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An Analysis of Therapeutic Alliance and Group Cohesion in a Group Positive Psychology Intervention Serving Middle School Students Reporting Low Life Satisfaction

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An Analysis of Therapeutic Alliance and Group Cohesion in a Group Positive Psychology Intervention Serving Middle School Students Reporting Low Life Satisfaction

by

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Every Black girl has at least one dream of doing what many have told them is impossible. Despite the echoes of fears and anxieties, we chase the dream anyway and eventually become it.

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Abstract

While previous research has focused on how positive psychology treatments relate to outcomes, it is also essential to evaluate the therapeutic process of these treatments. The therapeutic process consists of elements like the therapeutic alliance and the efforts the clinicians and the client put into the process (Bordin, 1979). Positive psychology intervention therapeutic processes differ from traditional treatments, as they have a skills-building perspective rather than a problem-focused perspective (Cunha et al., 2019; Datu & Bernardo, 2020; Kwok et al., 2016). Thus, the therapeutic relationship may take on a different form. Furthermore, as therapy approaches differ, so do the modalities that they are offered, such as individual or group settings. In individual therapy, the therapeutic process is usually between the client and the clinician. However, in group therapies, there are more relationships to account for that may relate to outcomes (Alldredge et al., 2021; Burlingame et al., 2018). Group therapy provides a unique context to develop a therapeutic relationship with the clinician and the peers within the group (Burlingame et al., 2011). This study aimed to address the gaps in the literature on positive psychology interventions with youth and understand how the therapeutic process in positive psychology group interventions may relate to client outcomes. Secondary analyses were conducted from a larger grant-funded study intended to improve middle school students' (5^{th} – 8^{th} grade) well-being through a positive psychology intervention. A second-order latent growth model analyzed the nested relationships of students' therapeutic alliance and group cohesion within groups across three time points in relation to the following client outcomes: life satisfaction, affect, and psychopathology symptoms (n = 199). The regression of post-test life

satisfaction on the initial (3 weeks into the intervention) student therapeutic alliance yielded a coefficient estimate of .31 (*SE* = .15, *p* = .04). This finding suggests that the more positively students rated their initial therapeutic alliance, the more positively they rated their post-intervention life satisfaction. A similar positive trend was seen for leaders' ratings of their therapeutic alliance in relation to students' post- test life satisfaction .22 (*SE* = .09, *p* = .02). There were no other significant results between students' and leaders' initial or growth perspectives. There were also no significant findings for students' group cohesion perspectives predicting student outcomes. As a supplement to the quantitative results, student interviews provided insight into what students valued in their therapeutic relationships. Close thematic analyses revealed that students valued leaders who showed characteristics of approachability, interest, and genuineness. Likewise, students enjoyed the presence of their peers more when there was a facilitation of safe spaces, respect, engagement, and fun from both their leaders and their group members. The results of this study may provide implications for mental health professionals and researchers to understand therapeutic alliance and group cohesion in group-positive psychology interventions and interpret how these factors may relate to student or youth client outcomes.

Chapter One: Introduction

Approximately 17% of school-aged youth (ages 6–17) have a mental health disorder (National Alliance on Mental Illness, 2019). Mental illness manifests as internalizing and externalizing behaviors and can occur due to many factors, such as genetic vulnerabilities, stress, and social learning (APA, 2013). COVID-19 data indicates more mental health concerns for youth and their families (APA, 2020). When there is an imbalance in one's ability to regulate their emotions and the stress that they are presented with, psychopathology is likely to develop (diathesis-stress model). Previous mental health research and interventions followed the medical model of treating the illness as it occurs. This approach, combined with waiting until the symptoms cause a disruption, maintains a reactive and punitive response that places the responsibility and blame on the child rather than examining and addressing the systems perpetuating the issue (Herman et al., 2021). Current literature supports early prevention and intervention to decrease potential future adverse outcomes in youth. Furthermore, there is more support for promoting complete mental health in youth that goes beyond reducing psychopathological symptoms. Instead, a holistic approach garners that wellness and well-being should also be promoted (Weist et al., 2014).

Positive Psychology Interventions

The dual-factor model supports that well-being should be addressed alongside psychopathology symptoms, as they are "related but distinct" factors (Suldo & Shaffer, 2008; Suldo & Doll, 2021, p.20). As research continues to grow around positive psychology and its implications on subjective well-being, more positive psychology interventions (PPIs) are

developed to explore these relationships. PPIs enhance well-being by allowing individuals to engage in activities and strategies that foster positive emotions and experiences, strong relationships, and a sense of purpose (Morrish et al., 2018; Wood & Johnson, 2016). The interventions can consist of one or multiple targets of the following activities: character strengths, acts of kindness, best possible self, gratitude, optimism, and post-traumatic growth (Munha et al., 2019; Kwok et al., 2016; Mongrain et al., 2018; Parks & Layoius, 2016; Proyer et al., 2015).

Empirical support for PPIs has increased over the last two decades. Carr et al. (2020) conducted meta-analyses with 347 studies totaling over 70,000 participants in PPIs across 41 countries. The sample's average age was 36.75, with studies targeting children (n = 67), young adults (n =125), people in middle adulthood (n = 105), and adults over 60 (n = 40). Participants were referred to treatment or volunteered based on physical conditions, mental health disorders, or non-clinical characteristics. Findings from this study supported that at an average of 10 sessions across six weeks, PPIs had small to moderate effects on increasing well-being (g = .39), quality of life (g = .48), and strengths (g = .46) while decreasing anxiety (g = -.62), depression (g = -.39), and stress (g = -.58). Sustained effects of the PPIs on each of these variables were seen at three-month follow-up but began to diminish after seven months. However, there were still significant small effect sizes for depression, anxiety, well-being, and strengths. This study provides insight into thriving and developing literature on PPIs across different contexts. It also supports the growing effort of administering PPIs to children in school settings.

Positive Psychology in Schools

Historically and presently, schools are excellent places for students to receive mental health services. Gallardo et al. (2020) conducted a meta-analysis with nine randomized (n = 7) and non-randomized (n = 2) school-based multicomponent PPI studies. There were 4,898

participants total between the ages of 10 and 18. The sessions ranged from 6 to 18 meetings and lasted 4 to 30 weeks. Results from this study yielded small but significant effect sizes for increasing psychological well-being (g = .28) and subjective well-being (g = .24) while decreasing depressive symptoms (g = .28). Though the effect sizes are small, this meta-analysis supports the use of multicomponent interventions in schools to help youth maximize positive experiences, decreasing depressive symptoms, and strengthening their psychological functioning (Gallardo et al., 2020).

More research on adolescents and school-based PPIs could help researchers and practitioners establish ways to serve students better and incorporate longer-lasting effects. One consideration for future studies would be to account for the therapeutic process of PPIs to understand more about the mechanisms of change as seen in other interventions targeted at decreasing psychopathological symptoms (Chodkiewicz & Boyle, 2016). When PPIs are delivered in the context of a counseling relationship (vs. self-administered), one factor that often contributes to improvement is therapeutic alliance.

The Importance of Therapeutic Alliance in Youth Psychotherapy

Practitioners and researchers alike find that therapeutic alliance is an important aspect of the therapeutic process (Flückiger et al., 2018). The therapeutic process consists of the relationship established throughout treatment, mainly between the client and the therapist. The development of therapeutic alliance between the client and the therapist is related to improved treatment outcomes and is assessed directly from different perspectives, such as the therapist, client, or observer (Flückiger et al., 2018; Marker et al., 2013). Therapeutic alliance assessments can also occur in vivo via rating scales or verbal discussion.

Most therapeutic alliance research has been conducted on adult populations (Horvath et al., 2011). However, the frequency of studies targeting understanding youth perceptions of therapeutic alliance is increasing (McLeod, 2011). A current issue with measuring therapeutic alliance is that multiple definitions can be applied. With multiple definitions, the consensus on how to measure alliance can differ across studies. As such, findings may be mixed on whether therapeutic alliance is related to symptomology improvement (Accurso & Garland, 2015; Hukkelberg & Ogden, 2013; McLeod, 2011). Furthermore, looking at how therapeutic alliance is measured with youth, previous studies have identified that they do not yield the same factor structure as when used with adult populations (Shirk et al., 2010).

Group Therapy Processes

Therapy has different modalities, such as individual or group therapy. Whereas individual therapy constitutes the relationship between a client and a therapist, group therapy has multiple relationships to consider. In group therapy, there is the relationship between the client and therapist, the relationship between the clients, and the relationship between the clients and the group as a whole (Burlingame et al., 2018; Gullo et al., 2015). While studies have linked group therapy to an effective mode for improving client symptoms, there is still a need to better understand the mechanisms contributing to these changes (Burlingame et al., 2013; Gullo et al., 2015).

Research has progressed in exploring the relationship between group processes in group therapy and how they relate to treatment outcomes (Alldredge et al., 2021; Burlingame et al., 2018; Kivlighan et al., 2012). However, there are different definitions of what constitutes the therapeutic process within group therapy. For example, group climate and cohesion are integral aspects of the group process but have different interpretations. Group climate refers to the

atmosphere of the group within the constructs of engagement, avoidance, and conflict (Mackenzie, 1983). Group cohesion concerns feelings of belonging to a group and its centrality to symptom improvements (Burlingame et al., 2011). Though both concepts are relevant to the group process, each can lead to different approaches to understanding and interpreting the group process and how it relates to therapeutic outcomes.

Like therapeutic alliance, group alliance is also essential for practitioners to assess how clients and the group are functioning. In school settings, providing group services to students can be beneficial as more students receive the services they may need at the same time (Jeong & Kim, 2017; Sherrod et al., 2009). However, it is important to monitor the factors supporting group therapy's benefits, such as the group therapeutic process. Thus, there is a call for more research to address how group therapeutic processes like group cohesion function in school-based psychotherapeutic interventions and if they are still relevant.

Statement of Problem

Positive psychology interventions (PPIs) are still fairly new and developing within the larger youth mental health care field. Most of the literature evaluating these interventions are randomized control studies that address the effectiveness and efficacy of the treatment (Carr et al., 2020). Few studies, however, investigate the therapeutic process that may be related to client outcomes in PPIs. The therapeutic process is an integral part of therapy that is supported to relate to treatment outcomes. Previous literature focused on adult populations to understand the therapeutic process. However, the therapeutic process may be a different experience for youth. Group interventions introduce another level to the group process with multiple developing relationships between the client, counselor, and the group. As such, adjustments in understanding these relationships about overall treatment outcomes are warranted.

Therapeutic alliance and group cohesion are supported as necessary components for therapeutic change. However, little research has looked into therapeutic alliance and group cohesion as necessary factors for improved mental health in positive psychology interventions. This study aims to contribute to the growing knowledge about how therapeutic alliance and group cohesion may provide insight into variance in student outcomes in a positive psychology intervention intended to promote subjective well-being.

Purpose of Study

This research study examined how students' perceptions of therapeutic alliance and group cohesion and how counselors' perceptions of therapeutic alliance may relate to student life satisfaction, affect, and psychopathology symptom outcomes in a group positive psychology intervention. This study examined the following questions:

1. To what extent, if any, do the initial therapeutic alliance perceptions of middle school students in a positive psychology intervention relate to the following indicators of their mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?
2. To what extent, if any, does the growth of therapeutic alliance perceptions of middle school students in a positive psychology intervention relate to the following indicators of their mental health:
    a. Life Satisfaction
    b. Positive Affect

c. Negative Affect

d. Psychopathology?

3. To what extent, if any, do the initial perceptions of group cohesion in a positive psychology intervention to middle school students relate to the following indicators of student mental health:

    a. Life Satisfaction

    b. Positive Affect

    c. Negative Affect

    d. Psychopathology?

4. To what extent, if any, does the growth of group cohesion in a positive psychology intervention to middle school students relate to the following indicators of student mental health:

    a. Life Satisfaction

    b. Positive Affect

    c. Negative Affect

    d. Psychopathology?

5. To what extent, if any, do the initial therapeutic alliance perceptions of counselors administering a positive psychology intervention to middle school students relate to the following indicators of student mental health:

    a. Life Satisfaction

    b. Positive Affect

    c. Negative Affect

    d. Psychopathology?

6. To what extent, if any, does the growth of the therapeutic alliance perceptions of counselors administering a positive psychology intervention to middle school students relate to the following indicators of student mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?
7. How do middle school students receiving a group positive psychology intervention conceptualize their therapeutic experience with their group leaders?
8. How do middle school students who receive a group positive psychology intervention conceptualize their therapeutic experience with their peers?

Hypotheses

Little to no research has looked at the therapeutic process of positive psychology interventions with youth. Savage et al. (2011) evaluated therapists' and children's aggregated alliance in a small group positive psychology intervention and found mixed and unexpected associations of alliance with student life satisfaction and positive affect (described in chapter two). A small sample size and the use of measures of alliance oriented toward problems and problem-solving may have skewed the results. These limitations prompt further investigation into using therapeutic alliance measures that align with positive psychology processes and with a larger sample size.

For research question one, this researcher hypothesized that higher levels of middle school students' initial rating of the therapeutic alliance would significantly predict positive relationships with their life satisfaction and positive affect. Higher alliance levels would also

predict negative relationships with negative affect and psychopathological symptom levels. Studies of alliance in traditional counseling interventions intended to reduce mental health problems (Cirasola et al., 2021; Shirk et al., 2011) support significant and positive correlations between youth reports of therapeutic alliance and treatment outcomes in psychotherapeutic interventions such as better functioning and less severe symptoms.

For research question two, the researcher hypothesizes that positive growth perspectives in youth's perspectives of therapeutic alliance would predict positive relationships with students' life satisfaction and positive affect while predicting negative relationships with their negative affect and psychopathology symptoms. The aspect of therapeutic alliance development was included in this study as Bickman et al.'s (2012) and O'Keefe et al.'s (2020) findings emphasized the importance of analyzing change in the alliance to predict therapeutic outcomes. Their findings suggest that better treatment outcomes are likely to be reported when clients initially have more positive perspectives of the alliance.

Research question three assessed students' perceptions of group alliance or cohesiveness in relation to their treatment outcomes. It was hypothesized that higher levels of the students' group alliance perceptions would significantly predict positive relationships with students' life satisfaction and positive affect while predicting negative relationships in their negative affect and psychopathology symptoms. For research question four, the researcher hypothesized that positive growth perspectives in youth's perspectives of group cohesion would predict levels of their life satisfaction, positive affect, negative affect, and psychopathology symptoms. This hypothesis was aligned with Burlingame et al.'s (2018) meta-analysis, which supports the idea that perceptions of group cohesion are related to improved treatment outcomes.

Research question five focused on the group leaders'perceptions about therapeutic alliances. The researcher hypothesized that higher levels of the group leaders' initial rating of the therapeutic alliance would significantly predict positive relationships with students' life satisfaction and positive affect while predicting negative relationships with their negative affect and psychopathology symptoms. Research question six looked at the growth of the group leaders' therapeutic alliance in relation to the students' outcomes. The researcher hypothesized that positive growth perspectives in the group leaders' perspectives of therapeutic alliance would predict positive relationships with students' life satisfaction and positive affect and negative relationships with students' negative affect and psychopathology symptoms. Although there are mixed findings regarding the relationship between therapists' views on the alliance and client outcomes, Bickman et al. (2012) and Kivlighan et al. (2014) also support that the therapists' perspectives are valued in the therapy process and across time.

Definition of Key Terms

This study includes several variables. Operational definitions of each variable based on previous research are described below as key terms.

Therapeutic Alliance

Therapeutic alliance is a critical component in the therapeutic process and focuses on the relationship that the client and the therapist build throughout treatment. This study defined therapeutic alliance under Bordin's pan-theoretical alliance model (1979). Bordin described the alliance as including the following constructs: bond, task, and goal agreement. The bond can be understood as the affective aspect of the relationship, while the tasks are the activities and engagement in the sessions. Lastly, goal agreement is a shared understanding and commitment to the set goals of therapy between the client and the therapist.

Group Cohesion

According to Burlingame et al. (2011), group cohesion consists of the feelings of belongingness an individual feels in their group and the importance the group has to that individual in their therapeutic process.

Positive Psychology Interventions

Positive psychology interventions (PPIs) enhance well-being by allowing individuals to engage in activities and strategies that foster positive emotions and experiences, strengthen relationships, and cultivate a sense of purpose (Morrish et al., 2018; Wood & Johnson, 2016). The interventions are not limited to but often include the following activities: identification and use of character strengths, acts of kindness, best possible self, gratitude, optimism, and post-traumatic growth (Parks & Layoius, 2016).

Life Satisfaction

Diener et al. (1999) described life satisfaction as one's overall perception of life from a cognitive and affective lens. Experts conceptualize life satisfaction as domain-specific or global. Life satisfaction is the cognitive component of the larger construct of subjective well-being, which is also composed of positive and negative affect.

Positive Affect

Positive affect is a broad dimension that pertains to the frequency of pleasant emotional and mood experiences like joy, pride, enthusiasm, and high energy (Watson et al., 1988).

Negative Affect

Negative affect pertains to the frequency of unpleasant emotional and mood experiences like sadness, fear, anger, and distress one may feel (Clark & Watson, 1991).

Psychopathology

Psychopathology references negative indicators of mental health problems (APA, 2013). It typically refers to dysregulated behaviors of an internalizing (e.g., anxiety and depression) or externalizing (e.g., aggression, impulsivity, and inattention) nature.

Significance of the Study

Schools are essential to provide mental health services that vary in type/aim (i.e., promote well-being vs. reduce psychopathology) and modality (e.g., individual or group counseling). In a school setting, group interventions can provide more flexibility and access for students to receive the services they need. This study will contribute to what is known about essential processes for improving student outcomes when they participate in a small-group positive psychology intervention. Specifically, analyzing the therapeutic alliance across multiple time points may provide valuable information regarding changes in how therapeutic alliance relates to student outcomes. The findings from student perceptions of group cohesiveness may also offer additional support for integrating its assessment in future group interventions to understand its relationship to clients' outcomes.

Chapter Two: Literature Review

This chapter reviews the relevant literature regarding the current study. It begins with an overview of school-based mental health and theories of well-being. The review then turns to positive psychology interventions and their value within youth mental health care. Next, the importance of the therapeutic process is addressed with a focus on the therapeutic alliance, group cohesion, and measures used with youth samples. Finally, the intersection of the therapeutic process in PPIs with youth is reviewed.

Role of Schools in Mental Health Care

While numerous community mental health centers and university counseling centers provide mental health services, they are not always accessible to every family, whether it be a need for transportation, insurance, or financial support (Knopf et al., 2008). The stigma around receiving mental health services can also contribute to the lack of urgency to receive them (DeLuca, 2019; Heflinger & Hinshaw, 2010). These barriers to mental health services do not justify youth and their families not receiving the support they need. Untreated mental health conditions are associated with future adverse outcomes, such as substance abuse, suicide, comorbid pathology, school dropout, and risky behaviors (NAMI, 2019; Porche et al., 2016). Early identification and treatment are essential and effective in helping youth and their families adapt and address mental health concerns.

Establishing school and home collaboration allows student support systems to build a community that fosters trust, positive mental health, and commitment to promoting student well-being. Youth spend the majority of their developmental years in schools. Due to the familiarity

of this setting and the many hours spent there weekly, these settings may be beneficial spaces for offering identification, prevention, and intervention opportunities. Mental health professionals such as school counselors, school psychologists, social workers, and nurses employed by schools/districts can offer such mental health services. Providing school-based mental health services decreases many of the barriers mentioned above to access and increases opportunities for youth and families from marginalized and diverse cultural backgrounds (Radzicki et al., 2020). Children from culturally diverse backgrounds may experience bicultural and societal stress, which may contribute to decreased self-esteem and optimism and increased anxiety and depression (Bronfenbrenner, 1979; Vélez-Agosto et al., 2017).

A Multitiered System of Support (MTSS) for Mental Health

Schools are critical settings for initiatives intended to promote wellness and intervene with mental illness in youth. Previous research has reported that only 36.2% of youth with mental health disorders received treatment (Merikangas et al., 2011). This low receipt of treatment may be due to the discrepancy in how different mental health issues present. For example, externalizing behaviors are more detectable because of their disruptive nature, which makes students who exhibit these behaviors more likely to be considered for special education and receive services (Marsh, 2016; Splett et al., 2019) and more likely to receive mental health care services (Merikangas et al., 2011). Internalizing behaviors are generally less likely to be why students are identified for services (Bradshaw et al., 2008; Forness et al., 2012). MTSS is an alternative to the wait-to-fail model that allows schools to provide students services based on their needs (Arora et al., 2019) versus a system that reserves intensive resources to students with severe externalizing behaviors to disturb others. Most research examining MTSS has been with academic support and outcomes in mind. Additional research is needed to address how mental

health can be integrated with academic support, as behavior and mental health are tied to academic success. Evidence-based practices and interventions are essential to make MTSS as effective as possible (Fabiano & Evans, 2019).

This study investigated an early intervention provided at the Tier 2 level following a universal screening of students' emotional well-being. Early identification is essential for providing necessary support to students at risk for mental health issues. A multitiered system of support (MTSS) provides a framework for graded service delivery and is integrated into the learning environment. MTSS consists of three tiers. Tier 1 focuses on universal wellness that promotes a positive and supportive school environment by fostering prosocial behaviors, safety, and resilience (Marsh, 2015; Marsh & Mathur, 2020). This tier addresses the whole school with social-emotional learning curricula, positive behavior interventions and discipline practices, and universal screenings for internalizing and externalizing behaviors. According to the Substance Abuse and Mental Health Services Administration (SAMSHA, 2019), universal screening is beneficial for early identification because it helps identify students who are at risk for negative outcomes and need emotional support.

Universal screening also helps the school understand the overall need for mental health services, the type of social-emotional programs their students can benefit from, and the risks and protective factors present (Doll et al., 2021; Dowdy et al., 2015). Students identified as at-risk from universal screenings or seen as not responding to the universal practices in place are provided Tier 2 services. At Tier 2, specific improvements are targeted at the school or classroom level for sub-sets of students. Tier 2 services include mentoring, check-in/check-out (Dart et al., 2012), social skills training, or small group counseling. School mental health professionals can guide this level of support in collaboration with teachers and families

(Goodman-Scott et al., 2020; Sherrod et al., 2009). Students who need extra help are referred to Tier 3 services. This tier can include targeted counseling, therapeutic intervention for internalizing and externalizing behaviors at the individual level, and functional behavior assessments and interventions (Goodman-Scott et al., 2020).

Modern Definition of Mental Health that Considers both Positive and Negative Indicators

Mental health was previously defined as the presence or lack of psychopathology (Chakhssi et al., 2018; Keyes, 2005). Understanding the cause of maladjustment is critical for prevention and developing interventions to help others. However, an evaluation of psychopathology exclusively does not provide a complete picture of a person's health (Antaramian et al., 2010; Jahoda, 1958). There are also positive factors and strengths to consider for mental health. Mental health can be seen as a multifaceted construct that involves understanding both maladjustment and components of well-being (Howell et al., 2016).

The dual-factor model conceptualizes positive and negative mental health indicators (Greenspoon & Saklofske, 2001; Suldo & Schaffer, 2008). This model posits that mental health has distinct psychopathology and well-being dimensions that differentiate individuals based on their placement. Those who report high levels of well-being and low levels of psychopathology can be identified as having positive mental health (Suldo & Shaffer, 2008). If they report having high well-being with high psychopathology, they are considered "symptomatic but content" based on the model. Individuals who report low well-being and low psychopathology are described as "vulnerable," while those who report high psychopathology and low well-being are "troubled." These four groups have been supported to exist in samples of youth and are associated with different outcomes for youth. For instance, Suldo and Shaffer (2008) found that middle school students in the positive mental health group performed better academically from

6th to 8th grade and had higher social competence than those identified as vulnerable. This finding supports that better outcomes are associated with higher levels of well-being. Other studies also showed that 7th and 8th-grade students who were identified as having positive mental health and symptomatic but content had emotional engagement increases at school at a 5-month follow-up while the troubled and vulnerable groups decreased (Lyons et al., 2013).

While it is critical to address psychopathological symptoms, addressing wellness and well-being can help provide youth with skills and qualities that promote healthy functioning (Carr et al., 2020; Seligman, 2002). Decreasing negative symptoms can work to alleviate stress. However, increasing positive well-being can also improve life satisfaction and flourishing for better future outcomes (Lyubomirsky, 2019; Scorsolini-Comin et al., 2013). Specifically for school-aged youth, positive indicators are not just defined by academic achievement; they can also be seen as protective factors like social support. Antaramian et al.'s study (2010) evaluated social support by applying the dual-factor model to 764 seventh and eighth-grade students. Results showed that students in the positive mental health group reported higher levels of family and teacher support, followed by students in the symptomatic but content group and the troubled and vulnerable groups. Thus, social support is associated with varying levels of positive mental health. The study's findings suggest that social support may also provide protection and an outlet for youth to speak about their experiences and receive help. Group counseling may offer space for social support, as the relationship between the youth, the therapist, and their peers can foster connection, belongingness, and vulnerability (Brooks, 2021; Thompson & Goodvin, 2016).

Furthermore, the dual-factor model is empirically based and can be applied to the school setting (Doll et al., 2021). Trained mental health professionals can use the dual-factor model alongside the multitiered support systems to provide students with the mental health services

they need based on their profiles. For example, though a student may report low psychopathology, it should not disqualify them from receiving support for their wellness and flourishing (Doll et al., 2021). For youth who are labeled as vulnerable, treating negative psychological symptoms along with bolstering positive ones can create an opportunity for better outcomes and healing.

Subjective Well-Being

Well-being is a multifaceted construct that includes the hedonic aspects of feeling good and the eudemonic aspects of doing good socially and psychologically (Diener et al., 1999; Forgeard et al., 2011). According to Diener (1984), subjective well-being can be conceptualized as one's perception of one's quality of life, considering how one feels (affects) and thinks about it (cognition). Positive affect pertains to pleasant emotions and mood experiences like joy and pride, while negative affect pertains to unpleasant experiences like fear and anger. This requires the evaluation of the frequency and intensity of both positive and negative events experienced and the emotionality and appraisals that come with them. For those who have high subjective well-being, there are associations for higher life meaning, hope, a sense of purpose, interpersonal character strengths, self-compassion, academic achievement, and engagement (Bronk et al., 2009; Datu & Bernardo, 2020; Heng et al., 2020; Lyons & Huebner, 2016; Zessin et al., 2015). Lower subjective well-being is associated with negative outcomes, such as lower levels of health and increased risky behaviors like drug usage, sexual activity, and violence (Valois et al., 2001; Zullig et al., 2001 & 2005).

Subjective well-being includes three components: positive emotions, negative emotions, and life satisfaction. Life satisfaction has been proposed as the most stable indicator. Its correlates—or factors that influence it—are individual, environmental, and situational variables (Huebner et al., 2006). Life satisfaction consists of positive appraisals of life on the whole

(globally) or with respect to satisfaction with specific domains such as family, friends, school, self, and living environment (McDougall & Wright, 2017; Strózik et al., 2015).

Seligman (2002) suggests that by partaking in intentional activities intended to foster positive feelings about one's past, present, and future, subjective well-being can be increased beyond one's biological set points. Intentional activities were initially hypothesized to address about 40% of the variance between an individual's happiness levels, while one's genetic set point and life circumstances account for 50% and 10% of the variability in subjective well-being levels, respectively (Lyubomirsky et al., 2005). Activities focusing on the past, present, and future were proposed to benefit subjective well-being by highlighting the positive aspects of life and fostering connections and self-efficacy.

In a more recent update to this model of determinants of subjective well-being, researchers have concluded that the contributions of genetics and intentional activities were overestimated, while life circumstances were underestimated (Brown & Rohrer, 2019). Also, the determinants can co-vary in the sense that life circumstances may be related to genetics, or genetics may relate to how one pursues intentional activities. Furthermore, Brown and Rohrer (2019) expressed that genes, life circumstances, and intentional activities may not constitute all happiness determinants. Sheldon and Lyubomirsky (2021) revisited the determinants and, in line with the critiques from colleagues, noted that the determinants are not precise and can vary within individuals. However, abundant studies still support the premise that practicing intentional activities and engaging in well-being can increase subjective well-being (Donaldson et al., 2021; Sheldon & Lyubomirsky, 2021).

Middle School Students' Subjective Well-Being

Adolescence is a social, emotional, psychological, and physical transition. The challenges faced during this developmental period can be risk factors for their mental health and

well-being. Furthermore, uncontrollable societal events, like COVID-19, may affect youth's subjective well-being as the pandemic caused social isolation and less access to mental health services (Blackwell et al., 2022; Rider et al., 2021).

Higher levels of subjective well-being among adolescent students are associated with higher academic achievement, motivation, self-regulation, and positive attitudes toward school (Antaramian et al., 2010; Datu et al., 2018; Suldo & Shaffer, 2008). It is plausible that many students could benefit from school-based support intended to increase subjective well-being by being monitored in a school's MTSS for mental health services. The next section reviews positive psychology interventions that may increase subjective well-being.

Positive Psychology Interventions

Subjective well-being can be fostered through interventions grounded in positive psychology approaches, or in other words, from research on the science of happiness. Positive psychology interventions (PPIs) teach gratitude, kindness, goal setting, and character strengths to enhance overall well-being (Cunha et al., 2019; Kwok et al., 2016; Mongrain et al., 2018; Proyer et al., 2015). Other common PPIs include mindfulness interventions or multiple components (Brunwasser et al., 2009; Waters et al., 2015).

PPIs help to decrease psychopathological symptoms like depression. For instance, Boiler et al. (2013) examined how effective positive psychology interventions were in increasing subjective and psychological well-being and reducing depression symptoms. Thirty-nine randomized control studies were included in this study, with 6,139 participants, including college students, adults, and elderly population samples, participating in self-help, group, and individual interventions. Results indicated that 34, .20, and .23 standardized mean differences were found for subjective well-being, psychological well-being, and depressive symptoms, respectively. Thus, those who participated in PPIs improved more across these domains than those who did

not receive the interventions. While the results of this study suggest that PPIs help foster better mental health, a limitation is that the study focused on a population ranging from young adults to elderly adults. Developing well-being is not limited to adult populations. Fostering subjective well-being through PPIs should occur at all developmental stages to provide the best outcomes for youth and follow a preventative model.

The Well-Being Promotion Program

As the literature continues to feature more calls to increase student SWB, more researchers are designing and implementing positive psychology interventions (PPIs), which provide intervention choices for mental health professionals to use in school and clinical settings. One promising PPI within initial support for efficacy in school-based applications is the Well-Being Promotion Program (WBPP). The WBPP is a 10-week positive psychology intervention developed for middle school students who report room for growth in their subjective well-being. It utilizes multiple positive activities to help youth increase their life satisfaction and decrease negative affect (Roth et al., 2017; Suldo et al., 2014). The positive activities included in the ten sessions target gratitude, kindness, character strengths, savoring, hope, optimism, and relationship enhancement, in line with Seligman's framework for increasing happiness through intentional activities that develop positive feelings about the past, present, and future (Suldo, 2016).

Suldo et al. (2014) first tested the 10-week manualized PPI to evaluate 6th-grade students' SWB changes and negative mental health indicators. Participants were 10- to 12 years old and were majority Caucasian (33%) and Hispanic (30%), followed by Asian (15%), African American (7%), Native American (5%) multiracial (5%) and other (5%). The sample was randomly assigned into intervention (n = 28) and wait-list conditions (n = 27). Participants were recruited based on data from a screening in which students completed the Brief

Multidimensional Students' Life Satisfaction Scale (BMSLSS; Seligson et al., 2003) during the first two weeks of school. The BMSLSS is scored on a one to six-point scale. For the 333 6th-grade students who completed the screener, the mean life satisfaction score was 5.95 (*SD* = 0.99). A total of 132 participants were recruited for the intervention due to an identified room for improvement in their well-being if they self-reported a mean score below six. There were 132 students recruited for the study, 55 students enrolled, and a propensity-matched sample of 40 were retained for analyses. Students in the control group had a mean BMSLSS of 4.80 (*SD* = .90), while those in the intervention had a mean of 4.72 (*SD* = 1.20).

Students in the intervention condition were divided evenly into five groups. Seven students were in each group, along with a trained school psychologist as the leader and a doctoral school psychologist student as the co-facilitator of the intervention. Each student's mental health was assessed using the Student Life Satisfaction Scale (Huebner, 1991), the Youth Self-Report form of the Child Behavior Checklist (Achenbach & Rescorla, 2001), and the Positive and Negative Affect Scale for Children (Laurent et al., 1999). All assessments were administered pre-intervention, post-intervention, and at 6-month follow-up. All students in the intervention group completed the 10-week WBPP.

