al., 2008). Other examples of individual (personality) variables include certain character strengths, such as temperance and transcendence, which have been found to be predictors of increased SWB in typically developing middle school students (Shoshani & Slone, 2013). Throughout the literature, measures of life satisfaction are commonly used to indicate levels of SWB (Proctor et al., 2009). Because life satisfaction is the most commonly studied aspect of SWB, findings related to correlates of life satisfaction in youth are described next.

Life Satisfaction

Youth life satisfaction refers to youth's subjective feelings towards their lives or specific domains such as family, friends, and/or school (Huebner, 1994). Research on correlates of life satisfaction indicate that it is related to various components of one's life. For example, typically developing adolescents (ages 9-14 years) with high-quality peer relationships report higher life satisfaction (Martin & Huebner, 2007; Oberle et al., 2010). In addition, Suldo, Shaffer, and Riley (2008) reported that typically developing adolescents (ages 14-18) with positive perceptions of

academic performance also reported higher life satisfaction. When examining the life satisfaction of autistic individuals, researchers have found a strong correlation between self-efficacy and life satisfaction (Feldhaus et al., 2015; Franke et al., 2018). In a study with 46 caregiver-adolescent dyads (ages 13-18; autistic adolescents), optimism, school support, and family coherence were strongly correlated with life satisfaction.

Some predictors of life satisfaction for typically developing youth and autistic youth have been identified. For example, Neto (2001) found self-esteem to be a strong predictor of life satisfaction in typically developing adolescents. On the other hand, Deserno and colleagues (2017) found social satisfaction (e.g., satisfaction with one's social contacts from various contexts) and societal contribution to be the strongest paths to happiness when using a network perspective with 2,341 autistic participants (ages 16-91).

Suldo and Huebner (2004) reported that high life satisfaction in typically developing adolescents (ages 9-19) is a protective factor for healthy adolescent development. Research has shown that, in general, typically developing adolescents who report high life satisfaction experience more fulfilling relationships, engage in less antisocial and violent behaviors, have more academic successes, and have increased adaptive psychosocial functioning (Gilman & Huebner, 2006; Proctor et al., 2009; Proctor et al., 2010; Suldo & Huebner, 2006). Furthermore, Suldo, Riley, and Shaffer (2006) found that life satisfaction is positively associated with typically developing youth's school satisfaction, teacher support, as well as perceived academic achievement, competence, and self-efficacy.

Low life satisfaction has been shown to predict negative effects in both relationships (e.g., parental and peer) as well as academic engagement, which can affect youth's academic success. For example, low life satisfaction in adolescents in grades 6-12 has been shown to be a

predictor for decreased support from caregivers (Saha et al., 2010). More specifically, low life satisfaction in adolescents in grades 6-8 was found to predict decreased academic engagement (Lewis et al., 2011), decreased positive peer interactions, and increased peer victimization (Martin & Huebner, 2007). A list of psychosocial correlates of lower levels of life satisfaction is displayed in Table 2. Broadening the focus to SWB, the dual-factor model will be discussed next.

Table 2
Psychosocial Correlates of Lower Levels of Life Satisfaction

Correlates	
Family	Low SES Lack of family structure Low parental involvement, emotional support, autonomy support, supervision, attachment Parental conflict
Peers	Low quantity or quality of peer relationships Bullying/peer victimization Loneliness
School	Low academic grades, self-concept Low school connectedness, engagement School dropout Negative teacher-student relations Low parental involvement
Living Environment/Community	Residential moves Low extracurricular activity participation Absence of non-parental adult role models Victim of violence
Self	Externalizing/antisocial behaviors Internalizing behaviors Social skills Risky behavior (e.g., substance use) Low self-esteem, hope, self-efficacy

Adapted from Proctor and Linley (2013) *Note*. SES= Socio-economic Status.

Dual-Factor Model

The literature on the dual-factor model encourages practitioners and researchers to focus on the construct of SWB as it is separate from mental illness. In the past, practitioners and

researchers have tended to prioritize psychopathology and hypothesized that the treatment of psychopathology would then improve youth's SWB. However, with the advancement of the dual-factor model, it has become clear that psychopathology and SWB can be supported separately. This has been made clear by researchers who have examined how individuals can experience differing levels of psychopathology and mental health.

Suldo and Shaffer (2008) examined the mental health and psychopathology of 349 adolescents ages 10-16 years. Suldo and Shaffer (2008) operationally defined complete mental health as youth who had high mental health and low psychopathology (57%), vulnerable youth were defined as having low mental health and low psychopathology (13%), content but symptomatic youth were defined as having high mental health and high psychopathology (13%), and troubled youth were defined as having low mental health and high psychopathology (17%). Suldo, Thalji, and Ferron (2011) utilized the same sample from Suldo and Shaffer (2008) and found that youth who were identified as having complete mental health, vulnerable, or content but symptomatic declined less in academic grades when compared to those who were identified as troubled. In addition, research has found that youth identified as having complete mental health have better physical health, social adjustment, identity development, and academic outcomes when compared to youth identified as vulnerable (Suldo & Shaffer, 2008).

In line with the literature on the dual-factor model, Suldo and Doll (2021) encouraged researchers and practitioners to utilize a dual-factor model when conceptualizing student mental health. This lens allows researchers and practitioners to give equal attention to promoting student well-being as well as intervening on emotional and behavioral problems. More specifically, the dual-factor model allows practitioners to engage in best practice due to its emphasis on complete mental health and its ability to better inform interventions through a multitiered system of

support (Suldo & Doll, 2021). Since utilizing a dual-factor model helps practitioners and researchers better support student SWB and mental health, adolescent self-reports of SWB and positive psychology interventions will be discussed next.

Overview of SWB and Mental Health in Middle Adolescence

Adolescents have consistently reported lower levels of SWB when compared to younger children (Casas & Gonzalez-Carrasco, 2019; Cavallo et al., 2015). However, Begeer and colleagues (2016) found that while typically developing children's (n=515) SWB decreased as they became older, autistic children (n=515) showed the opposite trend as their SWB increased with age. The children in this study were between the ages of eight and fourteen and the data were derived from two different registers of data in the Netherlands. Child SWB was measured through parental proxy-reports to a single question on a 5-point Likert scale which was *Which statement describes your child best?* with 5= *always or almost always happy*, 4= *more happy than unhappy*, 3= *equally happy and unhappy*, 2= *more unhappy than happy*, and 1= *always or almost always unhappy*. Begeer and colleagues (2016) found that parents reported lower levels of SWB for autistic youth when compared to the ratings from parents of the typically developing youth sample. More specifically, results showed that disability status accounted for a significant amount of variance on reported SWB ($p<.001$). As for the effect of age on mean scores on the proxy-reports, parents of autistic youth reported an average score in the range of 3-4 for youth while parents of typically developing youth reported an average score in the range of 4-5 (Begeer et al., 2016). Overall, this information supports the notion that autistic adolescents are in particular need of PPIs. However, the author would like to see this study replicated within the United States and use a more detailed measurement of SWB before proceeding, particularly given that life satisfaction and happiness is most typically assessed via child report of their

subjective experiences (vs. parent report of their child's emotions). Moving forward, autistic youth might also utilize the skills acquired through PPIs on their own and into older adolescence and adulthood.

Years ago, Proctor, Linley, and Maltby (2009) emphasized the importance of incorporating life satisfaction/SWB through the assessment and implementation of interventions to learn about the differential effects and impacts that PPIs can have on youths' quality of life. More recently, Doll and colleagues (2021) emphasized the use of dual-factor, multi-tiered systems of support to address students' complete mental health through utilizing interventions, screeners, and progress monitoring measures. Interventions aimed at promoting complete mental health in autistic youth are often overlooked as other supports, such as behavioral interventions, are often prioritized. Positive psychology interventions are needed for autistic youth as they have been shown to report lower levels of life satisfaction or quality of life (Egilson et al., 2017; Franke et al., 2018). In line with this need, Raley, Shogren, and Cole (2020) emphasized and supported the use of strength-based interventions to promote positive outcomes for students with disabilities. In order to better understand how to best support autistic youth through positive psychology interventions, ASD symptomology will be discussed next.

Autism Spectrum Overview

Symptomology

ASD is a neurodevelopmental disorder characterized by impairments in social and communicative behaviors, behavioral challenges, and restricted interests that may make it difficult to form meaningful, supportive social relationships (Beauchaine & Hinshaw, 2017; CDC, 2021). Studies have shown that social skills play a large role in SWB. For example, typically developing youth without adequate social skills have been shown to be more likely to

report lower levels of both SWB and life satisfaction (Bukowski & Adams, 2005). More recently, Egilson and colleagues (2017) examined a sample of 307 children (96 autistic children and 211 typically developing children) ages eight to seventeen; youth completed the KIDSCREEN-27 (KIDSCREEN Group Europe, 2006) while their parents completed the proxy-version of the same measure. The KIDSCREEN-27 is a measure validated in Iceland which includes five quality of life dimensions, 1) physical well-being, 2) psychological well-being, 3) autonomy and parent relations, 4) social support and peers, 5) school environment. Overall, autistic youth reported lower levels of satisfaction in the domain of social support and peers when compared to typically developing youth (Egilson et al., 2017).

The prevalence of ASD has consistently increased throughout the years with the latest prevalence being around one in 54 children who are eight years old, which was last reported in 2016 by the Autism and Developmental Disabilities Monitoring Network (ADDM) (Maenner et al., 2020). Common comorbidities of ASD include developmental delays and/or intellectual disabilities, with approximately 33% of autistic youth having a cognitive impairment (Beauchaine & Hinshaw, 2017; Maenner et al., 2020). In regard to medical comorbidities, Kohane and colleagues (2012) reported that epilepsy, gastrointestinal disorders, and a variety of psychiatric conditions are associated with ASD. The psychiatric conditions associated with ASD include attention-deficit/hyperactivity disorder, specific phobias, obsessive compulsive disorder, social anxiety disorder, and depression (Leyfer et al., 2006; Simonoff et al., 2008). Since studies have reported negative associations between life satisfaction and internalizing behaviors such as depression and anxiety (as reviewed by Proctor et al., 2009), it is pertinent to improve the life satisfaction of autistic youth who may be at increased risk of experiencing internalizing disorders.

The first set of diagnostic criteria for ASD in the DSM-V includes persistent deficits in social communication/interaction across various contexts as manifested by 1) social-emotional reciprocity, 2) non-verbal communicative behaviors, and/or 3) deficits in developing and maintaining relationships (APA, 2013). The second set of diagnostic criteria for ASD includes restricted and repetitive patterns of behaviors, interests, and/or activities (APA, 2013). The DSM-V explains that the restrictive/repetitive behaviors must be manifested by 1) stereotyped or repetitive motor movement, use of objects, or speech, 2) insistence on sameness or ritualized patters of behaviors, 3) highly restricted and fixated interests, and/or 4) hyperactivity to sensory input. For a medical diagnosis of ASD, the described symptoms must cause a significant impairment in one's day-to-day life and must not be better explained by another disability (APA, 2013). The severity of ASD varies across three different levels is described in Table 3.

Table 3

Severity Levels of ASD

Severity Level	Social Communication	Restricted, Repetitive Behaviors
Level 3 "Requiring very substantial support"	Severe deficits in verbal/non-verbal social communication skills cause severe impairments in functioning and very limited initiation of social interactions.	Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors interfere with functioning. Great distress/difficulty changing focus/attention.
Level 2 "Requiring substantial support"	Marked deficits in verbal/non-verbal social communication skills; social impairments apparent even with supports in place; and limited initiation of social interactions.	Inflexibility of behavior, difficulty coping with change, or other restricted/repetitive behaviors appear frequently and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus/attention.
Level 1 "Requiring support"	Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions. May appear to have decreased interest in social interactions.	Inflexibility of behavior causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems with organization and planning negatively affect independence.

Adapted from the DSM-V (APA, 2013)

While the criteria from the DSM-V are typically used for a medical diagnosis of ASD, youth can be identified with ASD in the school setting through different criteria and evaluation methods. In the following paragraph, the Florida standards will be discussed, but it should be noted that eligibility for identification of ASD in the school setting varies across states. In order for youth to be identified with ASD in the school setting, there must be evidence of 1) impairment in social interaction (delayed, absent, or atypical ability to relate to individuals/environments), 2) impairment in communicative verbal/non-verbal language skills, and 3) restricted/repetitive patterns of behavior, interests, or activities (State Board of Education, 2015). In the school setting, the evaluation process for ASD includes 1) behavioral observations of social skills and repetitive behaviors, 2) a social/developmental history parent interview, 3)

assessments including academic, intellectual, social-emotional, adaptive behavior, and behavioral functioning, and an assessment specific to ASD, and 4) a language evaluation/observation of social communication skills by a speech language pathologist (State Board of Education, 2015).

Subjective Well-Being of Autistic Youth

Assessment. Previous researchers have utilized parent reports, student self-reports, and a combination of the two when examining the SWB of autistic youth and typically developing youth. As described earlier in this document, Begeer and colleagues (2016) collected caregiver reports of youth SWB from caregivers of autistic children and caregivers of typically developing children. For this study, participants included 1,030 individuals ages 8-14 from the Netherlands. This study found that, on average, caregivers of autistic children reported their children as having lower levels of SWB when compared to the parents of the typically developing children (Begeer et al., 2016). However, SWB was measured using a single-item measure asking parents '*Which statement describes your child best?'* with 5= *always or almost always happy*, 4= *more happy than unhappy*, 3= *equally happy and unhappy*, 2= *more unhappy than happy*, and 1= *always or almost always unhappy.*

While Begeer et al. (2016) utilized caregiver reports of student SWB, other researchers such as Franke et al. (2018) have utilized both caregiver reports and student self-reports via the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003) to measure life satisfaction. Franke and colleagues (2018) examined a sample of 113 children (46 autistic children and 67 typically developing children) ages 13 to 18; adolescents completed the BMSLSS (Seligson et al., 2003) while their caregivers reported their estimates of their children's life satisfaction. This study found a statistically significant large correlation (r = .64) between

autistic youth self-reports of life satisfaction and their caregivers' reports of their children's life satisfaction (*n*=41 dyads). Although a large correlation was found, it was not near 1.0 and Franke et al. (2008) noted that autistic youth may be less likely to communicate with their caregivers regarding their internal states, making it difficult for caregivers to accurately report on their children's life satisfaction.

Overall, Franke et al. (2008) concluded that youth self-report would be beneficial in informing future interventions, specifically interventions aimed at promoting life satisfaction. Similar conclusions were formed by Egilson et al. (2017), and McDougall et al. (2012) as their studies found that autistic adolescents reported higher levels of quality of life than their caregivers reported, specifically with regard to psychological well-being.

Average Levels of SWB Indicators. Researchers examined life satisfaction reports of 80 typically achieving adolescents and 80 adolescents with "mild" disabilities in grades 9-12 who attended school in either self-contained classrooms or resource programs (Brantley et al., 2002, p 323). Although the specific types of disabilities were not reported, the students with mild disabilities had all received a special education classification through IDEA criteria and did not attend regular standards education classes—instead, their classes ranged from self-contained to resource classrooms (Brantley et al., 2002). The researchers found that adolescents in grades 9-12 with mild disabilities self-reported comparable levels of life satisfaction when compared to their typically achieving peers (Brantley et al., 2002). However, the students with mild disabilities reported lower life satisfaction in the domain of friendships and higher life satisfaction with their school experiences when compared to their typically achieving peers (Brantley et al., 2002).

More recently, Gaspar et al. (2016) examined the discrepancies between SWB reports in typically developing youth and youth with special education needs in Portugal. While the study had a sample size of 1,181, only 2.6% of the sample identified as having special education needs. Gaspar and colleagues (2016) reported that youth with special education needs presented low rates of SWB, optimism, resilience, self-esteem, and social support satisfaction. In addition, Franke and colleagues (2018) examined the life satisfaction of 113 adolescents, including typically developing youth (n = 67) and autistic youth (n = 46) with a mean age of 14.98 (range: ages 13 to 18). Participants completed the BMSLSS (Seligson et al., 2003) to assess for life satisfaction. autistic adolescents tended to report lower rates of satisfaction in the domains of family, friends, self, life, and total life satisfaction when compared to their typically developing peers (Franke et al., 2018). On the other hand, significant differences in satisfaction within the school or neighborhood domains were not found when comparing ratings between typically developing adolescents and autistic adolescents (Franke et al., 2018). Moreover, Egilson and colleagues (2017) found that autistic youth (n=96) reported lower levels of well-being when compared to their typically developing peers (n=211) across the domains of physical well-being, autonomy and caregiver relations, social support and peers, and school environment on the KIDSCREEN-27 (KIDSCREEN Group Europe, 2006).

In sum, autistic adolescents report moderate to high levels of life satisfaction (Franke et al., 2018; McDougall et al., 2012). However, findings have shown that, on average, youth with disabilities report lower levels of life satisfaction when compared to typically developing youth (Brantley et al., 2002; Egilson et al., 2017; Franke et al., 2018). Due to this discrepancy, researchers emphasize the potential benefit of interventions that target social relationships,

autonomy, optimism, and character strengths for autistic youth (Brantley et al., 2002; Egilson et al., 2017; Franke et al., 2018; Gaspar et al., 2016).

Intervention. In the last ten years, studies of the effectiveness of PPIs with youth have increased substantially. A recent meta-analysis by Tejada-Gallardo and colleagues (2020) analyzed nine randomized and non-randomized controlled trials which examined the efficacy of various PPIs on typically developing youth (ages 10-18). This meta-analysis indicated evidence for the efficacy of multi-component PPIs when utilized in school settings for the promotion of students' complete mental health both in short-term and long-term timelines (Tejada-Gallardo et al, 2020). More specifically, results showed small effects for SWB (g=0.24), psychological well-being (g=0.25), and depression symptoms (g=0.28) (Tejada-Gallardo et al., 2020).

However, studies on the effectiveness of PPIs on autistic youth are lacking. There has been research done on the effectiveness of PPIs on caregivers of autistic youth (Jones et al., 2018; Martin et al., 2019), but no studies to date examining PPIs when utilized with autistic youth. Some guidance in the literature suggests the potential usefulness of utilizing constructs from positive psychology with autistic youth. For instance, Raley and colleagues (2020) emphasized how the use of strength-based approaches, such as focusing on youth's character strengths, can support meaningful outcomes in youth with disabilities since youth with disabilities may have been traditionally defined by their weaknesses (e.g., deficits in social skills, engaging in aggressive behaviors, engaging in noncompliant behaviors). Wehmeyer and Shogren (2017) explained how goal setting, such as writing one's goals, can be a beneficial positive psychology activity for youth with disabilities. Furthermore, engaging autistic youth in activities that involve hope, autonomy, and connectedness can lead to resilience (Dykshoorn & Cormier, 2019). It can be hypothesized that allowing autistic youth to choose the positive psychology

activities they would like to engage in would aid their autonomy which has been linked to the quality of life of autistic youth (Egilson et al., 2017). In sum, preliminary evidence suggests that PPIs have the potential to aid in the life satisfaction of autistic youth. Furthermore, the PPIs utilized with autistic youth should emphasize and reinforce their autonomy, character strengths, and hope (Dykshoorn & Cormier, 2019; Egilson et al., 2017; Raley et al., 2020; Wehmeyer & Shogren, 2017).

Positive Psychology Interventions

The purpose of PPIs is to create positive behavioral, social, psychological, and academic outcomes (Proctor & Linley, 2013). PPIs aim to achieve this by teaching individuals about positive activities aimed at cultivating positive feelings, behaviors, and/or cognitions (Sin & Lyubomirsky, 2009). Single-component supports include PPIs that focus on one positive activity, such as character strengths. On the other hand, multi-component supports include PPIs that utilize multiple positive activities such as gratitude, character strengths, and optimistic thinking.

The Well-Being Promotion Program

The WBPP is a multi-target, multi-component (i.e., youth and caregivers) PPI that consists of ten 30-45 minute sessions that aim to target factors that align with SWB (Suldo, 2016). These factors include gratitude, kindness, signature strengths, savoring, hope, and optimism. The intervention is based on a theoretical framework in which SWB is grounded in the frequency of positive emotions regarding one's past, present, and future (Seligman, 2002). In line with this theory of authentic happiness, the WBPP aims to evoke students' positive emotions about their past, present, and future through positive activities within and outside of sessions led by trained school mental health counselors. For example, within a session, a counselor introduces students to a positive activity, such as keeping a gratitude journal to evoke positive feelings

about one's past. After each session, youth are guided to practice that given positive activity at home and share what they learned with their caregivers. Figure 1 presents the sequence of the WBPP and all of the positive activities shared through each session. Table 4 presents the positive activities included in the WBPP as well as their use for increasing positive emotions in the past, present, and future. In line with the ecological validity model (Bernal et al., 1995), the WBPP allows for interventionists to utilize various metaphors, concepts, goals, content, and instructional methods in order for the information to reach the target population in the most relevant/individualized way possible.

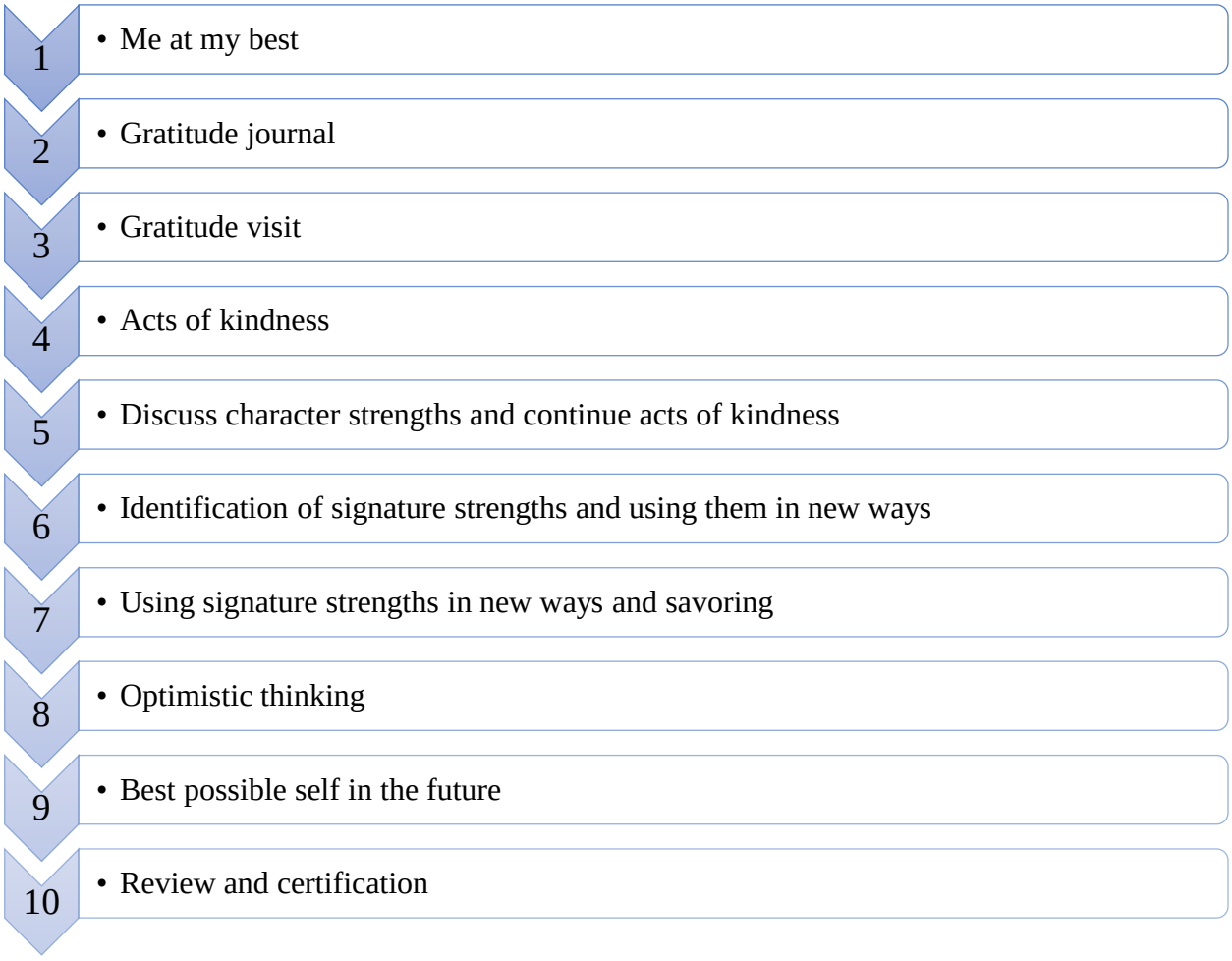

Figure 1
Sequence of WBPP Weekly Sessions and Positive Activities
Adapted from Suldo (2016)

Table 4

Positive Activities in the Past, Present, Future

Past	Present	Future
You at Your Best	Acts of Kindness	Best Possible Self in the Future
Gratitude Journaling	Identify and Apply Signature Strengths	Optimistic Thinking
Gratitude Visits	Strengths Spotting Savoring	

Adapted from Suldo (2016)

The WBPP includes a caregiver involvement component involving psychoeducation for parents and guardians. This caregiver information session allows parents and guardians to learn about the history of positive psychology and the goals of positive psychology. The information session then goes on to describe the WBPP and its components. Caregivers are then encouraged to complete a purposeful activity from the WBPP such as gratitude journaling to experience what their children will be doing in the intervention. Finally, research and resources are shared with caregivers to aid them in supporting their families in the home environment through positive psychology practices. At the end of the information session, caregivers are encouraged to voice any questions or concerns they may have.

Throughout each session of the WBPP, caregivers are provided with handouts after their youth complete each session. The one-page handouts include a summary of what their child learned in that specific session, the assigned weekly at-home practice activities, and a summary on how the caregiver can implement the content in the home setting. The caregiver handouts aim at increasing parental knowledge of the positive activities so that they can generalize and utilize those positive activities with their family in the home setting (Roth et al., 2017). Although it has not been specifically examined with the WBPP, research has shown that family-related variables such as perceived intrinsic and extrinsic caregiver support are positively related to youths' life satisfaction (Oberle et al., 2010).

The efficacy of the WBPP was first reported in a study by Suldo, Savage, and Mercer (2014). This study included 55 6th grade students who were identified as having room for growth in regard to life satisfaction. Suldo, Savage, and Mercer (2014) utilized random assignment for the intervention condition (WBPP) and the wait-list control condition. Overall, results showed a significant increase in life satisfaction for the youth in the intervention condition when compared to the youth in the control condition. Data on the youth's life satisfaction were also collected at 6-month follow-up, these data showed that gains in life satisfaction were maintained by the youth in the intervention condition (Suldo et al., 2014). As for internalizing symptoms of psychopathology, the youth in both the intervention and control groups reported statistically significant decreases from pre- to post-intervention. Neither group reported statistically significant decreases in their externalizing symptoms of psychopathology from pre- to post-intervention. Overall, between-group differences in reports of internalizing and externalizing symptoms of psychopathology from pre- to post-intervention to follow-up were not statistically significant (Suldo et al., 2014).

In 2017, Roth, Suldo, and Ferron examined the impact of the WBPP with a sample of 42 7th grade students. The participants were randomly assigned to the intervention group (n=21) and the control group (n=21). Student mental health (life satisfaction, affect, internalizing, and externalizing behaviors) were examined at baseline, after the administration of the WBPP, and about two months following the termination of the WBPP. Student life satisfaction was measured using the Student Life Satisfaction Scale (SLSS; Huebner, 1991) and the BMSLSS (Seligson et al., 2003), and affect was assessed using the Positive and Negative Affect Scale for Children (PANAS-C; Laurent et al., 1999). Results at post-intervention indicated that students who were assigned to the intervention condition reported significant gains in life satisfaction ($p < .02$, d

=.53) when compared to the control group (Roth et al., 2017). At the time of the 7-week follow-up, the average SLSS score for the intervention group (4.55) was higher than the control group (4.27) (Roth et al., 2017). Gains in positive affect among the intervention condition were also evident at post-intervention ($p < .001$, d=.76) and maintained at follow-up ($p < .001$, d=.81). It is also important to note that there were trends ($p < .10$) in reductions in the intervention group's negative affect, internalizing, and externalizing problems when compared to the control group (Roth et al., 2017). More importantly, those significant gains and reductions were maintained during the 2-month follow-up period (Roth et al., 2017). In sum, this study provides support for the likely positive impact of the WBPP on middle school students' SWB, specifically improvements in life satisfaction and positive affect. The extent to which these findings from research with typically developing students generalize to autistic youth is unknown.

Summary

Overall, autistic youth could benefit from supports aiming to improve their SWB as they have been shown to report lower levels of life satisfaction than typically developing youth (Brantley et al., 2002; Egilson et al., 2017; Franke et al., 2018). While there is a lack of research regarding appropriate PPIs and their effectiveness with autistic youth, researchers have examined components of PPIs that may be useful for autistic youth, such as strength-based interventions (Raley et al., 2020) and interventions that aid in youth's hope (Dykshoorn & Cormier, 2019). While the research supporting the WBPP and its use with typically developing youth is promising, more research is needed on its use with diverse populations. Overall, the WBPP has the potential to support autistic youth and their SWB as it is a multi-component intervention that includes purposeful activities, including the identification and use of character strengths and hope. Finally, the WBPP allows for autistic youth to engage in autonomy as specific sessions of

the WBPP allow for youth to engage in the purposeful activities they believe are most useful to them. This study addresses gaps in the literature by examining the acceptability and efficacy of the WBPP with a sample of middle school autistic youth.

CHAPTER THREE:

METHODS

In order to provide a context for this study evaluating the WBPP when used with autistic youth, this chapter describes the study design, participants/design, ethical considerations, and materials and measures. More specifically, a review of the reliability and validity of the screener and quantitative measures used will be provided. In addition, a qualitative measure to examine youth's acceptability and usefulness of the WBPP will be reviewed. Procedures for data collection and data analysis are also discussed.

Participants and Setting

Three adolescent participants who met the following inclusion criteria were recruited and successfully enrolled in this study: a) Individualized Education Program classification or medical diagnosis of ASD; b) currently attending middle school (6^{th}-8^{th} grade); c) English is considered the primary language; d) able to communicate verbally, and e) enrolled in a general education or gifted classroom for at least a year prior to the start of the study. Although the researcher initially aimed to enroll five participants, only 3 out of 11 students who were screened and met eligibility criteria ultimately enrolled, due to a lack of caregiver consent and child assent. Also of note, a 6^{th} criteria for study inclusion criteria originally included the youth having access to a smartphone, tablet, or computer/laptop for progress monitoring measures. However, upon recruitment, this researcher learned only one participant had access to a phone and was not allowed to text. Therefore, instead of having the participants complete progress monitoring measures via smartphone/tablet, the researcher helped all participants complete the progress monitoring

measures utilizing Qualtrics on the researcher's personal laptop in the school setting. While participants originally planned to complete the measures on their own, this researcher found that the participants often had questions about the items on the measures even after the participants had completed the measures multiple times. Research supports the use of Qualtrics-based completion of measures with autistic adolescents (Kovac et al., 2016).

Participants were recruited for screening and intervention procedures through their attendance at a middle school in a large southeastern school district. A school counselor identified autistic youth by searching school records for autistic students on their IEP. The screener utilized was the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003). The BMSLSS briefly identified those students who have room for growth in their SWB (i.e., mean scores ≤ 6 on the 1.0 to 7.0 range of scores), and the students with the most room for growth were invited to take part in the intervention. While participants considered English as their primary language, caregiver handouts describing each session of the WBPP and the caregiver information session were available in both English and Spanish. The three student participants who met the inclusion criteria and enrolled in the study are described below.

- **Participant 1**: Participant 1 was a 12-year-old White male in 6th grade with an individualized education plan (IEP) for ASD. During screening, his BMSLSS average was 4.3. During recruitment, Participant 1 was hesitant about the study due to possible changes in his schedule. Throughout the study, Participant 1 grew to be more comfortable with the changes in his schedule and showed excitement when coming to each session.
- **Participant 2**: Participant 2 was a 13-year-old Black male in 8th grade. Participant 2 had a medical diagnosis of ASD, with a specific-learning disability being his primary exceptionality listed on his IEP. During screening, his BMSLSS average was 4.67.

During the recruitment process, Participant 2 shared he was excited to start participating in the study as he was motivated to learn tools to increase his happiness through the program.

- **Participant 3**: Participant 3 was a 13-year-old biracial male in 7th grade with an IEP for ASD. During screening, his BMSLSS average was 6.0. During recruitment, Participant 3 was hesitant about participating in the study due to possible changes in his schedule and the social component of the program (i.e., interacting with a new adult, the researcher). Upon speaking with his caregiver and the participant, a plan was to make sure Participant 3 was comfortable during the study. This included having access to fidgets during sessions, having access to breaks when needed, along with having access to five minutes of a preferred video game upon completion of each program session. The participant and his caregiver expressed that having access to fidgets and breaks would help the participant with his comfort regarding the social component. Access to five minutes of a video game upon completion of each session motivated the participant to attend the intervention sessions even though possible changes in his schedule may arise.

Ethical Considerations

Caregivers of potential participants were provided an IRB-approved consent form (see Appendix A). Potential participants were also provided with an IRB-approved child assent form (see Appendix B). The IRB consent and assent forms emphasized that youth's participation was voluntary, and they may choose to stop participating at any point in time with no penalties. Participants were informed of the study purpose, procedures, data collection frequency, and information regarding confidentiality. The IRB-approved consent and assent forms explained how gift cards would be provided to incentivize study participation. Overall, the confidentiality

of all participant data was ensured by keeping data sets on a secure and password-protected online file along with the de-identification of all participant data.