Results from the study indicated that students who participated in the PPI reported significant increases in their life satisfaction compared to students in the control group from pre- to post-intervention ($F(1, 38) = 4.26$, $p = .046$). Gains for life satisfaction were maintained through follow-up, although students in the control group showed increases in their life satisfaction between the post and follow-up points. No statistically significant group differences were found for affect, but both groups reported decreases in negative affect from post to follow-up. Similar findings were reported for changes in psychopathology where no group differences

were reported, but there were significant decreases in both groups' internalizing symptoms from pre to post. The treatment acceptability of the intervention was positive overall, with youth reporting on preferred activities that they would continue doing in the future and advocating for more sessions. Regarding the small group intervention, students stated they appreciated the opportunity to share their thoughts in a group setting and make new friends.

This study provides some support for using PPIs to improve youth SWB. The results show statistically significant increases in life satisfaction from baseline to post-intervention, a component of subjective well-being, for youth who received the intervention versus those on the waitlist. Affect was not found to change significantly over time between the groups. However, this may be due to the transiency of emotions and moods, which could have been impacted by how youth felt when completing the forms. Another outcome that was measured was the change in psychopathology. While there were decreases in internalizing symptoms, no between-group results supported that the PPI was attributable to the decrease. This lack of change supports the notion that pathology and wellness are separate constructs that can be addressed independently (Keyes, 2005; Suldo & Shaffer, 2008).

A follow-up efficacy study evaluated the WBPP as a multi-component and multitarget small-group intervention for improving middle school students' subjective well-being (Roth et al., 2017). To improve on the number of indicators of SWB that evidenced positive effects following the use of the initial version of the WBPP evaluated by Suldo et al. (2014), the researchers hypothesized that including parent communication and booster sessions may increase positive impact on multiple indicators of subjective well-being, ideally for a longer duration. Of the 111 students recruited for reporting an average BSMLSS score of 6 or less, 42 students with parent permission were enrolled in the study and randomly assigned to treatment and wait-list

groups. The students in the intervention group took part in 10 PPI sessions, and then two booster sessions occurred at five- and seven weeks post-intervention. Parents of the students in the intervention group participated in one psychoeducation session on positive psychology and the WBPP and received ten weekly written communications about the content covered with the group that week. Students' mental health was measured using the measures of BMSLSS, SLSS, PANAS-C, and Brief Problem Monitor-Youth (BPM-Y; Achenbach et al., 2011). Each measure was given at four time points: baseline, post-intervention, and at five and seven weeks post-intervention.

Findings from this study showed that the students who participated in the expanded WBPP (i.e., core ten sessions, along with parent component and booster sessions) had significant increases across all indicators of subjective well-being at post-intervention compared to the wait list group. Effect sizes for differences in life satisfaction, positive and negative affect ranged from E.S. = .53 to .72. At follow-up, positive affect was the only dimension that sustained a statistically significant difference. As for internalizing and externalizing problems, the intervention group showed decreases compared to the control group, but it was not statistically significant (p = .09). An effect size of ES = .37 was noted. Due to a limited sample size, the statistical power may have been too small to detect smaller effects. Despite the lack of statistically significant findings on internalizing and externalizing symptoms in this study, replication of the evaluation of this PPI with a larger sample is warranted to determine if PPIs assist in alleviating adolescent psychopathological symptoms and the promising impacts on subjective well-being. Similar to acceptability findings identified by the students in Suldo et al.'s study (2013), students in this study reported positive experiences with the program activities and the group setting, which allowed them to work and talk together. Both studies provide promising

results to support the use of PPIs with youth in a small group modality. However, as PPIs continue developing, mutual focus should be given to the therapeutic process.

The Importance of Therapeutic Alliance in Mental Health Services

Research examining the small group WBPP indicates improvement in SWB among students who participated in the intervention compared to students who did not (Roth et al., 2017; Suldo et al., 2014). However, mechanisms of change have not been investigated. Youth seem to improve in SWB, but it is unclear whether this is because of the positive activities contained in the WBPP or relational variables that exist regardless of the meetings' content, topic, and focus. The common factors model suggests that some aspects of therapy affect treatment outcomes regardless of modality (i.e., therapeutic framework/approach or individual vs. small group). The factors with the largest effects on outcomes in counseling and therapy include alliance, empathy, treatment expectations, therapist effects, and cultural adaptations of the treatment (Cuijpers et al., 2019; Wampold, 2015). Therapist and client alliance is an important factor associated with treatment outcomes. According to Bordin's pan theoretical three-dimensional model (1979), alliance or the working alliance is the collaboration between the therapist and the client on the tasks and goals in treatment throughout the therapeutic process. It also includes the developed bond between the therapist and the client to work through the agreed goals. The development of a good alliance in the early stages of therapy has been found to increase the success of therapy and prevent premature termination (Cirasola et al., 2021; O'Keeffe et al., 2020).

Therapeutic alliance is a collaborative and emotionally supportive relationship between a client and therapist (Bordin, 1979; Zetzel, 1956). The three components of the therapeutic bond are the emotional bond, the collaborative agreement on setting goals for treatment, and the

collaborative agreement on the time it takes to achieve the goals (Ardito & Rabellino, 2011; Cuijpers et al., 2019). Researchers like Eyenseck (1952) noted the value of therapeutic alliance, who suggested that the attributions to psychotherapy outcomes extended beyond the psychotherapeutic approach or content used with the client. From this perspective, it is plausible that positive feelings generated through the relationship between the therapist and the client can produce a positive therapeutic climate and potentially better outcomes (Strupp, 1983).

Therapeutic alliance (TA) can be considered a process within a therapeutic intervention. Much of the research has focused on therapy outcomes, such as the client's remission of symptoms. However, the therapy process is essential to understand what unfolds in therapy and how it relates to the outcomes.

The therapeutic alliance can be assessed from multiple perspectives: the therapist, the client, an independent observer/rater, or a combination of these sources. There are mixed reviews about which party is a more accurate rater and whose ratings best predict treatment outcomes. Nevertheless, understanding the client's perspectives and self-evaluation of the therapist is critical to providing better care. Assessing alliance early on can provide critical information about client satisfaction or dissatisfaction. However, previous research has noted that later assessment of alliance could be a stronger predictor of therapeutic outcomes (Crits-Christoph et al., 2011; Flückiger et al., 2018). Though this is plausible, later reports of TA are likely to be influenced by the improvement or lack of improvements in client symptoms.

Current State of Therapeutic Alliance Research with Youth

Most research on therapeutic alliance was conducted with adult samples. As more studies focus on youth perspectives (Murphy & Hutton, 2017), there is a call for additional appropriate measures to understand the constructs of therapeutic alliance that are salient to them. There is

also a need for more consistency in methodological approaches and definition consensus of therapeutic alliance (Bickman et al., 2012). It is suggested that the developmental stage of adolescence may be a factor in understanding why research has not linked Bordin's three-factor model of therapeutic alliance with youth samples (Cirasola et al., 2020; Shirk et al., 2011).

Assessing Therapeutic Alliance

Measuring therapeutic alliance (TA) is necessary to monitor the relationship and process from both the therapist's and the client's perspectives. Commonly used scales like the Helping Alliance Counting Signs Method and the Helping Alliance Rating Method (Luborsky et al., 1983) are based on Luborsky's (1976) psychodynamic theory of emphasis on the client perceiving the therapist as supportive and collaborative in helping them overcome their problems. Many TA measures were initially developed with adult populations in mind, such as the Vanderbilt Psychotherapy Process Scale (O'Malley et al., 1983), the CALPAS (Delsignore et al., 2014), and the Working Alliance Inventory (Horvath & Greenburg, 1989). Other TA measures from both the therapists' and the clients' perspectives can be found in Bose et al.'s (2022) systematic review of therapeutic alliance as studied in evaluations of interventions for youth internalizing disorders. In recent years, there has been more development and emphasis on gathering the TA perspectives from youth who receive psychotherapeutic services. The following paragraphs describe in greater detail a few of the measures of TA that have been used most commonly with youth samples.

Working Alliance Inventory – Short (WAI-S)

One of the youth's most commonly used TA measures is the Working Alliance Inventory – Short (Tracey & Kokotovic, 1989). The WAI-S includes 12 questions generated from the original WAI based on Bordin's (1979) multidimensional conceptualization of TA: bond, task, and goal agreement. The bond represents the human relationship between the client and the

therapist, including the trust, respect, and care each gives one another. Bordin described tasks as opportunities for therapists to show their skills in helping the client and for the client to believe in the therapist's ability to help them. Also, tasks promote collaboration between the therapist and the client. Lastly, the goal component of the therapeutic alliance consists of agreement, commitment, and investment in the set goals by the client and therapist.

Despite the WAI-S being one of the most frequently used measures with youth samples, the resulting factor structure differs from what may be expected to be yielded from the original form for adults. Although three factors of TA have been confirmed for adults, a one-factor alliance has been found for youth (Anderson et al., 2012; Diamond et al., 2006). This is notable because when evaluating TA alone and in relation to other aspects of therapy, like outcomes, the one-factor alliance construct suggests that youth do not perceive the TA as Bordin suggests. This may indicate a developmental difference between youth and adults in TA perceptions. Cirasola et al. (2021) attempted to address this concern of the one-factor alliance for youth evaluated with the WAI-S.

Cirasola et al. (2021) examined adolescents diagnosed with depression, ages 11 to 17. Participants were randomly assigned to receive cognitive behavioral therapy, short-term psychoanalytic psychotherapy, or brief psychosocial intervention. A total of 338 youth completed the WAI-S at 6, 12, and 36 weeks. One hundred and fifty-seven therapists completed the WAI-S-T at the same time points. The response scaled from one (*never*) to seven (*always*). A higher score indicated a stronger alliance. A confirmatory factor analysis was used to estimate four alliance models (i.e., Bordin's three factors: bond, task, and goal agreement, one general alliance factor, collaboration, and bond factors, and general alliance with Bordin's factors as subfactors).

Findings did not support Bordin's structure of TA with three factors. Only the two-factor model for bond and task-goal combined and the general alliance factor model were statistically significant in describing the structure of the WAI-S for this youth sample. This can be interpreted as the WAI-S reports from this sample support the bidimensional factors of bond and task goal and an overall alliance factor structure. The therapists' data supported the same finding. It is suggested that the results for the WAI-S may reflect the adolescent developmental stage, which may influence how adolescents perceive alliance (Zack et al., 2007). Specifically, tasks and goals may be perceived by adolescents as similar aspects of therapy, especially if they are new to the process of therapy. According to Ormhaug et al. (2015), the TASC (described in a later paragraph) also has a two-factor model, which may indicate that future studies are needed to consider different approaches to include in evaluating TA that include all areas of suspected contribution. These findings also generate questions about how these different dimensions of TA relate to different youth outcomes and how critical they are at a specific developmental stage. Nevertheless, the WAI-S is still supported for TA with youth over time. Caution is suggested when interpreting the alliance and how it relates to the therapeutic process and outcomes.

Concerns for using measures designed for adults adapted for youth include unanticipated changes in the reliability of the construct that is being measured, generalizability, and misinterpretation of the questions. Shirk et al. (2010) suggested that the lack of TA measures for youth may contribute to youth alliance only having one-factor construct of alliance when measured on adult measures, whereas adult samples have the three-factor constructs based on Bordin's alliance theory model. Other considerations to be addressed for TA measures are the lack of utilization across multiple time points (Shirk et al., 2011) and the lack of session-specific focus on the evaluation, which can cause clients to think about the alliance generally versus how

it may have been affected from session to session. Using TA measurements at only one point throughout the therapy process may not accurately portray the trend or pattern across time (Kramer et al., 2009; Stiles et al., 2004) and instead reflect alliance as perceived at that point in treatment. When working with any client, monitoring the outcomes and alliance is essential to provide evidence for progress. Thus, there is a call for more psychometric studies on TA measures geared towards youth and ameliorating the noted concerns.

Therapeutic Alliance Quality Scale and Rating (TAQS and TAQR)

The Therapeutic Alliance Quality Scale (TAQS; Bickman et al., 2010) and the Therapeutic Alliance Quality Rating (TAQR, Bickman et al., 2010) were developed to address concerns regarding alliance rating scales for youth. The TAQS currently consists of five items rated on a Likert scale of 1 (*not at all*) to 5 (*totally*) and can be rated by the child or caregiver. The higher the score, the stronger the alliance. The original version of the TAQS had 12 items targeting Bordin's (1979) conceptualization of the therapeutic alliance, which were psychometrically tested with youth and eventually reduced to five questions to prevent redundancy and decrease completion time (Bickman et al., 2007). The clinician rates the TAQR, and it is currently one item. The previous TAQR was 52 questions long. Both measures were developed according to Bordin's conceptualization of the TA, which integrates the client-therapist relationship, task agreement in therapy, and treatment goals agreement (Bordin, 1979).

Bickman et al. (2012) conducted a longitudinal and psychometric study using the five-question TAQS for clients and their caregivers and the 52-question TAQR reports for the clients' clinicians. Their study aimed to monitor TA across multiple time points to evaluate the psychometric properties of the measurements and assess how TA trajectories or patterns may affect treatment outcomes. It was hypothesized that all TA reports from each party would have

positive trajectories associated with decreases in youth internalizing and externalizing symptoms. The sample from this study was taken from Bickman et al.'s earlier study that focused on measure-driven feedback systems for youth mental health (Bickman et al., 2011). The longitudinal study included 288 youth, 255 caregivers, and 300 clinicians; data from 679 youth, 561 caregivers, and 713 clinicians were examined for psychometric analyses. The youth averaged 14.8 years and were 57% Caucasian and 48% female. The Symptoms and Functioning Severity Scale was used to monitor mental health outcomes. Therapy sessions averaged 13 weeks.

Youth and caregivers reported high TA on the TAQS with a mean of 4.12 (SD = .89) and 4.24 (SD = .72), respectively. The TAQS had adequate internal reliability for the youth and caregiver versions, with a Cronbach's alpha of .85 and .86, respectively. Factor loading was also conducted for the TAQS youth and caregiver version. For the youth, the loading ranged from .64 to .77, while the caregiver ranged from .69 to .79, which suggests that a single construct was measured. The TAQR consists of only one question for the clinician to answer, so reliability analyses were not possible. The mean scores for the client and caregiver relationship were 3.8 and 4.22, respectively. The study's second goal involved determining how TA was related to youth symptoms. The TAQS reports from the youth and their caregivers did not predict symptom improvement. However, the clinicians' change in TAQR reports did predict a change in symptoms with an effect size of .15. This can be interpreted as youths' symptoms improved quicker when clinicians' reports of the TA improved. Regarding how TA changes in relation to symptom changes, clients who had no TA change to increasing TA over time were predicted to improve at the same rate. Youth with decreasing TA improved slower than youth who reported increasing or no change in TA.

Like Cirasola et al. (2021), this study provided insight into another TA measure for youth clients. The TAQS and TAQR are two forms that provide multiple perspectives of the therapeutic alliance and are psychometrically supported. Even more so, they have been tested to analyze changes in the alliance over time. However, there are concerns surrounding the validity of having one question to represent the alliance for the clinician, whereas the client has five questions to address the different factors of the alliance. While the TAQS and TAQR offer feasible administration, more thorough measures could be used to capture therapeutic alliance.

Therapeutic Alliance Scale for Children (TASC)

According to a meta-analysis conducted by Bose and colleagues (2021), the Therapeutic Alliance Scale for Children (TASC; Shirk & Saiz, 1992) is the most cited measure of alliance for use with youth, used within 27 articles that evaluated treatments for internalizing problems. Shirk and Saiz (1992) developed the TASC to measure therapeutic alliance relationships between youth and their therapists from session to session. It has two parallel forms to measure the perceptions of the therapeutic alliance between the child client (TASC-C) and the therapist (TASC-T) from session to session. Both forms are self-report and have 12 items on a 4-point Likert scale from 1 (*not like you*) to 4 (*very much like you*). Accurso and Garland (2015) administered the TASC-C and TASC-T to youth between the ages of 4 and 13 in individual therapy across four time points. The reliability of the measures was .91. Findings from this study are discussed in a later section of this chapter.

Like the WAI-S (Tracey & Kokotovic, 1989), the TASC is based on Bordin's (1979) conceptualization of therapeutic alliance. However, the content of the TASC items assesses the following constructs: affective bond and collaboration on tasks and goals. The affective bond is the degree to which the therapist is perceived as an ally, while the collaboration construct measures how well the youth and therapist worked together. The total TASC score reflects the

affective bond (attachment or trust between student and counselor) and task collaboration (agreement on goals and working together) scales. The TASC scores can range from 12 to 48, with higher scores indicating higher levels of therapeutic alliance. Despite these two factors, a total score has been used to measure alliance on one dimension (Kendell et al., 2009; Marker et al., 2013).

Like the previously addressed therapeutic alliance measures administered to youth populations, the TASC has mainly been used to measure alliance in treatments that aim to improve psychopathology symptoms. Future studies could benefit from understanding more about the development of therapeutic alliance in more youth samples and how alliance looks in interventions that address well-being.

Perspectives in the Therapeutic Alliance

The TA reflects efforts from and interactions between the therapist and the client (Bordin, 1979). In the therapeutic relationship, there is the client's perspective and the therapist's perspective. Individually, each perspective can tell a different story about the therapy process. Collectively, these perspectives can help clarify what is going well and how collaboration may be used to improve the process. In previous studies, correlations varied between no and moderate relationships when therapeutic alliance was evaluated for the therapist and client (Flückiger et al., 2012; Gergov et al., 2021). This is not surprising, considering that both parties hold different positions. However, considering that the TA is built on collaboration and shared goals, the inconsistencies in the perspectives call for further study.

Accurso and Garland's study (2015) examined therapeutic alliance from both the therapist's and the client's perspectives over time to assess temporal stability and cross-informant agreement. A total of 209 children, averaging nine years old, with disruptive behavior issues

participated in this study. The demographics of the students were 68% male, with the majority Caucasian (48%), followed by Latino (29%), Multiracial/Other (14%), and African American (10%). Seventy-five percent of the youth met the criteria for disruptive behavior or ADHD. The participants were served by 85 therapists across six community mental health centers. Therapeutic alliance was assessed every four months over 16 months of treatment by the therapist and the client. The clients and therapists completed the TASC-R. Results indicated that clients rated the TA higher than therapists (4 months (t_{68} = 2.73, p = .008), eight months (t_{50} = 5.71, p < .001), 12 months (t_{33} = 2.00, p = .054), and 16 months (t_{20} = 1.78, p = .090)). This suggests that therapists in this study had a different perception or expectation about the alliance than the clients. One reason could be the role differences in therapy or the therapists' higher expectations for themselves (Accurso & Garland, 2015).

Fernandez et al. (2016) also evaluated the TA of therapists and adolescents, hypothesizing that TA would increase from session one to session three and that the clients' perspective of the TA would predict the outcomes better than the therapists. A sample of 20 participants, with an average of 15, received individual counseling in an outpatient setting. Youth were referred to counseling services for the following issues: adaptive, behavioral, anxious, mood, or depressive disorders. The WAI for clients and therapists was used to measure alliance, and the Outcome Questionnaire (OQ; Lambert, 1996) was used to measure client outcomes at pre- and post-therapy. Findings from this study supported the researchers' first hypothesis as the TA increased from the first session to the third session for the clients [F (1, 13)=5.72; p <.05; η2 =0.31] and therapists [F (1, 12)=10.68; p <.01; η2 =.47]. As for the relationship between perceptions of TA and client outcomes, only the clients' TA was a significant predictor.

Heckenberg (2002) offers another example of TA perspectives as they described and explored the TA between children and school counselors, using both the children's and the counselors' perceptions of the alliance. Participants included 39 fourth (n = 20) and fifth (n = 19) grade students receiving individual counseling and four school counselors with master's degrees. Ten students were self-referred, while 29 were referred by parents or school staff. Alliance Ratings were collected using the TASC child and adult forms (time of rating was not reported). Qualitative data on the TA was collected using the phenomenological approach in a follow-up interview with eight students from a stratified sample of participants.

The average score for the TASC child report was 41.26 (SD = 4.35), with a range of 29 to 48 (maximum possible = 48). Self-referred students had a higher TA score (M = 43.10, SD = 2.96) than those who were other referred (M = 40.62, SD = 4.6). For the TASC adult report, the school counselors had a mean of 38.04 (SD = 9.65), with scores ranging from 16 to 48. Looking at the relationship between counselors and student reports of TA, results indicated that there was a positive, significant relationship between both student and counselor perspectives for affective bond (r = .72), task collaboration (r = .41), and total alliance (r = .69). All eight children in the follow-up interviews described attributes of counselors that contributed to the different parts of the alliance. For affective bonds, children noted helpfulness, caring communication, confidentiality, and a lack of negative communication as positive aspects. Youth who had particularly strong TA alliances also included their contribution to the affective bond with disclosures of trust and expressing positive feelings about the counselor. As for collaboration on tasks, youth also mentioned that talking about their problems and coping with their feelings were important.

Future research and practice implications align with further evaluation of the child's perspectives and integrating their perceptions into therapeutic practice for better buy-in and treatment outcomes. A limitation of this study is the generalizability of the results based on the small sample size. Also, providing more information to specify the time points when the scales were given and the interviews conducted could have provided a more in-depth understanding of how the relationship between the student and counselor developed.

In a study of adults, Bachelor (2011) used exploratory factor analyses to understand the relationship between therapists' and clients' views of the TA as indicated by ratings on the California Psychotherapy Alliance Scales (CALPAS; Delsignore et al., 2014), the Working Alliance Inventory (WAI-S, Tracey & Kokotovic, 1989) and the Helping Alliance Questionnaire (Alexander & Luborsky, 1986). A total of 125 women and 51 men classified as new clients volunteered from two university consultation services, one private clinic, and one community center. The participants' most common diagnoses were anxiety-related, personality-related, and marital problems, followed by mood, adjustment, identity, eating, and substance abuse. There were 61 therapists, who were predominantly women (n = 42) between the ages of 23 and 61. Therapist observations were increased to 133 by adding data from a previous study with Bachelor and Salame (2000). Data collection consisted of two phases. In phase one, therapists and clients completed the Global Rating Scale (GRS; Green et al., 1975) and the Target Complaint Methods (TC; Battle et al., 1966; Mintz & Kiesler, 1982) for outcomes and the three alliance measures. The alliance measures were completed following the fifth therapy session. Only the therapists completed the Global Assessment Scale and the Psychiatric Symptom Index. Clients and therapist completed the same measures for post-therapy following two weeks of termination. Regarding the duration of therapy, the average number of sessions attended was

16.6. For phase two data collection, another wave of therapists and clients completed the alliance measures similar to the first phase, but no outcome data were collected.

Results showed that the joint factor analysis of the alliance measures from the client perspective has six constructs: the collaborative process, the therapeutic bond, the productiveness of the work, active commitment to the process, non-disagreement on goals and tasks, and confidence in the progress. This posits that clients from this sample conceptualized these as separate constructs in their perception of TA. Therapists' emphasis in the TA was on the constructs of collaborative work relationships, client working ability, client commitment and confidence, and therapist confidence and dedication. This study demonstrates that evaluating and understanding both perceptions of the TA may provide important views of the positive aspects of the relationship. This study was limited to an adult population; thus, the findings do not necessarily generalize to TA in youth counseling.

Further, the voluntary sample included therapists with different therapy orientations (vs. all providing a similar intervention, such as a positive psychology approach to mental health care). Future studies could benefit from controlling therapeutic orientations to better understand how a clinician’s theoretical orientation may affect the alliance. Extending the TA evaluation to different age or developmental groups can provide another perspective on interpretations of the TA (Bickman et al., 2012). Additionally, a more in-depth evaluation of the differences in perspectives of TA may produce better measures to evaluate future TAs and shift how they relate to therapeutic outcomes.

Therapeutic Alliance and Outcomes in School Settings

Mental health care in schools is essential to providing holistic care and supporting positive youth development. While there are numerous studies examining providing school-

based mental health services to youth, they mainly focus on treatment efficacy, feasibility, and social validity. Few school-based mental health studies examine TA as a factor in treatment. Green (2005) stated that formal evaluation of the TA is necessary to understand the therapy process in alignment with developing evidence-based practices and programs.

Although the literature is limited on TA evaluation between counselors and students in school-based mental health interventions, one study by Hutchison et al. (2018) examined TA over two years in a school-based therapy program for children's mental health. They aimed to identify longitudinal TA trajectories based on caregiver reports of how well they perceived their child was receiving services. Other goals were to differentiate youth characteristics associated with the TA trajectories and evaluate the relationship between TA and students' functioning. A sample of 1714 students enrolled in a school and home-based behavioral health services program participated in the study. Students ranged from five to eighteen years old. The caregiver reported on the family functioning, child functioning, and the TA using the Child Outcome Survey (COS; Stein et al., 2010). The COS is a brief questionnaire completed by the caregivers that focuses on the family and child's strengths. It also has a TA component with four questions that ask the caregiver about their perceptions of respect, the approach to treatment, and the work being done to help their child. Teachers and caregivers of the students also completed the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) to assess internalizing and externalizing symptoms.

Data were collected at baseline, 6, 12, 18, and 24 months. Trajectory analyses revealed three groups based on TA ratings over time. One group had high-stable TA ratings (84%), followed by another group that had moderate-increasing TA ratings. The last group reported high and then decreasing TA ratings (11%). Despite the trajectory differences, all groups improved in

family and child functioning. When TA was factored in with control variables (demographics, family and child functioning, and clinical variables), caregivers who reported average TA were associated with average family and child functioning ratings, meaning that higher scores of TA co-occurred with higher functioning. This finding supports similar findings of how TA is related to treatment outcomes in general. It also gives insight into how caregiver perceptions can be an important and valuable predictor for clinical outcomes in a school-based therapy program.

One limitation of this study is that client perceptions of alliance were not included in evaluating association with outcomes. Client TA reports have been supported as strong predictors of treatment outcomes. Also, comparing the client's perceptions to the caregivers' may have revealed different trends. Another limitation of this study is that data were collected every six months, which is an extended time to determine the variability of TA. Future studies evaluating TA might consider more frequent evaluations to capture various trajectories and trends. Collecting frequent feedback data provides an opportunity to improve the therapeutic process and experience for the child and family. Addressing the lack of studies considering TA in school-based mental health practices is also warranted.

Therapeutic Alliance and Group Processes in Group Therapy

Therapeutic alliance in group therapy is potentially more complex than individual therapy. Group TA has multiple therapeutic agents, including the therapist, the group members, and the group. Thus, multiple relationships are formed throughout the process. Adapting Bordin's (1979) model of the TA, Pinsof (1988) developed the multiple interpersonal subsystems that identify relationships between the "self-to-therapist alliance," "group-to-therapist alliance," "self-to-members alliance," and "other to therapist alliance." This model exhibits what Gullaspy et al. (2002) considered the totality of alliances.

In group therapy, the therapeutic relationship has different components. According to Marziali et al. (1997), perceptions of group cohesion and alliance are two different contracts but related to positive outcomes. Alliance focuses more on the relationship between the therapist and the client, whereas group cohesion centers on the perceived relationship of the client to the group. Two meta-analyses were conducted to see how each component related to treatment outcomes.

Alldredge et al. (2021) reviewed 74 articles targeting alliance in group therapy between the therapist and the client, ranging from 1969 to 2019. A total of 29 studies with 3,628 clients were included in the meta-analysis. Random effects yielded a correlation between reported client and therapist alliance and therapeutic outcomes of $r = .17$ ($p < .001$) and small but statistically significant effect size ($d = 0.34$). Comparatively, Burlingame et al. (2018) conducted a meta-analysis to examine the relationship between reported group cohesion and therapeutic outcomes in group therapy from 55 studies with 6,055 participants. Their study showed a correlation of $r = .26$ and a small to medium effect size ($d = .56$). While both alliance and cohesion are supported as predictive outcomes, group cohesion may be stronger. These analyses help to position future research to consider what aspects of the TA are important for evaluating in different modalities. With group therapy, different relationships make up the experience of the therapeutic process. Thus, having a measure that provides feedback to the therapist about the perceptions of the group from client to client can help build safe spaces, fix ruptures, and develop more cohesive experiences.

Another notable aspect of both studies is the identification of moderator variables. Burlingame et al.'s (2018) and Alldredge et al.'s (2021) meta-analyses found theoretical orientation to be a significant moderator between group cohesion and outcomes. Modifying the

relationship between alliance and outcome in group therapy by theoretical orientation is plausible because some orientations, like CBT, have a more leader-centric approach to the therapist. Depending on the orientation, the therapist may facilitate the group in ways that may not necessarily promote group cohesion but rather center more on individual alliance during skill acquisition. Therefore, it may benefit practitioners to evaluate how the therapy orientation and modality align to increase respective aspects of TA, especially in group therapy. Alldredge et al. (2021) also found an association between alliance and outcomes related to the different rating perspectives. For example, independent observers' and therapists' alliance ratings did not correlate as strongly with alliance outcomes as the clients' report did. This was suggested to be due to clients' TA reports also correlating with their reports on their outcome measures, which may make them the most accurate reporters of the process (Burlingame et al., 2004).

Regarding group cohesion, Burlingame identified the following additional moderator variables: outcome measures used, interventions used by leaders to increase cohesion, the psychotherapeutic group type, the dosage of sessions, and the emphasis on group interaction. As more research is garnered for TA in group therapy with these aspects in mind, a limitation that needs to be addressed is how these factors translate to being salient to treatment success in youth populations, including in wellness-focused interventions.

A more recent study, which sought to understand how group cohesion related to treatment outcomes for adults in a transdiagnostic cognitive behavioral group, was conducted by Norton and Kazantzis (2016). A total of 373 adults, 18 years and older, diagnosed with anxiety disorders participated in this study. Participants completed the State-Trait Anxiety Inventory (Spielberger, 1983)at the beginning of their sessions. At the end of their session, participants completed the Group Cohesion Scale (Stokes, 1983) every other session. Group cohesion was

measured for sessions 1, 3, 5, 7, and 9. A Maximum Likelihood correlation was used to determine if the previous session's group cohesion scores would predict the next session's anxiety scores. It was hypothesized that higher reports of group cohesion would predict lower anxiety scores. The analysis results yielded non-significant predictions of anxiety scores for sessions 2, 4, and 6. However, GCS scores significantly predicted lower anxiety scores for sessions 8 (r = -.233) and 10 (r = -.236). This adds to the approach of measuring group cohesion by using multiple self-report time points, which can help capture changes over time. Although this study did not measure growth explicitly, it may be implicated that more group relationships may have been established as time progressed versus in the earlier sessions.

A limitation identified by the researchers is that there was a lack of clarity about whether the changes in the relationship between group cohesion and the anxiety scores were because of the treatment or the actual therapeutic processes. Future research would benefit from further details and distinctions between treatment and therapeutic techniques used when interpreting these types of relationships. Furthermore, a better understanding of the relationship between group cohesion and therapeutic outcomes and other treatments like positive psychology could be examined.

Christensen et al.'s (2021) qualitative study used a comparative framework to understand the experiences of group cohesion from patients receiving group diagnosis-specific versus transdiagnostic CBT. A total of 23 patients from Denmark with diagnoses of major depressive disorder, agoraphobia, or social anxiety were voluntarily interviewed at the end of their treatment. There were 14 females and 9 males, ranging from the age of 22 to 65. Sample questions in the interview included, "How did it feel to be in this group?" and "How were the other group members?".

The researchers analyzed the interview data using the Braun and Clarke (2006) thematic analysis. The three major themes that emerged from the completed analysis were "differences to similarities," "the role of group cohesion in group CBT," and "factors helpful and hindering group cohesion." For "differences to similarities," patients described how they perceived each other as externally or socially different, such as describing age and experience differences. However, they could identify ways they were similar, such as the reasons they were in the group together. Despite the differences they stated, as time passed and they continued to learn more about one another, they understood each other by taking on one another's perspective. For "the role of group cohesion in group CBT," in time, the differences they saw in each other initially were aspects they used to uplift one another by seeing how far they had come or, in a sense, finding hope for themselves and seeing each other grow. Lastly, the theme of "factors helpful and hindering to group cohesion" highlighted the positive aspects that facilitated group cohesion, such as group members supporting each other and being able to meet new people, while the negative aspects that hindered group cohesion was a lack of engagement from group members. Patients also spoke about their therapists' efforts to facilitate an open environment and provide opportunities for everyone to speak.

This qualitative study further reveals the components that contribute to group cohesion, whereas the previous quantitative studies provide more connection between group cohesion and client outcomes. Future studies could benefit from integrating qualitative input from clients, especially youth in group therapy settings, to understand how they perceive and value various group processes. Such data may help generate better processes for practitioners to facilitate group treatments and enhance overall treatment outcomes.