Materials and Measures

Well-Being Promotion Program

The WBPP includes an intervention manual with defined procedures for the interventionist as well as a fidelity checklist for each of the ten sessions. Student handouts for in-session and at-home practice are included in the WBPP intervention manual (Suldo, 2016). All ten caregiver handouts describing each session in English are also included in the WBPP intervention manual. Since none of the caregivers spoke Spanish, only the English caregiver handouts were shared.

A description of each session in the WBPP is provided in the "Procedures" section of this chapter. Potential modifications to the WBPP to increase the likelihood of use with autistic youth included giving participants the option to draw instead of write when completing the purposeful activities and the option to have the interventionist write for the participants as they shared what they would like written down. For example, when asked to write five things participants are grateful for in a gratitude journal, participants could draw the things they were grateful for. In order to keep participants engaged and motivate youth to participate in the discussions during the sessions, youth were reinforced for participating by the delivery of reinforcers such as behavior-specific praise, breaks, and/or time-limited access to a video game at the end of the session. Participants were rewarded for completing their homework assignments with the youth's preferred reinforcers which were identified by the participants as reinforcing during the first meeting with this researcher (i.e., stickers, fidget toys, erasers, pens). In this author's use of the WBPP with an autistic adolescent as part of a service activity associated with supervised

practicum during the Spring semester of 2021, this researcher used the WBPP in 100% adherence with the manual but had to make modifications for student motivation/engagement by rewarding the student with preferred reinforcers at the end of each session (i.e., a game of tic-tac-toe).

Throughout each session of the WBPP, data on the fidelity of intervention (FOI) implementation was collected by the interventionist with an aim of scoring at or close to 100%, with 80% or above of components implemented being acceptable. The FOI forms are scored by the interventionist; they check off the items on the FOI checklist as they complete the session and then calculate the number of items completed divided by the total amount of items to be tracked for the particular session. There were separate FOI checklists for each session, with each form ranging from 10-13 items. See Appendix C for an example of an FOI checklist form. Data were also collected each session for homework assignment completion and caregiver involvement, such as if the caregiver received the handout and whether the activities learned were discussed with someone at home. If the student completed all the homework for that session, they would receive a "2," and if they discussed activities with someone at home, they would receive a "2". If the student only completed part of the homework, they would receive a "1", and if the student only gave the handout to their caregiver without discussing it, they would receive a "1". If the student did none of the above, they would receive a "0". These data can be found below in Tables 6, 7, and 8.

Quantitative Measures

During the screening process, initial life satisfaction was measured through the BMSLSS (see Appendix D; Seligson et al., 2003) as previous researchers have been successful in utilizing this measure to assess life satisfaction in autistic youth (Franke et al., 2018). During the

intervention process, SWB was then measured through the BMSLSS (Appendix D; Seligson et al., 2003) and the shortened child-version of the Positive and Negative Affect Scale (Appendix E; PANAS-C-10; Ebesutani et al., 2012). Caregiver ratings of the youth's SWB were obtained throughout the study to permit a secondary source of information about the outcomes. In particular, caregivers were asked to complete the caregiver versions of the BMSLSS and PANAS-C-10 (see Appendices F and G), in which they estimated their perceptions of their child's life satisfaction and affect, respectively. Refer to Table 5 for a summary of the study variables and the constitutive and operational definitions.

While many of the psychometric properties of these measures have not been evaluated with samples of autistic youth in particular, researchers have attempted to better understand these measures and their use with autistic populations. While no studies were found utilizing the PANAS-C-10 (Ebesutani et al., 2012) with autistic youth, researchers have been successful in utilizing the PANAS-C (Laurent et al., 1999) with autistic adolescents when modifications were made (Kovac et al., 2016). The modifications to these measures and their psychometrics will be discussed next.

BMSLSS

The BMSLSS contains six items that aim to assess middle and high school students' life satisfaction across domains. These domains include 1) Family, 2) Friends, 3) School, 4) Neighborhood, 5) Self, and 6) Global Life Satisfaction (Seligson et al., 2003). Students respond to the items ("I would describe my satisfaction with my *family life* as…") on a 7-point scale: 1= *terrible*, 2= *unhappy*; 3= *mostly dissatisfied*; 4= *mixed (about equally satisfied and dissatisfied)*; 5= *mostly satisfied*; 6= *pleased*, and 7=*delighted.* A composite life satisfaction score is created by averaging responses to the six items to arrive at a mean score between 1.0 (lowest) to 7.0

(highest). The BMSLSS has been shown to have high internal consistency α=.75 with early adolescent youth (Seligson et al., 2003). Furthermore, convergent correlation coefficients between the BMSLSS and the Multidimensional Students' Life Satisfaction Scale (MSLSS; Huebner, 1994) have been reported as substantial, with a mean of .53 (Seligson et al., 2003). Franke and colleagues (2018) found preliminary support for the reliability and validity of the BMSLSS when used as a self-report measure for autistic youth (α>.80). Regarding typically developing youth, Suldo, Savage, and Mercer (2013) defined room for growth to be indicated by a mean score between 1.0 and 6.0 on the 7-point scale. A caregiver version of the BMSLSS was also utilized to collect caregiver perspectives; the BMSLSS caregiver version can be found in Appendix F. The BMSLSS was administered throughout the baseline and intervention periods twice per week for progress monitoring purposes via a Qualtrics survey.

PANAS-C-10

The PANAS-C-10 is a shortened self-report tool adapted from the PANAS-C (Ebesutani et al., 2012; Laurent et al., 1999). The PANAS-C-10 contains 10 items, and uses a 5-point response format: 1= *very slightly or not at all*; 2= *a little*; 3= *moderately*; 4= *quite a bit*; 5= *extremely*. The PANAS-C-10 measures positive (i.e., happy, cheerful, proud) and negative affect (i.e., sad, scared, miserable) which can provide indices of the affective component of SWB (Ebesutani et al., 2012). Acceptable psychometric properties of the PANAS-C have been found across ages 6-18, with high internal consistency with an alpha coefficient of .92 for the negative affect scale and .89 for the positive affect scale (Laurent et al., 1999). Strong construct validity for the relationships with anxiety and/or depression has also been found for the PANAS-C with positive affect, r=-.3 and r=.55, for negative affect r=.68 and r=.6 (Laurent et al., 1999). More

specifically, the PANAS-C-10 has shown strong internal consistency reliability with a Cronbach's alpha of .86 for positive affect and .82 for negative affect (Ebesutani et al., 2012).

This author could not locate any studies using the PANAS-C-10 with autistic youth. However, one study examined the larger PANAS-C with a sample of autistic individuals. In particular, Kovac and colleagues (2016) modified the PANAS-C by making the Likert scale labels less complex. These same modifications were made to the student and caregiver versions of the PANAS-C-10, these modifications can be seen in Appendices E and G. In addition, the wording in the directions of the PANAS-C-10 measures was edited to make the directions appropriate for the administration of the PANAS-C-10 twice per week. The PANAS-C-10 was administered to participants throughout the baseline and intervention periods twice per week for progress monitoring purposes via a Qualtrics survey.

C-SRS

The Child Session Rating Scale (C-SRS; Duncan et al., 2003) is a self-report inventory that gathers information on therapeutic alliance for individual therapy sessions. The four areas of the C-SRS include 1) relationship/listening, 2) importance of topics discussed, 3) preference of topics discussed, and 4) overall experience in the session. The C-SRS is based on the Session Rating Scale (SRS; Miller et al., 2000), which has strong internal consistency reliability (.93) when utilized with adults in a clinical sample. However, the reliability of the C-SRS for children and adolescents has not been reported. The C-SRS allowed the researcher to progress monitor therapeutic alliance and attain information on preferred positive psychology activities for each participant since each session of the WBPP includes a different positive psychology activity. An example of the C-SRS can be found in Appendix H.

Table 5

Summary of Study Variables

Study Variable	Constitutive Definition	Operational Definition
Subjective well-being		
Life satisfaction	Perceptions that one's life is going well	BMSLSS
Positive affect	Frequency of experiencing positive emotions	PANAS-C-10 (PA)
Negative affect	Frequency of experiencing negative emotions	PANAS-C-10 (NA)
Acceptability	Perceptions of session activities	C-SRS

Note. BMSLSS= Brief Multidimensional Students' Life Satisfaction Scale. PANAS-C-10=Positive and Negative Affect Scale for Children. PA=Positive Affect. NA=Negative Affect. C-SRS= Child Session Rating Scale.

Exit Interview

Qualitative data were collected at the end of the intervention in the form of an exit interview. These questions aimed to collect data regarding the acceptability of the WBPP, potential barriers to intervention implementation as perceived by the participants, and possible alterations/additions to the intervention for future use with autistic youth. Refer to Appendix I for the interview protocol and questions.

Procedures

Participants were recruited from a middle school in a large southeastern school district. Students completed the BMSLSS screener (Seligson et al., 2003), and participants identified with room for growth (e.g., mean score of 6 or lower on the 1-7 response metric) were asked to enroll in the study and participate in the WBPP. A counselor at the school had primary responsibility for completing the screening procedures and shared with this researcher a list of students who met eligibility criteria. Overall, 14 students were screened with the BMSLSS, with 11 of those students meeting inclusion criteria; 3 of those 11 students enrolled in the intervention study. Reasons for not providing consent include lack of child interest and caregiver concerns with the WBPP interrupting academic instruction. After attaining consent and collecting baseline data from the three participants, the WBPP sessions were administered on a weekly basis

through one-on-one individual meetings that took place in an office at the school during school hours. During the researcher's first meeting with the participants, the researcher asked for time/period preferences from the participants for the planned intervention time. The beginning and end of the school week were chosen by the researcher to collect data and implement the intervention as it allowed for the most time between data collection periods. Dynamic decision-making was used to assign participants to their intervention start date; all participants started the intervention at different points in time, consistent with the study's design. The homework assignments were assigned to participants in order to promote the generalization of intervention effects and for participants to continue their learning.

Caregiver Component of the WBPP

Caregivers also had the opportunity to learn and apply the positive activities their children learned through the WBPP. A live, individual virtual caregiver information session was provided to caregivers. This caregiver information session provided knowledge on positive psychology, caregiver resources, and the WBPP in general. Although the caregivers of Participants 1 and 2 were able to attend a live Zoom caregiver information session, the caregiver of Participant 3 had scheduling issues, and a phone call version of the caregiver information session was held instead. Throughout the intervention, caregivers were emailed and/or texted a handout after each session which included: 1) a summary of what their child learned in that session, 2) homework activities assigned to their child for the week, 3) a summary of how the caregiver could implement the content learned in the home setting.

Student Sessions of the WBPP

The goals of the first session were to 1) build rapport, 2) introduce the term SWB along with determinants of happiness and intervention goals, and 3) complete a positive activity. The

positive activity included in the first session was *Me at My Best Self* in which youth write or draw about a time they felt at their best. Youth were asked to read, reflect, and/or add to their *Me at My Best Self* story for at-home practice.

The second session of the WBPP introduced the topic of gratitude and youth were encouraged to think about five things they were grateful for and then write them down or draw them in a gratitude journal. Expressing one's gratitude as an early adolescent has been linked to greater optimism, life satisfaction, and satisfaction with school (Froh et al., 2008). For at home practice, youth were asked to engage in gratitude journaling once each day until the next session.

During the third session, participants continued to learn and apply gratitude in a new way in the form of a gratitude visit. Gratitude visits include writing and delivering a thank you letter to a person of one's choosing who has been especially kind but was never properly thanked. The fourth session of the WBPP introduced the topic of acts of kindness and participants planned to engage in acts of kindness across populations/settings (i.e., friends, family, teachers).

The fifth session of the WBPP introduced character strengths. The Values in Action Inventory of Strengths for Youth (VIA-Youth; Peterson and Seligman 2004; Park & Peterson, 2006) was used to define and identify participants' character strengths. The VIA-Youth contains 24 character strengths that fall under 6 different virtues, which are wisdom and knowledge, courage, love and humanity, justice, temperance, and transcendence—refer to Table 6 for all 24 character strengths and their definitions (Peterson & Seligman, 2004).

After defining and hypothesizing their character strengths, participants were provided the VIA-Youth self-report strengths-based assessment during the sixth WBPP session. Strengths-based assessments are measurements of emotional and behavioral skills and characteristics which can foster 1) a sense of personal accomplishment, 2) more satisfying family relationships

and friendships, 3) resiliency, and 4) personal, social, and academic development (Epstein, 2004). The VIA-Youth self-report survey includes an online 198-item self-report strengths-based assessment that measures youth strengths utilizing a Likert scale ranging from 1=*Not like me at all* to 5=*Very much like me*. The VIA-Youth self-report tool has reported good internal consistency (α=.72 to .91) (Park & Peterson, 2006). After completing the survey, participants were provided with their top five signature strengths that best represent them based on their answers to the survey. This information was then used to help participants utilize their identified signature strengths in new ways each day across settings (i.e., home, school).

During session seven, youth were encouraged to continue using their signature strengths in new ways, and a mindfulness activity called savoring was introduced. Savoring is defined as appreciating the present moment and enhancing the qualities of one's life (Bryant & Veroff, 2007). Gentzler et al. (2013) reported that young adolescents who savor positive events are more likely to maintain highly positive emotions about the event. Session seven guided youth through the savoring process by connecting it to their signature strengths, for example, asking youth to reflect on how it felt to use their signature strengths.

Since research has found a strong and positive relationship between life satisfaction and optimism, the concepts of hope and optimism were introduced in sessions eight and nine of the WBPP (Extremera et al., 2007). In session eight, youth were introduced to the concept of optimistic thinking and were guided through thinking optimistically about the good and bad events in their lives. Following activities involving optimistic thinking, session nine introduced hope as youth were encouraged to write or draw about their best possible future selves. Research has shown that hope is associated with positive outcomes in youth, such as academic achievement and life satisfaction (Proctor & Linley, 2013).

Lastly, session ten concluded the WBPP, provided a review of the positive activities learned throughout the intervention and planned for future use of the positive activities.

Data Collection

Two, 6, and 13 days after the 10th WBPP session, participants 3, 2, and 1, respectively, completed the exit interview regarding acceptability, barriers, and usefulness. The BMSLSS (Seligson et al., 2003) and PANAS-C-10 (Ebesutani et al., 2012) were administered to both participants and caregivers one to two times after participants completed the WBPP to attain maintenance data after one week and two weeks post-intervention completion for Participant 1 and after one week post-intervention completion for Participants 2 and 3.

This researcher was present during the collection of these progress monitoring measures and could answer participants' questions regarding the measures if necessary. The consistent data collection of the PANAS-C-10 and the BMSLSS allowed for progress monitoring of positive and negative affect and life satisfaction. Finally, caregiver versions of the BMSLSS and PANAS-C-10 were administered to caregivers four to five times throughout the intervention phases to allow for an assessment of interobserver agreement as well as caregivers' perceptions of their children's well-being. FOI, homework completion, and caregiver involvement data were collected throughout each session of the WBPP. Tables 5, 6, and 7 describe the homework completion, caregiver involvement, and FOI data throughout each session for each participant.

Table 6

Participant 1Intervention Implementation Data

Sessions	Homework Completion	Caregiver Involvement	Fidelity of Implementation
1	N/A	N/A	100%
2	2	2	100%
3	2	--	90%
4	2	--	90%
5	2	--	100%
6	2	0	90%
7	2	0	100%
8	2	2	100%
9	2	0	100%
10	2	0	100%

Note: -- indicates data were not collected.

Table 7

Participant 2 Intervention Implementation Data

Sessions	Homework Completion	Caregiver Involvement	Fidelity of Implementation
1	N/A	N/A	100%
2	2	2	100%
3	2	--	100%
4	2	2	100%
5	2	2	100%
6	1	0	100%
7	2	0	100%
8	1	0	92%
9	1	0	100%
10	1	0	100%

Note: -- indicates data were not collected.

Table 8

Participant 3 Intervention Implementation Data

Sessions	Homework Completion	Caregiver Involvement	Fidelity of Implementation
1	N/A	N/A	100%
2	2	2	100%
3	0	0	100%
4	0	0	100%
5	0	0	100%
6	0	2	100%
7	0	0	100%
8	0	2	100%
9	0	2	100%
10	0	0	100%

Table 9

VIA Classification of Character Strengths

Wisdom and knowledge: strengths that involve acquiring/using knowledge
- **Creativity**: Thinking of novel/productive ways to do things
- **Curiosity**: Taking an interest in all ongoing experiences
- **Judgment** [Critical thinking]: Thinking things through and examining them from all perspectives
- **Love of learning**: Mastering new skills, topics, and bodies of knowledge
- **Perspective** [Wisdom]: Being able to provide wise counsel to others

Courage: emotional strengths that involve exercise of will to accomplish goals in the face of opposition, external or internal
- **Bravery**: Not shrinking from threat, challenge, or pain
- **Perseverance**: Finishing what one starts, completing a course of action in spite of obstacles
- **Honesty** [Authenticity]: Speaking the truth and presenting oneself in a genuine way
- **Zest** [Vitality]: Approaching life with excitement/energy; not doing things halfway/ halfheartedly, feeling alive and activated

Humanity: interpersonal strengths that involve tending and befriending others
- **Love** [Capacity to give/Receive love]: Valuing close relations with others
- **Kindness**: Doing favors and good deeds for others; helping them; taking care of them
- **Social intelligence**: Being aware of the motives/feelings of self and others; knowing what to do to fit into different social situations; knowing what makes other people tick

Justice: strengths that underlie a healthy community life
- **Teamwork**: Working well as member of a group or team; being loyal to the group; doing one's share
- **Fairness**: Treating all people the same according to notions of fairness and justice; not letting personal feelings bias decisions about others; giving everyone a fair chance
- **Leadership**: Encouraging a group of which one is a member to get things done and at the same time maintain good relations within the group

Temperance: strengths that protect against excess and vices
- **Forgiveness**: Forgiving those who have done wrong; accepting the shortcomings of others; giving people a second chance
- **Humility**: Letting one's accomplishments speak for themselves; not seeking the spotlight
- **Prudence**: Being careful about one's choices; not taking undue risks; not saying or doing things that might later be regretted
- **Self-regulation**: Regulating what one feels/does; being disciplined

Transcendence: strengths that forge connections to the larger universe and provide meaning
- **Appreciation of beauty and excellence**: Noticing and appreciating beauty, excellence, and/or skilled performance in all domains of life, from nature to arts to mathematics to science
- **Gratitude**: Being aware of and thankful for the good things; taking time to express thanks
- **Hope** [Optimism]: Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about
- **Humor**: Liking to laugh and tease; bringing smiles to other people, seeing the light side
- **Spirituality** [Sense of Purpose; Faith; Religiousness]: Knowing where one fits within the larger scheme; having coherent beliefs about the higher purpose/meaning of life

Adapted from Peterson and Seligman (2004)

Design and Analysis

This thesis utilized a mixed methods design, more specifically, a sequential explanatory design. A sequential explanatory design allowed for the collection and analysis of quantitative and qualitative data in two consecutive phases (Ivankova et al., 2006). The quantitative portion utilized an experimental single-case design, specifically a multiple-baseline design across participants, which utilized dynamic decision-making. Ledford and Gast (2018, p. 16) describe single-case design (SCD) as "a quantitative experimental research approach in which participants serve as their own control." A multiple baseline design allowed for prediction, verification, and replication of treatment effects across participants. Some advantages of utilizing a multiple baseline design included not having to withdraw a potentially effective intervention as well as being able to measure different dependent variables such as affect and life satisfaction concurrently (Cooper et al., 2007). The combination of utilizing quantitative and qualitative data provided data on the relationship between the WBPP and youth's SWB and provided knowledge on how autistic youth perceived the WBPP. Qualitative data included what each participant found most useful and least useful from the WBPP as well as what they would like to see added to the WBPP in the future.

The What Works Clearing House (WWC; 2020) describes the criteria for multiple-baseline SCDs to meet standards without reservations, these criteria include: 1) data must be provided in a graphical and/or tabular format, 2) the independent variable must be systematically manipulated, 3) each outcome variable must be measured over time by more than one assessor (documented inter-observer/inter-assessor agreement), 4) the study cannot have residual treatment effects, 5) there must be at least three attempts to demonstrate intervention effects at three different times, and 6) must have a minimum of six phases with at least five data points.

Since a multiple-baseline design was used, participant data were staggered, allowing for comparisons between participants' baseline and intervention data. Inter-observer/inter-assessor agreements were attained from caregivers' reports of their children's well-being in the intervention phase (Participant 1=20%, Participant 2=22%, Participant 3=26%; Average=22.66%). There were various phases for intervention effects to be demonstrated, and this author met the WWC (2020) standards by having six phases with five data points (three data points minimum).

A single-case design was useful as it tested the success of the WBPP across at least three separate cases while providing evidence about the general effectiveness of the WBPP (Ryan & Filene, 2012). Finally, a staggered intervention implementation was utilized, the staggering of intervention start points increased internal validity, which allowed for at least three demonstrations of treatment effect. Each participant started the WBPP at a different time (i.e., after collecting 5 and 7 baseline data points). While there are only two different start points across the three participants, intervention implementation was staggered across all participants. Participant 3 was absent for 2 days of baseline data collection, resulting in fewer baseline data points than planned. This thesis allows researchers and practitioners to better understand the relationship between a PPI and its effects on the SWB of autistic youth. This study also states future recommendations for change within the WBPP for administering the intervention to autistic youth.

In order to examine within- and between-phase BMSLSS and PANAS-C-10 data, patterns in level, trend, variability, immediacy of the effect, overlap, and consistency of data patterns across phases were visually analyzed (Kratochwill et al., 2013). Nestor and Schutt (2012) define level changes as the magnitude of change that occurs from data in baseline to

intervention, from week to week during the administration of an intervention, and/or from pre-test to post-test. Furthermore, the data were visually analyzed to determine changes in scores on the caregiver-rated BMSLSS and PANAS-C-10 during the intervention phases. Data were also visually analyzed to determine changes in scores on the BMSLSS and PANAS-C-10 from week to week during the administration of the WBPP. The overall pattern/consistency of the data points in each phase was compared with the three participants. Visual analysis was supplemented with a nonparametric effect size estimate calculated for all dependent variables using Baseline Corrected Tau (Tarlow, 2016). Interpretive guidelines were adopted from Vannest and Ninci (2015), with a Tau of 0.20 representing a small effect, a Tau of 0.21-0.60 representing a moderate effect, a Tau of 0.61-0.80 representing a large effect, and a Tau of 0.81 or larger representing a very large effect.

Student Acceptability

Student perceptions of the acceptability of this intervention were drawn from students' sentiments provided through post-intervention exit interviews. The exit interview can be found in Appendix I. Exit interviews were audio recorded and answers to interview questions were analyzed for common themes. Since there were only three participants, qualitative data were not analyzed for themes but instead responses presented verbatim in a table, and commonalities noted. Throughout the intervention phases, participants completed the C-SRS (Duncan et al., 2003) after each WBPP meeting to assess the acceptability/usefulness of each specific meeting and the activities covered along with therapeutic alliance.

CHAPTER FOUR:

RESULTS

This chapter presents the findings from this study. First, quantitative results will be presented first through visual analysis, and Baseline Corrected Tau (Tarlow, 2016) calculations for each participant. While often negative directions of change are an indicator of contra-therapeutic treatment effects, when it comes to the variable of negative affect, negative directions or a "-" in front of a Baseline Corrected Tau (Tarlow, 2016) calculation indicates a positive change as it means that youth reported decreases in frequency of experiencing negative emotions. While caregiver data were aimed to be collected across all phases of the study, data were not collected during the baseline phases of the study, therefore, Baseline Corrected Tau (Tarlow, 2016) calculations were not attained, and comparisons could not be made. The C-SRS scores will be presented along with the qualitative data from the exit interviews with each participant. Quotes and themes from the qualitative interviews will be presented.

Participant 1

Life Satisfaction

Throughout the baseline phase, Participant 1 reported levels of life satisfaction with a mean of 4.20 on the BMSLSS, no apparent trend, and little variability. Upon implementing the WBPP, a small but consistent increase was noted immediately, with little to no variability and no apparent trend (see the first panel of Figure 2). Throughout the intervention phase, Participant 1 reported a mean of 4.53 on the BMSLSS, which represents a moderate treatment effect (Tau=.52). During the maintenance phase, Participant 1 reported a mean of 4.50 on the

BMSLSS, supporting the maintenance of gain in life satisfaction. Participant 1's caregiver reported Participant 1's life satisfaction with a mean of 4.90 during the intervention phase and a mean of 4.5 on the BMSLSS during the maintenance phase.

Positive Affect

Throughout the baseline phase, Participant 1 reported low levels of positive affect with a mean of 2.44, a slightly increasing trend, and little variability. Upon implementing the WBPP, a decrease in positive affect was noted immediately, along with noted variability and no apparent trend (see the first panel of Figure 3). Throughout the intervention phase, Participant 1 reported a positive affect mean of 2.41 on the PANAS-C-10, suggesting no therapeutic change (Tau=-.06). During the maintenance phase, Participant 1 reported a positive affect mean of 1.90 on the PANAS-C-10. Participant 1's caregiver reported Participant 1's positive affect with a mean of 3.73 during the intervention phase, and a mean of 3.60 for positive affect on the PANAS-C-10 during the maintenance phase, which is consistent in trend from the student reports indicating no improvement in positive affect as a result of the intervention, but substantially higher during both phases.

Negative Affect

Throughout the baseline phase, Participant 1 reported moderate levels of negative affect with a mean of 2.84, no apparent trend, and noted variability. Upon implementing the WBPP, a decrease in negative affect was noted immediately, along with little variability and a consistent trend (see the first panel of Figure 4). Throughout the intervention phase, Participant 1 reported a mean of 2.31 on the PANAS-C-10, which represents a moderate treatment effect (Tau=-.53). During the maintenance phase, Participant 1's reports of negative affect at one week follow-up decreased and then increased again at 2-week follow-up with a mean of 2.30 on the negative

affect scale of the PANAS-C-10 during the maintenance phase, supporting the maintenance of improvement in negative affect. Participant 1's caregiver reported Participant 1's negative affect with a mean of 1.73 during the intervention phase and a mean of 2.60 on the negative affect scale of the PANAS-C-10 during the maintenance phase. This caregiver report of negative affect is inconsistent with mean levels and trends reported by the student during both phases.

Summary of Data

In sum, once the WBPP was implemented, Participant 1 reported a moderate increase in life satisfaction (Tau=.52), no change in positive affect (Tau=-.06), and a moderate decrease in negative affect (Tau=-.53). This indicated improvement in two of the three components of SWB. Data from the caregiver report is somewhat inconsistent with the participant's self-report. While Participant 1 and his caregiver had similar reports in regard to negative affect and life satisfaction, there were noticeable discrepancies in scores for reports of positive affect between raters. Participant 1's gains in life satisfaction and decreases in negative affect were maintained at one- and two-week follow-ups.

Participant 2

Life Satisfaction

Throughout the baseline phase, Participant 2 reported levels of life satisfaction with a mean of 5.29, no apparent trend, and little variability. Upon implementing the WBPP, a small but consistent decrease was noted immediately, with little to no variability and no apparent trend (see the second panel of Figure 2). Throughout the intervention phase, Participant 2 reported a mean of 5.17 on the BMSLSS, which represents a moderate contra-therapeutic effect (Tau=-.24). During the maintenance phase, Participant 2 reported a BMSLSS score of 5.00. Participant 2's

caregiver reported Participant 2's life satisfaction with a mean of 5.27 during the intervention phase and a BMSLSS score of 5.50 during the maintenance phase.

Positive Affect

Throughout the baseline phase, Participant 2 reported medium levels of positive affect with a mean of 2.60, no apparent trend, and noted variability. Upon implementing the WBPP, a moderate decrease in positive affect was noted immediately, along with noted variability and no apparent trend (see the second panel of Figure 3). Throughout the intervention phase, Participant 2 reported a mean of 1.81 on the PANAS-C-10, which represents a moderate but contra-therapeutic effect (Tau=-.38). During the maintenance phase, Participant 2 reported a positive affect score of 2.00. Participant 2's caregiver reported Participant 2's positive affect with a mean of 3.06 during the intervention phase and a positive affect score of 2.60 during the maintenance phase.

Negative Affect

Throughout the baseline phase, Participant 2 reported low levels of negative affect with a mean of 2.10, a decreasing trend, and noted variability. Upon implementing the WBPP, a small increase in negative affect was noted immediately, along with little variability and a consistent trend (see the second panel of Figure 4). Throughout the intervention phase, Participant 2 reported a mean of 2.04 on the PANAS-C-10, which represents no treatment effect (Tau=0.00). During the maintenance phase, Participant 2 reported a negative affect score of 2.20. Participant 2's caregiver reported Participant 2's negative affect with a mean of 1.53 during the intervention phase and negative affect score of 2.00 during the maintenance phase.

Summary of Data

In sum, once the WBPP was implemented, Participant 2 reported a moderate decrease in life satisfaction (Tau=-.24), a moderate decrease in positive affect (Tau=-.38), and no changes in negative affect (Tau=0.00). There were no improvements in SWB reported during the course of the intervention. Data from the caregiver report is somewhat inconsistent with the student report. While Participant 2 and his caregiver had similar reports in regard to negative affect and life satisfaction, there were noticeable discrepancies in scores for reports of positive affect between raters. During the one-week follow-up, Participant 2 reported additional decreases across all indicators of SWB; this is consistent with the participant's ongoing reports of emotional distress related to a past history of trauma and family problems.

Participant 3

Life Satisfaction

Throughout the baseline phase, Participant 3 reported levels of life satisfaction with a mean of 6.11, no apparent trend, and little variability. Upon implementing the WBPP, a small but consistent increase was noted immediately, with little to no variability and no apparent trend (see the third panel of Figure 2). Throughout the intervention phase, Participant 3 reported a mean of 6.36 on the BMSLSS, which represents a moderate treatment effect (Tau=.52). During the maintenance phase, Participant 3 reported a score of 6.33 on the BMSLSS. Participant 3's caregiver reported Participant 3's life satisfaction with a mean of 5.50 during the intervention phase and a BMSLSS score of 5.83 during the maintenance phase.

Positive Affect

Throughout the baseline phase, Participant 3 reported medium levels of positive affect with a mean of 3.50, an increasing trend, and little variability. Upon implementing the WBPP, a

substantial increase in positive affect was noted immediately, along with no variability and a steady trend (see the third panel of Figure 3). Throughout the intervention phase, Participant 3 reported a mean of 5.00 on the PANAS-C-10, which represents a large treatment effect (Tau=.93). During the maintenance phase, Participant 3 reported a positive affect score of 4.20. Participant 3's caregiver reported Participant 3's positive affect with a mean of 4.40 during the intervention phase and a positive affect score of 4.60 during the maintenance phase.

Negative Affect

Throughout the baseline phase, Participant 3 reported very low levels of negative affect with a mean of 1.10, a decreasing trend, and no apparent variability. Upon implementing the WBPP, no changes in negative affect were noted, along with no variability and a consistent trend (see the third panel of Figure 4). Throughout the intervention phase, Participant 3 reported a mean of 1.00 on the PANAS-C-10, which represents a moderate treatment effect (Tau=-.33). During the maintenance phase, Participant 3 reported a negative affect score of 1.00. Participant 3's caregiver reported Participant 3's negative affect with a mean of 1.80 during the intervention phase and a negative affect score of 1.80 during the maintenance phase.

Summary of Data

In sum, once the WBPP was implemented, Participant 3 reported a moderate increase in life satisfaction (Tau=.52), a large increase in positive affect (Tau=.93), and a moderate decrease in negative affect (Tau=-.33). This indicates improvement across all three indicators of SWB. Data from the caregiver report is somewhat inconsistent from the participant's self-report. Participant 3's caregiver reported lower ratings for life satisfaction and positive affect and reported higher ratings for negative affect when compared to Participant 3's self-report ratings.

Participant 3's gains in life satisfaction and decreases in negative affect were maintained at the 1-week follow-up.

Summary of Single-Case Design Data

Life satisfaction, positive affect, and negative affect were monitored for all participants across baseline and intervention phases to assess for treatment effects. Participants 1 and 3 reported increases in their life satisfaction from baseline to intervention. However, Participant 2 reported a decrease in life satisfaction from baseline to intervention. Participants 1 and 2 reported decreases in positive affect from baseline to intervention. However, Participant 1 also reported decreases in negative affect from baseline to intervention. Participant 3 reported increases in positive affect from baseline to intervention and decreases in negative affect. In general, there was no clear pattern in life satisfaction or positive/negative affect data from baseline to intervention across participants. However, Participant 3 demonstrated a positive therapeutic response to the WBPP across all dependent variables, and Participant 1 demonstrated a positive therapeutic response to the WBPP across the domains of life satisfaction and negative affect.