Group Alliance Measures with Youth

In group therapy, interpersonal relationships are established with the therapist and their peers. For youth, the social component of group therapy can benefit their development positively (Leichtentritt & Shechtman, 2009). This engagement and feeling of belongingness are important in group settings as the people in the group communicate, trust, and learn from one another to improve themselves and each other (Yalom & Leszcz, 2005). Thus, a sense of group cohesion should be considered to establish and maintain throughout the therapeutic process.

Group Climate Questionnaire - Short. Like alliance, measures used to assess group cohesion in the treatment of youth have been based on measures developed for use with adult samples. One popular group cohesion measure is the Group Climate Questionnaire-Short (GCQ-S; MacKenzie, 1983). It is a 12-item measure comprising engagement, avoidance, and conflict scales. The engagement scales measure the degree of cohesion perceived in the group and the importance that the group holds for an individual. Avoidance measures the degree to which group members try to escape discussing their problems with the group and rely on others. Lastly, conflict refers to any interpersonal issues or distrust perceived in the group. The GCQ-S is completed by the clients and scored on a 6-point Likert scale ranging from 0 (*not at all*) to 6 (*extremely*).

One study used the GCQ-S with 13–15-year-old youth referred to therapy by Family Services to see how group cohesion differed across different group modalities: individually led or co-led by two therapists and small or large group (Kivlighan et al., 2012). There were 13 individually led groups and 19 co-led groups, with 3 to 12 members in each group. Group leaders were not randomly assigned; instead, they could choose which type of group they would lead. Youth completed the GCQ-S at the end of each session and completed the Youth Client Satisfaction Questionnaire at termination for overall satisfaction with the group experience.

Interrater agreement was calculated on the subscale scores of the GCQ-S to justify the aggregation of the group members' climate ratings. The interrater agreement for the engagement, avoidance, and conflict subscales were .83, .84, and .85, respectively. Aggregated group member scores represented the overall group climate score for each group's weekly session. Kivlighan et al. (2012) found that interitem reliability of the engagement, avoidance, and conflict scales were .86, .75, and .79, respectively.

Overall, results indicated that for groups that were large and co-led, group members reported higher group cohesion and perceived greater benefits. There was an inverse relationship with avoidance for large, individually led groups, meaning that the larger groups reported more avoidance. Increased group size in individually led groups was also related to increased perceived conflict and decreased engagement, while co-led groups with bigger sizes had decreases in avoidance and increased relationships with the group. This may be due to members not feeling like they were individually contributing or feeling anonymous in the group because attention is limited to one leader. These findings relate to Burlingame's (2018) finding that the group type (e.g., individually led or co-led) may moderate the group cohesion-outcomes relationship. Though this study does not link group cohesion to outcomes—when outcomes are defined as change in mental health— it provides support for considering how many individuals may be ideal to lead a group. This also underscores the importance of considering group size when forming groups. Also, this study provides an example of the GCQ-S being used meaningfully with a younger population, which can support future usage and maybe innovation of the measure. This researcher could not locate any studies published since 2012 that further examined group cohesion in school-based counseling.

Modified Working Alliance Inventory. Considering the lack of group alliance measures developed for youth, researchers have adapted other measures, such as the Working Alliance Inventory (Horvath & Greenberg, 1989). Leichtentritt and Shechtman (2009) conducted a study to evaluate how group counseling using an expressive supportive modality may differ for students with emotional and behavioral difficulties. Specifically, they wanted to see how students with learning disabilities (LD) progressed through treatment versus students who were not identified with LD. In other words, the students who were not identified with LD were the comparison group. The study evaluated the group process by modifying the WAI – Bonding Subscale to be interpreted for group perceptions instead of the therapist by switching "therapist" with the word "group" for each question in the subscale (e.g., "Me and my [group members] understand each other"). Students completed the measures in the third, seventh, and thirteenth (last) sessions. The scores for this measure were averaged. The reliability of this modified subscale in this study was .93.

Results supported no differences in perceptions of group bonding in counseling between students who were identified with LD and those who were not, which did not support the researchers' hypothesis that students with LD would have a lower response to the therapeutic process. It was also reported that the more students with LD perceived bonding with their group and their therapist, the more they also had increased social competence and decreased anxiety and aggression. This finding indicates that the measure was able to assess the construct of group alliance sufficiently well to correlate with outcomes. Though the modified group cohesion measure used in this study was a modified version of another therapeutic alliance scale, it still provided a means of assessing the therapeutic process in a group setting with good reliability.

Timing of Therapeutic Alliance Measurement

Therapeutic alliance perceptions can develop early in the therapeutic process. Studies support that early alliance ratings predict outcomes better than late alliance ratings (Cirasola et al., 2021; Horvath & Symonds, 1991; Labouliere et al., 2017; O'Keeffe et al., 2020). Alliance develops in phases. The first phase creates trust and confidence in the relationship and therapeutic process (Luborsky, 1976). The second phase marks a time for potential ruptures as the therapist begins to challenge the client (Luborsky, 1976). It is suggested to peak around the third session. Alliance is not a linear process, as different factors can contribute to a decline or lack of development of the relationship, such as the client's commitment, the therapist's personality, or ruptures (Horvath & Symonds, 1991).

Hartley and Strupp (1983) evaluated alliance ratings throughout short-term therapies. Data was collected from the first session and followed collection in 25% intervals until treatment was completed at 100%. Results from that study found that clients who had overall successful reports of therapy had positive early alliance reports from the first session to the session that represented 25% treatment completion. For clients who had unsuccessful experiences, their alliance ratings declined during the same time period. This finding suggests that evaluating early alliance can predict treatment outcomes. Early alliance may be conceptualized as approximately 1 to 3 sessions into treatment (McLeod, 2011), while late alliance can be considered closer to the termination of treatment. However, data collection points may differ based on the length of a given treatment.

Webb et al. (2011) explored how measuring TA at different times related to outcomes for adults with depression who were taking part in a cognitive pharmacotherapy treatment. They considered the factors of agreement and relationship in the TA construct. Participants were part

of two RCTs for treating adults identified with depressive symptoms with cognitive therapy (N = 105). The average age of the participants was 40 years old; the majority were white (82%) and female (62%). Throughout the 16-week treatment, their third (early session) and thirteenth (late session) sessions were recorded to be rated by trained researchers using the Working Alliance Inventory Short (WAI-S) observer rating (Tracey & Kokotovic, 1989). Two raters coded the videos. Symptom change in depression was monitored using the Beck Depression Inventory-II (BDI–II; Beck, Steer, & Brown, 1996).

Results from the study showed that early alliance significantly predicted subsequent change in depressive symptoms (B = .23, t(97) = 2.84, p <.01). Agreement alone (B = .25, t(97) = 3.02, p <.01) after controlling for relationship significantly predicted symptom change (B = .27, t(96) = 2.39, p <.02). However, relationship alone (B = .15, t(97) = 1.80, p = .07) when controlling for agreement (B = -.03. t(96) = -0.24, p = .81) was not significant. For late alliance, both agreement and relationship factors were associated with prior symptom change, suggesting that there may be a confound in these factors being positive due to their symptoms improving. While this study was limited to examining cognitive therapy as the treatment (vs. a different approach such as positive psychology), the findings illustrate how dimensions of TA may be differentially associated with changes in symptoms.

While the timing of when TA is collected can be a key predictor of the outcomes for therapy, how often alliance data is collected should also be considered. Evaluating TA throughout the therapy process can be helpful to therapists and the client in building a positive relationship and moving toward the treatment goals. However, alliance is not always stable. Stiles et al. (2004) identified four patterns that describe how TA in adults can fluctuate throughout therapy: negative slope, positive slope, positive accelerated with high variability, and

negatively accelerated with low variability. As such, one or two measures of TA may not capture the full extent of the relationship. Thus, it is plausible that multiple time points of alliance data would be beneficial in identifying more relationship patterns and connections to outcomes in individual therapy.

Crits-Christoph et al. (2011) conducted a study with nine therapists and 45 patients who had a primary diagnosis of major depressive disorder to examine how dependable alliance scores are at the client and the therapist level using generalizability theory (Cronbach et al., 1963; Wasserman et al., 2009). This was a secondary analysis of a prior study (Crits-Christopher et al., 2006) for training clinicians in alliance-fostering therapy. Each therapist had nine clients each and conducted individual therapy. Most participants were Caucasian women, and the average was 43 years of age. The treatment lasted 16 weeks and consisted of 50-minute individual therapy sessions. Client alliance was measured using the California Psychotherapy Alliance Scale – Patient Version (CALPAS; Delsignore et al., 2014). Outcomes for depressive symptoms were measured using the Hamilton Depression Rating Scale and the Beck Depression Inventory–II. Findings from the analyses supported the idea that including more time-point measures of alliance across multiple sessions yielded stronger predictions of the outcomes. A generalizability score of .77 was calculated for one measure of TA, which may be viewed as unacceptable, given that a generalizability score of .80 or higher is deemed acceptable (Cardinet et al., 2010). As the aggregation of the alliance scores increased over the sessions, so did the generalizability score. Across four sessions, the generalizability score was >.96. At the therapist level, one evaluation of alliance was also not dependable, yielding a very low score of .34. However, increasing the number of sessions aggregated only increased the score to .40. The researchers also found that if

studies were to continue to conduct alliance ratings at one time-point, then the therapists would have to have at least 70 clients to have a generalizability score of .80.

Early alliance was also examined in relation to the outcomes of the clients' depressive symptoms. A total of 4.7% of the variance in treatment outcomes was explained by only using session 3, while aggregating alliance data across sessions 3 through 9 accounted for 14.7% of the outcome variance. Late alliance and the outcome relationship were confounded as a reverse causal relationship was identified. This study did not collect data on the therapists' view of the TA, which can be another predictor of outcomes. However, the client's perception does provide valuable input. Future studies could benefit from applying this study's rationale for evaluating multiple points of alliance. Also, teasing apart early and late alliances can help to prevent confounds. Another consideration gleaned from this study would be the alliance in relation to the treatment provided, which could be related to variability in the relationship. As well, alliance may vary by the disorder the client presents. This study focused on clients with major depressive disorder. Thus, these findings may not be generalizable to clients with other internalizing problems such as anxiety, externalizing behavior problems, or even different well-being levels. Other measures could also be used to measure alliance.

Moderator Variables Relevant to Effects of Therapeutic Alliance

Therapeutic alliances theoretically play a critical role in the therapeutic process. However, empirical results have shown a consistently small but significant relationship between alliance data and youth outcomes (Karver et al., 2018; Shirk et al., 2011). Researchers speculate that moderator variables may strengthen or negate the relationship between alliance and client outcomes. Bose et al. (2022) conducted a systematic review of the heterogeneity of alliance and youth outcome relationships across 20 randomized control trial studies evaluating treatments for

internalizing behaviors (e.g., separation anxiety, generalized anxiety, selective mutism, obsessive-compulsive disorder, panic disorders, specific phobias, social anxiety, major depressive disorder, and dysthymia). Eighteen studies qualified for a meta-analysis. The researchers hypothesized that the relationship between alliance and outcomes relationships would be moderated by the following variables: problem type, the time the alliance data was collected, and the geographic location of the studies (i.e., the cultural factors that are associated with the different countries the studies were conducted in). Participants ranged from 6 to 18 years of age; most were female (53%) and people who identified as Caucasian, followed by Hispanic/Latino, African American, Mixed/Other, and Asian (specific percentages of participants in each group were not specified). The interventions were mostly cognitive-behavioral treatments, lasting an average of 13.41 sessions, with 30 to 90-minute sessions. The meta-analysis of the 18 study effect sizes yielded a small but significant correlation, $r = 0.18$ ($p = .01$, $df = 16.8$, $SE = 0.04$).

Follow-up simple comparisons showed a smaller relationship between alliance and outcomes for studies that involved youth with anxiety compared to youth with other psychiatric disorders such as depression and OCD. This suggests that TA may not have much of an influence on positive outcomes within the treatment of anxiety or that there may be other ways to cultivate TA that works more effectively with youth with anxiety. As for when alliance data was gathered, the findings showed that the alliance-outcome relationship was the largest when it was measured between sessions four and six, with the average number of sessions in the intervention being 13.41 across the 18 studies. This is consistent with previous research that found that alliances can have a growth pattern throughout the process (Kramer et al., 2009; Stiles et al., 2004). For internalizing behaviors like anxiety, behavioral treatments are likely to begin after the

first few sessions, which would garner a need for trust and established goals. The alliance and outcome relationship for geography was also smaller in the United States compared to other countries (e.g., Denmark, Netherlands, Norway, Chile, and Australia). This signifies a potential cultural difference in approaches to therapy and the alliance.

Moderators of the association between TA and client outcomes in individual therapy can be seen in treatments for internalizing symptoms (Bose et al., 2022). These moderators are plausible and necessary to investigate because numerous factors can contribute to treatment success besides the effect of a strong therapeutic alliance. Nevertheless, the alliance is likely an important construct to consider across therapy types and modalities. As mental health practitioners continue to pursue complete mental health practices, there is a need to understand further how TA plays a role in different treatments for different symptoms and goals across varying time points and within various geographic contexts. Few studies have evaluated how TA relates to well-being outcomes in positive psychology interventions. Future practice would benefit from more studies that understand this relationship across different potential moderating variables like time.

Therapeutic Alliance in Positive Psychology Interventions

Current literature on the measurement and study of TA in positive psychology interventions (PPIs) is scant. Similar to how traditional psychotherapy studies have focused on the efficacy of the intervention (i.e., the outcomes of the intervention), studies of PPIs have also neglected to evaluate the process of the intervention and the interaction of process variables such as alliance in relation to the intervention's effectiveness (Boiler et al., 2013). In an exception, Savage's (2011) evaluation of a small group positive psychology intervention (i.e., the WBPP, when provided to small groups of middle school students using co-leaders assigned to small

groups of seven students) considered client progress beyond traditional outcomes of psychopathology (i.e., client outcomes included subjective well-being). It examined the effort of alliance and the effect of group (intervention vs. wait-list control group). One of the main aims of the study was to examine how the therapeutic relationship predicted outcomes in the positive psychology intervention for middle school youth. An archival dataset of 56 6th-grade students randomly assigned to intervention or control during fall 2007 was analyzed. Student participants were screened for life satisfaction using the Brief Multidimensional Student Life Satisfaction Scale (BMSLSS; Seligson et al., 2003) and recruited if they had room to grow in life satisfaction. Twenty-eight students were randomly assigned to the intervention group, and 26 were assigned to the delayed-intervention control condition. The Student Life Satisfaction Scale (SLSS; Huebner, 1991) and the Positive and Negative Affect Scale for Children (PANAS-C; Laurent et al. 1999) were used for pre and post-test measures. The TASC was used to measure both the clients' and the counselors' perspectives on the TA; both forms of the measure were completed at week three and week eight of the intervention.

Savage found that therapists' ratings of the TA positively predicted post-intervention life satisfaction scores (beta = .31), but it was not significant (p = .11) in this underpowered study. Child ratings of the TA inversely predicted life satisfaction (beta = -.24) but were also non-significant (p = .19). Child ratings of TA significantly predicted positive affect (beta = -0.34, p < .05) but in an unanticipated direction. Specifically, positive affect was inversely predicted by child TA ratings, meaning that the lower the aggregated child-rated TA, the higher the positive affect they reported at the end of the intervention. Therapist reports of TA were not significant predictors of positive affect. Also, no ratings of TA significantly influenced youth's negative affect.

The results of this study are interesting because previous research has supported the idea that TA is conducive to the therapeutic process in producing positive outcomes. Thirty percent of therapeutic change is asserted to be associated with the TA (Lambert, 1992; Murphy, 1999), although such assertions are largely based on research from individual counseling rather than interventions provided through group counseling. Savage's unanticipated findings may reflect a variety of unique features of the study, including examining a positive psychology intervention provided in the school setting over a relatively compact duration (10 weeks). Further, the sample size was rather small, which may have limited statistical power to detect a significant positive effect of therapist-rated TA on youth life satisfaction. Furthermore, the scope of TA evaluation within positive psychology interventions could be changed to align with wellness aspects. For example, the TASC-C focuses on the TA from the problem-focused perspective, which is aligned with the traditional way of assessing alliance in treatments intended to reduce psychopathological symptoms; sample items students completed on the TASC-C include "I work with my counselor on solving my problems" and "I think my counselor and I work well together on dealing with my problems." Future studies could benefit from choosing and modifying- or developing- better measures that consider the well-being factors of PPIs and include items taping how the client and therapist ideally interact with these elements to produce positive outcomes. Nevertheless, the findings from this study are highly relevant to the current study, as Savage (2011) examined TA in an intervention provided in a group format and within the school setting. This researcher could not locate any studies published since 2011 that further examined therapeutic alliance in school-based group counseling for a PPI.

Commonly, the TA is studied between the therapist and the client within an individual counseling relationship. However, multiple relationship perspectives exist in a group setting,

such as group cohesion. More research is warranted to evaluate the importance and differences accounting for these complex relationships may reveal about TA and outcomes in therapy in general and within PPIs in particular.

Addressing the Gaps

Current literature is vast when it comes to addressing TA with adults, particularly in the context of individual counseling treatment for psychopathology. However, it is still in the growing phase of understanding what process variables predict outcomes for youth participating in counseling. Providing the full range of mental health services for youth- including small group and individual counseling following the detection of problems such as low subjective well-being or elevated psychopathology- is essential because early intervention and treatment can make positive future outcomes more likely to occur. Specifically in school settings, tiered services for mental health offer excellent opportunities to connect youth with credentialed school mental health professionals such as counselors, social workers, and school psychologists, as well as address barriers to mental health access for disadvantaged populations associated with reliance on community mental health services.

Within the context of advocating for best practices in student mental health care, there is a need to conceptualize and address mental health beyond psychopathology (Suldo & Doll, 2021). Modern definitions of complete mental health consider indicators of illness (i.e., psychopathology symptoms) and wellness (i.e., life satisfaction and positive affect). Examining both of these factors in studies of the impact of small group counseling interventions will inform the field's understanding of mental health services that can be provided and further specify the needs a child may have. For example, a child may not present with psychopathological symptoms but may have very low subjective well-being (i.e., a vulnerable mental health profile),

which is a risk for dysregulation if they encounter future stressors (Zuckerman, 1999). As such, interventions that foster subjective well-being, like PPIs, would be an optimal service.

PPIs are developing faster, along with the field's emphasis on the dual-factor model of mental health. However, compared to evaluations of the impact of PPIs on adults, fewer studies have been conducted with youth. Furthermore, with respect to PPIs as a psychotherapeutic approach, research is also scant on the therapeutic process elements of PPIs, such as the development of TA and how it relates to well-being outcomes. The TA is a critical component in the therapeutic process, potentially accounting for 30% of the differences between client's change on various outcomes (Horvath, Del Re, Flückiger, & Symonds, 2011). However, studies with youth samples are less extensive than those with adult samples. More research is needed to evaluate youth's perspective of the TA and understand it in the context of different service modalities, such as group PPIs. While providing an evidence-based intervention is best practice, it is also essential to understand the process that makes the intervention successful. TA in group therapy is suggested to be more complex than individual therapy, as there are more relationships to account for, and factors like group cohesion may play a bigger role in its evaluation. Furthermore, understanding the development and trajectories of TA over time can also help mental health providers adjust to the needs of their clients and potentially address ruptures to maximize the possibility of better treatment outcomes.

This study aimed to contribute to the growing literature around therapeutic and group processes for youth participating in a positive psychology intervention. Therapeutic alliance and group cohesion measures were modified to align with positive psychology, such as doing positive activities versus working through problems. Furthermore, multiple time points of the perspectives were collected to understand how the development of these perceptions may relate

to student outcomes. The researcher hoped that integrating these elements would help build a more comprehensive interpretation of these processes and how practitioners using positive psychology group interventions may apply these understandings in practice.

Chapter 3: Methods

In this chapter, the methods for this study are outlined in alignment with the larger study's goals. Quantitatively, the first goal explored the degree to which therapeutic alliance perspectives from the counselor and the student relate to client outcomes in a positive psychology intervention. The second goal explored if group cohesion perspectives from the students relate to their outcomes in a group positive psychology intervention. Qualitatively, this study also examined students' perceptions of their relationships with their group leaders and peers to understand different therapeutic alliance and group cohesion aspects. The positive psychology intervention used for this study was the Well-Being Promotion Program (WBPP; Suldo, 2016). The study's research design and sample will be discussed, followed by the data collection procedures, analyses, and ethical considerations. The following research questions guided the data analyses:

1. To what extent, if any, do the initial therapeutic alliance perceptions of middle school students in a positive psychology intervention relate to the following indicators of their mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?

2. To what extent, if any, does the growth of therapeutic alliance perceptions of middle school students in a positive psychology intervention relate to the following indicators of their mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?
3. To what extent, if any, do the initial perceptions of group cohesion in a positive psychology intervention to middle school students relate to the following indicators of student mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?
4. To what extent, if any, does the growth of group cohesion in a positive psychology intervention to middle school students relate to the following indicators of student mental health:
    e. Life Satisfaction
    f. Positive Affect
    g. Negative Affect
    h. Psychopathology?

5. To what extent, if any, do the initial therapeutic alliance perceptions of counselors administering a positive psychology intervention to middle school students relate to the following indicators of student mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?
6. To what extent, if any, does the growth of the therapeutic alliance perceptions of counselors administering a positive psychology intervention to middle school students relate to the following indicators of student mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?
7. How do middle school students receiving a group positive psychology intervention conceptualize their therapeutic experience with their group leaders?
8. How do middle school students who receive a group positive psychology intervention conceptualize their therapeutic experience with their peers?

Research Design

This study involved a secondary data analysis from a larger study funded by the Institute of Educational Sciences (R305A200035) in the southeastern and northeastern parts of the United States. The grant-funded study was a multisite randomized control trial focused on evaluating the effects of a positive psychology intervention on middle school students' subjective well-being.

This researcher examined data collection during Year 2 (2022-23 school year) from the larger 5-year study and was an active member of the approved study team. Data collection for Year 2 was completed in the spring of 2023.

This analysis focused on the naturally occurring changes in therapeutic alliance, group alliance, and student outcomes in the participant group receiving the intervention. Participants in the study were randomly assigned to receive the intervention or not (delayed-intervention control) after being stratified based on student self-report baseline responses on life satisfaction. Students assigned to the intervention condition were then assigned to a small group based primarily on grade level (e.g., 14 students in 7th grade were split mostly randomly into two small groups). Throughout the intervention, researchers collected data on students' and counselors' perceptions of the therapeutic alliance (TA) and students' perceptions of group alliance. Therapeutic alliance was collected at three timepoints: October (session 3), November (session 7), and January (session 10). Student group alliance perceptions were also collected at the same three timepoints: October, November, and January. The following data was collected at the end of the intervention (after session 10): life satisfaction, affect, psychopathology symptoms, therapeutic alliance, and group alliance for post-intervention outcomes. See Table 4 for an outline of all data collection timepoints.

Recruitment and Participants

Two middle schools in the southeastern United States (Schools A and B, Table 1) and three middle schools in the northeastern United States (Schools C, D, and E, Table 1) were invited and agreed to participate in the larger IES-grant study for improving student well-being. The primary investigators (PIs) of the grant explained the purpose and procedures of the study to the school principals, who agreed to be a part of the study. Middle school students between the

ages of 11 and 14 were recruited for this study, beginning with initial permission from their parents to participate in a schoolwide wellness screening using brief measures of subjective well-being. The use of active or passive consent for screening procedures varied by state.

Students who had room for growth in well-being, meaning that they scored below thresholds previously established on the following measures: Brief Multidimensional Student Life Satisfaction Scale (BMSLSS) < 5; positive affect scale of the PANAS-C-10 < 4.5; SLSS <5.5, were then invited to participate in the Well-Being Promotion Program (WBPP) by enrolling in the intervention evaluation study. Parent-informed consent was requested for students who were identified with low subjective well-being to be a part of the intervention study. Students who obtained written parent consent and provided written assent to participate in the intervention study were enrolled in the study and completed baseline measures of mental health before assignment to condition. All parent permission forms were available in both Spanish and English.

Participants with consent and assent to participate in the intervention study completed a demographic survey and baseline measures of life satisfaction, affect, and psychopathology, all administered electronically using REDCap, an online data management system. Following collection of baseline student-report data, participants were stratified by baseline SLSS score and grade level and randomized to intervention or control groups. Siblings enrolled in the study were assigned to the same condition. Students assigned to the intervention group were then placed into small groups (e.g., 5 – 12 students per group) for the intervention, which was led by two school mental health providers per group during school hours.

Table 1 shows a breakdown of the demographic features of the schools that participated in Year 2 of the larger 5-year study. The study sample enrolled across the two sites is described

later in the **Procedures** section of this chapter. The bottom portion of Table 1 presents the sample size of youth participants enrolled in Year 2.

Table 1

Summary of Student Demographic Features by School (N = 5)

		School A	School B	School C	School D	School E	Total
Race							
	White	40%	53%	73%	73%	79%	-
	Black	11%	14%	2%	2%	1%	-
	Native American	0.1%	0.3%	1.4%	0.1%	0.2%	-
	Pacific Islander	0%	0.2%	0%	0%	0%	-
	Asian American	1%	1%	3%	3%	2%	-
	Hispanic	44%	25%	17%	19%	17%	-
	Multiracial	3%	6%	4%	3%	1%	-
Gender							-
	Male	50%	50%	52%	51%	49%	-
	Female	50%	50%	48%	49%	51%	-
Sample	School Population	1027	935	670	693	527	3852
	Screened	510	485	579	672	504	2750
	Eligible	161	151	130	251	102	795
	Consent and Assent	104	98	68	76	48	394
	Treatment	52	49	35	38	25	199
	Control	52	49	33	38	23	195
	Completed Intervention	47	45	34	34	23	183
	Completed Post-Test Data	48	45	34	36	25	188

Note. Data for School Population N and Demographics was sourced from the National Center for Education Statistics (NCES) during the 2022-2023 school year.

Table 2

Leaders' and Co-Leaders' Demographic Features

Demographic	Frequency (*N*)	%
Gender		
Female	22	81.5%
Male	5	18.5%
Ethnicity/Race		
Black or African American	1	3.7%
White	19	70.4%
Hispanic	4	14.8%
Not Reported	3	11.1%
Position		
Graduate Student Research Assistant	8	29.6%
School Counselor	12	44.4%
School Psychologist	2	7.4%
Behaviorist	1	3.7%
School Social Worker	3	11.1%
Special Education Teacher	1	3.7%

Note. Leaders and co-leaders are school mental health providers who led the small-group positive psychology intervention.

Table 3

Demographic Features of Students in Intervention Sample

Demographics	Frequency (N)	%
Gender		
Female	123	61.8%
Male	59	29.6%
Non-Binary	14	7.04%
Other	3	1.5%
Ethnicity/Race		
Black or African American	17	8.5%
White	127	63.8%
Hispanic	21	10.6%
Latino	1	.5%
Asian	5	2.5%
American Indian/Alaska Native	1	.5%
Other	27	13.6%
Grade		
5th	24	12.1%
6th	60	30.2%
7th	57	28.6%
8th	58	29.1%

Procedures

The research questions in this study were addressed using procedures conducted within a larger grant-funded study to determine the WBPP's efficacy in a randomized controlled trial. This dissertation explored therapeutic processes for students, counselors, and the group in relation to their outcomes, which is not a central aim of the larger study. The following describes the procedures used to administer the intervention appropriately and to collect the necessary data in the larger study.

Intervention Implementation

The WBPP is a positive psychology intervention developed to help increase subjective well-being by teaching youth various positive and intentional activities. The core program consists of 10 sessions, delivered most commonly in 10 group meetings, held once weekly. Students met in a group setting under the supervision and guidance of a mental health professional (e.g., school counselor, social worker, school psychologist, or school psychology graduate student) who completed training in the WBPP and were certified as ready to implement the program under weekly supervision of doctoral-level psychologists with expertise in the program. Students in the intervention condition were assigned to small groups based on grade level, and when there were two groups per grade level, student assignments to a particular group were done at random. Students remained in the same small group throughout the ten weeks. The intervention took place during school hours. Sessions lasted 35 – 50 minutes, about 45 minutes on average. Sessions were delivered on a rotating schedule so that students did not miss the same class week after week. Students who missed a session due to an absence from school had the opportunity to take part in a makeup session with a study team member. Each group had a leader (i.e., the schools' counselors, social workers, and school psychologists) and a co-leader (i.e.,

graduate students and postdoctoral fellows affiliated with the study team). Throughout the ten weeks of the WBPP, leaders and students discussed positive emotions, gratitude, kindness, character strengths, optimism, and hope. Table 4 provides an overview of the weekly WBPP activities for each session. Parents received a handout each week summarizing the session's purpose and activities. Within a week following the 10th session, students took the same measures at baseline. They also completed their third alliance and group cohesion measures during that post-intervention data collection through REDCap.

Table 4

Outline of Intervention Activities

Week	WBPP Topic	WBPP Activities
1	Positive Emotions	1. Rationale for positive activities 2. Establish group norms 3. You at Your Best Activity
2	Gratitude Journals	1. Review You at Your Best Activity 2. Introduce gratitude *3.* Practice gratitude journaling
3	Gratitude Visits	1. Review gratitude journals 2. Review gratitude and positive feelings about the past 3. Gratitude Visits Activity 4. *Collect early therapeutic alliance from students and counselors* 5. *Collect early group cohesion from students*
4	Acts of Kindness	1. Review gratitude journals and visits 2. Introduce kindness 3. Discuss performing 5 acts of kindness in 1 day
5	Introduction to character strengths	1. Review acts of kindness 2. Introduction and identification of character strengths and virtues 3. Positive feelings about the present
6	Assessment of character strengths	1. Review acts of kindness 2. Survey assessment of signature character strengths 3. Plan to use first signature strength in new ways
7	Use of signature strengths in new ways and savoring	1. Review use of character strength 2. Explore new uses of character strengths 3. Defining savoring *4. Gather middle therapeutic alliance from student and counselor* *5. Collect middle group cohesion from students*
8	Optimistic thinking	1. Review character strength and savoring 2. Defining optimism 3. Learn and practice an optimistic explanatory style
9	Hope	1. Review optimistic thinking 2. Defining hope 3. Best Possible Self in the Future activity

Table 4 (Continued)

10	Program termination	1. Review Best Possible Self in the Future, happiness framework, and reflections. 2. Wrap up and obtain student feedback 3. Collect post-intervention data on student mental health and related outcomes. 4. *Gather late therapeutic alliance from student and counselor* 5. *Collect late group cohesion from students*

Training of Group Leaders

Group leaders of the Well-Being Promotion Program were school counselors, school psychologists, and post-doctoral and graduate student trainees in school psychology. Each leader underwent a professional development training involving a series of 6 workshops to learn the purpose and implementation of the WBPP. Each workshop was two hours in duration. The training was led by the PIs and supported by the postdoctoral fellows who coordinate project activities. A pre-knowledge quiz on positive psychology was completed before the workshops. Participants also received a guided self-study journal that mimics the activities in the program. During the training workshops, future interventionists are introduced to the principles of positive psychology and walk through each of the weekly sessions of the WBPP. Each intended leader was required to lead a role play where they mock-delivered an assigned session. Another participant tracked the fidelity of the delivery to the manualized intervention and noted group counseling skills used by the leader in the role play. A summary of the focus of each workshop is presented in Table 5. After completing the training, participants must get an 80% on the exit quiz and complete the role-play with high fidelity to protocol to work independently with the students. All leaders and co-leaders met the 80% criteria for knowledge competency and role-play.

The PIs and postdoctoral fellows held weekly 30-minute coaching with group leaders to monitor the fidelity of each session, give feedback on how the leaders facilitate and cultivate

group processes, plan for future sessions, and problem-solve. Before the coaching sessions, the coaches listened to audio files of a recently completed session, recorded fidelity to protocol, and noted group counseling process variables. During 30-minute virtual sessions held through Zoom, coaches give written and verbal feedback to the co-leaders on fidelity and the flow of the sessions. Leaders also reflected on group process variables, including session flow, relationship enhancement, student engagement, and cultural humility. Coaches provide goals, tips, and reminders for facilitating fidelity, group processes, and content delivery.