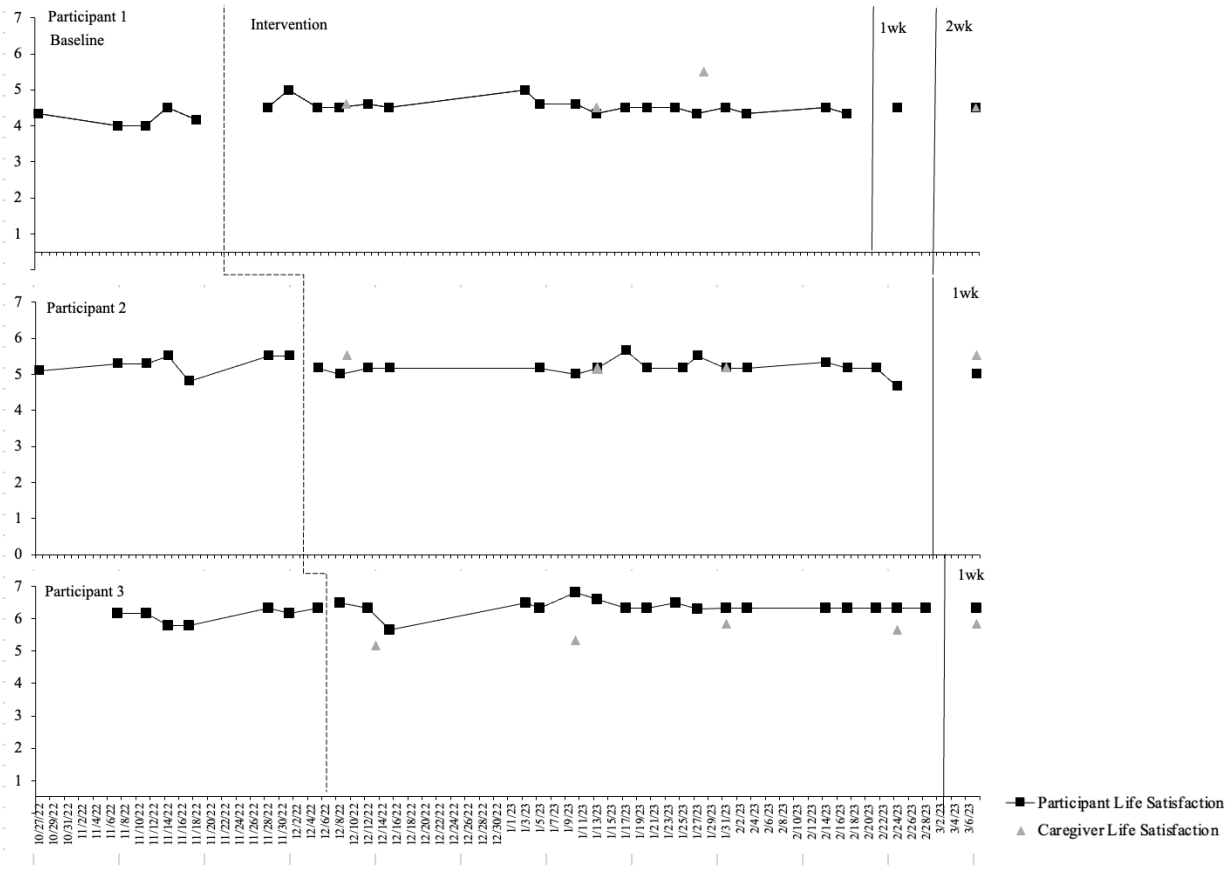

Figure 2
BMSLSS Graph

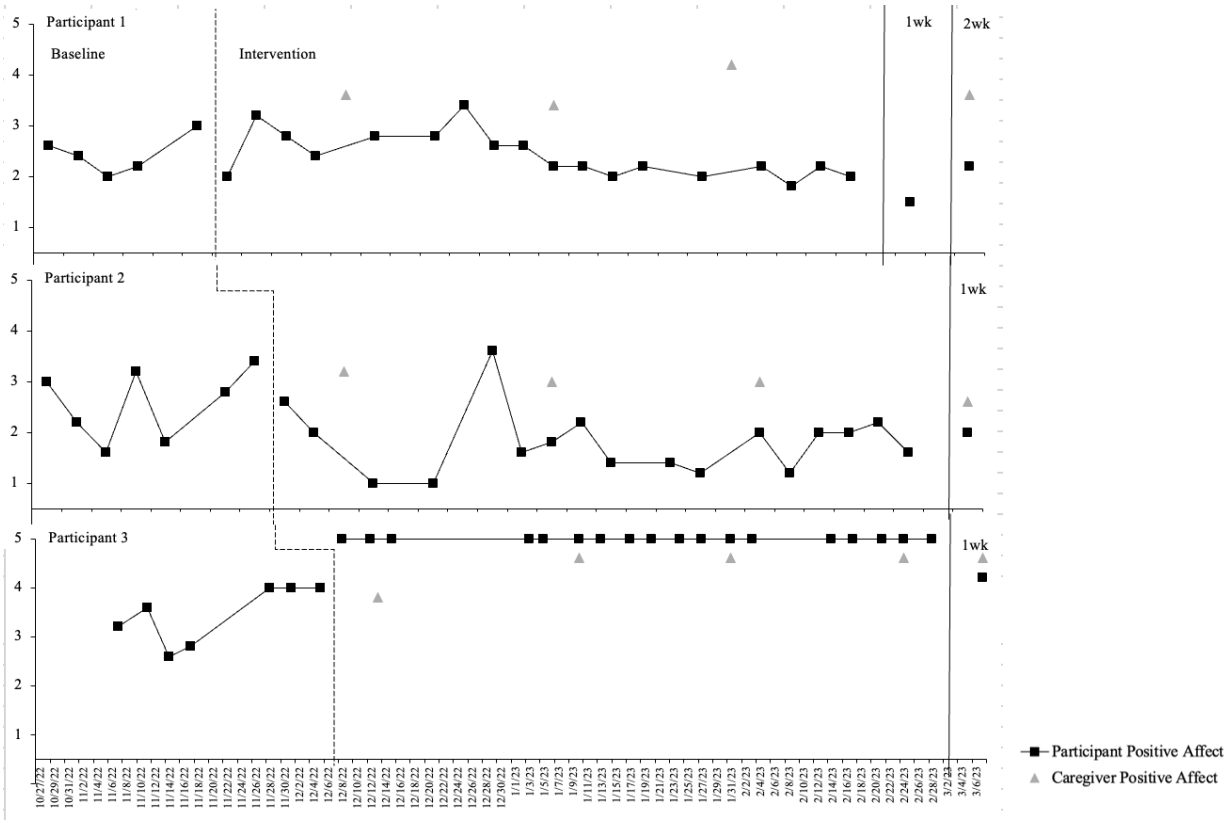

Figure 3
PANAS-C-10 Positive Affect Graph

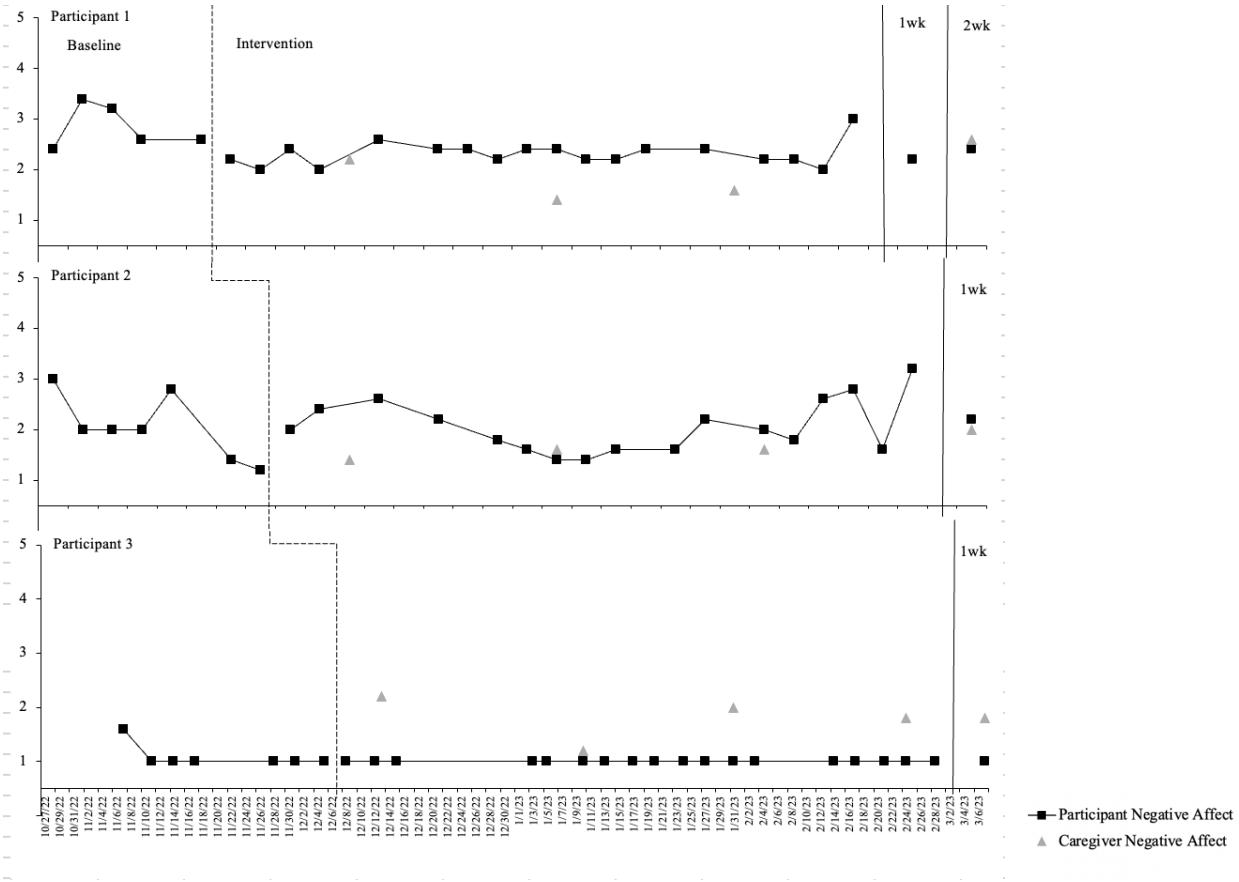

Figure 4
PANAS-C-10 Negative Affect Graph

Social Validity Data

Social validity data were collected through the C-SRS (Duncan et al., 2003), which was administered weekly following the completion of each WBPP session. Tables 10, 11, and 12 demonstrate the social validity ratings across all participants and sessions. The C-SRS evaluates three interacting elements of social validity: 1) the relational bond between the student and the interventionist, 2) the concordance of the goals of the intervention, and 3) the concordance of the tasks of the intervention (Hauber & Boon, 2022). The first item of the C-SRS measure assesses the feeling of being listened to, the second item assesses if the topics discussed in the session were perceived as important to the student, the third item assesses if the activities completed in the session were perceived as enjoyable to the student, and the fourth item asks the youth to

evaluate the session as a whole (Hauber & Boon, 2022). The score on these four items results in a total session score, varying from 0 to 40, with a high average total score indicating a high-quality therapeutic relationship. The scoring for this measure involves the researcher measuring the length in centimeters from the start of the line to the line marked by the participant. Each line is a max of 10 centimeters long, which means each item has a maximum score of 10. Hauber and Boon (2022) utilized the C-SRS in a study with a sample of 92 adolescents, the calculated mean total score on the C-SRS across participants was 26.50; this was used as a guideline for interpreting the total C-SRS scores in this study with 0-14 being low, 15-28 being moderate, and 29-40 being high. As seen in Tables 10, 11, and 12, across all sessions, Participant 1 reported a mean of 29.2 (high), Participant 2 reported a mean of 39.9 (high), and Participant 3 reported a mean of 26.7 (moderate).

Table 10

Participant 1 Social Validity Data: C-SRS Scores

Session	Listening	Importance	Preference of Activity	Overall Preference	Total Score
1	6.3	3.8	3.4	2.6	16.1
2	8.1	7	7	7.6	29.7
3	8.5	6.5	7	7.5	29.5
4	8.1	8.3	7.4	7.8	31.6
5	7.8	7.2	7.6	7.8	30.4
6	7.1	7.5	8.1	8.3	31.0
7	7.9	7.8	7.9	7.5	31.1
8	7.8	8.1	8.5	8.1	32.5
9	8.3	7.8	7.3	7.5	30.9
10	8.1	7.3	6.7	7.2	29.3
Average	7.8	7.13	7.09	7.19	29.21

Note. Total Score: Low: 0-14, Moderate:15-28, High: 29-40.

Table 11

Participant 2 Social Validity Data: C-SRS Scores

Session	Listening	Importance	Preference of Activity	Overall Preference	Total Score
1	10	10	10	10	40.0
2	10	10	9.1	10	39.1
3	10	10	10	10	40.0
4	10	10	10	10	40.0
5	10	10	10	10	40.0
6	10	10	10	10	40.0
7	10	10	10	10	40.0
8	10	10	10	10	40.0
9	10	10	10	10	40.0
10	10	10	10	10	40.0
Average	10	10	9.91	10	39.91

Note. Total Score: Low: 0-14, Moderate:15-28, High: 29-40.

Table 12

Participant 3 Social Validity Data: C-SRS Scores

Session	Listening	Importance	Preference of Activity	Overall Preference	Total Score
1	8.9	8.1	8	4.9	29.9
2	6.3	6.9	8.8	5.3	27.3
3	6	9	8.5	4.6	28.1
4	5.2	7	6.6	5.2	24.0
5	6.2	7.8	7.8	5.2	27.0
6	6.2	7.1	6.8	5.2	25.3
7	6.2	5.2	6.8	5.2	23.4
8	4.9	9.3	5.2	5.2	24.6
9	7.3	8.3	8.5	5.2	29.3
10	6	8.2	8.5	5.2	27.9
Average	6.32	7.69	7.55	5.12	26.68

Note. Total Score: Low: 0-14, Moderate:15-28, High: 29-40.

Review of Qualitative Data

Upon the completion of the WBPP, all participants completed an exit interview to provide their thoughts on the program and their recommendations for change. Two graduate student research assistants with expertise in the WBPP and in conducting exit interviews with

middle school age students conducted the exit interviews. Before conducting the exit interviews, the research assistants met with this researcher to attain more information on each participant such as fidgets that they utilize to increase their comfort levels with meeting new people, break signals, and preferred methods of non-verbal communication (i.e., minimal eye contact). Participant 1's exit interview was 13 minutes and 42 seconds long, Participant 2's exit interview was 17 minutes and 5 seconds long, and Participant 3's interview was 16 minutes and 39 seconds long. Upon exit interview completion, all participants received a gift card. Participants' perceptions regarding the acceptability of the intervention (Table 13), the barriers to the intervention (Table 14), and their recommendations for change (Table 15) are presented below. Table 13 provides responses to questions such as "What did you like best about the program?" and "What are some of the most important things you learned in the program?".

Table 13

Qualitative Data: Acceptability

	Exit Interview Questions Regarding Acceptability of Intervention
Participant 1	• Thought that the handouts were very good • The pace of the weekly meetings was just about right • "All of them [positive activities] can contribute to your happiness" • "You can use these activities every day for a little bit and make you happier when you're feeling down" • Would recommend this program to his friends if they were feeling down • Good relationship with interventionist • "She [interventionist] helped me try to be happier in my life" • "She [interventionist] was nice to me, she didn't make me feel lost"
Participant 2	• Liked acts of kindness, gratitude journal, and signature strengths handouts • "I liked that it [the intervention] taught me how to be happy through acts of kindness, savoring, and also the gratitude journal. It also taught me how to use my signature strengths." • "It was a very good program" • "They [homework assignments] were great, they taught me how to think differently" • "I learned how to be happy, to have a good time, and to always be thankful for what you have."

Table 13 *(Continued)*

	• Thought frequency, pace, and timing of the program was good • Learned how to be happy and learned about what makes him happy • "Gratitude journal helped me learn what I enjoy and I am grateful for. Optimistic thinking made me see things differently." • "I liked all the activities" • "By using those [positive activities] I found different ways to see light" • "I would continue to do acts of kindness and signature strengths because then I could look back at them when I really need them and I could see all the things that made me happy" • Would describe this program to his friends as "a really great program" • "I got to be myself again and I started trying more" • "…it [the intervention] would teach you different ways to be happy and most of my friends suffer from similar problems as me" • "Great" relationship with interventionist • "She [interventionist] taught me different ways to be happy" • Thought that the interventionist's happiness helped contribute to their therapeutic relationship • "When I had bad days, I would tell her [interventionist] and she had some hard days too. She taught me ways to cope because of that. She showed me different ways and how to use things like my strength of appreciation of beauty and excellence" • "She [interventionist] taught me to be more kind and more happy" • "She [interventionist] showed that she understands my unique life experiences because those [homework] assignments were really personal to me" • "I felt accepted, safe, and comfortable" • "She [interventionist] was always a really kind and nice person" • Gratitude journaling made him feel accepted, safe, and comfortable sharing his thoughts in meetings
Participant 3	• Thought involving his caregiver went well as he shared the caregiver handouts • Enjoyed gratitude journaling and signature strengths • Thought optimistic thinking, signature strengths, acts of kindness, and gratitude journaling were important activities learned in the intervention • "I feel good about my signature strengths" • Since completing the intervention: "I get less angry now at school and at home" • "I liked the activities" • Thought pace of meetings was just about right • Thought signature strengths and optimistic thinking helped him see things differently

Table 13 *(Continued)*

	• Likely to continue acts of kindness and gratitude journal activities on his own • Thought pace of meetings was just about right • Would recommend the intervention to his friends • Discussing relationship with interventionist: "At the beginning I didn't want to do the program and now I do—she [interventionist] made me think that the program wasn't so bad" • "She [interventionist] didn't get mad when I forgot to do the take-home challenges [homework] or once I needed breaks" • Gratitude journaling helped him feel safe, accepted, and comfortable because he could express himself

Note: Underlined statements refer to recommendations for changes and future practice.

Table 14 presents answers to questions such as "What did you like least about the program?" and "Which activities were the least beneficial/enjoyable? Why?".

Table 14

Qualitative Data: Barriers

	Exit Interview Questions Regarding Barriers of the Intervention
Participant 1	• Had a difficult time thinking about best possible self in the future and did not enjoy writing • Thought the homework assignments were repetitive and difficult to complete when he had academic-related homework • Felt shy talking to his caregiver about the intervention • Frequency and timing of the meetings were good sometimes and not good other times when he was pulled from a class where his friends were present
Participant 2	• Didn't really attempt to involve his caregiver
Participant 3	• Did not like the long surveys • Did not like the in-session handouts • Thought the program didn't really increase his happiness • Did not enjoy the homework • Noted, "At the beginning, I didn't want to do the program…"

Note: Underlined statements refer to recommendations for changes and future practice.

Table 15 presents answers to questions such as "Is there anything you would change about the program delivery?" and "What changes would you make to the program to make it better for kids like you?".

Table 15

Qualitative Data: Comments that Yield Recommendations for Changes or Future Practice

	Exit Interview Questions Regarding Recommendations for Change
Participant 1	○ **What changes would you make to the program to make it better for kids like you?:** No changes. ○ **What advice would you give the interventionist to help all students feel accepted, safe, comfortable, and respected?:** No advice. ○ **Is there anything you would change about the program delivery?:** "No"
Participant 2	○ **What changes would you make to the program to make it better for kids like you?:** "Try to get to know the students more because if you get to know them more, you can give them assignments that can really help them" ○ **What advice would you give the interventionist to help all students feel accepted, safe, comfortable, and respected?:** "No advice" ○ **Is there anything you would change about the program delivery?:** "No"
Participant 3	○ **What changes would you make to the program to make it better for kids like you?:** "Not sure" ○ **What advice would you give the interventionist to help all students feel accepted, safe, comfortable, and respected?:** "I think she should keep doing what she's doing" ○ **Is there anything you would change about the program delivery?:** "No"

Summary of Social Validity Data

Overall**,** the preference of activities and perceived importance of activities completed varied. Since each session of the WBPP includes a different positive psychology activity, it makes sense that Participants 1 and 3 had varying ratings as the WBPP progressed on the C-SRS. Participant 1's most preferred activity included completing the VIA Signature Strength Survey, which allowed him to learn about his top five signature strengths. Participant 3's most preferred activity included gratitude journaling. Participant 2 found all WBPP activities to be of perceived importance to him, however, WBPP Session 2, which includes gratitude journaling, was not of a preferred activity for Participant 2 according to the C-SRS data. These data show how the preference for positive psychology activities varies on the individual and emphasizes the need

for a multi-component positive psychology intervention that allows individuals to experience multiple positive psychology activities.

In regards to acceptability, Participants 1, 2, and 3 shared that they experienced positive changes upon engaging in the WBPP, such as feeling happier, feeling thankful, experiencing a decrease in feelings of anger, feeling like oneself again, engaging in kindness, and experiencing an increase in motivation. However, it is important to note that although Participant 3 shared that he thought the program did not really increase his happiness, however, the self-report data from the BMSLSS and PANAS-C-10 shows gains in SWB for Participant 3. All three participants also discussed the importance of the therapeutic relationship by referring to how it made them feel safe, accepted, and comfortable in the intervention sessions. Some of the preferred positive activities referred to in the qualitative interviews included acts of kindness, savoring, gratitude journaling, and optimistic thinking. More specifically, Participants 2 and 3 shared the benefits of gratitude journaling, such as making one feel accepted, safe, and comfortable sharing one's thoughts during sessions and expressing oneself. On the other hand, non-preferred activities included the best possible self in the future activity due to experiencing difficulty thinking about the future and the VIA signature strength survey due to its length. A recommendation for changes and/or future practice included getting to know the students more in order to provide them with more helpful homework assignments.

CHAPTER FIVE:

DISCUSSION

Summary and Interpretation of Results

The primary purpose of the present study was to evaluate the effectiveness of a positive-psychology intervention, the WBPP (Suldo, 2016), in increasing the subjective well-being of autistic youth. Overall, two out of the three participants reported moderate increases in life satisfaction and small to moderate reductions in negative affect following the implementation of the WBPP (Kratochwill et al., 2013, p.28). As discussed in Chapter I, many factors correlate with a youth's subjective well-being level. Types of factors that predict SWB include genetic predispositions (e.g., familial trends in affect), life circumstances (e.g., SES, age), and engaging in purposeful activities that correlate with higher positive affect and life satisfaction (e.g., performing acts of kindness; engaging in gratitude practices), as summarized by Suldo (2016). Since the WBPP only influences the third of those three factors that predict SWB, even changes in raw scores that may seem relatively small may be clinically meaningful. In the current study, two out of the three participants reported such improvements in SWB. Given that only two of three participants were positive responders, we can assume that either 1) the intervention is leading to idiosyncratic effects (e.g., helping some participants and not others) or 2) the changes reported by the participants are occurring due to a factor other than the intervention. With two participants reporting increases in life satisfaction and reductions in negative affect, this study did not fully demonstrate a functional relation between the WBPP and life satisfaction, positive

affect, and negative affect due to the lack of a third replication. However, the qualitative data supports the promise of the intervention on autistic students' outcomes.

In contrast to the evidence of promise for improving life satisfaction and reducing negative affect, the WBPP demonstrated mixed effectiveness in increasing experiences of positive emotions, as only one out of the three participants reported increases in positive affect. Although positive changes on any indicator of SWB were reported by Participants 1 and 3, Participant 2 reported *decreases* in life satisfaction and positive affect, along with no changes in negative affect. However, Participant 2 consistently reported particularly high social validity ratings across all 10 sessions of the WBPP on the C-SRS. Participant 2 also expressed experiencing significant gains in life satisfaction when completing the exit interview. The discrepancies between the quantitative and qualitative data for Participant 2 may be due to 1) his mental health status, as he showed symptoms of depression throughout this study, and/or 2) the validity and reliability of measures such as the PANAS-C-10 for autistic youth. Since this is the first study utilizing the PANAS-C-10 with autistic youth, there is a lack of information regarding the reliability and validity of this measure when utilized with autistic youth.

Regarding social validity, the WBPP received overall high ratings from all three participants, with C-SRS mean averages ranging from 29.2-39.9 out of 40. During the exit interviews, all participants shared that they experienced positive changes upon engaging in the WBPP and enjoyed many of the positive activities they engaged in throughout the intervention, such as gratitude journaling. Overall, the intervention appears a promising positive psychology intervention for autistic youth when implemented with accommodations.

Integration with Prior Research

High life satisfaction has been shown to have many potential benefits for youth. Higher levels of life satisfaction can provide a buffer against symptoms of stress and psychopathology, low levels of caregiver support, decreased academic engagement, decreased positive peer interactions, and peer victimization (Lewis et al., 2011; Martin & Huebner, 2007; Saha et al., 2010). Since autistic youth report lower rates of life satisfaction when compared to their typically developing peers, it is essential that researchers prioritize identifying effective and socially acceptable PPIs (Franke et al., 2018).

Prior studies of the WBPP have supported it to be effective when utilized to support typically-developing youth, and when evaluated in group level designs with randomization to treatment or control group (Roth et al., 2017; Suldo et al., 2014). The use of the WBPP through individual counseling with autistic youth, evaluated through single case methodology in this study demonstrated mixed effectiveness. Participants 1 and 3 reported positive changes upon intervention implementation, whereas Participant 2 reported contra-therapeutic changes. Suldo, Shaffer, and Riley (2008) reported that typically developing adolescents (ages 14-18) with positive perceptions of academic performance reported higher life satisfaction. This could be one reason why Participant 2 did not report positive changes upon intervention implementation, as he struggled with academic performance during the time of the study, and his primary exceptionality on his individualized education plan was for a specific learning disability. In addition, Participant 2 experienced mental health issues throughout the time of the intervention phase, specifically symptoms of depression, including suicidal thoughts. While he was receiving treatment for these mental health concerns from a different therapist, the WBPP is aimed at increasing subjective well-being, not intended to decrease symptoms of mental illness. It is

possible that this student's emotional distress was the more pressing mental health issue to attend to at the time the WBPP was implemented, and he would have benefited from a more intense treatment for mental illness.

Research has shown that autistic youth report lower levels of life satisfaction when compared to their typically-developing counterparts, studies like these show that autistic youth could benefit from an intervention aimed at increasing their life satisfaction, such as the WBPP (Franke et al., 2018). While only two out of three participants experienced gains in life satisfaction upon intervention implementation, all of the participants expressed the WBPP as being acceptable and useful. Overall, the WBPP appears to be an acceptable intervention and may be an effective way to increase autistic middle school students' SWB. However, more research is still needed to fully evaluate efficacy among this population.

Caregiver reports of their children's life satisfaction often differed from the youth's self-report. This lines up with previous research as it has been found that autistic youth may be less likely to communicate with their caregivers regarding their internal states, which makes it difficult for caregivers to accurately report on their children's life satisfaction (Franke et al., 2008). Research has shown that caregivers report lower levels of SWB for autistic youth when compared to the ratings from caregivers of typically developing youth (Begeer et al., 2016). More specifically, results from the study done by Begeer and colleagues (2016) showed that disability status accounted for a significant amount of variance on reported SWB ($p<.001$).

Practical Implications

This study provided many opportunities for learning and practical implications that can be applied across settings and populations when implementing an intervention or running a study. During the recruitment phase of this study, a few barriers occurred that future researchers

or practitioners in this field could prepare for. For example, at first, Participant 3 was very hesitant about participating in the study and was also reluctant to communicate with the researcher regarding his hesitations. This researcher communicated with Participant 3's caregiver to create a safe space for Participant 3 to share his hesitations with his caregiver, who then relayed the information to this researcher. Participant 3's hesitations included a change of schedule and a lack of breaks during the intervention sessions. This researcher and Participant 3's caregiver collaborated to identify a reward that would motivate Participant 3 to manage the potential change in his school schedule; this reward included five minutes of video game time upon completing each WBPP session. In addition, this researcher and Participant 3 worked together to identify a hand signal that would indicate Participant 3 needed a break. Participant 3 could utilize this hand signal at any time and would receive a break; upon completing all sessions of the WBPP, Participant 3 did not ask for any breaks.

Throughout the baseline and intervention phases, participants often asked questions regarding the PANAS-C-10 measure. For example, they asked what "cheerful" or "lively" meant. In the future, practitioners and researchers may consider providing pre-intervention training on affective education and how to complete measures related to positive/negative affect. In addition, researchers and practitioners should collect and examine qualitative data to better understand autistic students' perspectives of their emotional well-being.

Throughout the intervention phases, while the WBPP was implemented in an individual format rather than a group format, very few adjustments were made to the WBPP session content for the participants. The main accommodation that was made was regarding the positive activity participation modality of the WBPP activities. For example, when it came to activities that included writing, all three participants expressed that they did not like to write. Therefore, this

researcher gave them the option to draw or the researcher could write for them. While Participants 1 and 3 preferred to have the researcher write for them, Participant 2 enjoyed drawing and appreciated the opportunity to draw during the activities. For example, Participant 2 drew his best possible future self instead of writing about this topic during session nine. This researcher noted that, at times, it was difficult to start the WBPP sessions due to participants' perseveration on events that occurred before the sessions. In the future, due to the tendency for autistic youth to perseverate, practitioners should consider beginning each session with a mindfulness activity to clear the slate and help youth focus on learning and engaging with the positive activity(s) planned for that session.

Participants 1, 2, and 3 found the weekly schedule of the WBPP to be acceptable, but both Participants 1 and 2 expressed discomfort with the sudden ending of the WBPP. This researcher introduced that session 10 would be the final session with Participant 1 during session 9, and due to his emotional reaction, this researcher introduced that session 10 would be the final session with Participants 2 and 3 sooner (i.e., during sessions 7 and 8). While Participant 2 expressed discomfort and sadness that the program was soon ending, this researcher speculates that his emotional reaction may have been more intense if he had discovered the program was ending later on. Future practitioners should consider continuously preparing students for the end of PPIs by letting students know of an end date at the start of the intervention and reminding them of that end date.

The potential benefits that accompany the added social support that comes with providing a weekly psychotherapeutic intervention to autistic youth should not be overlooked. In a study done by Egilson et al. (2017), autistic youth reported lower levels of satisfaction in the domain of social support. This is important because youth without adequate social skills have been shown

to be more likely to report lower levels of SWB (Bukowski & Adams, 2005). Implementing the WBPP in a one-on-one format allowed students to complete activities with assistance and share their unique lived experiences at their own pace. As mentioned in the exit interviews, gratitude journaling was specifically helpful in allowing youth to express themselves and feel safe, comfortable, and respected in intervention sessions.

While many autistic youth most typically receive support within the realm of applied behavior analysis, providing youth with support within the realm of positive psychology showed to be beneficial in unexpected ways. For example, while the main goal of this study and of implementing the WBPP was to increase students' SWB, this researcher had the opportunity to see participants grow in their social skills throughout the intervention. Direct observations made by this researcher include increased eye contact from Participants 1 and 3, along with increased verbal communication across all three participants. By meeting with a trusted adult every week, participants were able to become more comfortable in sharing their life experiences and asking for help when needed. For example, throughout the intervention, Participant 2 expressed concerns about his safety to the researcher, and therefore two risk assessments were completed by school staff. These conversations and follow-up supports may have not been possible if the participant did not have a safe space and a trusted adult with whom he could share his concerns.

Overall, data from the C-SRS showed that all participants found the WBPP sessions to be acceptable as they reported moderate to high scores on the C-SRS ranging from 26.7 to 39.9 out of a total score of 40. In line with this, the qualitative exit interviews showed that the participants found the WBPP to be acceptable and reported positive changes upon engaging in the intervention. As for recommendations for changes or future practice, Participant 2

recommended that interventionists try to get to know the students more to give them homework assignments that are more likely to help them.

In order to include autistic students in the WBPP when implemented in a small group modality, use of accommodations found to be helpful in this study may be integrated. Rather than singling out any student, practitioners should consider providing accommodations to all of the students in the small group. These accommodations include but are not limited to 1) access to fidgets, 2) choices for completion intervention activities (i.e., drawing and talking and having interventionist write), 3) access to preferred reinforcers upon completion of each WBPP session, and 4) access to breaks. When implementing the WBPP to a small group including both typically developing students and autistic students, practitioners should give time for the youth to build rapport with one another before jumping into the WBPP sessions.

Limitations

Participants in this study were not precluded from receiving other mental health services during the time of data collection and intervention implementation, which may have impacted the effects of the WBPP in unknown ways. These mental health services included individual therapy with someone in the community (Participant 1) and individual therapy/evaluation for depression (Participant 2). The WBPP is an intervention grounded in the principles of positive psychology and intended to improve SWB, and is not a treatment for depression or other mental health illnesses, thus, in theory, participating in forms of mental health services that target wellness and illness might be complementary. Nevertheless, the severity of the mental health problems experienced by participants may have lessened the likelihood that the WBPP could have been effective due to the severity of the mental health illness Participant 2 was enduring.

The second limitation of this study includes the lack of data collection for caregiver data during the baseline phases. Due to these missing data, Baseline Corrected Tau (Tarlow, 2016) could not be calculated, and comparisons between phases could not be made. This limits our knowledge of if caregivers noticed a difference in their children's life satisfaction, positive affect, and/or negative affect once the intervention was implemented.

The third limitation includes the small stagger on the single-case design graphs across the 2nd and 3rd Participants. Due to the limited time to implement the intervention, Participants 2 and 3 only have one data point staggering their data, while Participants 1 and 2, for example, have two. This small stagger makes it more difficult to visually analyze treatment effects across participants in a multiple baseline design.

A final limitation includes the reliance on student self-report measures for life satisfaction and positive and negative affect. Some participants experienced challenges when completing the measures, such as perseverating on a specific negative experience that occurred quite recently instead of thinking of the big picture. Since the positive/negative affect and life satisfaction measures have primarily been used to detect variability between individuals and have less support for use within a subject, qualitative measures may be a more preferable or at least supplemental way to assess how an individual changes over time.