Table 5
Overview of Professional Learning Workshops

Workshop 1	Introducing Positive Psychology and the Well-Being Promotion Program
Workshop 2	Maximizing Engagement in the Well-Being Promotion Program
Workshop 3	Evoking Positive Feelings about the Past
Workshop 4	Evoking Positive Feelings in the Present and Strengthening Relationships
Workshop 5	Evoking Positive Feelings about the Future
Workshop 6	Logistics of Providing the Well-Being Promotion Program

Therapeutic Alliance Measures

Modified Therapeutic Alliance Scales for Children (M-TASC). Shirk and Saiz (1992) developed the TASC with two parallel forms to measure the perceptions of the therapeutic alliance between the child client (TASC-C) and the therapist (TASC-T). Both forms are self-report and have 12 items on a 4-point Likert scale from 1 (*not like you*) to 4 (*very much like you*). The scales assess the affective orientation of the child to the therapeutic relationship based on Bordin's conceptualization of the therapeutic alliance. The internal consistency of the child form for the bond, negativity, and verbalization subscales were .72, .74, and .67, respectively. Though the TASC-C was based on Bordin's conceptualization of therapeutic alliance (e.g., bond, task, and goals), a previous study found that positively and negatively worded items yielded two separate factors (Ormhaug et al., 2015). The TASC-C was modified for this study to use the six-

item bond subscale. This decision was justified by the items having a better correspondence with assessing positive psychology skill-focused group interventions versus the task items focusing on "problems." Two negatively worded items in the bond scale were removed because they did not correspond with the other items in the factor analysis (Ormhaug et al., 2015). In addition, three items from the Psychoeducational Group Alliance Scale for Children (PGAS-c) were added to the scale to capture the task aspects of the sessions (Brouzos et al., 2018). Please see Appendix A for the original and modified TASC-C. The retained items from the TASC-C are items one, two, three, and four, and added items from the PGAS-c are items five, six, and seven.

As for the therapist form, the reliability of the bond, negativity, and verbalization subscales was .88, .72, and .87, respectively (Shirk & Saiz,1992). Divergent validity was identified between the bond and negativity for the therapist (r = -.50) and child form (r = -.57), suggesting that the scales measure different constructs. Also, when comparing the two forms for convergence, both perspectives had a significant moderate correlation on the bond (r = .42) and negativity (r = .37) subscales. A factor analysis of the TASC-T showed that therapists' reports loaded into two of Bordin's conceptualizations of therapeutic alliance: bond and tasks (Ormhaug et al., 2015). Similar to the child form for the TASC, the bond items for the therapist form were used, totaling six items (negatively-worded items deliberately retained). These items will provide insight into how the counselors perceive the bond or affective relationship between them and the students. The original and modified TASC-R can be found in Appendix B. The Modified TASC-C and TASC-R were given after the intervention's third, seventh, and tenth sessions.

Group Cohesion Measure

Modified Group Cohesiveness Scale (M-GCS). The original GCS is a 7-item measure used to assess perceptions of group cohesion in group therapy (Wongpakaran et al., 2013). It is rated on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). In developing

this measure, the researchers adopted five items from the engage subscale of the GCQ-S (MacKenzie, 1983). Wongpakaran et al. (2013) reported a reliability of .87, with item correlations ranging from .48 to .75 for the total score. A factor analysis also revealed that all items loaded into one factor for measuring group cohesion, with loadings ranging from .57 to .83. A two-factor model was attempted to measure engagement and cohesiveness. However, the convergence was deemed too high (r = .83).

In the current study, five questions were retained that targeted cohesiveness in the intervention sessions. Modifications of the GCS were discussed and approved by the PIs and expert methodologists. Two questions (number four and six) were removed to increase the feasibility of scale completion for students in the session. Each question was modified to clarify or personalize experience with "I" statements. The measure was administered after the intervention's third, seventh, and tenth sessions. Please see Appendix C for the original GCS and the modified measure.

Student Outcomes

Students' Life Satisfaction Scale (SLSS). The SLSS is a self-report measure used to assess youth's global life satisfaction (Huebner, 1991). It has seven items scored on a 6-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). After reverse scoring items 3 and 4, all items are averaged together to produce a mean score. Higher scores indicate higher levels of life satisfaction. The SLSS is supported by a high internal consistency of .82 and a high test-retest reliability of .74 (Huebner, 1991). Gilman and Huebner (1997) also reported that the SLSS has temporal stability over four weeks (r = .64). See Appendix D for the scale.

10-Item Positive and Negative Affect Scale – Children (PANAS-C-10). Ebesutani et al. (2012) developed the PANAS-C-10 based on Laurent et al.'s version of the PANAS-C (1999) for youth from 4^{th} – 8^{th} grade from the Positive and Negative Affect Scale (PANAS; Watson et

al., 1988). The original PANAS-C has 27 items, and youth rate how often they have experienced words that describe positive and negative emotions in the past few weeks. This study used a 10-item version of the PANAS-C-10, with five items from the positive affect scale and five from the negative affect scale. The PANAS-C-10 measures the frequency of emotional distress (e.g., negative mood) and emotional arousal (e.g., positive mood) an individual experiences. The rating is on a Likert scale from 1 (*very slightly or not at all*) to 5 (*extremely*). The internal consistency for each scale is .92 and .89, respectively (Laurent et al., 1999), with a moderate negative correlation (r = -.36) to indicate that the scales measure different structures. Ebesuntani et al. (2012) reported similar internal consistency with positive affect (α = .86) and negative affect (α = .82) with 799 youth between the ages of 6 and 18. See Appendix E for the scale.

Brief Problems Monitor-Youth (BPM-Y) Short Form of the Youth Self Report (YSR). From the Achenbach System of Empirically Based Assessment (ASEBA), the BPM-Y (ASEBA; Achenbach & Rescorla, 2017) was used to assess students' internalizing and externalizing behaviors. This measure is self-report and developed for youth between the ages of 11 and 18. The complete YSR measure has 112 items that create composite scores of internalizing, externalizing, and attention problems. The BPM-Y contains a subset of these items and was developed to monitor internalizing and externalizing problems over time. For the purposes of the larger grant study, the BPM-Y was used at post-intervention and follow-up periods, whereas the larger YSR was administered at baseline. This study utilized the total psychopathology behaviors scale using six items for internalizing problems, seven for externalizing problems, and six for attention problems scales of the 19-item BPM-Y. Students were asked to report the degree to which they relate to each item over the past six months on a scale of 0 (*not true*) to 2 (v*ery true or often true*). A sum of all items on a given scale produces

the raw total scores. A higher total score indicates higher internalizing, externalizing, or attention difficulties. The reliability was indicated by a high internal consistency of .86 for the total score (Achenbach 2017). The test-retest reliability was also reported as high (r = .88) . Table 6 describes the measures used for this study and those used by the larger grant study. Table 7 provides the measures used for this study and the data collection time points. Due to copyright restrictions, the BPM-Y is not provided in the appendix.

Table 6

Summary of Measures

Name	Developer (Year)	Items	Scales	Original Measures' Scale Reliability
Modified Therapeutic Alliance Scales for Children – C	Shirk & Saiz (1992)	7	1 (*Not at all*) to 4 (*Very much*)	Bond = .72
Modified Therapeutic Alliance Scales for Children – T	Shirk & Saiz (1992)	6	1 (*Not at all*) to 4 (*Very much*)	Bond = .88
Modified Group Cohesiveness Scale	Wongpakaran et al. (2013)	5	1 (*Strongly disagree*) to 5 (*Strongly agree*)	α = .87
Students' Life Satisfaction Scale	Huebner (1991)	7	1 (*Strongly disagree*) to 6 (*Strongly agree*)	α = .82 Retest = .74
10-ItemPositive and Negative Affect Scale – Children (PANAS-C-10)	Ebesutani et al. (2012)	10	1 (*Very slightly or not at all*) to 5 (*Extremely*)	Positive Affect = .92 Negative Affect = .89
Brief Problem Monitor – Youth (BPM-Y)	Achenbach & Rescorla (2017)	19	0 (*Not true*) to 2 (*Very true or often true*)	Total Score = .86 Retest = .88

Pre-Test, Post-Test, and Therapeutic Processes Data Collection

Before the intervention sessions began, baseline data was collected on student perception of life satisfaction, affect, and psychopathology symptoms. After completing the 10th session, the same outcomes were measured again for post-intervention data. Data collection for student and counselor perspectives of the therapeutic alliance occurred after the intervention's third, seventh, and tenth weeks. Students rated their therapeutic alliance experience based on their

relationship with the group leader. Each group was assigned a leader and co-leader, and groups varied in the extent to which the leader/co-leader split up responsibilities for facilitating activities in a given session. For instance, in some groups, the co-leader had a relatively passive role and assisted with logistical concerns; in other groups, the two leaders contributed almost equally to facilitation responsibilities. Thus, the instructions for the alliance measure prompted students to reflect on the group leader(s), allowing them to select which leader(s) to consider. Leader and co-leader counselors of the group intervention rated their experience with each student in their group. From the student perspective, group cohesion was also collected during the intervention's third, seventh, and tenth weeks. After completing all ten sessions, students were interviewed to understand their perspectives on the WBPP intervention, overall experience, relationships, and contributions to the program.

Table 7

Quantitative Data Collection Timeline

	PT	Week 1	Week 2	Week 3	Week 2	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
MTASC-C				X				X			X
MTASC-T				X				X			X
MGCS				X				X			X
SLSS	X										X
PANAS-C	X										X
BPM-Y	X										X

Note. PT = Pre-Test. MTASC-C = Modified Therapeutic Alliance Scale for Children – Child. MTACS-T = Modified Therapeutic Alliance Scale for Therapists – Therapist. MGCS = Modified Group Cohesiveness Scale. SLSS = Student Life Satisfaction Scale. PANAS-C-10 = 10-Item Positive and Negative Affect Scale – Children. BPM-Y = Brief Problem Monitor – Youth.

Quantitative Data Analyses Plan

Preliminary Analyses

After all data was collected and de-identified, it was screened for incomplete responses and random answering. The sample size for this study of youth in the intervention condition was

199 students, served in 22 groups (i.e., six groups each at Schools A and B; 3 groups at School C, four groups at School D, and three groups at School E), led by 27 school mental health staff and research study team members (e.g., five at School A, five at School B; five at School C; seven at School D; and five at School E). Descriptive statistics (e.g., frequency counts, mean, standard deviation, skew, kurtosis, and range) were used to analyze the experimental groups' demographic features and responses on the measures for life satisfaction, affect, and psychopathological symptoms. Descriptive statistics were calculated for student therapeutic alliance, counselor therapeutic alliance, and group cohesion. Each of the measures used also had their reliability calculated and compared to previous studies. Due to the nested data collection, the Cronbach's alpha was calculated for each measure.

Primary Analyses

Research question one explored how the students' initial perspective of the therapeutic alliance at time-point one, between them and their counselor, may relate to their treatment outcomes. Research question two explored how the change in students' perceptions of therapeutic alliance may predict their intervention outcomes. Second-order latent growth models were built to model student therapeutic alliance perspectives predicting their therapeutic outcomes. Other predictors included student pre-test outcomes, state, and grade level. This analysis was used to account for measurement error and invariance. It also allowed for the nested data of students within the group to be addressed. A significance level of $<.05$ was used for each analysis. Trends were identified using a p-value of $.05 < p < .10$.

For research questions three and four, a similar approach to questions one and two was taken for students' perspectives of group cohesion. The questions explored how the students' initial and growth in perspective of group cohesion may relate to their students' treatment outcomes. Second-order latent growth models were built to model student group cohesion

perspectives predicting their therapeutic outcomes. Other predictors included student pre-test outcomes, state, and grade level. This analysis was used to account for measurement error and invariance. It also allowed for the nested data of students within the group to be addressed.

Research question five examined how initial leader perceptions of therapeutic alliance may relate to students' therapeutic outcomes. Second-order latent models were built to model leader therapeutic alliance perspectives predicting their therapeutic outcomes. Other predictors included student pre-test outcomes, state, and grade level. A growth model was attempted for research question six but was not successfully run. Leaders' reports of therapeutic alliance from School C, D, and E at Time 3 were missing from the sample. It is suspected that the model was unable to run due to a need for a bigger sample size to accommodate the complexity of the model (i.e., the number of observed and latent variables input). Descriptive statistics are reported for leaders' therapeutic alliance change.

Timepoints two and three were considered indicators of late therapeutic alliance, data points that could be individually examined. However, previous research (Crits-Christoph et al., 2011; Webb et al., 2011) cautioned that late alliance may be associated with prior symptom change, suggesting that there may be a confound in these factors being positive due to symptom improvement. Thus, the initial and growth reports of therapeutic processes were highlighted in this study to help further tease apart how early alliance and its potential trajectories across time may be related to post-intervention outcomes in a PPI.

Qualitative Data Collection

While the quantitative portion of the study aimed to explore whether there was a relationship between therapeutic and group process perceptions and student outcomes, this data only provided a general scope of statistical relationship. Thus, a qualitative portion of the study

supplemented the quantitative finding by identifying the aspects of students' perceptions of their experience with their leaders and group members that may have related positively or negatively to their experience in the program. The student perspective was specifically highlighted as their qualitative perspectives are underrepresented in the literature. After collecting post-intervention outcome data, students were invited to participate in exit interviews that included 16 broad questions. A subset of questions from the exit interview protocol was utilized to interpret further the quantitative survey results of students' perceptions of the therapeutic alliance and group cohesion. The subset of questions can be seen in Table 8. A total of 124 students were interviewed across the two states. The complete student interview questions can be found in Appendix F. Individual student interviews were transcribed by the grant research team (outsourced to a professional transcription company, then verified for accuracy by a research team member who double-checked for spelling, grammar, and content accuracy).

Table 8
Student Exit Interview Subset Questions

Therapeutic Alliance
1. *How would you describe your relationship with your group leaders?*
2. *Did the relationships with the group leader(s) change from the time the group started until now?*
a. PROBE: *What session(s) did you notice you felt this way?*
3. *What about your leaders contributed to that relationship?*
a. PROBE, if not mentioned: *What did the leaders do to build relationship?*
4. *Did your group leaders try to understand what it's like to be you? How?*
5. *What was a memorable moment for you with your leader(s) in this group?*
Group Cohesion
1. *How would you describe your relationship with the other students in your group?*
2. *Did the relationships with other students in the group change from the time the group started until now?*
a. PROBE: *What session(s) did you notice you felt this way?*
3. PROBE: *What about this group and the people in it helped you feel closer to other students in the group?*
4. *How did your relationships with other students influence your overall experience in the group?*
5. *What was a memorable moment for you with other students in this group?*
Self-Contribution
1. *How do you think that you contributed to the experience of the group?*

After all interviews were transcribed, the sample of interviews for this study was chosen by stratification on their aggregate mean responses on the therapeutic alliance and group cohesion measure. The cutoff percentile for low therapeutic alliance or group cohesion scores was below the 25th percentile. Moderate scores were between the 25th and 75th percentile, and high scores were above the 75th percentile. A total of nine students were sampled for therapeutic alliance, and nine students were sampled for group cohesion. Table 9 and Table 10 display the percentiles and demographics of the student interviews randomly sampled for the qualitative analysis. All presented names are pseudonyms to protect the privacy of the students.

Table 9

Students Chosen for Therapeutic Alliance Qualitative Analysis

ID	Percentile	State	School	Grade	Age	Gender	Race/Ethnicity
Elaine	.08	MA	C	6	11	Female	White
Jake	.08	FL	B	6	11	Male	White
Mark	.15	MA	C	6	12	Male	White
Jessie	.46	FL	B	7	12	Non-Binary	White
Lyla	.53	MA	E	7	13	Female	White
Katie	.61	MA	E	8	13	Female	White
Mia	.76	MA	C	5	11	Female	Other/Puerto Rican
Anthony	.87	FL	A	6	11	Male	White
Tim	.93	FL	A	8	13	Male	White

Table 10

Students Chosen for Group Cohesion Qualitative Analysis

ID	Percentile	State	School	Grade	Age	Gender	Race/Ethnicity
Sam	.05	MA	C	6	11	Other	White
Opal	.09	FL	A	7	13	Female	White
Jessie	.15	FL	B	7	12	Non-Binary	White
Lisa	.51	MA	E	5	10	Female	White/Black/Other: Puerto Rican
Ken	.39	MA	C	6	12	Male	White
Mike	.59	MA	E	5	10	Male	White/Black/Other: Puerto Rican
Sandy	.87	MA	C	6	11	Female	Asian
Yasmine	.78	MA	E	8	14	Female	White/Native American/Other: Puerto Rican
Hannah	.76	FL	A	7	12	Female	White

Qualitative Data Theoretical Approach

The interpretivist phenomenological approach (IPA) was used to analyze the qualitative portion of the study. The IPA expands the traditional phenomenological approach by examining people's perspectives while considering how their experiences converge and diverge across a group of people (Allan & Eatough, 2016; Smith et al., 2009). IPA aligned with the goals of this study to further understand the individual and collective experiences of students' development of relationships with their leaders and their peers in a group positive psychology intervention. Furthermore, IPA highlights that each person can experience aspects of a phenomenon and interpret it differently. In this study, as students attended groups and developed their relationships with their leaders and peers, differences were expected among their interpretations of those experiences. The student exit interviews were utilized to analyze individual cases of students' perceptions of leader and peer relationships, followed by the collective interpretation of all randomly sampled students to create a meaningful understanding of what students identified in those relationships.

Researcher Reflexivity

I am an African American woman and doctoral graduate student interested in the well-being and processes that youth go through in the school and community setting. I have worked with youth and their families for five-plus years to provide mental health support at school, home, and within their communities. Through this work, I have applied a socio-ecological and humanistic approach, which has allowed me to understand further how to identify barriers and supports to increase positive student outcomes. In the school setting, I have conducted small groups (e.g., social skills; the Well-Being Promotion Program [WBPP]). I have also provided the WBPP one-on-one through individual counseling, allowing for more individualized experiences

and development with the students. In 2023, I instructed an undergraduate course that taught students positive psychology principles, trained them to implement the WBPP with fidelity, and fostered growth in their own therapeutic alliance style.

These experiences have honed my understanding of the importance of mental health and the value of building a strong, trusting relationship with students. My previous experiences with youth may have created assumptions about what students look for in therapeutic relationships and influenced how I interpreted the students' responses when coding. Furthermore, as a research team member, I conducted some of the student interviews. Having first-hand experience with the students and seeing their non-verbal responses while answering the questions may have further impacted my perspective. However, these biases were considered and attempted to be lessened throughout the analysis process by randomly selecting students, keeping reflection journals, and consulting with another graduate student for a different perspective.

Applying the IPA, I reviewed and analyzed each student's responses exclusively within the context they provided while accounting for their own potential biases. Though bias cannot be completely excluded from qualitative research, I consulted with another qualitative researcher. This researcher identifies as a Trinidadian woman and has completed extensive training in qualitative research, implemented the Well-Being Promotion Program for over three years, and provided research assistance within the larger IES-funded study over two years. The graduate student and I collaborated to develop methods, themes, and analysis considerations to provide more trustworthy results that limited bias.

Qualitative Analyses Plan

Data analysis of the transcripts proceeded with two coders: the researcher of this study and the graduate student mentioned above, who was a part of the research grant. Based on

previous understandings of adolescent therapeutic alliance and group cohesion, the researcher had some ideas on how students might describe their experience. Coding progressed through the steps of open and axial (Corbin & Strauss, 1998). The constant-comparative method was utilized to identify similar, dissimilar, and overarching ideas as more data presented itself (Fereday and Muir-Cochrane, 2006). A code book was progressively developed throughout this process. Inconsistencies in coding were discussed and resolved.

The researcher conducted a thematic analysis of the codes using inductive inquiry to identify themes in the data. Overarching themes were considered *primary*. Codes that fit into primary themes but had distinctive themes were considered *secondary*. The two coders applied the same iterative process to reach a consensus on the therapeutic alliance and group cohesion themes. An exploratory style was utilized to understand further quantitative findings regarding students' perceptions of leader and peer relationships.

The researcher organized the results section by presenting the qualitative therapeutic alliance results following the quantitative therapeutic alliance results. The same order was followed for the qualitative group cohesion results. Each main theme in the therapeutic alliance and the group cohesion analysis was included in the results. The researcher selected a few quotes that she considered best representing each primary theme while capturing various secondary themes.

Ethical and Legal Considerations

The following procedures were implemented to address this study's relevant ethical concerns. All collected consent, assent, and research data are stored in a password-protected database accessible only to research staff. Participants are also assigned a code number to aid in de-identification. All data collected in this study will be destroyed five years after the larger

study's completion. Furthermore, students in the control group of this study will receive the opportunity to participate in the intervention during the spring of the following year after collecting 1-year follow-up data.

Chapter 4: Results

This study aimed to determine if 1) student perceptions of therapeutic alliance, 2) students' perceptions of group cohesion, and 3) leaders' perceptions of therapeutic alliance individually predicted students' intervention outcomes of life satisfaction, positive affect, negative affect, and psychopathology symptoms. These three goals were analyzed individually using second-order latent growth models, structural equation models, and qualitative analyses from student surveys. This results section consists of three main quantitative sections based on the abovementioned goals, followed by two sections of qualitative analyses based on the first two goals. Each quantitative section will present and discuss the key statistics of each variable, the growth model, and the model parameters predicting each post-test outcome. The two qualitative sections will present the key themes, followed by their analyses.

Research Questions One and Two

This section of the results will address the following research questions:

1. To what extent, if any, do the initial therapeutic alliance perceptions of middle school students in a positive psychology intervention relate to the following indicators of their mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?

2. To what extent, if any, does the growth of therapeutic alliance perceptions of middle school students in a positive psychology intervention relate to the following indicators of their mental health:
    a. Life Satisfaction
    b. Positive Affect
    c. Negative Affect
    d. Psychopathology?

Reliability and Descriptive Statistics of Student- Rated Therapeutic Alliance

Students' perceptions of therapeutic alliance were measured during three time points at weeks three, seven, and 10. The reliability of the students' 7-item therapeutic alliance measure was analyzed for the sample of students in the present study. Reliability estimates for the present study were compared to values reported in previous research studies, with consideration that the alliance scales were modified to align with the purpose of the study. Table 11 displays the item descriptive statistics across the three time points. Alphas were .90, .92, and .94 for weeks 3, 7, and 10, respectively, indicating strong score reliability.

Descriptive statistics were calculated for students' perceptions of therapeutic alliance scores across the three time points. The mean scores for students' therapeutic alliance across the three time points divided by the schools the students attended are displayed in Table 12. The response scale ranged from 1 to 4, with higher values indicating reports of more positive relationships with their leaders. Collectively, students' therapeutic alliance increased over time from 2.96 to 3.10. Specifically, observed trends revealed that students who attended schools A, C, D, and E reported more positive relationships with their group leaders at the end of the intervention than at the beginning, whereas School B stayed relatively consistent. The total

distribution of students' therapeutic alliance was approximately normal. Residual plots were used to check for outliers, and no outliers were detected (scores greater than three standard deviations +/- from the mean). Appendix H contains the correlation matrix table demonstrating all bivariate associations between the therapeutic process and student outcome variables at each time and between time points. Significant and positive correlations were identified variably between the three student therapeutic alliance time points and the post-intervention student outcomes of life satisfaction and the pre- and post-intervention outcomes of positive affect (r = .15 to .34, p < .05) . There were no significant correlations between student outcomes of negative affect or psychopathology symptoms.

Table 11

Student-Rated Therapeutic Alliance Item Descriptive Statistics

	Time 1		*Time 2*		*Time 3*	
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*
M-TASC-C						
Question 1	2.84	0.80	3.02	0.80	3.12	0.86
Question 2	3.17	0.84	3.19	0.82	3.18	0.82
Question 3	2.90	0.90	2.98	0.89	3.05	0.95
Question 4	3.27	0.76	3.27	0.76	3.26	0.80
Question 5	2.59	0.94	2.7	0.94	2.90	0.93
Question 6	3.15	0.80	3.23	0.75	3.20	0.80
Question 7	2.83	0.94	3.03	0.86	2.96	0.94

Note. M-TASC-C = Modified Therapeutic Alliance Scale for Children – Child Version. The mean response scale ranges from 1(less positive perception) to 4 (more positive perception). Time 1= Week 3 Time 2 = Week 7 Time 3 = Week 10. The student sample size varied at each data collection point due to attendance or attrition. The sample of students was 186, 177, and 187, respectively at Time 1, 2, and 3.

Building the Latent Growth Model for Student-Rated Therapeutic Alliance

Student therapeutic alliance was conceptualized as a latent variable at each time point, with each latent variable measured by seven items. A second-order linear latent growth model was used to model the growth parameters (intercept and slope) representing the change in therapeutic alliance across the three time points.

Student Therapeutic Alliance Configural and Scalar Model Comparisons

First-order configural and scalar measurement models of the three student therapeutic alliance time points were evaluated to evaluate longitudinal measurement invariance. The ***configural model*** consisted of no constraints on the factor loadings, intercepts, and residual variances of the individual items of the student therapeutic alliance measured across the three time points. In other words, each observed variable could contribute differently to the latent variable across time. For the ***scalar model*** of students' therapeutic alliance, the factor loadings and intercepts for each observed variable were constrained to be equal across time (e.g., loadings for item 2 at weeks 3, 7, and 10 were constrained to be equal; similarly, intercepts for item 2 at weeks 3, 7, and 10 were constrained to be equal). This means that each respective item across the three time points was made to have the same strength of association with the latent factor, which helps support measure invariance. Unstandardized factor loadings for the scalar model ranged from .879 to 1.080. Along with the factor loadings, the intercepts or the starting points for each item of the therapeutic alliance scale across the three time points were equal. The intercepts for each respective item ranged from –0.27 to 0.53.

One of the major goals of this study was to predict student outcomes based on the growth parameters from the growth model of student therapeutic alliance perceptions. The scalar model was considered in terms of measurement invariance and the consistency of measuring therapeutic alliance across the three time points. The model fit indices, Chi-Square, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and the Standardized Root Mean Square Residual (SRMSR) were used to compare the configural and scalar models. The Chi-Square test measured the difference between the model's observed data and implied covariance structure. The configural and scalar models had significant *p*-values for the chi-square, which

suggests that the respective models did not fit the data well. The RMSEA measures the difference between the models and the observed data while accounting for the model's complexity. Values below 0.05 suggest close fit, values up to .08 suggest reasonable fit, and values above .10 suggest poor fit.

The configural (.061) and the scalar (.063) RMSEA were within the acceptable fit range. The CFI measures how well the models fit compared to a model with no relationship between the variables. From 0 to 1, the cutoff criterion for CFI goodness of fit is at least .95. The configural (.94) and the scalar (.93) models were within the good fit range. Lastly, the SRMR assesses the difference between the model-implied and the observed covariances. The cutoff criterion for a good fit for SRMR was less than 0.06. No major changes were indicated by the fit indices when comparing the scalar model with the configural model. The configural (.051) and the scalar (.059) fit indices were within the goodness of fit range. Table 13 compares the configural and scalar model of students' therapeutic alliance across the three time points.

The scalar model was used to interpret the average slope, average intercept (initial starting point was at week 3), and variances in the intercepts and slopes for therapeutic alliance. Figure 1 displays the scalar growth model for student therapeutic alliance. Table 14 displays the growth model means and variances of student therapeutic alliance. On average, students' therapeutic alliance scores at Timepoint 1 (Week 3) were 2.92 (*SE* = .07). The average growth rate of students' therapeutic alliance scores was .02 (*SE* = .01). The slope was statistically significant ($p < .05$), which suggests that there was significantly small, but positive growth in students' therapeutic alliance perspectives towards their leaders. The variance of the intercepts (.32, *SE* = .03) indicates significant variation in students' therapeutic alliance scores at Timepoint

1. As for the variation in the slope or growth of students' therapeutic alliance scores, the variance in the slopes was not significantly different from zero ($p > .05$).

Table 12

Descriptives of Student Therapeutic Alliance Across Three Timepoints by Schools

	Time 1					Time 2					Time 3				
M- TASC-C	*n*	*M*	*SD*	*Sk*	*KU*	*N*	*M*	*SD*	*Sk*	*KU*	*N*	*M*	*SD*	*Sk*	*KU*
School A	48	3.09	0.65	-0.37	-0.71	46	3.31	0.59	-1.43	3.77	48	3.22	0.74	-0.90	0.48
School B	46	2.92	0.77	-0.02	-1.42	45	3.02	0.76	-0.43	-1.11	44	2.91	0.89	-0.43	-0.54
School C	32	2.79	0.61	-0.88	0.07	31	2.78	0.66	0.28	-1.15	32	3.01	0.64	0.17	-1.04
School D	37	2.75	0.62	0.12	-0.64	31	2.78	0.56	0.19	-0.48	37	2.92	0.68	0.34	-0.95
School E	23	3.37	0.41	-0.33	-0.49	24	3.37	0.60	-0.58	-0.91	25	3.57	0.53	-0.71	-1.22
Total	186	2.96	0.67	-0.27	-0.81	177	3.06	0.68	-0.40	-0.70	187	3.10	0.75	-0.47	-0.38

Note. M-TASC-C = Therapeutic Alliance Scale for Children - Child Version. The mean response scale ranges from 1(less positive perception) to 4 (more positive perception). Time 1= Week 3 Time 2 = Week 7 Time 3 = Week 10.

Table 13

Student-Rated Therapeutic Alliance Configural and Scalar Model (n = 199)

Model	X2	df	RMSEA	CFI	SRMR
Configural	320.284	188	0.061	0.944	0.051
Scalar	372.56	212	0.063	0.933	0.059

Note. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

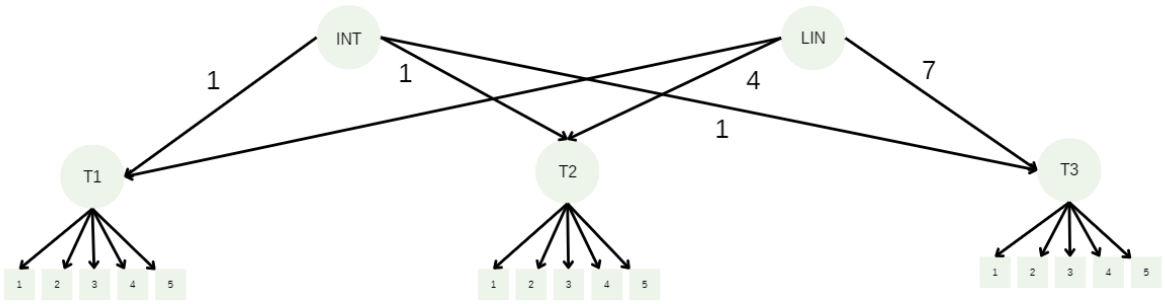

Figure 1 *Scalar Growth Model of Student Therapeutic Alliance*

Note. INT = Intercept of therapeutic alliance. LIN = Slope of therapeutic alliance. T1 = Time one at week three of the intervention. T2 = Time two at week seven of the intervention. T3 =Time three at week 10 of the intervention.

Table 14

Growth Model for Student-Rated Therapeutic Alliance (n= 199)

	Estimate	Standard Error	*p-value*
Means			
Intercept	2.92**	0.07	< .01
Linear	0.02*	0.01	0.02
Variances			
Intercept	0.32**	0.03	< .01
Linear	0.002	<0.01	0.20

Note. ** p< .01. * p <.05

Descriptives of Student Life Satisfaction Scores (SLSS)

Students' life satisfaction was measured with the SLSS before the intervention was administered and after the conclusion of the 10th session. Of the seven items rated from one to six, items three and four were negatively worded and reverse-coded. Cronbach's alphas for the SLSS for the pre-test and post-test were .86 and .87, respectively. These two reliabilities were above the range of previous alphas found for this measure from .70 to .80 (Huebner, 1991). Table 15 displays the item descriptive statistics for student life satisfaction.

Table 15

Item Mean Scores and Standard Deviations for Student Life Satisfaction

	Pre-Test		*Post-Test*	
SLSS	*M*	*SD*	*M*	*SD*
Q1	3.53	1.19	3.82	1.33
Q2	3.18	1.32	3.50	1.49
Q3R	2.64	1.45	2.82	1.53
Q4R	3.58	1.53	3.61	1.58
Q5	3.64	1.33	4.05	1.28
Q6	3.37	1.37	3.74	1.44
Q7	3.20	1.51	3.44	1.55

Note. SLSS = Student Life Satisfaction Scale. The mean response scale ranges from 1(less life satisfaction) to 6 (more life satisfaction). The sample size for the pre-test was 199 with a Cronbach's alpha of .86. The sample size for the post-test was 187 with a Cronbach's alpha of .87.

Table 16

Descriptives of Student Life Satisfaction Scale (SLSS) by School

	Pre-Test					Post-Test				
SLSS	*N*	*M*	*SD*	*Sk*	*Ku*	*N*	*M*	*SD*	*Sk*	*Ku*
School A	51	3.23	0.98	0.43	0.07	48	3.71	1.08	-0.18	0.12
School B	50	3.25	0.90	0.31	0.05	44	3.46	0.97	-0.19	-0.65
School C	33	3.11	0.97	-0.02	-0.33	32	3.32	1.17	0.22	-0.51
School D	40	3.45	1.11	0.32	-0.23	38	3.52	1.08	-0.26	0.25
School E	25	3.58	1.22	0.22	-0.38	25	3.87	1.18	0.01	-1.10
Total	199	3.31	1.02	0.33	-0.10	187	3.57	1.09	-0.07	-0.39

Note. The mean response scale ranges from 1(less life satisfaction) to 6 (more life satisfaction). Schools A and B are schools in Florida. Schools C, D, and E are schools in Massachusetts.

Descriptive statistics were calculated for pre-test and post-test students' life satisfaction scores. The composite scores for the pre-test and post-test were created in SPSS after reverse-coding questions three and four due to their negatively worded nature. Each student's pre-test and post-test responses were individually averaged. The mean score for students' life satisfaction at pre-test and post-test by the schools the students attended is displayed in Table 16. The response scale ranged from 1 to 6, with higher values indicating reports of more life satisfaction. The total sample's life satisfaction average was 3.31. Collectively, students' life satisfaction increased over time from 3.31 to 3.57. Students' life satisfaction scores were approximately normally distributed. Box plots were used to check for outliers, and no outliers were detected.

Student-Rated Therapeutic Alliance Predicting Post-Test Life Satisfaction

A second-order linear latent growth model was constructed to address research questions one and two pertaining to students' therapeutic alliance growth parameters (intercepts and slopes) predicting their post-test life satisfaction outcomes. The growth model for predicting

students' post-test life satisfaction included the established scalar model of the students' intercept and slope displayed in Table 14. In addition, the model included pre-test life satisfaction, the state in which the intervention took place (dummy coded FL = 0 and MA = 1), and grade levels (grades 5^{th} to 8^{th}) as predictors. Table 17 displays the full model. Figure 2 displays the complete model for predicting post-test student life satisfaction. Table 18 shows the students' TA growth model results predicting post-test life satisfaction. The regression of post-SLSS on the complete model yielded a coefficient estimate of .31 (*SE* = .15, *p* = .04). This finding suggests that the more positively students rated their initial therapeutic alliance, they also reported higher levels of life satisfaction at post-intervention. As for the slope or growth of students' TA across the three time points, the coefficient was 6.82 (*SE* = 6.10, *p* = .26). This result indicates that students' growth was not significantly related to their post-test outcomes. Pre-test life satisfaction significantly predicted post-test life satisfaction (.78, *SE* = .08, *p* < .01). There was no significant prediction of post-test life satisfaction based on the students' site (regression coefficient = .15, *p* = .17) or grade (regression coefficient = .09, *p* =. 18).

Descriptive Statistics of Student Positive Affect

Students' positive affect (PA) was measured before the intervention was administered and after the conclusion of the 10^{th} session. Cronbach's alphas for the PANAS-C-10 Positive Scale for the pre-test and post-test were .83 and .91, respectively. Table 19 displays the items' descriptive statistics for positive affect.

Descriptive statistics were calculated for pre-test and post-test students' positive affect scores. Items 2, 5, 6, 8, and 10 were all positively worded and were averaged together to generate a mean score for positive affect. The mean scores for students' positive affect at pre-test and post-test by the schools the students attended are displayed in Table 20. The response scale

ranged from 1 to 5, with higher values indicating reports of more positive affect. Collectively, students' positive affect increased over time from 2.68 to 2.99. Students' positive affect scores were approximately normally distributed. Box plots were used to check for outliers, and no outliers were detected.

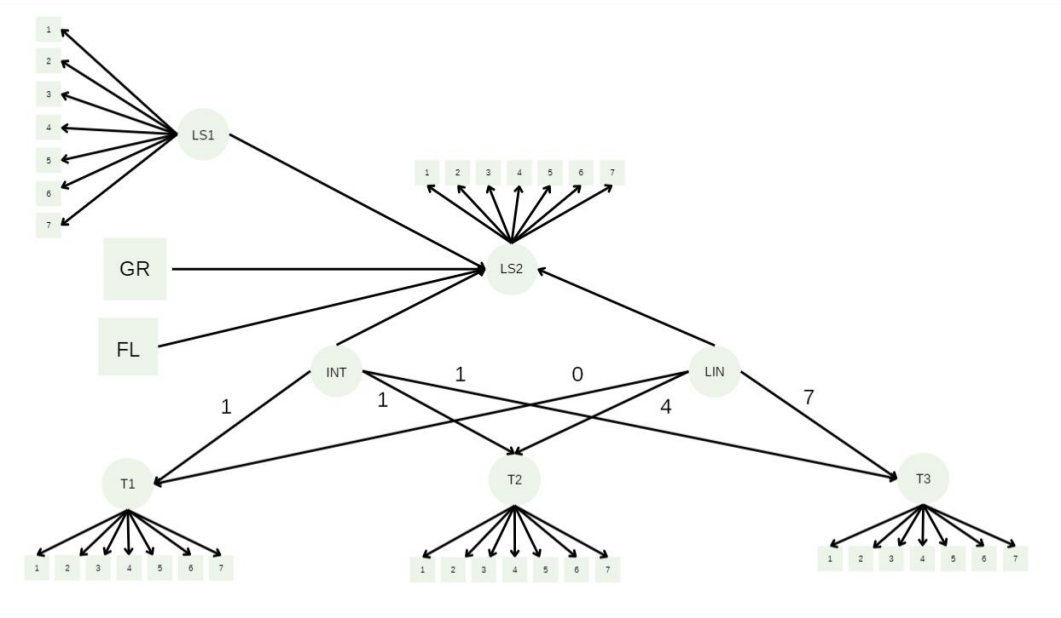

Figure 2 *Second Order Latent Growth Model Predicting Student Life Satisfaction*

Note. INT = Intercept of the therapeutic alliance. LIN = Slope of therapeutic alliance. T1 = Time one at week three of the intervention. T2 = Time two at week seven of the intervention. T3 =Time three at week 10 of the intervention. LS1 = Life satisfaction at pre-test. LS2 = Life satisfaction at post-test. FL = Dummy coded variable of schools (FL = 0, MA = 1). GR = Grades 5th through 8th.

Table 17

Student-Rated Therapeutic Alliance Full Model Predicting Post-Test Life Satisfaction (n = 199)

Model	X2	df	RMSEA	CFI	SRMR
Full Model	1178.17	646	0.06	0.87	0.07

Note. The "full" model refers to the inclusion of the student therapeutic alliance scalar model, along with the predictors of life satisfaction pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 18

Second-Order Latent Growth Model: Student-Rated Therapeutic Alliance Parameters Predicting Post-Test Life Satisfaction

Student Therapeutic Alliance Parameters	Estimate	*SE*	*p*
Intercept of TA	0.31*	0.15	0.04
Slope of TA	6.82	6.10	0.26
Pre-Test (Life Satisfaction)	0.78**	0.08	0.00
Site (0=FL, 1=MA)	0.15	0.11	0.17
Grade	0.09	0.07	0.18

Note. * p <.05. ** p <.01.

Table 19

Item Mean Scores and Standard Deviations for Student Positive Affect

	Post-Test		**Pre-Test**	
PANAS-C-10 Positive	*M*	*SD*	*M*	*SD*
Q2	2.93	1.02	3.27	1.02
Q5	2.60	1.14	2.88	1.25
Q6	2.45	1.13	2.81	1.26
Q8	2.68	1.08	3.01	1.19
Q10	2.76	1.14	3.00	1.16

Note. PANAS-C-10= Positive and Negative Affect Schedule for Children – 10 Items. The mean response scale ranges from 1(less positive affect) to 5 (more positive affect). The sample size for the pre-test was 199, with a Cronbach's alpha of .83. The sample size for the post-test was 187, with a Cronbach's alpha of .91.

Table 20

Descriptives of Student PANAS-C-10 Positive Affect Scale by School

	Baseline					Post-Test				
PANAS-C-10 P	*N*	*M*	*SD*	*Sk*	*KU*	*N*	*M*	*SD*	*Sk*	*KU*
School A	51	2.61	0.89	0.25	0.11	48	2.94	0.99	0.45	-0.43
School B	50	2.71	0.70	0.17	-0.34	44	2.97	1.06	0.34	-0.83
School C	33	2.68	0.85	0.29	0.20	32	3.00	0.95	0.33	-0.48
School D	40	2.66	0.98	0.23	-0.54	38	2.89	0.97	0.16	-0.39
School E	25	2.82	0.88	0.50	0.04	25	3.28	1.09	-0.11	-0.73
Total	199	2.68	0.85	0.25	-0.08	187	2.99	1.01	0.27	-0.67

Note. The mean response scale ranges from 1(less positive affect) to 5 (more positive affect). Schools A and B are schools in Florida. Schools C, D, and E are schools in Massachusetts.

Student-Rated Therapeutic Alliance Predicting Post-Test Positive Affect

Another second-order linear latent growth model was constructed to address student-rated therapeutic alliance initial and growth parameters (intercepts and slopes) predicting their post-test positive affect outcomes. The growth model for predicting students' post-test positive affect included the established scalar model of the students' intercept and slope displayed in Table 14. The model for predicting post-test positive affect is similar to that of Figure 2. Table 21 displays the full model. Table 22 shows the results of students' TA growth model predicting post-test positive affect. The regression of post-test positive affect on the intercept or initial student TA yielded a coefficient estimate of .15 (*SE* = .14, *p* = .28). This finding suggests that students' initial perceptions of therapeutic alliance were not significantly related to their post-test outcomes. As for the slope or growth of students' TA across the three time points, the coefficient was 8.41 (*SE* = 5.52, *p* = .13). This result also indicates that students' growth was not significantly related to their post-test outcomes. Pre-test positive affect significantly predicted post-test positive affect (.69, *SE* = .15, *p* < .001). There was no significant prediction of post-test positive affect based on the students' site (regression coefficient = -0.08, *p* = .43) or grade (regression coefficient = .02, *p* =. 69).

Table 21

Student-Rated Therapeutic Alliance Full Model Predicting Post-Test Positive Affect (n = 199)

Model	X2	df	RMSEA	CFI	SRMR
Full Model	841.20	512	.06	.91	.07

Note. The "full" model refers to the inclusion of the student therapeutic alliance scalar model, along with the predictors of PANAS-C-10 Positive Affect pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 22

Second-Order Latent Growth Model of Student-Rated Therapeutic Alliance Parameters Predicting Post-Test Positive Affect

Student Therapeutic Alliance Parameters	Estimate	*SE*	*p*
Intercept of TA	0.15	0.14	0.28
Slope of TA	8.41	5.52	0.13
Pre-Test (Positive Affect)	0.69**	0.15	0.00
Site (0=FL, 1=MA)	-0.08	0.10	.430
Grade	0.02	0.05	0.69

Note. * p <.05. ** p <.01. Students' positive affect (PA) was measured before the intervention was administered and after the conclusion of the 10th session. Cronbach's alphas for the PANAS-C-10 Positive Scale for the pre-test and post-test were .83 and .91, respectively. These two reliabilities were above the range of previous alphas found for this measure from .70 to .80 (Huebner, 1991).

Descriptive Statistics for Student Negative Affect

Students' negative affect (NA) was measured before the intervention was administered and after the conclusion of the 10th session. Cronbach's alphas for the PANAS-C-10 Negative Scale for the pre-test and post-test were .77 and .81, respectively. Table 23 displays the item descriptive statistics for student negative affect.

Table 23

Item Mean Scores and Standard Deviations for Student Negative Affect

	Pre-Test		***Post-Test***	
PANAS-C-10 Negative	*M*	*SD*	*M*	*SD*
Q1	3.01	1.15	2.97	1.23
Q3	2.11	1.27	2.31	1.33
Q4	2.40	1.25	2.48	1.28
Q7	2.17	1.24	2.35	1.32
Q9	2.93	1.36	3.06	1.35

Note. PANAS-C-10= Positive and Negative Affect Schedule for Children – 10 Items. The mean response scale ranges from 1(less negative affect) to 5 (more negative affect). The sample size for the pre-test was 199, with a Cronbach's alpha of .77. The sample size for the post-test was 188, with a Cronbach's alpha of .81.

Descriptive statistics were calculated for students' negative affect scores at pre-test and post-test. Items 1, 3, 4, 7, and 9 were all negatively worded in that higher levels of each item reflected higher levels of negative feelings. The scores were averaged together to generate a

mean score for negative affect. The mean scores for students' negative affect at pre-test and post-test by the schools the students attended are displayed in Table 24. The response scale ranged from 1 to 5, with higher values indicating reports of more negative affect. Collectively, students' negative affect increased over time from 2.53 to 2.63. Students' negative affect scores were approximately normally distributed. Box plots were used to check for outliers, and no outliers were detected.

Table 24

Descriptives of Student PANAS-C-10 Negative Affect Scale by School

	Baseline					Post-Test				
PANAS-C-10 Negative	*N*	*M*	*SD*	*Sk*	*KU*	*N*	*M*	*SD*	*Sk*	*KU*
School A	51	2.47	0.90	0.54	0.06	48	2.65	0.96	0.13	-0.54
School B	50	2.58	1.00	0.03	-1.36	44	2.60	1.13	0.26	-0.88
School C	33	2.55	0.76	0.39	-0.40	32	2.81	1.01	0.70	-0.10
School D	40	2.52	0.85	0.66	-0.44	38	2.56	0.84	-0.06	-0.95
School E	25	2.50	1.01	0.17	-1.08	25	2.55	0.96	0.70	-0.17
Total	199	2.53	0.90	0.32	-0.74	187	2.63	.98	0.32	-0.51

Note. The mean response scale ranges from 1(less negative affect) to 5 (more negative affect). Schools A and B are schools in Florida. Schools C, D, and E are schools in Massachusetts.

Student-Rated Therapeutic Alliance Predicting Post-Test Negative Affect

Another second-order linear latent growth model was constructed to address research questions one and two pertaining to students' therapeutic alliance growth parameters (intercepts and slopes) predicting their post-test negative affect outcomes. The growth model for predicting students' post-test negative affect included the established scalar model of the students' intercept and slope displayed in Table 14. The model for predicting post-test negative affect is similar to that of Figure 2. Table 25 displays the full model. Table 26 shows the results of students' TA growth model predicting post-test negative affect. The regression of post-test negative affect on the intercept or initial student TA yielded a coefficient estimate of –0.22 (*SE* = .14, *p* = .12). This finding suggests that students' initial perceptions of therapeutic alliance were not significantly

related to their post-test outcomes. As for the slope or growth of students' TA across the three time points, the coefficient was .94 (*SE* = 1.50, *p* = .53). This result also indicates that students' growth was not significantly related to their post-test outcomes. Pre-test negative affect significantly predicted post-test negative affect (.58, *SE* = .12, *p* < .001). There was no significant prediction of post-test negative affect based on the students' site (regression coefficient = 0.01, *p* = .90) or grade (regression coefficient = -0.08, *p* =.09).

Table 25

Student Therapeutic Alliance Full Model for Predicting Post-Test Negative Affect (n = 199)

Model	X2	df	RMSEA	CFI	SRMR
Full Model	998.84	512	.07	.86	.07

Note. The "full" model refers to the inclusion of the student therapeutic alliance scalar model, along with the predictors of PANAS-C-10 Negative Affect pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 26

Second-order Latent Growth Model: Student-Rated Therapeutic Alliance Parameters for Predicting Post-Test Negative Affect

Student Therapeutic Alliance Parameters	Estimate	*SE*	*p*
Intercept of TA	-0.22	0.14	0.12
Slope of TA	0.94	1.50	0.53
Pre-Test (Negative Affect)	0.58**	0.12	<0.01
Site (0=FL, 1=MA)	0.01	0.08	0.90
Grade	-0.08	0.05	0.09

Note. * p <.05. ** p <.01.

Descriptive Statistics of Student Psychopathology Symptoms

Students' psychopathology symptoms were measured before the intervention was administered and after the conclusion of the 10th session, using the complete YSR measure, which has 112 items that create composite scores of internalizing, externalizing, and attention problems. The BPM-Y contains a subset of these items and was developed to monitor internalizing, externalizing, and attention problems over time. For this study, the analyzed pre-test items from the YSR were the same items that corresponded with the 19 items on the BPM-Y.

Cronbach's alphas for the YSR pre-test and BPM-Y post-test were .85 and .89, respectively. Table 27 displays the item descriptive statistics and the corresponding item numbers for the student psychopathology symptoms on the BPM-Y.

Table 27

Item Mean Scores and Standard Deviations for Student Psychopathology Symptoms

Pre-Test			***Post-Test***		
YSR Items	*M*	*SD*	*BPM-Y Items*	*M*	*SD*
1	0.62	0.66	**1**	0.61	0.65
3	1.02	0.67	**2**	1.09	0.67
4	1.03	0.68	**3**	1.05	0.72
8	1.43	0.65	**4**	1.40	0.68
10	1.38	0.69	**5**	1.36	0.70
21	0.21	0.49	**6**	0.37	0.62
22	0.54	0.63	**7**	0.66	0.65
23	0.29	0.52	**8**	0.49	0.66
35	0.93	0.78	**9**	0.95	0.76
41	0.91	0.67	**10**	0.91	0.72
50	0.96	0.83	**11**	1.02	0.78
52	0.82	0.80	**12**	0.92	0.78
71	1.19	0.81	**13**	1.28	0.76
78	1.33	0.72	**14**	1.36	0.68
86	1.02	0.74	**15**	1.09	0.72
95	0.88	0.81	**16**	0.97	0.78
97	0.25	0.49	**17**	0.41	0.67
103	0.95	0.73	**18**	0.92	0.78
112	1.30	0.76	**19**	1.27	0.76

Note. YSR= Youth Self Report. BPM-Y = Brief Problem-Monitoring – Youth. The mean response scale ranges from 0 (less psychopathology symptoms) to 2 (more psychopathology symptoms). The sample size for the pre-test was 199, with a Cronbach's alpha of .85. The sample size for the post-test was 187, with a Cronbach's alpha of .89.

Descriptive statistics were calculated for students' psychopathology symptoms scores at the pre-test and post-test. The mean scores for students' psychopathology symptoms at the pre-test and post-test by the schools the students attended are displayed in Table 28. The response scale ranged from 0 to 2, with higher values indicating reports of more psychopathology symptoms. Collectively, students' psychopathology symptoms increased over time from .90 to

.95. Students' psychopathology symptoms scores were approximately normally distributed. Box plots were used to check for outliers, and no outliers were detected.

Table 28

Descriptives of Student Psychopathology Symptoms Scale by School

	Baseline					Post-Test				
BPM-Y	*N*	*M*	*SD*	*Sk*	*KU*	*N*	*M*	*SD*	*Sk*	*KU*
School A	51	0.93	0.33	0.10	0.07	48	0.98	0.41	-0.10	0.54
School B	50	0.94	0.36	-0.21	-0.52	44	1.04	0.39	0.06	0.11
School C	33	0.85	0.34	0.20	-0.47	32	0.97	0.43	0.42	0.01
School D	40	0.85	0.33	-0.48	0.13	38	0.82	0.41	-0.18	0.35
School E	25	0.89	0.49	-0.15	-1.17	25	0.94	0.42	0.45	0.35
Total	199	0.90	0.36	-0.11	-0.39	187	0.95	0.41	0.06	0.19

Note. The mean response scale ranges from 0 (less psychopathology symptoms) to 2 (more psychopathology symptoms). Schools A and B are schools in Florida. Schools C, D, and E are schools in Massachusetts.

Student-Rated Therapeutic Alliance Predicting Post-Test Psychopathology Symptoms

Another second-order linear latent growth model was constructed to address research questions one and two pertaining to students' therapeutic alliance growth parameters (intercepts and slopes) predicting their post-test psychopathology symptoms outcomes. The growth model for predicting students' post-test psychopathology symptoms included the established scalar model of the students' intercept and slope displayed in Table 14. The model for predicting post-test psychopathology symptoms is similar to that of Figure 2. Table 29 displays the full model. Table 30 shows the results of students' TA growth model predicting post-test psychopathology symptoms. The regression of post-test psychopathology symptoms on the intercept or initial student TA yielded a coefficient estimate of –0.05 (*SE* = .05, *p* = .33). This finding suggests that students' initial perceptions of the therapeutic alliance were not significantly related to their post-test outcomes. As for the slope or growth of students' TA across the three time points, the coefficient was –0.14 (*SE* = .74, *p* = .85). This result also indicates that students' growth was not significantly related to their post-test outcomes. Pre-test psychopathology symptoms

significantly predicted post-test psychopathology symptoms (.70, *SE* = .12, $p < .01$). There was no significant prediction of post-test psychopathology symptoms based on the students' site (regression coefficient = 0.11, $p = .06$) or grade (regression coefficient = -0.05, $p = .06$).

Table 29

Student-Rated Therapeutic Alliance Full Model (n = 199)

Model	X2	df	RMSEA	CFI	SRMR
Full Model	2171.97	1786	.03	.84	.16

Note. The "full" model refers to the inclusion of the student therapeutic alliance scalar model, along with the predictors of psychopathology symptoms pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 30

Second-Order Latent Growth Model: Student-Rated Therapeutic Alliance Parameters for Predicting Post-Test Psychopathology Symptoms

	Estimate	*SE*	*p*
Intercept of TA	-0.05	0.05	0.33
Slope of TA	-0.14	0.74	0.85
Pre-Test (Psychopathology)	0.70**	0.12	<.01
Site (0=FL, 1=MA)	0.11	0.06	0.06
Grade	-0.05	0.03	0.06

Note. * $p < .05$. ** $p < .01$. TA = Therapeutic alliance. FL = Florida. MA = Massachusetts.

Research Questions Three and Four

This section of the results will address the following research questions:

3. To what extent, if any, do the initial perceptions of group cohesion in a positive psychology intervention for middle school students relate to the following indicators of student mental health:

    a. Life Satisfaction

    b. Positive Affect

    c. Negative Affect

    d. Psychopathology?

4. To what extent, if any, does the growth of group cohesion in a positive psychology

intervention to middle school students relate to the following indicators of student mental health:

a. Life Satisfaction

b. Positive Affect

c. Negative Affect

d. Psychopathology

Reliability and Descriptive Statistics of Group Cohesion Measure

Students' group cohesion perspectives were measured during three time points at weeks three, seven, and 10. The reliability of the students' group cohesion measure was analyzed for the sample of students in the present study. Reliability estimates for the present study were compared to values reported in previous research studies, with consideration that the group cohesion scales were modified to align with the purpose of the study. Table 31 displays the items' descriptive statistics. Alphas were .81, .85, and .92 for weeks 3, 7, and 10, respectively, indicating strong score reliability.

Table 31

Item Descriptive Statistics for Group Cohesion

	Time 1		**Time 2**		**Time 3**	
M-GCS	*M*	*SD*	*M*	*SD*	*M*	*SD*
1	3.70	0.94	3.74	0.96	3.80	1.03
2	3.54	1.03	3.65	0.91	3.80	0.92
3	3.58	0.89	3.62	0.91	3.80	0.93
4	3.76	0.92	3.72	0.96	3.76	0.99
5	3.53	1.04	3.57	0.96	3.73	0.98

Note. M-GCS = Modified Group Cohesion Scale. The mean response scale ranges from 1(more negative perception) to 5 (more positive perception). Time 1= Week 3 Time 2 = Week 7 Time 3 = Week 10. At Time 1, 185 student reports were received. At Time 2, 176 student reports were received. At Time 3, 187 student reports were received.

Descriptive statistics were calculated for students' group cohesion scores across the three time points. The mean scores for students' group cohesion across the three time points

divided by schools the students attended are displayed in Table 32. The response scale ranged from 1 to 4, with higher values indicating reports of more positive relationships with their peers in the group. Collectively, students' group cohesion increased over time from 3.53 to 3.73. Specifically, students who attended schools A, C, D, and E reported more positive relationships with their peers at the end of the intervention than at the beginning. The total distribution of students' group cohesion was approximately normal. Residual plots were used to check for outliers, and no outliers were detected (scores greater than three standard deviations +/- from the mean). Appendix H contains the correlation matrix of bivariate associations between all therapeutic processes and student outcomes at each time point. Significant and positive correlations were identified between the three student group time points and the pre and post-intervention student outcomes of life satisfaction and positive affect (r = .17 to .36, p <.05). There were also significant and negative correlations between student group cohesion across the three time points and outcomes of negative affect and psychopathology symptoms (= -.15 to -.24, p <.05).

Table 32

Descriptive Statistics of Student Group Cohesion Scale (GCS) at Three Timepoints

	Time 1					**Time 2**					**Time 3**				
M-GCS	*N*	*M*	*SD*	*Sk*	*KU*	*N*	*M*	*SD*	*Sk*	*KU*	*N*	*M*	*SD*	*Sk*	*KU*
School A	48	3.72	0.69	0.15	0.06	45	3.91	0.63	0.16	-0.80	48	3.95	0.77	-1.05	3.19
School B	46	3.62	0.74	0.39	-0.82	45	3.58	0.73	-0.29	0.53	44	3.60	0.87	-0.14	0.59
School C	31	3.53	0.83	-0.85	0.65	31	3.40	0.79	-0.32	-0.08	32	3.78	0.90	0.17	-1.30
School D	37	3.38	0.57	0.65	0.34	31	3.44	0.68	0.42	0.20	37	3.51	0.74	0.49	0.19
School E	23	3.92	0.79	-0.75	0.19	24	3.97	0.76	-0.46	-0.41	25	4.16	0.86	-0.96	0.07
Total	185	3.62	0.73	-0.04	-0.13	177	3.66	0.74	-0.16	-0.11	187	3.78	0.85	-0.24	-0.07

Note. Modified GCS = Modified Group Cohesion Scale. The mean response scale ranges from 1 (more negative perception) to 5 (more positive perception). Time 1= Week 3. Time 2 = Week 7. Time 3 = Week 10.

Building the Latent Growth Model for Group Cohesion

Similar to the construction of the therapeutic alliance model, group cohesion was also conceptualized as a latent variable at each time point with each latent variable measured by five items. A second-order linear latent growth model was used to model the initial and growth parameters (intercept and slope) representing the change in group cohesion across the three time points. First-order configural and scalar measurement models of the three time points of student group cohesion were evaluated to evaluate longitudinal measurement invariance. Please see the previous section on building the therapeutic alliance model for more details about the configural and scalar models. Unstandardized factor loadings for the scalar model ranged from .84 to 1.00. Along with the factor loadings, the intercepts or the starting points for each item of the group cohesion scale across the three time points were made equal. The intercepts for each respective item ranged from –0.07 to 0.46.

The scalar model was considered in terms of measurement invariance and the consistency of measuring group cohesion across the three time points. The model fit indices, Chi-Square, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and the Standardized Root Mean Square Residual (SRMSR) were used to compare the configural and scalar models. The Chi-Square test measured the difference between the model's observed data and implied covariance structure. The configural and scalar models had significant *p*-values for the chi-square, which suggests that the respective models did not fit the data well. The RMSEA measures the difference between the models and the observed data while accounting for the model's complexity. Values below 0.05 suggest close fit, values up to .08 suggest reasonable fit, and values above .10 suggest poor fit. The configural (.08) and the scalar (.08) RMSEA were within the acceptable fit range. The CFI measures how well the models fit compared to a model

with no relationship between the variables. From 0 to 1, the cutoff criterion for CFI goodness of fit is at least .95. The configural (.91) and the scalar (.90) models were within the good fit range. Lastly, the SRMR assesses the difference between the model-implied and the observed covariances. The cutoff criterion for a good fit for SRMR is less than 0.06. The configural (.07) and the scalar (.09) fit indices were not within the goodness of fit range. The fit was considered suboptimal. However, consideration was given to the complexity of the model and the necessary variables that needed to be included in the study. Table 33 compares the configural and scalar model of students' group cohesion across the three time points.

Table 33

Student Group Cohesion Configural and Scalar Model (n = 199)

Model	X2	df	RM*SE*A	CFI	SRMR
Configural	192.32	89	0.08	0.91	0.07
Scalar	225.64	105	0.08	0.90	0.09

Note. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

To model growth, the scalar model was used to interpret the average change, average intercept (initial starting point was at week 3), and variances in the intercepts and slopes for group cohesion. Figure 3 displays the scalar growth model for student group cohesion. Table 34 displays the growth model means and variances of student group cohesion. On average, students' group cohesion scores at Timepoint 1 (Week 3) were 3.66 (*SE* = .07). The intercept was statistically significant at $p < .01$, which suggests that students' different initial perceptions of their peers in their groups may have had an observable influence on their later perceptions of the peers. The average growth rate of students' group cohesion scores was .02 (*SE* = .01). The slope was statistically significant ($p < .05$), which suggests that there was significantly small but

positive growth in 104 students' group cohesion perspectives towards their peers. The variance of the intercepts (.30, *SE* = .07) indicates a significant variation in students' group cohesion scores at Timepoint 1. As for the variation in the slope or growth of students' group cohesion scores, variance in the slopes was not significantly different from zero ($p > .05$).

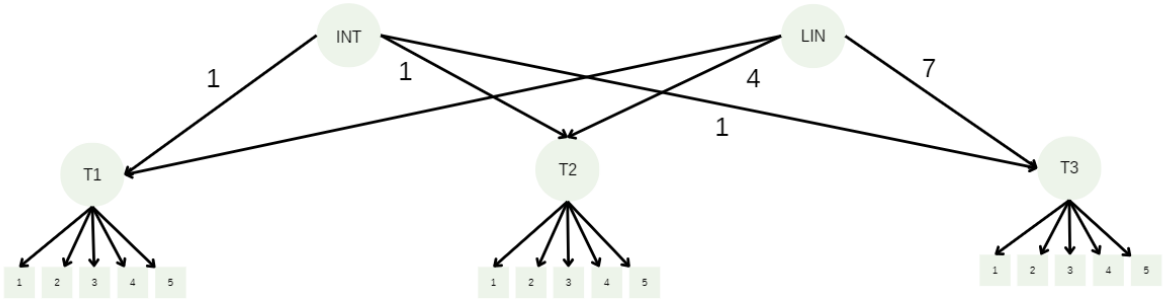

Figure 3 *Scalar Growth Model of Student Group cohesion*

Note. INT = Intercept of group cohesion. LIN = Slope of group cohesion. T1 = Time one at week three of the intervention. T2 = Time two at week seven of the intervention. T3 =Time three at week 10 of the intervention.

Table 34
Growth Model for Student Group Cohesion (n= 199)

	Estimate	**Standard Error**	***p*-value**
Means			
Intercept	3.66**	0.07	< .01
Linear	0.02*	0.01	0.03
Variances			
Intercept	0.30***	0.07	< .01
Linear	<0.01	0.002	0.62

*** p< .01. * p <.05*

Student-Rated Group Cohesion Predicting Post-Test Life Satisfaction

Students' life satisfaction (SLSS) was measured before the intervention and after the conclusion of the 10th session. Cronbach's alphas and the descriptive statistics for SLSS can be reviewed in the previous section, which discusses student therapeutic alliance.

A second-order linear latent growth model was constructed to address research questions three and four pertaining to students' initial group cohesion and growth parameters (intercepts and slopes) predicting their post-test life satisfaction outcomes. The growth model for predicting students' post-test life satisfaction included the established scalar model of the students' group cohesion intercept and slope displayed in Table 34. In addition, the model included pre-test life satisfaction, the state where the intervention took place (dummy coded FL = 0 and MA = 1), and grade levels (grades 5^{th} to 8^{th}) as predictors. Figure 4 and Table 35 display the complete model for predicting post-test student life satisfaction.

Table 36 shows the students' group cohesion growth model results predicting post-test life satisfaction. The regression of post-SLSS on the intercept or initial student group cohesion yielded a coefficient estimate of .35 (*SE* = .21, *p* = .09). This suggests that the more positively students rated their initial group cohesion, the more positively they rated their levels of post-intervention life satisfaction. However, this finding was not significant. As for the slope or growth of students' group cohesion across the three time points, the coefficient was 14.26 (*SE* = 17.51, *p* = .42). This result indicates that students' growth in group cohesion was not significantly related to their post-test life satisfaction outcome. Pre-test life satisfaction significantly predicted post-test life satisfaction (.64, *SE* = .22, *p* < .01). There was no significant prediction of post-test life satisfaction based on the students' site (regression coefficient = .13, *p* = .23) or grade (regression coefficient = .08, *p* =. 23).