Future Directions for Research

Future researchers should aim to continue this inquiry to identify and implement PPIs such as the WBPP alongside other treatments for autistic youth who may have comorbid disorders. Since autism varies in degree of impairment, appropriate accommodations for positive psychology interventions should be further researched. While Participants 1 and 3 seemed to benefit from the WBPP, Participant 2 did not. This may be because Participant 2 was

experiencing symptoms of depression during this time that the WBPP is not aimed at treating. It could also be because Participant 2 was the only participant whose primary exceptionality was a specific learning disorder, whereas both Participants 1 and 3's primary exceptionality on their IEP was autism. Since many autistic youth also experience comorbid disorders such as anxiety, attention-deficit/hyperactivity disorder, depression, and bipolar disorder (Bennett, 2017), further research should be conducted to identify the most appropriate approach to implementing positive psychology interventions alongside other treatments for a transdiagnostic approach. In terms of measures and choosing a dependent variable, researchers might focus on life satisfaction as an indicator of SWB due to the reliability of data, since positive/negative affect changes more frequently than overall appraisals of satisfaction with one's family, life, friends, self, living situation, and school. Finally, while this study included a diverse sample in terms of race, future research should replicate this research with a larger, more diverse sample (e.g., varying ages, genders, cultures, ethnicities, degrees of impairment from ASD) in order to further examine the WBPP's effectiveness and acceptability.

Conclusion

This study aimed to examine the effectiveness and social validity of a PPI when implemented individually to autistic youth. Overall, the WBPP was found to be acceptable by all participants and may be a promising PPI that can increase the SWB of autistic youth when implemented with accommodations such as breaks, access to fidgets, varying options to complete positive activities such as drawing or having the interventionist write, and positive reinforcers such as access to a preferred game upon session completion. Common preferences shared by participants included the 1) pace, frequency, and timing of the weekly meetings, 2) positive activities such as gratitude journaling and signature strengths, 3) strong therapeutic

alliance, and 4) feeling safe, comfortable, and accepted during WBPP sessions. Common barriers of the WBPP identified by participants included the homework associated with the WBPP and the caregiver involvement component, both being considered of intervention *engagement*. Future research should attempt to identify strategies to further examine the WBPP as a potentially viable PPI for autistic adolescents and should aim to generalize the current findings into alternative settings with additional populations.

REFERENCES

American Psychiatric Association, A. (2013). *Diagnostic and statistical manual of mental disorders* (Vol. 5). Washington, DC: American Psychiatric Association.

Autism Spectrum Disorder (ASD) (2021). In *CDC: Centers for Disease Control and Prevention*. Retrieved from https://www.cdc.gov/ncbddd/autism/signs.html

Beauchaine, T.P., & Hinshaw, S.P. (2017). *Child and adolescent psychopathology (3rd Ed.).* Hoboken, NJ: Wiley.

Begeer, S., Ma, Y., Koot, H. M., Wierda, M., van Beijsterveldt, C. T., Boomsma, D. I., & Bartels, M. (2017). Brief Report: Influence of gender and age on parent reported subjective well-being in children with and without autism. *Research in Autism Spectrum Disorders*, *35*, 86-91.

Bennett, A. (2017, July 1). Autism's Clinical Companions: Frequent Comorbidities with ASD. *Children's Hospital of Philadelphia*. https://www.chop.edu/news/autism-s-clinical-companions-frequent-comorbidities-asd

Bernal, G., Bonilla, J., & Bellido, C. (1995). Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology*, *23*(1), 67-82.

Bramston, P., Bruggerman, K., & Pretty, G. (2002). Community perspectives and subjective quality of life. *International Journal of Disability, Development and Education*, *49*, 385–397.

Bramston, P., Chipuer, H., & Pretty, G. (2005). Conceptual principles of quality of life: An empirical exploration. *Journal of Intellectual Disability Research, 49*, 728–733.

Brantley, A., Huebner, E. S., & Nagle, R. J. (2002). Multidimensional life satisfaction reports of adolescents with mild mental disabilities. *Mental Retardation*, *40*(4), 321-329.

Bryant, F. B., & Veroff, J. (2007). Savoring: A new model of positive experience (pp. 184–185).

Bukowski, W. M., & Adams, R. (2005). Peer relationships and psychopathology: Markers, moderators, mediators, mechanisms, and meanings. *Journal of Clinical Child and Adolescent Psychology*, *34*, 3–10.

Casas, F., & González-Carrasco, M. (2019). Subjective well-being decreasing with age: New research on children over 8. *Child Development*, *90*(2), 375-394.

Cavallo, F., Dalmasso, P., Ottova-Jordan, V., Brooks, F., Mazur, J., Välimaa, R., ... & Positive Health Focus Group. (2015). Trends in life satisfaction in European and North-American adolescents from 2002 to 2010 in over 30 countries. *The European Journal of Public Health*, *25*(suppl_2), 80-82.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied Behavior Analysis* (2ndnd ed.). New York City, NY: Pearson. Retrieved from https://wps.prenhall.com/chet_cooper_appliedbeh_2/73/18706/4788844.cw/index.html

Deserno, M. K., Borsboom, D., Begeer, S., & Geurts, H. M. (2017). Multicausal systems ask for multicausal approaches: A network perspective on subjective well-being in individuals with autism spectrum disorder. *Autism*, *21*(8), 960-971.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542–575.

Diener, E. (Ed.). (2009). *The science of well-being: The collected works of Ed Diener* (Vol. 37). Springer Science & Business Media.

Dietz, P. M., Rose, C. E., McArthur, D., & Maenner, M. (2020). National and state estimates of adults with autism spectrum disorder. *Journal of autism and developmental disorders*, *50*(12), 4258-4266.

Doll, B., Dart, E. H., Arora, P. G., & Collins, T. A. (2021). Framing school mental health services within a dual factor model of mental health. In *Fostering the emotional well-being of our youth: A school-based approach* (pp. 40-60). Oxford University Press.

Duncan, B. L., Miller, S. D., & Sparks, J. A. (2003). *Child session rating scale*. Ft. Lauderdale, FL: Author

Dykshoorn, K. L., & Cormier, D. C. (2019). Autism spectrum disorder research: time for positive psychology. *Autism Open Access*, *9*(1).

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.

Egilson, S. T., Ólafsdóttir, L. B., Leósdóttir, T., & Saemundsen, E. (2017). Quality of life of high-functioning children and youth with Autism spectrum disorder and typically developing peers: Self-and proxy-reports. *Autism*, *21*(2), 133-141.

Epstein, M. H. (2004). *Behavioral and emotional rating scale* (2nd ed.). Austin: PRO-ED.

Extremera, N., Durán, A., & Rey, L. (2007). Perceived emotional intelligence and dispositional optimism–pessimism: Analyzing their role in predicting psychological adjustment among adolescents. *Personality and Individual Differences*, *42*, 1069–1079.

Fogle, L. M., Huebner, E. S., & Laughlin, J. E. (2002). The relationship between temperament and life satisfaction in early adolescence: Cognitive and behavioral mediation models. Journal of Happiness Studies, *3*, 373–392.

Franke, K. B., Hills, K., Huebner, E. S., & Flory, K. (2019). Life satisfaction in adolescents with autism spectrum disorder. *Journal of autism and developmental disorders*, *49*(3), 1205-1218.

Froh, J. J., Sefick, W. J., & Emmons, R. A. (2008). Counting blessings in early adolescents: An experimental study of gratitude and subjective well-being. *Journal of School Psychology*, *46*, 213–233.

Galinha, I., & Pais-Ribeiro, J. L. (2011). Cognitive, affective and contextual predictors of subjective wellbeing. International Journal of Wellbeing, *2*(1), 34–53. Doi:10.5502/ijw.v2i1.3

Gaspar, T., Bilimória, H., Albergaria, F., & Matos, M. G. (2016). Children with special education needs and subjective well-being: Social and personal influence. *International Journal of Disability, Development and Education*, *63*(5), 500-513.

Gentzler, A. L., Morey, J. N., Palmer, C. A., & Yi, C. Y. (2013). Young adolescents' responses to positive events: Associations with positive affect and adjustment. *The Journal of Early Adolescence*, *33*(5), 663-683.

Giacomoni, C. H. (2004). Bemestar subjetivo: Em busca da qualidade de vida [Subjective well-being: In search of quality of life]. *Temas em Psicologia da SBP* [Topics in Psychology SBP], *12*, 43–51.

Gilman, R., Easterbrooks, S. R., & Frey, M. (2004). A preliminary study of multidimensional life satisfaction among deaf/hard of hearing youth across environmental settings. Social Indicators Research, *66*, 143–164.

Gilman, R., & Huebner, E. S. (2000). Review of life satisfaction measures for adolescents. *Behaviour Change, 17*(3), 178. Retrieved from http://ezproxy.lib.usf.edu/login?url=https://www.proquest.com/scholarly-journals/review-life-satisfaction-measures-adolescents/docview/219361066/se-2?accountid=14745

Gilman, R., & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence, 35*, 311–319.

Greenspoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective well-being and psychopathology. *Social Indicators Research, 54*, 81–108.

Hauber, & Boon, A. (2022). First-Session Therapeutic Relationship and Outcome in High Risk Adolescents Intensive Group Psychotherapeutic Programme. *Frontiers in Psychology*, *13*, 916888–916888. https://doi.org/10.3389/fpsyg.2022.916888

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

Huebner, E. S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment, 6*, 149–158.

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

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. *Field Methods*, *18*(1), 3–20. https://doi.org/10.1177/1525822X05282260

Jones, L., Gold, E., Totsika, V., Hastings, R. P., Jones, M., Griffiths, A., & Silverton, S. (2018). A mindfulness parent well-being course: Evaluation of outcomes for parents of children with autism and related disabilities recruited through special schools. *European Journal of Special Needs Education*, *33*(1), 16-30.

KIDSCREEN Group Europe (2006) *The KIDSCREEN Questionnaires: Quality of Life Questionnaires for Children and Adolescents – Handbook*. Lengerich: Pabst Science Publishers.

Kohane, I. S., McMurry, A., Weber, G., MacFadden, D., Rappaport, L., Kunkel, L.,...Churchill, S. (2012). The comorbidity burden of children and young adults with autism spectrum disorders. *PloS One*, *7*, e33224.

Kovac, M., Mosner, M., Miller, S., Hanna, E. K., & Dichter, G. S. (2016). Experience sampling of positive affect in adolescents with autism: Feasibility and preliminary findings. *Research in autism spectrum disorders*, *29*, 57-65.

Kratochwill, T. R., Hitchcock, J. H., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2013). Single-case intervention research design standards. *Remedial and Special Education*, *34*(1), 26-38.

Laurent, J., Catanzaro, S. J., Joiner, T. E., Jr., Rudolph, K. D., Potter, K. I., Lambert, S., Osborne, L., & Gathright, T. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment*, *11*(3), 326-338. https://doi.org/10.1037/1040-3590.11.3.326

Ledford, J. R., & Gast, D. L. (Eds.). (2018). *Single case research methodology*. New York, NY: Routledge.

Lewis, A. D., Huebner, E. S., Malone, P. S., & Valois, R. F. (2011). Life satisfaction and student engagement in adolescents. *Journal of Youth and Adolescence, 40*, 249–262.

Leyfer, O., Folstein, S. E., Bacalman, S., Davis, N. O., Dinh, E., Morgan, J.,... Lainhart, J. E. (2006). Comorbid psychiatric disorders in children with autism: Interview development and rates of disorders. *Journal of Autism and Developmental Disorders*, *36*, 849–861.

Maenner, M. J., Shaw, K. A., & Baio, J. (2020). Prevalence of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 sites, United States, 2016. *MMWR Surveillance Summaries*, *69*(4), 1.

Martin, F., Clyne, W., Pearce, G., & Turner, A. (2019). Self-management support intervention for parents of children with developmental disorders: The role of gratitude and hope. *Journal of Child and Family Studies*, *28*(4), 980-992.

Martin, K., & Huebner, E. S. (2007). Peer victimization and prosocial experiences and emotional well-being of middle school students. *Psychology in the Schools, 44*, 199–208.

McDougall, J., Wright, V., Nichols, M., & Miller, L. (2012). Assessing the psychometric properties of both a global and a domain-specific perceived quality of life measure when used with youth who have chronic conditions. *Social Indicators Research, 114*, 1243–1257. https://doi.org/10.1007/s11205-012-0200-z.

Miller, S. D., Duncan, B. L., & Johnson, L. D. (2000). The session rating scale 3.0. *Chicago, IL: Authors*.

Nestor, P. G., & Schutt, R. K. (2012). *Research methods in psychology: Investigating human behavior.* Thousand Oaks, CA: Sage Publications.

Neto, F. (2001). Personality predictors of happiness. *Psychological Reports, 88*, 817–824.

Oberle, E., Schonert-Reichl, K. A., & Thomson, K. C. (2010). Understanding the link between social and emotional well-being and peer relations in early adolescence: Gender-specific predictors of peer acceptance. *Journal of Youth and Adolescence, 39*(11), 1330-1342.

Oberle, E., Schonert-Reichl, K. S., & Zumbo, B. D. (2010). Life satisfaction in early adolescence: Personal, neighborhood, school, family, and peer influences. *Journal of Youth and Adolescence*. Doi:10.1007/s10964-010-9599-1.

Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the values in action inventory of strengths for youth. *Journal of Adolescence, 29*(6), 891–909.

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A classification and handbook*. Washington, DC: American Psychological Association.

Proctor, C., & Linley, P. A. (2013). *Research, applications, and interventions for children and adolescents*. Springer.

Proctor, C. L., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies, 10*, 583–630.

Proctor, C., Linley, P. A., & Maltby, J. (2010). Very happy youths: Benefits of very high life satisfaction among youths. *Social Indicators Research, 98*, 519–532.

Raley, S. K., Shogren, K. A., & Cole, B. P. (2021). Positive Psychology and Education of Students with Disabilities: the Way Forward for Assessment and Intervention. *Advances in Neurodevelopmental Disorders, 5*(1), 11-20.

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.

Ryan, K., & Filene, J. (2012). Single Case Design Brief. Retrieved from https://www.jbassoc.com/wp-content/uploads/2018/03/Selecting-Single-Case-Designs.pdf

Saha, R., Huebner, E. S., Suldo, S. M., & Valois, R. F. (2010). A longitudinal study of adolescent life satisfaction and parenting. *Child Indicators Research, 3*, 149–165.

Schimmack, U., Schupp, J., & Wagner, G. (2008). The influence of environment and personality on the affective and cognitive component of subjective well-being. Social Indicators Research, *89*, 41-60. http://dx.doi.org/10.1007/s11205-007-9230-3

Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: The Free Press.

Seligson, J. L., Huebner, E. S., & Valois, R. F. (2003). Preliminary validation of the brief multidimensional students' life satisfaction scale (BMSLSS). *Social Indicators Research*, *61*(2), 121-145.

Shogren, K. A., Lopez, S. J., Wehmeyer, M. L., Little, T. D., & Pressgrove, C. L. (2006). The role of positive psychology constructs in predicting life satisfaction in adolescents with and without cognitive disabilities: An exploratory study. The Journal of Positive Psychology, *1*, 37–52.

Shoshani, A., & Slone, M. (2013). Middle school transition from the strengths perspective: Young adolescents' character strengths, subjective well-being, and school adjustment. *Journal of happiness studies*, *14*(4), 1163-1181.

Simonoff, E., Pickles, A., Charman, T., Chandler, S., Loucas, T., & Baird, G. (2008). Psychiatric disorders in children with autism spectrum disorders: Prevalence, comorbidity, and associated factors in a population-derived sample. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*, 921–929.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of clinical psychology*, *65*(5), 467-487.

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

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

Suldo, S. M., & Huebner, E. S. (2004). The role of life satisfaction in the relationship between authoritative parenting dimensions and adolescent problem behavior. *Social Indicators Research, 66*, 165–195.

Suldo, S. M., & Huebner, E. S. (2006). Is extremely high life satisfaction during adolescence advantageous? *Social Indicators Research, 78*, 179–203.

Suldo, S. M., Riley, K. N., & Shaffer, E. J. (2006). Academic correlates of children and adolescents' life satisfaction. *School Psychology International, 27*, 567–582.

Suldo, S. M., Savage, J. A., & Mercer, S. H. (2014). Increasing middle school students' life satisfaction: Efficacy of a positive psychology group intervention. *Journal of happiness studies*, *15*(1), 19-42.

Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review, 37,* 52–68.

Suldo, S. M., Shaffer, E. J., & Riley, K. N. (2008). A social-cognitive-behavioral model of academic predictors of adolescents' life satisfaction. *School Psychology Quarterly, 23,* 56–69.

Suldo, S., Thalji, A., & Ferron, J. (2011). Longitudinal academic outcomes predicted by early adolescents' subjective well-being, psychopathology, and mental health status yielded from a dual factor model. *The Journal of Positive Psychology, 6,* 17–30.