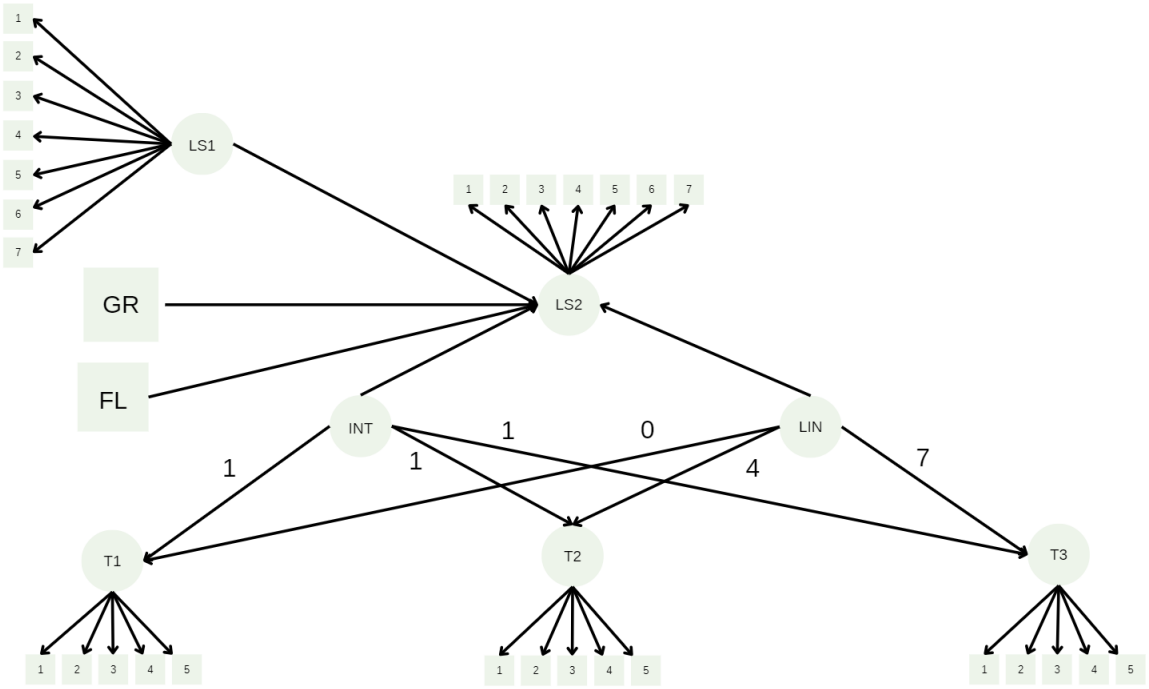

Figure 4 *Group Cohesion Second Order Latent Growth Model Predicting Student Life Satisfaction*

Note. INT = Intercept of the group cohesion. LIN = Slope of the group cohesion. T1 = Time one at week three of the intervention. T2 = Time two at week seven of the intervention. T3 =Time three at week 10 of the intervention. LS1 = Life satisfaction at pre-test. LS2 = Life satisfaction at post-test. FL = Dummy coded variable of schools (FL = 0, MA = 1). GR = Grades 5th through 8th.

Table 35

Student Group Cohesion Full Model for Predicting Post-Test Student Life Satisfaction (n = 199)

Model	X2	df	RMSEA	CFI	SRMR
Full Model	882.38	443	0.07	0.85	0.08

Note. The "full" model refers to the inclusion of the student group cohesion scalar model, along with the predictors of life satisfaction pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 36

Second-Order Latent Growth Model: Student Group Cohesion Perspectives Predicting Student Life Satisfaction

Student Group Cohesion Parameters	Estimate	SE	*p*
Intercept	0.35	0.21	0.09
Slope	14.26	17.51	0.42
Post-Test (Life Satisfaction)	0.64**	0.22	< .01
Site	0.13	0.11	0.23
Grade	0.08	0.07	0.23

*Note. * p <.05. ** p <.01.*

Student-Rated Group Cohesion Predicting Post-Test Positive Affect

Another second-order linear latent growth model was constructed to address research questions three and four pertaining to students' group cohesion growth parameters (intercepts and slopes) predicting their post-test positive affect outcomes. The model for predicting post-test positive affect is similar to Figure 4 and displayed in Table 37. Table 38 shows the results of students' group coheison growth model predicting post-test positive affect. The regression of post-test positive affect on the intercept or initial student group cohesion yielded a coefficient estimate of .24 (*SE* = .14, *p* = .07). Despite this finding not having statistical significance related to life satisfaction, this trend suggests that the higher students rated their initial perceptions of the peers in their group, the higher they rated their post-test life satisfaction. As for the slope or growth of students' group cohesion across the three time points, the coefficient was 10.92 (*SE* = 12.80, *p* = .39). This result also indicates that students' group cohesion growth over time was not significantly related to their post-test outcomes. Pre-test positive affect significantly predicted post-test positive affect (.47, *SE* = .21, *p* < .05). There was no significant prediction of post-test

positive affect based on the students' site (regression coefficient = -0.09, p = .36) or grade (regression coefficient = .01, p =. 76).

Table 37

Student Group Cohesion Full Model for Predicting Post-Test Positive Affect (n = 199)

Model	X2	df	RM*SE*A	CFI	SRMR
Full Model	595.70	333	0.06	0.90	0.08

Note. The "full" model refers to the inclusion of the student group cohesion scalar model, along with the predictors of positive affect pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 38

Second-Order Latent Growth Model: Student Group Cohesion Perspectives Predicting Post-Test Positive Affect

Student Group Cohesion Parameters	Estimate	SE	*p*
Intercept	0.24	0.14	0.07
Slope	10.92	12.80	0.39
Baseline (Positive Affect)	0.47*	0.21	0.03
Site	-0.09	0.10	0.36
Grade	0.01	0.05	0.76

Note. * p <.05. ** p <.01.

Students-Rated Group Cohesion Predicting Post-Test Negative Affect

Another second-order linear latent growth model was constructed to address research questions three and four pertaining to students' initial group cohesion perceptions and growth parameters (intercepts and slopes) predicting their post-test negative affect outcomes. The model for predicting post-test negative affect is similar to Figure 4 and displayed in Table 39. Table 40 shows the results of students' group cohesion growth model predicting post-test negative affect. The regression of the post-test negative affect on the intercept or initial student group cohesion yielded a coefficient estimate of –0.23 (*SE* = .15, p = .15). This finding suggests that students' initial perceptions of group cohesion were not significantly related to their post-test outcomes. As for the slope or growth of students' group cohesion perceptions across the three time points,

the coefficient was –9.01 (*SE* = 17.90, *p* = .61). This result also indicates that students' growth was not significantly related to their post-test outcomes. Pre-test negative affect significantly predicted post-test negative affect (.52, *SE* = .20, *p* < .05). There was no significant prediction of post-test negative affect based on the students' site (regression coefficient = .01, *p* = .88) or grade (regression coefficient = -0.08, *p* =.11).

Table 39

Student Therapeutic Alliance Full Model for Predicting Post-Test Negative Affect (n = 199)

Model	X2	df	RM*SE*A	CFI	SRMR
Full Model	723.26	333	.07	.82	.09

Note. The "full" model refers to the inclusion of the student group cohesion scalar model, along with the predictors of PANAS-C-10 negative affect pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 40

Second-Order Latent Growth Model: Student Group Cohesion Perspectives Predicting Post-Test Negative Affect

Student Group Cohesion Parameters	Estimate	SE	*p*
Intercept	-0.23	0.15	0.15
Slope	-9.01	17.90	0.61
Post-Test (Negative Affect)	0.52*	0.20	0.01
Site	0.01	0.08	0.88
Grade	-0.08	0.05	0.11

*Note. * p <.05. ** p <.01.*

Student-Rated Group Cohesion Predicting Post-Test Psychopathology

Another second-order linear latent growth model was constructed to address research questions one and two pertaining to students' group cohesion growth parameters (intercepts and slopes) predicting their post-test psychopathology symptoms outcomes. The model for predicting post-test psychopathology symptoms is similar to Figure 4 and displayed in Table 41. Table 42 shows the results of students' group cohesion growth model predicting post-test

psychopathology symptoms. The regression of post-test psychopathology symptoms on the intercept or initial student group cohesion yielded a coefficient estimate of –0.06 (*SE* = .05, *p* = .23). This finding suggests that students' initial perceptions of group cohesion were not significantly related to their post-test outcomes. As for the slope or growth of students' group cohesion across the three time points, the coefficient was 1.62 (*SE* = 2.04, *p* = .43). This result also indicates that students' growth was not significantly related to their post-test outcomes. Pre-test psychopathology symptoms significantly predicted post-test psychopathology symptoms (.79, *SE* = .16, *p* < .01). There was no significant prediction of post-test psychopathology symptoms based on the students' site (regression coefficient = 0.11, *p* = .06) or grade (regression coefficient = -0.05, *p* =.06).

Table 41

Student–Rated Group Cohesion Full Model for Predicting Post-Test Psychopathology Symptoms (n = 199)

Model	X2	df	RM*SE*A	CFI	SRMR
Full Model	1863.65	1439	.04	.81	.14

Note. The "full" model includes the student group cohesion scalar model and the predictors of psychopathology symptoms pre-test, school, and grade. Root Mean Square Error of Approximation = RMSEA. Comparative Fit Index = CFI. Standardized Root Mean Square Residual = SRMSR.

Table 42

Second-Order Latent Growth Model: Student-Rated Group Cohesion Parameters Predicting Post-Test Psychopathology

Student Group Cohesion Parameters	Estimate	SE	*p*
Intercept	-0.06	0.05	0.23
Slope	1.62	2.04	0.43
Pre-Test (Negative Affect)	0.79**	0.16	<0.01
Site	0.11	0.06	0.06
Grade	-0.05	0.03	0.06

Note. * *p* <.05. ** *p* <.01.

Research Questions Five and Six

This section of the results will address the following research questions:

5. To what extent, if any, do the initial therapeutic alliance perceptions of counselors administering a positive psychology intervention to middle school students relate to the following indicators of student mental health:

a. Life Satisfaction

b. Positive Affect

c. Negative Affect

d. Psychopathology?

6. To what extent, if any, does the growth of the therapeutic alliance perceptions of counselors administering a positive psychology intervention to middle school students relate to the following indicators of student mental health:

a. Life Satisfaction

b. Positive Affect

c. Negative Affect

d. Psychopathology?

Reliability and Descriptive Statistics of Leaders' Therapeutic Alliance

Leaders' therapeutic alliance was measured during three time points at weeks three, seven, and ten. The reliability of the leaders' therapeutic alliance measure was analyzed for the sample of leaders in the present study. Items three and five were negatively worded and reverse-coded. Reliability estimates for the present study were compared to values reported in previous research studies, considering that the alliance scales were modified to align with the purpose of the study. Table 43 displays the item descriptive statistics across the three time points. The

alphas for weeks 3, 7, and 10 were .88, .91, and .89, respectively, indicating strong score reliability.

Table 43

Item Descriptive Statistics for Leader-Rated Therapeutic Alliance

	Time 1		Time 2		Time 3	
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*
M-TASC-T						
1	2.74	0.84	3.07	0.85	3.29	0.81
2	2.80	0.81	3.12	0.81	3.38	0.76
3R	3.41	0.85	3.65	0.67	3.54	0.78
4	2.59	0.87	2.76	0.98	2.92	1.05
5R	3.73	0.64	3.65	0.67	3.71	0.62
6	2.87	0.887	3.12	0.839	3.35	0.822

Note. M-TASC-T = Modified Therapeutic Alliance Scale for Children – Therapist Form. The mean response scale ranges from 1(more negative perception) to 4 (more positive perception). Time 1= Week 3 Time 2 = Week 7 Time 3 = Week 10. At Time 1, 186 leader reports were received. At Time 2, 178 leader reports were received. At Time 3, 91 leader reports were received.

Descriptive statistics were calculated for leaders' therapeutic alliance scores across the three time points. The mean scores for leaders' therapeutic alliance across the three time points divided by schools the leaders worked at are displayed in Table 44. The response scale ranged from 1 to 4, with higher values indicating reports of more positive relationships with their students (after the two negatively worded items were reverse-scored). Leaders' perceptions of therapeutic alliance increased over time from 3.03 to 3.37. The total distribution of leaders' therapeutic alliance was approximately normal. Residual plots were used to check for outliers, and no outliers were detected (scores greater than three standard deviations +/- from the mean). Appendix H contains the correlation matrix table of all therapeutic processes and students' pre

and post-intervention outcomes. No significant correlations were identified between leader-rated therapeutic alliance and student outcomes at the three time points.

Table 44

Descriptives of Leader-Rated Therapeutic Alliance at Three Timepoints by Schools

	Time 1					Time 2					Time 3				
	N	M	SD	Sk	KU	N	M	SD	Sk	KU	N	M	SD	Sk	KU
School A	46	2.89	0.78	-0.46	1.46	46	3.27	0.73	-0.60	-0.91	46	3.29	0.76	-0.91	-0.14
School B	48	3.29	0.58	-0.74	0.39	46	3.51	0.52	-0.83	-0.45	45	3.44	0.53	-0.72	-0.13
School C	37	2.51	0.45	0.09	-0.50	31	2.98	0.69	0.00	-0.94	-	-	-	-	-
School D	23	3.29	0.59	-0.91	0.30	24	3.10	0.76	-0.44	-0.92	-	-	-	-	-
School E	32	3.20	0.43	0.35	-0.33	31	3.06	0.51	0.09	-0.54	-	-	-	-	-
Total	187	3.03	0.66	-0.39	0.47	178	3.23	0.67	-0.45	-0.83	91	3.37	0.66	-0.98	0.37

Note. TASC-T = Therapeutic Alliance Scale for Children – Therapist Form. N = number of reports turned in by leaders for each student. The mean response scale ranges from 1(more negative perception) to 4 (more positive perception). Time 1= Week 3 Time 2 = Week 7 Time 3 = Week 10.

Building the Structural Equation Model for Leader-Rated Therapeutic Alliance

This study's last major quantitative goal was to predict student outcomes based on the initial and growth parameters of leaders' perceptions of therapeutic alliance. However, only an analysis for the initial leader therapeutic alliance was conducted due to sample and data time point collection constraints. For this analysis, as seen in Figure 5, there is one latent outcome variable for post-test life satisfaction (LS2), measured by seven items. The predictors of the outcome are two latent variables: pre-test life satisfaction (LS1) and initial leader therapeutic alliance scores (LD1). State and grade are also included as observed predictor variables.

Leaders' Therapeutic Alliance Perceptions Predicting Post-Test Life Satisfaction

A structural equation model was used to model leaders' perceptions of therapeutic alliance predicting students' outcomes. The model fit indices were evaluated. The Chi-Square test measured the difference between the model's observed data and implied covariance structure. The RMSEA measures the difference between the models and the observed data while

accounting for the model's complexity. Values below 0.05 suggest close fit, values up to .08 suggest reasonable fit, and values above .10 suggest poor fit. This model's RMSEA = .09. The CFI measures how well the models fit compared to a model with no relationship between the variables. From 0 to 1, the cutoff criterion for CFI goodness of fit is at least .95. The CFI for this model was .84. Lastly, the SRMR assesses the difference between the model-implied and the observed covariances. The cutoff criterion for a good fit for SRMR was less than 0.06. This model's SRMR = .08. The fit was considered suboptimal. However, consideration was given to the complexity of the model and the necessary variables that needed to be included for the purpose of the study.

Table 45 shows the results of the leader-rated TA model predicting post-test life satisfaction. The post-test student life satisfaction regression on the initial leader TA yielded a coefficient estimate of .22 (*SE* = .09, *p* = .02). This finding suggests that the more positively leaders rated their initial therapeutic alliance, the higher the student rated their life satisfaction at post-intervention. A similar positive trend was seen for students' initial ratings of alliance, which indicated that higher perceptions of the therapeutic alliance at week 3 are associated with higher levels of post-intervention life satisfaction across raters (student and leader) of the alliance. Pre-test life satisfaction significantly predicted post-test life satisfaction (.78, *SE* = .09, $p < .001$). There was no significant prediction of post-test life satisfaction based on the students' state (regression coefficient = .09, *p* = .47) or grade (regression coefficient = .12, *p* =. 10).

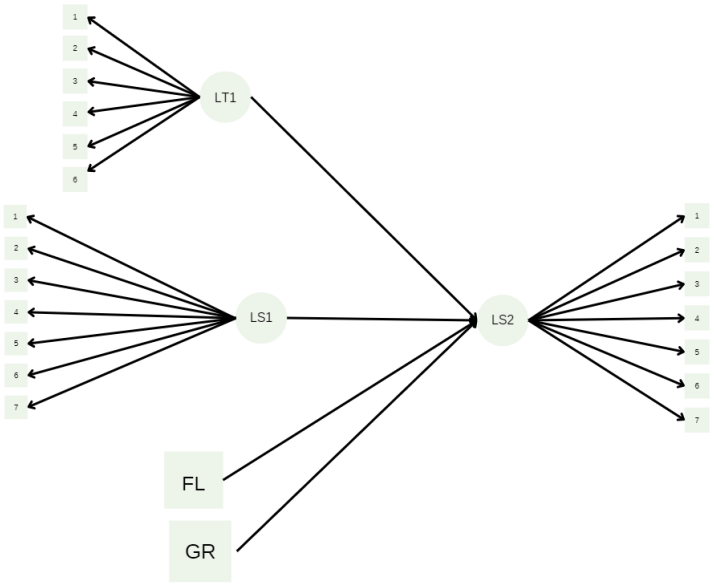

Figure 5 *Structural Equation Model of Initial Leader Therapeutic Alliance Predicting Post-Test Life Satisfaction*

Note. LT1 = Leader therapeutic alliance. LS1 = Life satisfaction at pre-test. LS2 = Life satisfaction at post-test. FL = Dummy coded variable of schools (FL = 0, MA = 1). GR = Grades 5th through 8th.

Table 45

Structural Equation Model: Leader-Rated Therapeutic Alliance Parameters Predicting Post-Test Life Satisfaction

	Estimate	***SE***	***p***
Initial Leader TA	0.22*	0.09	0.02
Pre-Test (Life Satisfaction)	0.78**	0.09	<0.01
Site **(0=FL, 1=MA)**	0.09	0.13	0.47
Grade	0.12	0.07	0.10

Note. * p <.05. ** p <.01.

Leaders' Therapeutic Alliance Perceptions Predicting Post-Test Positive Affect

Another structural equation model was used to model leaders' perceptions of therapeutic alliance predicting students' positive affect. The model fit indices were evaluated (Chi = 277.41, RMSEA = .08, CFI = .92, and SRMR = .07). The fit was considered suboptimal. However, consideration was given to the complexity of the model and the necessary variables that needed to be included for the purpose of the study.

Table 46 shows the leaders' TA model results predicting post-test positive affect (PA). The regression of post-test PA symptoms on the initial leader TA yielded a non-significant coefficient estimate of 0.03 (*SE* = .07, *p* = .66). Pre-test PA significantly predicted post-test PA (.62, *SE* = .10, *p* < .01). There was no significant prediction of post-test PA based on the students' site (regression coefficient = -0.09, *p* = .40) or grade (regression coefficient = 0.02, *p* =. 76).

Table 46

Structural Equation Model: Leader-Rated Therapeutic Alliance Parameters Predicting Post-Test Positive Affect

	Estimate	*SE*	*p*
Initial Leader-Rated TA	0.03	0.07	0.66
Pre-Test (Positive Affect)	0.62**	0.10	<0.01
Site (0=FL, 1=MA)	-0.09	0.10	0.40
Grade	0.02	0.05	0.76

Note. * p <.05. ** p <.01.

Leaders' Therapeutic Alliance Perceptions Predicting Post-Test Negative Affect

Another structural equation model was used to model leaders' perceptions of therapeutic alliance, predicting students' negative affect. The model fit indices were evaluated (Chi = 449.47, RMSEA = .11, CFI = .79, and SRMR = .10). The fit was considered suboptimal.

However, consideration was given to the complexity of the model and the necessary variables that needed to be included for the purpose of the study.

Table 47 shows the leaders' TA model results predicting post-test negative affect (NA). The regression of post-test NA symptoms on the initial leader-rated TA yielded a non-significant coefficient estimate of –0.13 (*SE* = .09, *p* = .16). Pre-test NA significantly predicted post-test NA (.56, *SE* = .12, *p* < .01). There was no significant prediction of post-test NA based on the students' site (regression coefficient = .04, *p* = .07) or grade (regression coefficient = -0.10, *p* =. 09).

Table 47

Structural Equation Model: Leader Therapeutic Alliance Parameters for Predicting Post-Test Negative Affect

Leader Therapeutic Alliance Parameters	Estimate	*SE*	*p*
Initial Leader TA	-0.13	0.09	0.16
Pre-Test (Negative Affect)	0.56**	0.12	<0.01
Site (0=FL, 1=MA)	0.04	0.09	0.68
Grade	-0.10	0.06	0.09

Note. * p <.05. ** p <.01.

Leaders' Therapeutic Alliance Perceptions Predicting Post-Test Psychopathology

Another structural equation model was used to model leaders' perceptions of therapeutic alliance predicting students' psychopathology symptoms. The model fit indices were evaluated (Chi = 1479.30, RMSEA = .05, CFI = .78, and SRMR = .16). The fit was considered suboptimal. However, consideration was given to the complexity of the model and the necessary variables that needed to be included for the purpose of the study.

Table 48 shows the leaders' TA model results predicting post-test psychopathology symptoms. The regression of post-test psychopathology symptoms on the initial leader TA yielded a non-significant coefficient estimate of –0.05 (*SE* = .03, *p* = .09). This trend suggests that the higher or more positive group leaders rated their perceived relationship with their students, the less students reported psychopathological symptoms post-intervention. Pre-test psychopathology symptoms significantly predicted post-test psychopathology symptoms (.73, *SE* = .13, *p* < .01). There was no significant prediction of post-test psychopathology symptoms based on the students' site (regression coefficient = .11, *p* = .06) or grade (regression coefficient = -0.06, *p* =. 06).

Table 48

Structural Equation Model: Leader Therapeutic Alliance Parameters for Predicting Post-Test Psychopathology Symptoms

Leader Therapeutic Alliance Parameters	Estimate	*SE*	*p*
Latent Leader TA	-0.05	0.03	0.09
Pre-Test (Psychopathology)	0.73**	0.13	<0.01
Site (0=FL, 1=MA)	0.11	0.06	0.06
Grade	-0.06	0.03	0.06

*Note. * p <.05. ** p <.01.*

Quantitative Results Summary

This study aimed to determine if 1) student perceptions of therapeutic alliance, 2) students' perceptions of group cohesion, and 3) leaders' perceptions of therapeutic alliance individually predicted students' intervention outcomes of life satisfaction, positive affect, negative affect, and psychopathology symptoms. Second-order latent growth models were built and evaluated for goals one and two. Table 49 displays the growth model for student therapeutic

alliance and group cohesion. The rates of change in TA and group cohesion were significantly different from zero. The variances in the slopes were not significantly different from zero. Intercepts for TA and group cohesion were significantly different from zero.

Table 49

Growth Models for Student-Rated Therapeutic Alliance and Group Cohesion (n= 199)

	Student Therapeutic Alliance		Group Cohesion	
	Estimate	Standard Error	Estimate	Standard Error
Means				
Intercept	2.92**	0.07	3.66**	0.07
Linear	0.02*	0.01	0.02*	0.01
Variances				
Intercept	0.32**	0.03	0.30**	0.07
Linear	<0.01	<0.01	<0.01	<0.01

*Note. ** p< .01. * p <.05*

For research questions one and two, second-order latent growth models were run to determine if students' initial or growth in therapeutic alliance reports would predict their post-therapeutic outcomes (e.g., life satisfaction, positive affect, negative affect, and psychopathology symptoms). Students' initial reports of their therapeutic alliance positively and significantly predicted their therapeutic outcome of life satisfaction with a coefficient estimate of .31 (*SE* = .15, *p* = .04). This indicates that the higher students rated their initial therapeutic alliance at Week 3, the higher they rated their life satisfaction after the completion of the 10-week intervention. No other therapeutic outcomes were significantly predicted. Refer to Table 50 for the student-rated therapeutic alliance growth model parameters predicting all student post-test outcomes.

For research questions three and four, a second-order latent growth model was run to determine if students' initial or growth in group cohesion perceptions would predict their post-therapeutic outcomes (e.g., life satisfaction, positive affect, negative affect, and psychopathology symptoms). Students' reports of their initial and growth in group cohesion did not significantly predict any therapeutic outcomes. However, a trend indicated for students' initial group cohesion perceptions predicted their post-test life satisfaction (.35, SE = .21, p = .09). This suggests that the more positively students rated their group cohesion perception, the higher they seemed to rate their life satisfaction. Table 52 displays the student-rated group cohesion growth model parameters predicting all student post-test outcomes.

Table 50

Student-Rated Therapeutic Alliance Growth Models' Parameters

	LS		PA		NA		PSY	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	0.31*	0.15	0.15	0.14	-0.22	0.14	-0.05	0.05
Slope	6.82	6.10	8.41	5.52	0.94	1.50	-0.14	0.74
Pre-Test	0.78**	0.08	0.69**	0.15	0.58**	0.12	0.70**	0.12
Site	0.15	0.11	-0.08	0.10	0.01	0.08	0.11	0.06
Grade	0.09	0.07	0.02	0.05	-0.08	0.05	-0.05	0.03

Note. LS = Life satisfaction. PA = Positive affect. NA = Negative Affect. PSY = Psychopathology symptoms. ** = $p < .01$. * = $p < .05$.

Table 51

Student Group Cohesion Growth Models' Parameters

	LS		**PA**		**NA**		**PSY**	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	0.35	0.21	0.24	0.14	-0.23	0.15	-0.06	0.05
Slope	14.26	17.51	10.92	12.80	-9.01	17.90	1.62	2.04
Pre-Test	0.64**	0.22	0.47*	0.21	0.52*	0.20	0.79**	0.16
Site	0.13	0.11	-0.09	0.10	0.01	0.08	0.11	0.06
Grade	0.08	0.07	0.01	0.05	-0.08	0.05	-0.05	0.03

Note. LS = Life satisfaction. PA = Positive affect. NA = Negative Affect. PSY = Psychopathology symptoms. ** *p< .01.* * *p <.05*

For research question five, a second-order latent model was run to determine if the leaders' initial reports of therapeutic alliance reports would predict students' post-therapeutic outcomes (e.g., life satisfaction, positive affect, negative affect, and psychopathology symptoms). The leaders' initial reports of their therapeutic alliance positively and significantly predicted students' therapeutic outcome of life satisfaction with a coefficient estimate of .22 (*SE* = .09, *p* = .02). This indicates that the higher leaders rated their initial therapeutic alliance at Week 3, the higher students rated their life satisfaction after the completion of the 10-week intervention. The regression of post-test psychopathology symptoms on the initial leader TA yielded a non-significant coefficient estimate of –0.05 (*SE* = .03, *p* = .09). This trend suggests that the higher or more positive group leaders rated their perceived relationship with their students, the less students reported psychopathological symptoms post-intervention. The initial reports of leaders' therapeutic alliance significantly predicted no other therapeutic outcomes. See Table 52 for the leader-rated therapeutic alliance model parameters predicting all student post-test outcomes. For question six, the leaders' growth of therapeutic alliance was tested with a second-order latent growth model. However, the model could not run due to data constraints described in Chapter Three.

In sum, post-test life satisfaction is significantly predicted by the initial level of the therapeutic alliance (rated by students or leaders). In contrast, post-intervention positive affect, negative affect, and psychopathology symptoms are not statistically significantly predicted by initial levels or growth in alliance or group cohesion. However, trends were seen for student group cohesion positively predicting post-test life satisfaction and positive affect. As well, the leader-rated therapeutic alliance also had a trend for inversely predicting students' post-test psychopathology symptoms.

Following a quantitative analysis to understand the relationships between students' and leaders' therapeutic processes and students' therapeutic outcomes, this study also incorporated a qualitative component to comprehend further students' perceptions of their experiences in the group.

Table 52

Leader-Rated Therapeutic Alliance Models' Parameters

	LS		PA		NA		PSY	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	0.22*	0.09	0.03	0.07	-0.13	0.09	-0.05	0.03
Pre-Test	0.78**	0.09	0.62**	0.10	0.56**	0.12	0.73**	0.13
Site	0.09	0.13	-0.09	0.10	0.04	0.09	0.11	0.06
Grade	0.12	0.07	0.02	0.05	-0.10	0.06	-0.06	0.03

Note. LS = Life satisfaction. PA = Positive affect. NA = Negative Affect. PSY = Psychopathology symptoms. ** $p < .01$. * $p < .05$

Qualitative Examination of Student Therapeutic Relationships and Group Interactions

This qualitative analysis of interview data was provided to better understand middle school students' thoughts and perceptions about their experience with the relationships they developed with their group leaders and peers. Through students' voices, there may be a better understanding of improving therapeutic group processes for future positive psychology group interventions. Student interviews were recorded via digital recorders, and audio files were transcribed by a private service and verified by the research team. The researcher and their partnered coder created separate codes for therapeutic alliance and group cohesion by reviewing the transcripts through an inductive and iterative process. For the coding process, the researcher and their partnered coder independently coded the interview transcripts and compared them. From 125 interviews, a total of nine transcripts were analyzed for therapeutic alliance and nine transcripts for group cohesion based on their stratified scores.

Qualitative Results: Student Therapeutic Alliance

These qualitative findings were used to further understand potential reasons behind students' ratings on the therapeutic alliance and group cohesion scales. Interview data from nine of the 125 students interviewed were randomly selected to be analyzed. Three primary themes emerged throughout the coding and thematic analysis process: 1) Student and Group Leaders' Relationship Dynamic, 2) Influential Factors in Student-Leader Relationships, and 3) Student-Leader Relationship Development. Table 53 displays primary and secondary themes. Table 54 shows the primary and secondary themes across the interviewed students. All presented names are pseudonyms to protect the privacy of the students.

Table 53

Identified Student Themes: Student Therapeutic Alliance

Primary Theme	Secondary Theme
Student and Group Leaders' Dynamic	Positive Interactions
	Making Connections
	Challenging Experiences
Influential Factors in Student-Leader Relationships	Activities & Engagement
	Safe and Supportive Environment
	Leader Characteristics
Student-Leader Relationship Development	No Change
	Change
	Session Identification

Table 54

Therapeutic Alliance Themes and Codes Across Students

	Student and Group Leaders' Dynamic			Influential Factors			Relationship Development		
ID	**PI**	**MC**	**CE**	**AE**	**SSE**	**LC**	**NC**	**C**	**SI**
Elaine	X	X	X			X	X		
Jake	X	X		X				X	X
Mark			X	X		X			
Jessie	X	X		X	X	X		X	
Lyla	X	X			X	X		X	X
Katie		X			X	X		X	X

Table 54 (Continued)

Mia	X	X	X	X	X	X	X	X
Anthony	X	X		X	X	X	X	X
Tim	X	X	X			X	X	

Note. All presented names are pseudonyms to protect the privacy of the students. ID = Student. PI = Positive Interactions. MC = Making Connections CE = Challenging Experiences. AE = Activities and Engagement. SSE = Safe and Supportive Environment. LC = Leader Characteristics. NC = No Change. C = Change. SI = Session Identification.

Student and Group Leaders' Dynamics

The first theme, *Student and Group Leaders' Dynamics*, focused on students' affective perceptions of their relationship with their group leaders by describing it positively or negatively. Within this theme were three secondary themes: *Positive Interactions, Making Connections,* and *Challenging Experiences. Positive Interactions* included quotes from students who positively described their relationship with their group leaders. *Making Connections* included quotes that indicated a positive experience for students based on how leaders attempted to engage them in the group. *Challenging Experiences* included quotes from students who provided examples of negative or lack of experiences with their group leaders. The results reported subsequently do not include *all* relevant quotes from students. However, the researcher reported some specific quotes that comprehensively highlighted the scope of what the students reported within each theme.

Positive Interactions. Seven out of nine students reported positive interactions with their group leaders. Jessie expressed, "I really liked my group leaders. I thought we had a great relationship and they made me very comfortable to talk to them." This quote reflects a quality relationship between Jessie and their leaders. It also highlights the feeling of comfort as a potential positive interaction that the student felt throughout the program. Lyla also had positive feelings and stated,

> It [student-leader relationship] was good. I feel like I could talk to her and it was nice being able to talk to someone and try to figure out new ways to be happy. And it didn't

> feel like she was a teacher trying to teach us. It felt like we could just relate to her and talk to her.

This quote conveys the ease Lyla felt being open and discussing with her leaders. Lyla also expressed sentiment for having a trusted person who did not present themselves as a teacher figure; rather, the leaders presented themselves as someone Lyla could relate to in the group. Transparency and humanness are important for trust and buy-in when building any therapeutic relationship, especially with youth. Student Mia also highlighted similar positive interactions with one of her leaders. She stated,

> It's actually a really good relationship...being introduced to this new person I'm going to be working with, it was a really good experience because she got us, she was checking in with us every day, well not every day, every Wednesday and she was making sure that we were on top of these things, but she said that if they needed to slow down we could tell them anything. And so it really helped with expressing my emotions, and just tell them anything.

Here, Mia expands upon the positive dynamic they perceived with their leader. Her quote further reveals other aspects of positive interactions, such as accountability, approachability, and support between students and leaders.

Making Connections. For *Making Connections,* this code was applied to quotes that indicated a positive experience for students based on how leaders attempted to engage them in the group. Six out of nine students reported that their leaders engaged positively with them via activities done in the group. For example, Katie stated,

> Well, we did the activity, the Fly Swatters. And our group leaders were laughing about it because we were a jokeful group, which I thought it felt like they were part of the group

too, not just teaching it, but they were part of us, which I thought it was good to know, I think.

This quote highlights how leaders engaged with students through activities and humor, which was a valued experience for students like Katie. Her perspective also adds another level of understanding the positive engagement felt by Katie, in which the leaders and students had more connection to one another. Another example of positive engagement was provided by Jessie when she stated,

> Probably the activity where we took the test to find out our character strengths, and they went by us one by one and they talked about our character strengths and how we can use them. It felt super personal because they took their time with each and every one of us.

Jessie's quote further suggests that leaders' positive engagement includes having personalized approaches to individual students and in-depth and meaningful discussions. These aspects, facilitated activities, and humor would allow for more enhanced personal connections that students may value in their relationships with their leaders.

Students also expressed how their leaders attempted to understand them and be present in the group. Tim expressed that they greatly appreciate "being there and being able to express how I was feeling." His perspective suggests that there was consistency in a feeling of support from their leaders.

Challenging Experiences. Four of the nine students reported challenging aspects of their experience with their group leaders. Mark expressed the following.

> Well, for me, they were absent two or three sessions, so wasn't seen as much as full... There was also a couple others that were gone two, three, four times. But not really much of a connection.

His quote offers insight into a therapeutic relationship that did not have enough presence or support from leaders to develop. Later in the interview, Mark also stated that there was

> ...not much interactivity with specific students. It was really just the whole group, so you never felt a connection with them themselves. You really more felt a connection with the whole group.

His perspective further elaborates on how when leaders were not present, elements of connection were missing from the relationship that was meant to develop. While Mark's quotes highlight challenging experiences attributed largely to the leader, other students identified their own internal challenges that may have hindered developing a stronger therapeutic alliance.

For example, Elaine stated, "I didn't really talk too much. They did try and talk to me. I did respond, but it was a once in a while occasion." Difficulties or a lack of motivation or confidence in engaging with one's leaders may inhibit the development of the therapeutic relationship. On the other hand, if therapeutic alliance was not established well enough throughout the 10 weeks, then a lack of engagement from Elaine may also be explained by that. Elaine also said later in her interview, "I think they did reach out to me, and they did have that little relationship with me. And I kept it there. And I still think they are someone to me that I can talk to." This may further support the personal challenges she had opening up in general and not necessarily related to what the leaders presented. Mia offers another layer of difficulty with vulnerability by stating,

> They really tried and, at first I was like, eh but after a couple sessions I really... Just them every session they would try, but sometimes I won't. But most of the time I will because I open up to them because sometimes it's hard to build up all these emotions and they let me... Sometimes I would cry in sessions because it was really hard.

While Mia's quote conveys their and leaders' efforts to build trust and engagement with one another, there were personal challenges related to opening up. In a therapeutic relationship, vulnerability can be difficult, especially if one is not used to expressing the emotions they are feeling. Though the intervention was a positive psychology intervention, it does not negate the negative aspects of life that students may have discussed in the group. There were probably moments when students came across topics that were tough for them to grasp or discussions that led to deeper emotions. As such, if students are not ready or do not feel comfortable enough to share, then they may have difficulties engaging or they may disengage completely.

Overall, most of the students discussed positive interactions with their leaders over the course of the program. These interactions included students liking their leaders and expressing that the relationship was great. Key elements for these positive interactions included approachability, accountability, support, and trust. Some students also reported challenging experiences regarding their student-leader relationship. On one hand, there were leader factors to consider, where they were not consistently present, or they did not connect well with the students. On the other hand, there were also student-centered factors that highlighted considerations for their comfort with engaging with the leaders and their vulnerability levels.

Influential Factors in Student-Leader Relationships

The second theme, *Influential Factors in Student-Leader Relationships,* depicted more specifically different aspects of the therapeutic relationship that students expressed contributed to their experience with their leaders. This theme comprised three secondary themes: *Activities & Engagement, Leader Characteristics, and Safe and Supportive Environment.* For *Activities and Engagement,* students' responses were coded when they mentioned how leaders engaged them in sessions (i.e., activities, participation, and choices). *Safe and Supportive Environment* was coded about students reporting how leaders made them feel welcome and safe in the group. Lastly, the

Leader Characteristics code was applied to student descriptions of their leaders' character or personality that they felt contributed to their overall relationship.

Activities and Engagement. Within the Well-Being Promotion Program (WBPP), several positive activities are covered across the 10 weeks (e.g., you at your best, gratitude journaling, gratitude letters, acts of kindness, character strengths, savoring, and hope). Mia elaborated on their experience with "You at Your Best" by stating,

> When we were doing Me at My Best, I remembered a time where me and my great grandma, we were taking a walk on the beach with my brothers and it was sunset. And we really talked about that and they asked me how I felt, how the sun was, how good it felt like, how the water was, everything and now from that point. I really just let them feel how it was.

While these activities are a required part of the program, how leaders engaged students with them seemed to be valued. Mia's comments highlight the engagement element of curiosity by leaders asking questions. Later on in Mia's interview, they also mentioned

> They would ask you what at home challenges you want, so you had to do the signature strengths because there was five you didn't have to, but if you wanted to, and then there was like, you could do the acts of kindness, you could do the gratitude journal. You could do all these other things. And sometimes I would do all of them because it made me feel more calm and more happy.

After each session, students were tasked with doing an at-home challenge to practice the positive psychology skill they learned, which ranged from two to three different activities. Here, Mia highlights the idea of choice as another element of engagement that the leaders used. Choice allows students like Mia to choose what matters to them. By leaders providing choices, students

may have perceived more ownership of their growth and built a more trusting relationship with their leaders as their guides to learning more about positive psychology versus experiencing what Lyla described as a "teacher" relationship. Another aspect of choice that leaders seemed to provide was participation. Jessie stated,

> and they didn't pressure you a ton into saying things. They more encouraged it to help you get out some of your personal feelings so you don't bottle it up. And I think they did that in a really way that it was spread out, and they didn't force it all at once and they more focused on one thing at a time.

Choice in participation can be a beneficial tool in building rapport, as some students may need more time to collect their thoughts. Other students may benefit from watching others model how they express their thoughts or feelings. From the students' perspective, one may assume it is a positive component for building therapeutic alliance in a group setting.

Safe & Supportive Environment. The students' experiences with their leaders conveyed an underlying sense of trust. Trust is a feeling built by creating an environment that provides a sense of safety and support. Katie mentioned that "They [their group leaders] made that clear that we can speak out to them, which I thought was cool." From this student's perspective, efforts from the leaders to create that open dialogue and relationship was valued. Jessie expanded on their experience with being able to speak with their leader by expressing,

> Well, every time someone shared out, they would say a good comment about it, whether it was a bad thing, they tried to cheer it up a little bit, which I thought was very good. And just the positive attitude just brought up the spirits of the group.

Their recount of this experience further paints a picture of students being supported when they speak or open up about their thoughts. For students who may not have been ready to express

themselves in the group, Jessie also reflected on how leaders approached these difficult moments.

> and they didn't pressure you a ton into saying things. They more encouraged it to help you get out some of your personal feelings so you don't bottle it up. And I think they did that in a really good way that it was spread out, and they didn't force it all at once and they more focused on one thing at a time.

Utilizing optional participation, as discussed in the *Activities and Engagement* section, it is evident that its use may help with engagement and building a safe and supportive student environment. Furthermore, an empathetic understanding of what students were sharing was also highlighted in Jessie's quote as leaders offered space for students to express their emotions but not force them if they were not ready. Woven into this idea of emotional support is also encouragement. Jessie stated,

> And they went through the effort of trying to remind us that change is always possible and that they changed, so we definitely can. They reminded us that we were smart, that we were special. The character strengths activity, they reminded us that we all have our strengths and that we can all use them in different ways.

In this quote, they emphasized how they valued how leaders encouraged the students in the group. Another aspect of support that leaders would provide was advice. Lyla stated,

> Well, she would always talk to us and try to help us through our problems. And I talked to her about my classes and schoolwork and teachers, and she would give me advice and feedback on what I should do.

Mark mentioned, “They sometimes had a two-minute thing at the beginning of the session to try to get to know everybody.” According to Mark, providing a space for students to be open and get to know others may be important to implementing a safe and supportive environment.

Leader Characteristics. In these results, students reported on the positive characteristics they saw in their leaders that contributed to their therapeutic alliance perceptions. Tim reported about one their leaders that “Pretty much, she was always happy even though she understood what we were going through and she tried thinking on the bright side of things and I really liked that.” This quote highlights the value of leaders' positive affect and optimism when working with Tim. Beyond being a positive presence to students, another noteworthy characteristic that leaders displayed was being an active and intentional listener. Katie stated,

> I think they were very accepting and they wanted to listen to everyone, and they made time. Even if it was an inconvenient time, but you needed to say something, they would still listen, which I think is very good. And they also said some very well thought out things. The way that they just ran the group overall was good too.

Katie followed up by also expressing,

> Yeah, I think they really tried to put it in perspective because they knew exactly what to say, and then they were like, ‘Oh yeah, that can be hard.’ So very understanding, which I liked it. It made me felt like we had connections almost, and I liked it.

Not only did Katie’s leader actively listen, but they also provided empathetic comments, which made her feel understood and more connected to her leaders. Another leader characteristic- self-disclosure- was noted by Jessie, who stated that their leaders:

> Sometimes talked about their own experiences and the way that they grew up and how they got here, and it gave me hope that I could be like them. Because even if their

> circumstances weren't good back then, they were really good now and they're helping other people.

For Jessie, it was important that their leaders were personable and shared parts of themselves. It may have helped them feel closer to their leaders and know that they are human too. Jessie's sentiment, "Yes. I think they brought themselves down to our level of how they felt in school and how much pressure they felt when they were us." further showcases that value of vulnerability and relatability from their leaders. The same values can also be seen in Lyla's statement,

> I feel like I could talk to her and it was nice being able to talk to someone and try to figure out new ways to be happy. And it didn't feel like she was a teacher trying to teach us. It felt like we could just relate to her and talk to her.

Overall, the characteristics of leaders highlighted and valued by the students manifested as positive affect, optimism, active listening, empathy, connection, personability, vulnerability, and relatability. While each of these characteristics was perceived positively alone, a culmination of these characteristics may yield an even higher quality of therapeutic alliance when combined with creating a safe group environment and delivering the content of a PPI.

In sum, the *Influential Factors in Student-Leader Relationships* were layered by the first theme identified as *Activities and Engagement.* Within this theme, students continued to build on leaders' characteristics by noting that their leaders were curious about them and asking questions about their lives and stories. Leaders also displayed flexibility throughout the program by offering the students choices for participation. Students expressed that they appreciated leaders for not being teacher-like, but rather that they were trusted guides in learning about how to be happy. Along with this value for flexibility, the students' quotes highlighted leaders' deeper

understanding of applying choice with student vulnerability as students experienced leaders reaffirming them that they could share when they were ready or not share if they did not feel comfortable. The second secondary theme was *Safe and Supportive Environment.* Within this theme, students provided examples of the collective factors that played a role in creating a safe space for them within the group. Specifically, positive interactions that students experienced with their leaders individually and across other students built trust and encouragement. Lastly, students' quotes about how they valued their leaders' characteristics were acknowledged. From the student interviews, there were themes of students highlighting their leaders' openness and ability to connect with them.

Student-Leader Relationship Development

The third theme, *Student-Leader Relationship Development* pertained to how students perceived their relationship with their group leaders grew. This theme included three secondary themes: *No Change, Change,* and *Session Identification.* The *No Change* theme was applied when students indicated that they did not perceive a change in their relationship with their group leaders. *Change* was applied when students discussed changes they experienced in the therapeutic alliance over the ten weeks. *Session Identification* was coded when students referenced a specific session that they perceived their relationship with their leaders changed.

No Change. Out of all nine student interviews sampled, Elaine indicated no change in their relationship with their leaders. They stated "not really" noticing any difference from the beginning of the program to the end of the program. In previous themes, Elaine's quotes revealed that they may have had challenging experiences building a therapeutic relationship due to vulnerability issues. However, they did not fault the leaders for that. They, in fact, expressed that the leaders tried to form a relationship. Mark also indicated that they had no memorable

interactions with their leader, which is consistent with their lack of experience and connection with their leaders, as seen in their previous sentiments.

Change. Seven of the nine student interviews sampled indicated that students perceived a change in their relationship with their leaders from the beginning to the end of the program. Students who identified change mentioned previous themes of leader characteristics and feeling safe. Jessie offered insight into the development of their relationship by sharing,

> Yes, because I was a lot less comfortable sharing. But as time went on, they made me feel a lot more safe and this was a safe space for us to be in for us to share.

Their statement builds on the importance of creating a safe environment for the students to feel more comfortable making connections or opening up. Katie stated, “Well, I think from the beginning they were all very accepting, but then by the end, it just felt very friendly. More like you knew them almost. I think that makes sense.” Within this quote, the leader's characteristic of acceptance was highlighted as a potential constant connected to Katie perceiving the relationship as more friendly. The idea of acceptance can be seen as another component that contributes to a safe place, as Jessie described. Providing a more descriptive recount of their experience with their leaders, Mia stated,

> Definitely, because at first we were kind of like, oh, now we're going to introduce ourselves because the first activity was saying our names, getting to know each other a little bit, saying truth. So it was first three weeks we were kind of like, meh. The rest of the sessions that we had, we felt more of a close connection and they help a lot and they just want to know everything about you to help you and to know more about you and so I feel like I didn't really see them as a counselor I kind of saw them as my friend because they kind of got me a lot.

Mia's quote clearly shows the positive development of the therapeutic relationship. Though there were hesitations around the first few weeks of them getting to know each other, the building blocks of establishing rapport by getting to know the students and understanding their perspective provided a stronger connection to the point that Mia considered their leaders as friends.

Session Identification. Five out of nine students identified when they felt a shift in their perception of the relationship between them and their leaders. However, there was substantial variability in when this shift occurred. Specifically, the sampled students identified sessions one, two, three four, five, six, seven, eight, and nine. Katie identified session two and said, "I think it was the second one. Because just from the beginning, it was felt very friendly. I think moving on, it just got better and better." This quote conveys that the friendliness of the leaders was valued. As a result of this attribute in their leaders, they felt more positively towards them and their experience in the group. Anthony had sentiments similar to theirs, as they expressed, "Yes. At the first three sessions, I was really nervous and really shy, but now I feel a lot more accepted and [inaudible 00:08:11]."

Overall, students' reports indicated that positive relationships and therapeutic alliances were built in the early sessions of the program. This may further support the value of dedicating time and effort to engaging students positively within the first few sessions of therapeutic interventions for better outcomes, relationships, and buy-in.

Qualitative Results: Student Group Cohesion

Five primary themes emerged throughout the coding and thematic analysis process for students' perspectives of group cohesion: 1) Peer Relationship Dynamic, 2) Influential Factors in Peer Relationships, and 3) Peer Relationship Development. Table 55 displays themes to provide

visual differentiation between primary and secondary themes. Table 56 shows the primary and secondary themes across the interviewed students. All presented names are pseudonyms to protect the privacy of the students.

Table 55

Primary and Secondary Themes for Group Cohesion

Primary Theme	Secondary Theme
Peer Relationship Dynamic	Positive Interactions
	Making Connections
	Contributions to the Group
	Challenging Experiences
Influential Factors in Peer Relationships	Activities
	Safe Space and Supportive Peers
	Peer Characteristics
Peer Relationship Development	No Change
	Change
	Session Identification

Table 56

Group Cohesion Themes and Codes Across Students

	Peer Relationship Dynamics				Influential Factors in Peer Relationships				Peer Relationship Development		
ID	**PI**	**MC**	**CG**	**CE**	**A**	**SSE**	**PC**	**ER**	**NC**	**C**	**SI**
Sam			X	X	X		X			X	X
Opal				X			X		X		
Jessie		X	X	X	X	X		X			
Ken	X		X			X		X			X
Lisa	X		X		X			X		X	X
Mike	X		X	X							
Hannah		X				X		X		X	X
Yasmine		X	X					X		X	X
Sandy	X					X				X	X

Note. All presented names are pseudonyms to protect the privacy of the students. ID = Student. PI = Positive Interactions. MC = Making Connection. CG = Contributions to the Group. CE = Challenging Experiences. A = Activities. PC = Peer Characteristics. SI = Session Identification.

Peer Relationship Dynamics

This theme focused on students' multifaceted experiences with their group peers. Within this theme were four secondary themes: 1) *Positive Interactions* and 2) *Making Connections*, 3) *Contributions to the Group,* and 4) *Challenging Experiences*. *Positive Interactions* included

sentiments from students who described their relationships with peers positively by stating that the peers in their group were friendly or nice. These experiences seemed to foster connection and a sense of belonging to the group. *Making Connections* included students' quotes describing how they met new people or grew closer to another peer. *Contributions to the Group* included quotes in which students discussed what actions or aspects about themselves they felt made the group better. *Challenging Experiences* included quotes of students' difficult interactions with their group peers. These interactions included reluctance for students to participate, being disliked or disliking other people, and feelings of alienation. These challenging experiences highlight the diversity of challenges within peer group relationships.

Positive Interactions. Three out of nine students conveyed positive interactions with the other youth members of their group. Positive interactions were coded when students mentioned aspects of friendship or had a pleasant experience with their peers. For instance, Yasmine expressed,

> I feel like it was really nice. We had a lot of laughs and smiles and got to talk about things, and it was really nice that I got to hear what those people were going through and what their mental state was at.

This quote highlights that the interactions with her peers were fun as they shared laughter and smiles with one another. Another aspect of her peer interactions was her experience with engaging in empathy and understanding of other students in her group. This allowed space for awareness of others, and the peer's willingness to be open may have fostered a more open atmosphere for Yasmine to have a more positive and grounded experience with her peers. Ken shared similar sentiments of positive interactions by sharing the following:

> Some of them are nice, and then some of them are very talkative, and I'm also very talkative. But other people, sometimes, they're like... They're my friends obviously, and they joke around, but not too mean. We don't call each other bad names, but we also don't say... Most of the time, we also don't say their true names because we have nicknames.

Ken's perspective further illustrates how positive interactions took place through friendly jokes and the use of nicknames. The use of familiar language and humor may indicate a level of friendship and trust. As well, shared traits of being outgoing may have served as a facilitator for more interactions with one another.

Making Connections. This secondary theme was applied when students stated they were meeting new people or growing closer to another peer. Students also identified these experiences as ones that were meaningful and memorable. Hannah shared,

> We would have makeup sessions and they, if we were absent, which I was absent twice by accident or late and we would do a different, would do a makeup meeting with new people that I never met before. And it was really fun meeting new people and stuff like that. And they were really nice.

A part of implementing the positive psychology program included offering students the opportunity to attend a make-up session if they missed their original session. In these make-up sessions, Hannah reflects on their opportunity to meet new people, experience positive relationships, and enjoy a welcoming atmosphere.

Some students had friends before the intervention began who were a part of their group, which helped them feel safe and supported enough to share with others who they may not have known. Students also mentioned forming new connections, which they found exciting and

valuable in getting along with others and understanding their unique experiences. As mentioned by Jessie,

> I think it made me a lot happier and a lot more hopeful when I made friends or when I started talking to old friends again. And I think it has definitely helped life circumstances of knowing I still have these friends and even if someone doesn't like me, I have people who do.

Along with the duality of building old and finding new friendships, Jessie's quote also illustrates an emotional and resilient aspect created from the friendships that developed in the group. The formation of these friendships and their positive aspects may be seen as the positive outcomes of peers experiencing sharing their stories, finding commonalities, and supporting one another.

Contributions to the Group. This theme included quotes in which students discussed what actions or aspects about themselves that they felt made the group better. When asked how they thought they contributed to the group, Sam stated "I don't really think I did much. I don't really think I changed anything." Sam may share sentiments similar to Opal's feelings of needing to engage more with the group. Another perspective to consider is that Sam was not as aware as other students of their importance and contribution to the group, whether through talking or just being present.

Other students expressed that they proactively participated and were open with the group. Four of the nine students indicated they contributed to the group by sharing. Lisa and Ken expressed that listening and asking questions were their way of contributing to the group and helping others be comfortable telling their stories. By modeling active participation and personal disclosure, these students helped create a comfortable group atmosphere and encouraged reciprocity in open dialogue. Jessie further elaborated,

> I think I helped with some other students helping them know I was open to share. Because I've always been the kind of person if someone else is uncomfortable, I'll go first just help them out. It's kind of just always something I've done because I'm an older sister, so I've always had that if someone's not willing to do something, I'll do it first to show they can do it. And so I feel like I helped the group with being someone who's down to share and help others feel comfortable before they had to.

This quote continues to highlight the supportive roles that students played with one another by initiating openness and establishing a supportive environment for their peers to engage within the group.

Another form of student contribution included engaging their peers through jokes and making them smile to foster more comfort and connection in the group. When asked how they contributed to the group, Yasmine stated

> I feel like I eased some of the tension, because for me, when I'm awkward, having a good laugh helps. So, I cracked a lot of jokes to make people smile and laugh, and it worked. I got a few people to laugh. I get more comfortable with each other, so that was nice.

Her reflection provides insight into how they used their personal strength of humor to engage their peers in the group and build comfort among their peers. Overall, students displayed the awareness and application of their skills and personality to provide a positive experience for their peers.

Challenging Experiences. Four out of nine students indicated challenging experiences with their peers. Across these experiences, a commonality was that students did not engage in their group. According to Opal, “I think I could have done better; because again, I didn't really participate much. Well, I did the journals and all that stuff. The journals is mostly what I did but

I also did the acts of kindness mostly during the meetings. But I felt like I could have done better." Her reflection provides insight into what other students may have felt as a barrier to having a more positive experience with their peers.

Another challenge identified among the sample was a lack of connection to their peers in their group. For instance, Opal also mentioned that despite knowing some of their peers, she did not really talk to them. She did not elaborate on why they did not. However, a lack of communication and connection may have created a sense of isolation or detachment. Jessie highlighted another layer of disconnection by stating, "I felt sometimes it was awkward because I knew sometimes the people in the group didn't like me." This quote illustrates a sense of social rejection among the peer groups, which can be challenging to navigate and potentially create negative social dynamics and emotional well-being.

Influential Factors in Peer Relationships

Student quotes were coded for this theme when they described the different aspects or factors that contributed to their peer relationships. Three secondary codes were identified within this code: *Activities, Safe and Supportive Environments*, and *Peer Characteristics*.

Activities. For Activities, this code was applied when students mentioned a specific activity that was memorable to them. Three of the nine sampled students mentioned that some activities they did with their group members were meaningful to them. Jessie mentioned, "When we did the word-sorting activity and I made my first friend here." Their experience highlights the importance of having activities and spaces to let students engage with one another so that they may talk, share, and find commonalities, which may further develop their bonding with individuals in the group, and likewise to the entire group.

Safe and Supportive Environments. For *Safe and Supportive Environments,* the quotes pertained to how positive and affirming group environments were created based on peer support. Jessie stated,

> The fact that we all felt open to talk about our experiences over time and that we all felt that none of us made fun of each other or made us feel insecure or bad about what happened to us and that we kind of all just helped each other understand how we felt.

Their experience highlights open communication, emotional safety, and a non-judgmental atmosphere. Sandy also expressed appreciation for her group by stating,

> They made it more comfortable to laugh out loud and to share so many more thoughts. Because some I would relate to and made me more comfortable to say it out loud instead of keeping it in mind.

This quote further conveys a positive group dynamic through the feelings of comfort to express herself and the ability to relate to the others in the group. Although not directly mentioned, the feeling of a safe space may be suspected to be fostered by their peers engaging with active listening and respect towards one another. Such experiences, like Jessie's and Sandy's, may increase students' comfort with being more open and able to relate to their peers more, thus positively impacting peer relationships.

Peer Characteristics. For *Peer Characteristics,* students mentioned moments of peers sharing their personal stories during group activities. According to Sam, " People would share things from their personal life and it made us realize who they were and stuff and write things about that." This quote provides insight into the sharing and disclosure aspect of the group dynamic that Sam experienced. Hearing their peers share their experiences presents as a positive influential factor in building more understanding about the individuals in the group and forming

stronger connections. Other characteristics students may have noticed in their peers could be related to their contributions to the group, such as humor and openness. These qualities could have enhanced students' ability to bond with one another and feel a sense of belonging with others.

Peer Relationship Development

The third theme, *Peer Relationship Development* pertained to how students perceived their relationship with their peers in the group grew. This theme included three secondary themes: *No Change*, *Change*, and *Session Identification*.

No Change. The *No Change* theme was applied when students indicated that they did not perceive a change in their relationship with their peers in their small group. Of the nine students sampled, only one indicated that they did not experience changes in their peer group relationship. Opal disclosed that they noticed change “With others, yeah; but with me, no. Because I sat alone because they'll sit next to each other and I would just sit the opposite side alone.” Her report of no change in their perceived relationship with their peers is consistent with their previous quote that they were not as engaged with the group as they would have liked. Opal did not disclose why they did not engage, but it may be suspected that variables of shyness or lack of personal connection could be contributing factors.

Change. *Change* was applied when students discussed changes they experienced in their perceptions of group cohesion over the ten weeks through developed friendships or closeness to other peers. Five of the nine sampled students reported that they experienced change within their relationships with their peers in their small group. Most of them described these changes within domains of friendship and talking to their group members more in and outside the group. Hannah shared, “I feel like I got to know one of the girls a bit, a lot better. And we talked a lot more because we would walk together to class, back to class.” Her quote indicates a development of a

relationship may not have occurred without the experience of the group intervention. It also highlights the extended value of the relationship and how it has transitioned to outside of the group. Another quote from Yasmine further expands on the feelings of change that students may have felt throughout the ten weeks related to growing connections and finding commonalities.

> I feel like in the beginning, we weren't that close, so it was awkward because we didn't talk too often, we felt weird sitting next to each other. But as time went on, we've just gotten closer and closer and we sat next to the people we enjoyed sitting with. We talked to each other more. I talked to more people that I didn't talk to in the beginning of the class and realizing what we have similar was nice. So that's what I'd say.

Session Identification. *Session Identification* was coded when students referenced a specific session in which they perceived their relationship with their group members to have changed. Six of the nine sample students indicated that there were specific sessions in which they felt a shift in their relationships with the group peers, again with considerable variability in the timing. Sessions one, two, three, four, five, seven, and eight were identified. Many students related to positive experiences of getting to know their peers through the week's activities and sharing their thoughts. Yasmine shared that the session they felt their relationship change with their peers was when they were:

> Using signature strengths in new ways, because hearing what their signature strengths were and having the same ones as them was cool, because I never would have thought that they had the same strengths as I did, and the optimistic thinking because it's cool hearing that some people don't think optimistically, but some do. It's cool hearing how they have similarities, but also don't.

Overall, sharing and discovering similarities among the group members presents a common and prevalent theme for students' group experiences.

Chapter 5: Discussion

Current research supports that youth participating in a small group Well-Being Promotion Program (WBPP) significantly improve their subjective well-being (Roth et al., 2017; Suldo et al., 2014). However, whether this is because of the positive activities in the WBPP or relational variables, regardless of the meetings' content, topic, and focus, is unclear. The current study aimed to understand some of the mechanisms of change and therapeutic processes in a small-group positive psychology intervention. The sample consisted of 199 middle school students from ages 10 to 15. This chapter begins with discussing the findings of research questions one and two regarding the initial and growth perceptions of student-rated therapeutic alliance perceptions and how they may relate to students' outcomes. Next, findings for students' initial and growth perceptions of group cohesion are interpreted. Findings specific to the leaders' perspectives on their therapeutic alliance with the students in their groups are then examined. The study limitations are also provided. Lastly, implications for mental health practitioners and future research directions are discussed.

Relationship of Students' Perceptions of Therapeutic Alliance to Student Outcomes during a Small Group Positive Psychology Intervention

Quantitative Interpretations of Student Therapeutic Alliance

For research question one, this researcher hypothesized that higher levels of middle school students' initial rating of therapeutic alliance will significantly predict better mental health outcomes, with regard to higher levels of life satisfaction and positive affect and lower levels of negative affect and psychopathology symptoms. Descriptive statistics for the students' therapeutic alliance measure mean scores at Time 1 (Week 3) was 2.96 out of 4. This can be

interpreted as students initially perceived moderately positive relationships with their group leaders.

The second-order latent growth model results indicated that the students' initial perceptions of therapeutic alliance toward their group leaders significantly predicted greater post-intervention life satisfaction. This result is consistent with previous research that states that early alliance ratings predict outcomes better than late alliance ratings (Cirasola et al., 2021; Horvath & Symonds, 1991; Labouliere et al., 2017; O'Keeffe et al., 2020). However, in Savage et al.'s (2011) study, child ratings of therapeutic alliance did not significantly predict life satisfaction and had a negative association, indicating lower therapeutic alliance scores were related to higher life satisfaction scores. The current study's finding may provide a more theoretically consistent relationship between therapeutic alliance and student-rated life satisfaction outcomes.

As for the other outcomes, initial student-rated alliance did not predict changes in affect or psychopathology in the latent growth models that also considered the influence of baseline mental health and demographic variables (grade, site). This finding is not uncommon in the literature as Savage et al. (2011) found that child ratings of therapeutic alliance predicted positive affect, but not life satisfaction or negative affect. Bickman et al. (2012) also found that initial reports of youth therapeutic alliance did not predict their outcomes of internalizing and externalizing symptoms.

For research question two, it was hypothesized that students' growth in therapeutic alliance would play a role in their intervention outcomes. Descriptive statistics for the students' therapeutic alliance measure mean scores across the three time points of collection ranged from 2.96 to 3.10. This can be interpreted as students perceived more positive relationships with their

group leaders across time. In their post-intervention interview, students who expressed feeling change in their therapeutic relationship identified feeling safe and accepted. However, results from the second-order latent growth model indicated that the students' growth in perceptions of therapeutic alliance toward their group leaders was not significantly related to their outcomes. This finding does not align with the current literature (Crits-Christoph et al., 2011; Flückiger et al., 2018). Bickman et al.'s (2012) and O'Keefe et al.'s (2020) findings emphasized the importance of analyzing change in the alliance to predict therapeutic outcomes. Their findings suggested that better treatment outcomes are likely to be reported as clients' perspectives of the alliance become more positive over time. Considering the measurement aspect of the modified therapeutic alliance measure used in the current study, the response metric scale ranged from one to four. This small range may have created a low-ceiling affect in which the breadth of their growing perceptions of alliance over time may have been limited.

Qualitative Interpretations of Student Therapeutic Alliance

The quantitative results for student therapeutic alliance highlighted that students' initial perspectives of their relationship with their group leaders significantly and positively predicted their life satisfaction outcomes. From students' reports, early sessions, such as one, two, and three, were identified as sessions were identified as sessions where they felt a shift in their relationships with their leaders. The themes present in the student interviews offered more insight into what youth may value in their therapeutic relationships.

Bordin describes the alliance as including the following constructs: bond, task, and goal agreement (1979). The bond can be understood as the affective aspect of the relationship, while the tasks are the activities and engagement in the sessions. Lastly, goal agreement is a shared understanding and commitment to the set goals of therapy between the client and the therapist. From students' reports, they valued positive interactions with their leaders. Students' quotes

conveyed the bond and ease of openly discussing with their leaders. Students also discussed having a trusted person who did not present themselves as a teacher figure. Rather, the leaders presented themselves as someone relatable. Transparency and humanness are important for trust and buy-in when building any therapeutic relationship, especially with youth. Other appreciated factors contributing to student-leader bonds included being accepting, good listeners, curious about students' lives and backgrounds, relatable, and understanding, which helped create a safe and supportive environment.