Suldo, S. M., Thalji-Raitano, A., Kiefer, S. M., & Ferron, J. M. (2016). Conceptualizing high school students' mental health through a dual-factor model. *School Psychology Review, 45*(4), 434-457. https://doi.org/10.17105/SPR45-4.434-457

State Board of Education. (2015). Exceptional Student Education Eligibility for Students With Autism Spectrum Disorder. In *Florida Administrative Code & Florida Administrative Register*. Retrieved from https://www.flrules.org/gateway/ruleNo.asp?id=6A-6.03023

Tarlow, K. R. (2016). Baseline Corrected Tau Calculator. http://www.ktarlow.com/stats/tau

Tejada-Gallardo, C., Blasco-Belled, A., Torrelles-Nadal, C., & Alsinet, C. (2020). Effects of school-based multicomponent positive psychology interventions on well-being and distress in adolescents: a systematic review and meta-analysis. *Journal of Youth and Adolescence*, *49*(10), 1943-1960.

Terry, T., & Huebner, E. S. (1995). The relationship between self-concept and life satisfaction in children. Social Indicators Research, *35,* 39 – 52.

Vannest, K. J., & Ninci, J. (2015). Evaluating intervention effects in single-case research designs. *Journal of Counseling & Development*, *93*(4), 403-411.

What Works Clearinghouse . (2020). What Works Clearinghouse standards handbook (Version 4.1). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. https://ies.ed.gov/ncee/wwc/handbooks

APPENDICES

Appendix A: IRB-Approved Caregiver 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), including when provided to students on the Autism spectrum. 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. This project offers extra support to students whose survey responses indicate room for growth in well-being. This study will determine the effect of the WBPP on students' emotional well-being along with their perspectives of the usefulness of the WBPP. 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, and examine its effects when used with students on the Autism spectrum. Findings from the study will help educators know more about activities that increase well-being in youth with Autism Spectrum Disorder (ASD). The study is funded by the Institute of Education Sciences. We are requesting your child's participation because they are (1) a middle school student, (2) with an Individualized Education Program (IEP) for ASD, (3) participate in general educational or gifted classes, and (4) may benefit from services intended to increase 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 complete the WBPP in the coming months, complete surveys about their well-being, and be interviewed about their experiences with the WBPP.
  - Surveys. Children will be asked to complete several surveys each week for up to 16 weeks. Some surveys will be delivered on paper during school hours and others will be delivered electronically—these can be completed at school or outside of school. These surveys will ask about your child's attitudes towards the WBPP along with their emotional well-being (life satisfaction). Completion of the electronic surveys is expected to take about 10 minutes on each occasion (twice per week). Completion of the paper surveys is expected to take about 5 minutes on each occasion (once per week after each WBPP meeting).
  - WBPP. Each child in this study will receive the full WBPP. Children will begin the program on different dates. Although we do not know the exact start date for your child, it will be no longer than eight weeks after this document is signed. We will send home a notice when your child is scheduled to begin the WBPP. The WBPP includes 10 weekly meetings. Specifically, our study staff will meet with students individually, once per week for 20-30 minutes, for a total of 10 meetings. 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.
  - Interview. Your child be invited to participate in one 30-minute interview to provide feedback on the program and their use of skills learned in the WBPP meetings.

  Research activities such as the WBPP meetings and completion of the interview will be during regular school hours and scheduled to be minimally disruptive to your child's academic course schedule. The surveys will be administered to students via text or email depending on preference, and students can complete the surveys at their preferred location. 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, student participation will take no more than 10 hours throughout the entirety of the study.

  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 a student with an exceptionality such as ASD; identification as an English Language Learner; 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 study period.

- ✓ What Your Participation Requires: One parent/caregiver per child participant will be asked to complete brief surveys of your child's experience with different feelings and life satisfaction. These surveys will ask about your child's emotional

well-being and life satisfaction as demonstrated at home. You will be asked to complete these brief surveys on 6 to 8 occasions, across the duration of your child's participation study. Completion of the surveys is expected to take about 10 minutes on each occasion.

Also, 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 self-paced (i.e., caregivers/parents can watch a pre-recorded session online). 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. Throughout the time you're your child participated in the WBPP 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.

The family information meeting will be at your convenience, outside or during school hours based on your preference. Participation will take no more than 4 hours for parents/caregivers.

✓ 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 typically-developing 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 for students with ASD may allow more children in the future to take part in such programs at school. 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 and feelings will receive a $5 gift card after every two to three completed surveys. These gift cards will be distributed to students every two weeks, on up to 13 occasions, for a maximum of $65 in gift cards. Students who provide feedback on the WBPP will receive an additional $10 gift card the same day they provide feedback in an interview. Students who withdraw from the study early will still receive gift cards in the amount of what they earned up until the point of withdrawal. In sum, over the course of the study, compensation for student participants can total up to about $75 in gift cards. All parents who provide ratings of their child's emotional well-being (up to eight occasions) will receive a $50 gift card upon the completion of all surveys. Parents who withdraw from the study early will still receive $25 for the completion of any surveys completed up until the point of withdrawal.

✓ 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. 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 WBPP meetings, and information from students' school records. 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 or your child 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 for students on the Autism spectrum. Study findings will inform educators about activities that promote emotional well-being in middle school students with ASD. 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 5 children and 5 adults (parents) will take part in this study on the acceptability and impact of the WBPP with students with ASD. 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 blue paper with the completed form to their designated teacher.*** Sign and keep the other copy of this letter (on pink paper) for your records.

Sincerely,

Shannon Suldo, Ph.D. (Professor)	Sarah Fefer, Ph.D. (Associate Professor)
School Psychology Program, College of Education	School Psychology Program, College of Education
University of South Florida	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: IRB-Approved Child 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.

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 individual students once a week during the school day. These meetings will take about 20-30 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. Once you complete the full program, you will receive a certificate of completion.

Each student will start the Well-Being Promotion Program at a different date. While we currently do not know the exact start date for each student, it will be no longer than seven weeks after this document is signed. This school year you will spend about 5 hours of time in program activities (10 meetings, each about 30 minutes long). At program completion, you will be asked to tell us your thoughts about the program, which will take about 30 minutes.

You will be asked to participate by completing surveys about your thoughts, feelings, and behavior, including your satisfaction with life. Most of these surveys will be sent to you electronically, twice per week. It will take no longer than 10 minutes to complete the surveys on a given occasion. We will ask you to complete one additional survey after each Well-Being Promotion Program meeting, which will take no longer than 5 minutes on each occasion. 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. We will also ask one of your parents/caregivers to complete surveys about their perspectives of your feelings and life satisfaction.

The total amount of time you will be asked to volunteer for this study is 10 hours over for the entirety of the study. For all students, we will look at your grades, test scores, and attendance. 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, many middle school students 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?
When you complete surveys about your thoughts and feelings, you will receive a $5 gift card after every two to three completed surveys. These gift cards will be given out every two weeks, on up to 13 occasions, for a maximum total of up to $65 in gift cards. You will also have the opportunity to tell us your thoughts about the Well-Being Promotion Program for an additional $10 gift card. In total, over the course of the study you can receive up to $75 in gift cards. If you stop participating before the study is over, the amount of gift cards that 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 meetings is kept confidential.

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 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: FOI Checklist Example

Well-Being Promotion Program Manual (Suldo, 2016)

Intervention Integrity Checklist

Core Session 2

Date: _____

Leader(s): _____

	Session Activity	Completed?	
1.	Homework review: you at your best.	Yes	No
2.	Provide incentives for students who completed homework.	Yes	No
3.	Discuss definition of gratitude.	Yes	No
4.	Students rate personal level of gratitude.	Yes	No
5.	Share gratitude level with group.	Yes	No
6.	Discuss benefits of gratitude.	Yes	No
7.	Decorate gratitude journals.	Yes	No
8.	Complete initial entry in gratitude journal.	Yes	No
9.	Share notebook entries.	Yes	No
10.	Assign homework (gratitude journaling).	Yes	No

Session Integrity Level:

A. Number of session activities completed (circled "Yes"):	A. _____
B. Number of session activities expected:	B. 10
Percentage of activities implemented this session (box A/box B):	_____%

Appendix D: BMSLSS

BMSLSS

For each statement, circle a number from (1) to (7), where (1) means you feel *terrible* about that area of life and (7) means you are *delighted* with that area of life.

During the past several weeks…	Terrible	Unhappy	Mostly Dissatisfied	Mixed *(about equally satisfied & dissatisfied)*	Mostly Satisfied	Pleased	Delighted
1. I would describe my satisfaction with my *family life* as:	1	2	3	4	5	6	7
2. I would describe my satisfaction with my *friendships* as:	1	2	3	4	5	6	7
3. I would describe my satisfaction with my *school experience* as:	1	2	3	4	5	6	7
4. I would describe my satisfaction with *myself* as:	1	2	3	4	5	6	7
5. I would describe my satisfaction with *where I live* as:	1	2	3	4	5	6	7
6. I would describe my satisfaction with my *whole life* as:	1	2	3	4	5	6	7

Appendix E: PANAS-C-10

PANAS-C-10 **(**Ebesutani et al., 2012) (Adapted version from Kovac et al., 2016)

This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent you have felt this way since the last time you completed this survey.

Feeling or emotion:	~~Very Slightly~~ Not at all	A little	~~Moderately~~ Some	Quite a bit	~~Extremely~~ A lot
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 F: BMSLSS Caregiver Version

BMSLSS- Caregiver Version

We would like to know your perspective on your child's satisfaction with life *during the past several weeks.* For each statement, circle a number from (1) to (7), where (1) means your child feels *terrible* about that area of life and (7) means your child is *delighted* with that area of life.

During the past several weeks…	Terrible	Unhappy	Mostly Dissatisfied	Mixed *(about equally satisfied & dissatisfied)*	Mostly Satisfied	Pleased	Delighted
1. My child would describe their satisfaction with their *family life* as:	1	2	3	4	5	6	7
2. My child would describe their satisfaction with their *friendships* as:	1	2	3	4	5	6	7
3. My child would describe their satisfaction with their *school experience* as:	1	2	3	4	5	6	7
4. My child would describe their satisfaction with *themselves* as:	1	2	3	4	5	6	7
5. My child would describe their satisfaction with *where they live* as:	1	2	3	4	5	6	7
6. My child would describe their satisfaction with their *whole life* as:	1	2	3	4	5	6	7

Appendix G: PANAS-C-10 Caregiver Version

PANAS-C-10- Caregiver Version

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 since the last time you completed this survey. There are no right or wrong answers.

Item	Not at all	A little	Some	Quite a bit	A lot
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 H: C-SRS

Child Session Rating Scale (CSRS)

Name _____Age (Yrs):____
Gender:_____
Session # ____ Date:_____

How was our time together today? Please put a mark on the lines below to let us know how you feel.

Listening

_____ did not always listen to me.

I----------I

_____ listened to me.


How Important

What we did and talked about was not really that important to me.

I----------I

What we did and talked about were important to me.


What We Did

I did not like what we did today.

I----------I

I liked what we did today.


Overall

I wish we could do something different.

I----------I

I hope we do the same kind of things next time.


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Appendix I: Exit Interview

Qualitative Questions

Instructions

- Share purpose of discussion:
    - *We're interested in learning more about your experiences in the Well-Being Promotion Program. We want your feedback on the program activities and materials, in part so that we can improve the program before using it with other students. There are no right or wrong answers – we want your honest opinions.*
- *Your specific responses will not be shared. We are recording this session only as a tool to capture all information. After what was said during this session has been typed, you will <u>not</u> be identified by name.*
- *You have previously given your written consent/assent to take part in this discussion. As a reminder, you are free to stop participating at any point.*

Participant Exit Interview

- *We'll start with your overall or big picture thoughts on the Well-Being Promotion Program, then I will ask some more specific questions. As a reminder, here's an overview of the topics and activities covered throughout the Well-Being Promotion Program.*
    - [show visual reminder of topics and activities covered in the WBPP]

1. *What did you like the best about the program?*

2. *What did you like the least about the program?*

3. *Thank you! What feedback do you have about the program in terms of…*
    A. Meeting activities?
    B. Handouts?
    C. Take-home challenges?
    D. Attempts to involve your caregivers, for instance, through the weekly handouts or talking to them about what you did in the sessions?
    E. Frequency and timing of weekly meetings? (once a week during 1st or 2nd period)
    F. Pace of the weekly meetings?(e.g., were parts too rushed? Too slow? Or just about right?)
    - PROBE: *Is there anything you would change about the program delivery?*

4. *What are some of the most important things you learned in the program?*

    - PROBE: *Do you think you can increase/change your happiness? Why/why not?*

5. *Which activities were the most beneficial/enjoyable? Why?*

    - Follow-Up: *Which activities were the least beneficial/enjoyable? Why?*

6. *Which activities that you learned in the meetings are you <u>most</u> likely to continue to do on your own? Why?*

    - Follow-Up: *Which activities are you the <u>least</u> likely to continue on your own? Why?*

7. *How would you explain this program to your friends?*

    - Follow-Up: *Would you recommend this program to your friends?*

8. *What are some of the most important things you learned in the program?*
    - Follow-up: *Why are these things important to you?*
    - Follow-up: *Describe an example of something in your life that you think changed based on what you learned in this program (e.g., at school, with your family, with friends, with yourself?)*

9. *How would you describe your relationship with your program counselor, Ms. Nico?*
    - Follow-up: *Did the relationship with Ms. Nico change from the time the program started until now?*
        - PROBE: *What session(s) did you notice you felt this way?*
    - Follow-up: *What about Ms. Nico contributed to that relationship?*
        - PROBE, if not mentioned: *What did Ms. Nico do to build that relationship?*
    - Follow-up: *Did Ms. Nico try to understand what it's like to be you? How?*
    - Follow-up: *What was a memorable moment for you with Ms. Nico in this program?*

10. *How did Ms. Nico show that she understood your unique life experiences? OR What made you feel like she did not understand your unique life experiences?*

11. *Describe whether or not you felt accepted, safe, and comfortable during the sessions.*
    - PROBE*: What session activities or interactions in the program made you feel accepted, safe, comfortable sharing?* OR
    - *Why did you feel uncomfortable or like you couldn't share?*

12. *What advice would you give Ms. Nico to help all students feel accepted, safe, comfortable, and respected?*

13. *What changes would you make to the program to make it better for kids like you?*

    - Follow-up: *What suggestions do you have to improve the program for kids like you?*

    [Summarize responses] *is that correct? Please take a moment to think if there is anything else you might want to add.*

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APPROVAL

September 8, 2022

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

Dear Dr. Shannon Suldo:

On 9/7/2022, the IRB reviewed and approved the following protocol:

Application Type:	Modification / Update
IRB ID:	STUDY001065_MOD000005
Review Type:	Expedited
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; • Study Protocol_Track changes; • Parent Combined Consent and Permissio Form_Version 3_8-23-22_Clean.pdf; • Parent Combined Consent and Permission Form_Version 3_Spanish.pdf; • Parent Combined Consent Permission_Students with ASD_9-2-22.pdf; • Student Assent for Intervention Evaluation_8-23-22_Clean.pdf; • Student Assent_Students with ASD_9-2-22.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.

The modifications, as described by the study team below, have been approved:

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One set of requested modifications to the study involve changes in language used during the participant recruitment process in an effort to reduce stigma attached to any school mental health service (including the intervention evaluated in this study- the Well-Being Promotion Program [WBPP]) and increase clarity of study procedures. In particular, we created a 2-page flyer (to be printed front-to-back) to share with youth and parents/caregivers during the recruitment process to (a) describe the Well-Being Promotion Program in layman's terms and (b) serve as a visual aide throughout the recruitment meetings between a school mental health team member and an eligible youth. We made editorial changes to the recruitment script, the parent consent form, and student assent form in accordance with the goal of reducing potential stigma and increasing clarity. For instance, in the consent document we changed words like "intervention" and "service" to "program." Further, we clarified language around the screening process used to identify students eligible to participate, and specified that students in the study (assigned to either participate in the program now, or participate later) will still receive existing supports provided by the school.

A second set of requested modifications of the study pertain to an additional study aim: to determine if middle school students with Autism Spectrum Disorder (ASD) are appropriate to include in the WBPP intervention, by examining the acceptability and impact of the WBPP with a small sample of students with ASD (diagnosis of ASD per school records). Support for the utility of the WBPP with students with ASD would lend confidence that students with ASD who otherwise meet eligibility criteria for the larger RCT efficacy study by reporting diminished subjective well-being during the screening process are appropriate for inclusion in the intervention (WBPP) offered at their school. To explore this topic, we have expanded the study protocol to detail a single-case design approach with five students with ASD. Note: no change in total sample size of youth participants in the multi-year multi-site study (N = 1170) is anticipated as a result of this sub-study of 5 students with ASD. In this modification request, we have uploaded separate parent consent and student assent forms, as well as a recruitment script, for use with these 5 individuals.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Reconsent of participants is not needed.

Sincerely,

Andi Encinas
IRB Manager