As for tasks and activities, students recalled doing "You at Your Best," character strengths, and acts of kindness. They did not reflect so much on the content of the activities. Rather, they focused on how leaders engaged them and made them feel. Students valued their leaders engaging with them and providing choices on how they wished to participate. Task agreement was not identified as a theme in the analysis of the student interviews. However, the activity and participation choice that the group leaders used could be seen as a strategy to increase student task agreement as it may make them feel more comfortable and have a sense of control in the relationship. Overall, students' reports align with the significant quantitative finding of their perspectives of positive therapeutic alliance predicting increases in life satisfaction considering that it consists of positive appraisals of life within domains such as friends and school (McDougall & Wright, 2017; Strózik et al., 2015). Students' sentiments shed light on the types of group process variables that leaders may want to attend to to build alliance.

Relationship of Student Group Cohesion on Student Outcomes during a Small Group Positive Psychology Intervention

Quantitative Interpretations of Student Group Cohesion

For research question three, this researcher hypothesized that higher levels of middle school students' initial rating of group cohesion significantly predict their life satisfaction and

positive affect. Higher levels of group cohesion were also predicted to decrease their negative affect and psychopathology symptoms. Descriptive statistics for the students' group cohesion mean score at Time 1 (Week 3) was 3.62 out of 5. This can be interpreted as students initially perceived moderately positive relationships with their peer group. Results from the second-order latent growth models did not yield any significant results that indicated students' initial perceptions of group cohesion toward their peers were related to their therapeutic outcomes. However, a trend was identified between students' initial perceptions of their peers and their post-test life satisfaction. This finding suggested that the higher students rated their initial group cohesion, the higher they rated their post-test life satisfaction. The same trend was identified for initial perceptions of group cohesion being positively associated with students' post-test positive affect, which indicated that students who rated their group perceptions higher also had higher ratings for positive emotions. No significant findings or trends were noted for research question four, which hypothesized group cohesion growth being related to student outcomes.

In the field of positive psychology, no previous studies were identified by the researcher to compare results. However, at face value, similar to the findings of students' and leaders' therapeutic alliance, the trends of higher group cohesion predicting higher life satisfaction and positive affect suggest that there is relevance to how students perceive their peers in the initial sessions of the intervention.

In a broader scope of group therapy, the trends of students' initial group cohesion perspectives positively predicting life satisfaction and positive affect may provide further support for previous research. Burlingame et al.'s (2018) meta-analysis findings showed a significant correlation between reported group cohesion and therapeutic outcomes in group therapy from 55 studies with 6,055 participants. Though this study's findings were not statistically significant, a

replicated study may yield significant results compared to Burlingame et al.'s findings. Furthermore, compared to Alldredge et al. (2021), Burlingame et al.'s (2018) study supported that group cohesion may be a stronger predictor while alliance and cohesion are supported as predictive outcomes. This study comparison may further support the need for a replicated study.

One major factor that may have contributed to the trend of the current study could be the sample size. Although there were 199 participants, the model was complex due to items from latent factors and groupings. Thus, too many statistical connections without enough participants and grouping variability may have limited significance potential. Another consideration would also be a low ceiling effect used for the measure. Nonetheless, the results of this study goal further highlight a need for more research on the group process developments and its potential influences on post-intervention outcomes.

Qualitative Interpretations of Student Group Cohesion

For youth, the social component of group therapy can benefit their development positively (Leichtentritt & Shechtman, 2009). This engagement and feeling of belongingness are important in group settings as the people in the group communicate, trust, and learn from one another to improve themselves and each other (Christensen et al., 2021; Yalom & Leszcz, 2005). Despite the quantitative results not yielding statistical significance, the student interviews highlighted important aspects of group cohesion that they believed to contribute to their experience.

Several students expressed that they appreciated when other people would share in the group because it allowed them to get to know one another and understand their experiences. Along with valuing sharing, students also described how their peers were supportive and helped build a safe space in the group. Their responses highlighted their experiences of feeling safe

within their group and not feeling ashamed of sharing because there seemed to be an atmosphere of respect and honor for each other's voices.

Students also expressed positive experiences in building more connections and making friends within their groups. Within group therapy or counseling, everyone is not guaranteed to get along or like each other. However, the interviewed students described the elements that can help build trusting and amicable relationships. In Christensen et al.'s (2021) qualitative study, similar findings were revealed in the value of positive group processes of sharing, respect, and relationship building. Through the group-related activities and discussions students engaged in with their group members, they also developed a sense of normalcy, sense of belonging, and understanding amongst each other, further strengthening cohesion (Christensen et al., 2021).

Another important theme identified in the students' interviews regarding group cohesion entailed their reflections on what they contributed to the group. Often, a reflection of how well a service was experienced may solely focus on the actions of others and what the individual is receiving. However, it is also important to reflect on how one engages and interacts with the environment themselves. Through the interviews, some students recalled moments in which they initiated conversations or humor because they perceived their peers as nervous or reluctant to share. These contributions show a sense of social awareness and individual and group responsibility to help create more positive experiences within their groups and for themselves. Some students disclosed that they did not contribute much to the group, whether through in-session dialogue or completion of take-home challenges, although they wished they had in hindsight. Barriers to a lack of contribution may stem from students' need to feel more comfortable or empowered in their group to take more control or responsibility for their experiences. Future group leaders, counselors, and clinicians may benefit from helping their

students or youth clients understand how they can positively contribute to their therapeutic experiences.

Though the quantitative results suggested no relationship between group cohesion and student outcomes, students' reports reflect otherwise. A relationship between their perception of group cohesion and their perceived outcomes can be interpreted here when considering aspects of life satisfaction and positive affect.

Relationship of Leader-Rated Therapeutic Alliance to Student Outcomes during a Small Group Positive Psychology Intervention

Quantitative Interpretations of Leader Therapeutic Alliance

For research question five, this researcher hypothesized that higher levels of group leaders' initial rating of therapeutic alliance significantly predicted students' life satisfaction and positive affect. Higher levels of leader therapeutic alliance were also predicted to decrease their negative affect and psychopathology symptoms. Descriptive statistics for the leaders' therapeutic alliance mean score at Time 1 (Week 3) was 3.03 out of 4. This can be interpreted as leaders initially perceived moderately positive relationships with their students. Results from the second-order latent models indicated that the leaders' initial perceptions of therapeutic alliance toward their students only had a significantly positive relationship with students' post-test outcome of life satisfaction. This finding corresponds with previous research. Savage et al. (2011) found that leaders' ratings of the TA positively predicted post-intervention life satisfaction scores, but it was not significant in their study. Savage et al. (2011) also found that leaders' reports of TA were not significant predictors of positive affect or negative affect, which is consistent with the current study's results. This suggests that there may be reliability in group leaders' perspectives in predicting student life satisfaction, but not for positive affect or negative affect. However, there

was an inverse trend of initial leader-rater therapeutic alliance predicting psychopathology symptoms. A replicated study with a larger sample may yield a significant finding.

In a broader sense, research question five's findings add to previous research, which reports mixed findings on whether clients or therapists predict therapeutic outcomes. Ormhaug et al. (2015) and Fernandez et al. (2016) study findings supported that only the clients' TA was a significant predictor. However, in Bickman et al.'s study (2010), the clinicians' therapeutic reports did predict changes in clients' symptoms. The differences within the literature may be supported by what Bachelor (2013) suggests as a difference of values and importance in therapeutic alliance for both parties. Specifically, when working with youth who are experiencing therapy for the first time, they may not be aware of what they are looking for in the relationship. In comparison, the therapist may be looking for elements of compliance and effort from the client. These different ideas or values can be hard to overlap or consolidate in two individual scales if not considered appropriately. Specifically, studies have found that their perceptions or evaluations of therapeutic alliances do not separate into dimensions of bond and task when measuring therapeutic alliances with adolescents. Instead, Accurso et al.'s study (2013) suggests that adolescents' perception of alliance is more affective and relatable to their relationships with friends and family.

Further evaluating the difference in perceptions from the leader and students' reports, students reported a lower initial TA at 2.09, while leaders averaged 3.03 at Time 1. Comparing Accurso and Garland's study (2015) and Ormhaug et al. (2015), their results indicated that clients rated the TA higher than therapists. One reason for this difference between the studies could be the intervention program and the therapeutic relationship strategies applied. For the Well-Being Promotion Program, leaders were required to have training on strategies to build

therapeutic alliances with individual students and among group members, which may have helped them feel more confident in their abilities and have a more positive perception. Another reason for the difference between the leaders and the students' scores could be the added layer of multiple relationships. While leaders were working with multiple students and establishing relationships, so were the students among themselves. Depending on how students received their leaders' approaches and interactions with other students could have influenced how they felt toward them.

Research question six could not be answered due to data collection constraints. However, descriptive statistics for the leaders' therapeutic alliance measure mean scores across the three collection time points ranged from 3.03 to 3.38. Given the mean increases in the leaders' therapeutic alliance, the researcher speculates with a bigger sample size that the results of this analysis would relate to students' outcomes.

Limitations

Several limitations were identified for the current study. Student and leader self-report scales were used to measure therapeutic alliance and group cohesion constructs. Errors can occur naturally in self-reports as participants may not be honest or feel social pressure to respond positively. Though self-reports can be subject to error, this measurement method allowed the researcher to capture seemingly authentic relationship experiences of students and leaders in an observable manner. This study also added an element of qualitative data to support the results of students' perspectives, but not in the extended manner of a complete mixed methods study. Future studies would benefit from applying a mixed methods model to further enhance the data collected.

The sample size was another limitation of this study. Despite having 199 students and 27 leaders, the complexity of the second-order latent growth model required more variability. It is suspected that more relationships in the data may appear if future studies were to have a greater sample size. The generalizability of findings to populations other than middle school students with low subjective well-being is also cautioned. Furthermore, the sample size for the leader was also limited in the third of three time points due to missing data in one state. This limitation may have contributed to the reported results.

Considering the statistical growth results, another potential study limitation involved the scale ranges (response metrics) for the student and leaders' therapeutic alliance measures. Holistically, the modified measures captured both students' and group leaders' perspectives within a PPI small-group setting over three time points with good reliability and validity. However, a low ceiling was identified for the student and leaders' therapeutic alliance scale, which ranged from one to four. A low ceiling can make it difficult to discern growth globally over a period of time if students are reporting high scores in early time points. Thus, future modifications of the measures or new measure designs may include wider response metrics or even the inclusion of reverse-coded items to provide an opportunity for more variability within the scores.

Implications for Practice

Therapeutic relationships are an important part of the therapeutic process. As society and schools are leaning more toward building frameworks and resources for youth to receive therapeutic services, it is essential to understand and integrate therapeutic processes and their development. Based on the processes involved in this study and the dialogue provided by students, the individual and group relationships developed in a small-group positive psychology

intervention may have helped to increase student life satisfaction. Mental health practitioners engaging in small group interventions like the Well-Being Promotion Program may benefit from further integrating and fostering these pivotal connections.

Developing these connections should be considered imperative in early sessions. This study used brief, valid, and reliable measures to monitor therapeutic alliance and group cohesion over three time points across ten weeks. This monitoring allowed researchers and practitioners to see how students perceived individual and peer group relationships over time. Current practitioners are encouraged to consistently and repeatedly monitor group processes quantitatively and qualitatively, like therapeutic alliance and group cohesion. Utilizing both data collection methods may help provide comprehensive feedback on what is going well or what needs improvement in the relationships. Especially for youth, having options for them to provide feedback can be beneficial as some students may not know how to put their thoughts into words or be ready to express themselves.

Applying insights from students' interviews from this study, their input highlighted positive characteristics that their group leaders displayed. When working with youth individually or in small groups, mental health practitioners may want to reflect on their approachability, engage more in active listening, and present a positive attitude. Students noted these aspects as influential in building trust and connection with their leaders. Students also valued the creation of safe spaces by their group leaders. In a group setting, practitioners may establish this environment by building further trust through sharing personal narratives, providing opportunities for students to share their experiences, engaging students in ice-breaker activities, cultivating fun, and providing guidelines for mutual respect. An early integration of these

practices may contribute to a better foundation for positive relationships and increasing life satisfaction.

While applying positive characteristics and facilitating safe environments were noted, some students also revealed that they did not have the best connections with their leaders or peers. Students' comments ranged from personal to external factors. One specific external barrier students identified was a lack of connection to leaders based on the leaders not being present in the group as often. A lack of physical or emotional presence may cause the therapeutic alliance to stagnate or rupture. It is important that practitioners are aware of these factors to either be able to prevent or repair them. For example, practitioners absent from sessions should work with their students in the next session to re-establish rapport and trust. If practitioners know they will have to cancel a session or not be there, they should notify them before the absence and schedule the next meeting as soon as possible.

As for working with challenging experiences with peers, not all students are guaranteed to get along. However, practitioners can try their best to facilitate an environment that is respectful and engaging. Modeling respectful dialogue exchanges may be useful. Reinforcing positive exchanges and behaviors between group members may also help create a safe space where students feel more comfortable sharing and being amicable with one another. Furthermore, students noted that doing activities that helped them get to know one another provided opportunities to understand each other and embrace their differences. While specific ruptures between students were not mentioned, practitioners should be aware that miscommunications or arguments may arise within or outside of the group between group members. It is important that while facilitating a positive atmosphere and modeling appropriate behavior, relationships within the group should be monitored for ruptures. If ruptures occur, it is

recommended that they should be meditated as soon as possible to increase the likelihood of maintaining and increasing group cohesion.

Future group leaders who plan to implement PPIs like the Well-Being Promotion Program may benefit from expanded professional development or extended training to review previous interview findings and reflect on how they may integrate commonly valued aspects of humor, kindness, and curiosity into their therapeutic style. Other components of leader or counseling styles could integrate how to promote student empowerment to help them feel more responsive and in control of their contributions and experiences in the group. Leaders may also benefit from engaging in role-playing scenarios of building early therapeutic alliance, maintaining the alliance, and navigating relationship ruptures.

Overall, the practice of building therapeutic alliances and group cohesion is an ongoing process. Specifically, with student or youth populations in a small group intervention, these group processes seem to rely heavily on how the practitioner presents themselves, engages with the group, and facilitates a welcoming space. As mental health practitioners continue to serve youth populations, it will be important to continue to apply these aspects of group processes to help increase positive outcomes.

Contributions to Literature and Future Directions

As more youth take part in mental health services, a better understanding of their therapeutic experiences is needed to produce better outcomes. In recent years, there has been more development and emphasis on gathering the TA perspectives from youth who receive psychotherapeutic services. As more studies focus on youth perspectives (Murphy & Hutton, 2017), there is a call for additional appropriate measures to understand the constructs of therapeutic alliance that are salient to them.

This study contributed to the literature by continuing to utilize measures consistently identified in the literature designed for working with youth in a therapeutic setting, further supporting their usage and applicability. Specifically, the measures used were modified to encompass positive psychology aspects while retaining the ability to measure therapeutic processes. Further support for the measures' usage with youth samples across multiple time points was identified through the analyses of second-latent order growth models for student therapeutic alliance and group cohesion. These analyses helped to establish measurement invariance, which enhances the validity of measuring therapeutic processes over time. As for the implementation of the measures used in this study, the research team found that they were easy to administer and keep track of over the ten weeks of intervention, which suggests positive social validity. Future research may benefit from further utilizing measures in this study and developing additional measures that may better encompass youth's therapeutic alliance and group cohesion perspectives.

This study also included a qualitative component to further interpret students' perceptions of their relationships with their leaders and group members. Little to no previous studies have been conducted on the therapeutic processes in a PPI, which have integrated a mixed-methods approach. Through the use of mixed methods, I was able to better understand and connect the experiences that may have contributed to more positive perceptions with students' group leaders and peers. Such data may now inform researchers and practitioners who are interested in developing training for future leaders on how they may provide to build better group experiences. The data may also encourage ideas for incorporating and empowering student voices to enhance the services that they receive, especially in a school setting,

It is suggested that future studies continue to take on a complete mixed methods approach to expand understanding of therapeutic alliance and group processes from students and leaders, as this study was only one sample. There may be more to understand about students' and leaders' perspectives in a small group PPI in a school setting and beyond. Another approach for future mixed methods research to bridge the gap within practice would be more in-depth interviewing processes that examine the development or barriers to therapeutic alliance and group cohesion throughout the intervention. For example, more enriched answers from students may have to be built over time, with check-in interviews in the middle of the intervention and a follow-up interview at the end of the intervention. This approach may also be beneficial in providing student feedback to leaders to promote better outcomes.

Overall, this study helped understand how students perceived their peers and group leaders while accounting for leaders' perceptions of therapeutic alliance with their students. However, it did not consider students' previous therapeutic experiences, which could affect how students perceive different aspects of the process. Often, schools may be the first place students are exposed to therapeutic and group experiences. As such, they may not know what to expect from the process and the relationships. Thus, a final future direction for research is to conduct a study in which a sample of students who have not received any therapeutic services are randomized to receive psychoeducation on what they can expect in a therapeutic group, while the other sample does not. Both samples' therapeutic processes would then be monitored quantitatively and qualitatively for potential differences in perceptions of therapeutic alliance. In no way are the proposed future directions exhaustive, but hopefully, they will spark further investigation of youths' perspectives of therapeutic alliance to integrate into the growing literature and services they are provided.

Conclusion

Positive psychology is a growing approach to increasing youth well-being. For small-group positive psychology interventions, further research on therapeutic and group processes would be beneficial for improving practice and services to youth and increasing positive outcomes. The findings from this study demonstrated a significant positive relationship between students' and leaders' perceptions of therapeutic alliance and students' subsequent life satisfaction, even after controlling for baseline levels of life satisfaction and some demographic features (age, site). Despite the lack of statistically significant impact on other indicators of subjective well-being and the secondary outcome of psychopathology, this result emphasizes the importance of student and leader relationships on arguably the most salient therapeutic outcome in a PPI.

Another element of this study looked at students' perceptions of group cohesion and how they related to the same student outcomes. The results of this research goal revealed a trend for group cohesion positively predicting post-test life satisfaction and positive affect, but there were no other significant relationships. Considering the elements that define group cohesion and the student outcomes and the experiences that students expressed having, the researcher believes that there is a relative relationship between youth's positive experience with their peer group and their therapeutic outcomes. More refined research with a bigger sample size is suggested to evaluate these speculations.

The last component of this study included evaluating student responses about their experiences with their group leaders and peers. Close thematic analyses revealed that students valued leaders who showed characteristics of approachability, interest, and genuineness. Likewise, students enjoyed the presence of their peers more when there was a facilitation of safe

spaces, respect, engagement, and fun from both their leaders and their group members. Results from the qualitative analysis helped to connect more of the students' thoughts to the quantitative data that may not always tell a complete story. Practitioners and future researchers could benefit from utilizing more student voices to capture enriched data and feedback for improving mental health services designed for youth.

The goals of this study contributed to what is known about essential processes for improving student outcomes when middle school students with low subjective well-being participate in a small group positive psychology intervention. Analyzing the therapeutic alliance and group cohesion across multiple time points, augmented by student interviews, provided valuable information regarding how changes in therapeutic alliance and group cohesion relate to student outcomes. Furthermore, the findings and implications from perceptions of therapeutic alliance and group cohesiveness may also provide additional support for continuing to integrate quantitative and qualitative multi-time point assessment in future group interventions to understand its relationship to clients' outcomes.

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Appendix A: Modified Therapeutic Alliance Scales for Children, Child Form

(TASC-T; Shirk & Saiz, 1992)

Every few weeks, we ask all students and leaders who are taking part in the Well-Being Promotion Program to provide confidential information about various relationships within the group. The following questions ask about your personal experiences in the group. The opinions of different people involved in the group are all helpful. There are no right or wrong answers, just how you feel. Please read each statement below, and select one answer for each item.

The Group Leader(s)

Think about the adult(s) who leads your meeting. After reading the sentence, decide how much the sentence is like you, on a scale from **not at all** (1) to **very much** (4).

	Not at All	**A Little**	**A Lot**	**Very Much**
1. I like spending time with my group leader(s).	1	2	3	4
2. I feel like my group leader(s) is on my side and tries to help me.	1	2	3	4
3. I look forward to meeting with my group leader(s).	1	2	3	4
4. I like my group leader(s).	1	2	3	4
5. We talk about and do things that I find interesting.	1	2	3	4
6. I like the way the group leader(s) leads the group.	1	2	3	4
7. I like the activities we do in the meetings.	1	2	3	4

Original TASC-C

Instructions: We are going to read some sentences about meeting with your counselor. After reading the sentence, you decide how much the sentence is like you. Let's try this example:

I do activities with my counselor when we meet together.

Would you say that is:

1	**2**	**3**	**4**
Not Like You	A Little Like You	Mostly Like You	Very Much Like You

Here are the rest; remember there are no right or wrong answers, just how you feel

1. I like spending time with my counselor.	1	2	3	4
2. I find it hard to work with my counselor on solving problems in my life. *	1	2	3	4
3. I feel like my counselor is on my side and tries to help me.	1	2	3	4
4. I work with my counselor on solving my problems.	1	2	3	4
5. When I'm with my counselor, I want the meetings to end quickly. *	1	2	3	4
6. I look forward to meeting with my counselor.	1	2	3	4
7. I feel like my counselor spends too much time working on my problems. *	1	2	3	4
8. I'd rather do other things than meet with my counselor. *	1	2	3	4
9. I use my time with my counselor to make changes in my life.	1	2	3	4
10. I like my counselor. *	1	2	3	4
11. I would rather not work on my problems with my counselor.	1	2	3	4
12. I think my counselor and I work well together on dealing with my problems.	1	2	3	4

Note. The asterisks indicate items that negatively worded and need to be reverse coded.

Appendix B: Modified Therapeutic Alliance Scales for Children, Therapist Form

(TASC-T; Shirk & Saiz, 1992)

Every few weeks, we ask all students and leaders who are taking part in the Well-Being Promotion Program to provide confidential information about various relationships within the group. The following questions ask about your personal experiences in the group. The opinions of different people involved in the group are all helpful. There are no right or wrong answers, just how you feel. Please read each statement below, and select one answer for each item.

The Student in Your Group

Think about the student named at the top of the page. Please rate that student's current presentation in the group meetings. After reading each sentence below, rate how much the sentence is like that student, on a scale from **not at all** (1) to **very much** (4).

	Not at All	**A Little**	**A Lot**	**Very Much**
1. The student likes spending time with you, the group leader.	1	2	3	4
2. The student considers you to be an ally.	1	2	3	4
3. The student appears eager to have sessions end.	1	2	3	4
4. The student looks forward to counseling sessions.	1	2	3	4
5. The student is resistant to coming to counseling.	1	2	3	4
6. The student expresses positive emotions toward you, the group leader.	1	2	3	4

Original TASC-T

Instructions: Please rate your client's current presentation in treatment on the following scales. Circle the number corresponding to your rating for each item.

1	**2**	**3**	**4**
Not Like My Client	A Little Like My Client	Mostly Like My Client	Very Much Like My Client

1. The child likes spending time with you, the counselor.	1	2	3	4
2. The child finds it hard to work with you on solving problems in his/her life. *	1	2	3	4
3. The child considers you to be an ally.	1	2	3	4
4. The child works with you on solving his/her problems.	1	2	3	4
5. The child appears eager to have sessions end. *	1	2	3	4
6. The child looks forward to counseling sessions.	1	2	3	4
7. The child feels that you spend too much time focusing on his/her problems/issues. *	1	2	3	4
8. The child is resistant to coming to counseling. *	1	2	3	4
9. The child uses his/her time with you to make changes in his/her life.	1	2	3	4
10. The child expresses positive emotion toward you, the counselor.	1	2	3	4
11. The child would rather not work on problems/issues in counseling. *	1	2	3	4
12. The child is able to work well with you on dealing with his/her problems/issues.	1	2	3	4

Note. The asterisks indicate items that negatively worded and need to be reverse coded.

Appendix C: Modified Group Cohesiveness Scale

Other Group Members

Think about the students in your group. How strongly do you agree with each of the following statements concerning your experiences with the group so far? After reading the sentence, respond on a scale from **strongly disagree** (1) to **strongly agree** (5).

	Strongly Disagree	**Disagree**	**Neither Agree or Disagree**	**Agree**	**Strongly Agree**
1. I feel accepted by the group.	1	2	3	4	5
2. In my group, we trust each other.	1	2	3	4	5
3. The members like and care about each other.	1	2	3	4	5
4. I feel like group members participate.	1	2	3	4	5
5. The members share personal information or feelings.	1	2	3	4	5

Source Measure

Group Cohesiveness Scale (Wongpakaran et al., 2013).

Item no.	Item wording (*Czech in italics*)	Cohesiveness (C) or engagement (E) domain	Affective (A) or behavioral (B) domain
1	I feel accepted by the group. (*Cítím se být skupinou přijímaný/á.*)	C	A
2	In my group, we trust each other. (*Ve skupině si vzájemně důvěřujeme.*)	C	A
3	The members like and care about each other. (*Členové skupiny se mají rádi a vzájemně jim na sobě záleží.*)	E	A
4	The members try to understand why they do the things they do; they try to reason it out. (*Členové se snaží porozumět tomu, proč dělají věci, které dělají; snaží se na to přijít.*)	E	B
5	The members feel a sense of participation. (*Členové skupiny cítí, že se podílejí na chodu skupiny.*)	E	B
6	The members appear to do things the way they think will be acceptable to the group. (*Vypadá to, že členové dělají věci způsobem, o němž si myslí, že bude pro skupinu přijatelný.*)	E	B
7	The members reveal sensitive personal information or feelings. (*Členové si sdělují citlivé osobní informace a pocity.*)	E	B

Appendix D: Student Life Satisfaction Scale

Students' Life Satisfaction Scale (SLSS)

Student: _____ **Date:** _____

Teacher: _____

Instructions: We would like to know what thoughts about life you've had *during the past several weeks.* Think about how you spend each day and night, and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with life. In answering each statement, circle a number from **1** to **6**, where **1** indicates you **strongly *dis*agree** with the statement and **6** indicates you **strongly agree** with the statement.

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

Appendix E: Positive and Negative Affect Scale for Children

(PANAS-C; Laurent et al., 1999)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent you have felt this way during the past few weeks.

PANAS-C-10

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

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

*Permission to reprint not needed as measure is available for free in the public domain.

Appendix F: Procedures for Exit Interviews with Students

(keep to < 30 minutes)

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.*

Student Discussion, in individual interviews to be held ideally within a week of intervention conclusion

- *Let's 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 10 weeks of the Well-Being Promotion Program.*
  - [show visual reminder of 10 week schedule of topics and activities in the WBPP]

1. *What did you think about the program? (e.g., handouts, activities, topics covered, take home challenges)*
   - Follow-up: *What did you like the best about the program?*
   - Follow-up: *What did you like least about the program?*
   - PROBE: If not mentioned, ask: *Did your caregivers get involved in the program, for instance by attending the initial information session, engaging with any of the weekly handouts, or talking with you about what you did in group?*
     - If yes: *How did they get involved? Did you talk to them about the program or did they bring it up?*
     - If no: *What kept your caregivers from getting involved?*

2. *What was it like to participate in the program at your school (e.g., when and where groups met, length of meetings, pace, group size)?*
   - PROBE: If not already answered, ask: *What worked well? What didn't work well?*
   - PROBE: If not mentioned, ask:
     - *Do you have anything else to share on when or where groups met?*
     - *Length or pace of meetings?*
     - *Group size?*

3. *How would you explain this program to your friends?*
   - Follow-Up: *Would you recommend this program to your friends?*

The next questions ask about your feelings about the goals and outcomes of the program

[show handouts from Session 1 as visual reminder of determinants of happiness (pie chart)]

As a reminder, the goal of the WBPP is to teach positive activities to improve life satisfaction and overall well-being for middle school students.

[review handouts from Session 1 as visual reminder of intent of program to teach skills in purposeful behaviors that evoke happiness, through positive activities that focus on your past-present-future]

4. *Do you think that this goal is important for all middle school students? Why?*
    - Follow-up: *Is this goal important to you personally? Why?*

5. *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?)*
        - PROBE: If not discussed across multiple domains, ask if the program impacted the other domains not yet mentioned.

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

6. *Which activities that you learned do you think you will use in the future? Why?*
    - Follow-up*: What settings do you think you will be able to use what you've learned (family, friends, schools)?*
        - PROBE: If not discussed across multiple settings, ask if the program is applicable across the other settings not yet mentioned or why not those settings.

The next questions will focus on your perspectives on relationships in the group – with leaders and with other students.

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

8. *How would you describe your relationship with the other students in your group?*
    - Follow-up: *Did the relationships with other students in the group change from the time the group started until now?*
        1. PROBE: *What session(s) did you notice you felt this way?*
        2. PROBE: *What about this group and the people in it helped you feel closer to other students in the group?*
    - Follow-up: *How did your relationships with other students influence your overall experience in the group?*
    - Follow-up: *What was a memorable moment for you with other students in this group?*

9. *How do you think that you contributed to the experience of the group?*

The next questions will focus on how the program fits with your culture, identity, and unique life experiences. There are a variety of racial groups, like Black, Asian, White, Hispanic or Latino. In addition to race and ethnicity, there are other aspects of your identity that make you who you are. Next I will ask about how the program matched up with your culture, identity, and unique life experiences.

10. *How would you describe your culture or identity?*
    - *PROBE: What other aspects of your identity are important to you?*

11. *Describe whether or not the program activities easily related to your own life.* (if student appears confused, reword with: *in other words, did program activities feel relevant to you, clicked with you, matched up with what's important to you?*)
    - PROBE*: Which discussions, examples, or activities did you feel were relatable to you?*
    - PROBE: *Which didn't feel like they were relatable to you?*

12. *Describe whether or not your group leaders incorporated your culture, identity, and unique life experiences into the discussions and activities?*

    Reword if confused: *Did you feel like group leaders incorporated anything that you identify with or things that make you unique?*
    - Follow-up: How did they incorporate your identity OR How could leader incorporate your identity more?
    - Follow-up: *Anything to add about how group leaders attended to your...* [culture/identity/ unique life experiences... whatever wasn't covered already by student but mentioned by student as a salient part of their identity [question 10]

13. *How did group leaders show that they understood your unique life experiences? OR What made you feel like they did not understand your unique life experiences?*

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

15. *Describe whether or not you felt like you fit in with the other members of your group?*
    - PROBE*: Please describe what made you feel connected OR what made you feel different from the group?*
    - If they felt different from the group probe further*:*
        - PROBE*: Do you think this had anything to do with your culture or identity? If so, why?*

16. *What advice would you give group leaders to help all students feel accepted, safe, comfortable, and respected?*

For this final question we want you to reflect back on all of your experiences in the program.

17. *What changes would you make to the program?*
    - Follow-up: *What suggestions do you have to improve the program?*

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

Appendix G: CITI Program Research Certificate

Completion Date 01-Nov-2022
Expiration Date 31-Oct-2025
Record ID 52489413

This is to certify that:

Alexis Taylor

Not valid for renewal of certification through CME.

Has completed the following CITI Program course:

Human Research
(Curriculum Group)
Social / Behavioral Investigators and Key Personnel
(Course Learner Group)
2 - Refresher Course
(Stage)

Under requirements set by:

University of South Florida

Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w0db88354-e4d7-439a-8235-6e01ada1da03-52489413

Appendix H: Correlations of Therapeutic Alliance, Group Processes, and Intervention Outcomes

Table of Therapeutic Alliance, Group Processes, and Pre-Test and Post-Test Outcomes Correlations

	Student Report						Leader Report			Student-Rated Outcomes						
	ST1	STA2	STA3	GC1	GC2	GC3	LTA1	LTA2	LTA3	SLSSPre	SLSSPo	PANPPre	PANNPre	PANNPo	BPMPre	BPMPo
STA1	1.00															
STA2	.63**	1.00														
STA3	.62**	.65**	1.00													
GC1	.65**	.46**	.43**	1.00												
GC2	.41**	.70**	.39**	.50**	1.00											
GC3	.51**	.55**	.73**	.43**	.45**	1.00										
LTA1	.44**	.32**	.36**	.43**	.34**	.37**	1.00									
LTA2	.34**	.42**	.34**	.31**	.36**	.28**	.51**	1.00								
LTA3	.33**	.30**	.44**	.33**	.19	.39**	.61**	.79**	1.00							
SLSSPre	.08	.04	.09	.17*	.15	.22**	.01	-.09	-.10	1.00						
SLSSPo	.14	.13	.21**	.17*	.16*	.35**	.11	.03	-.06	.62**	1.00					
PANPPre	.23**	.15*	0.12	.20**	.12	.25**	.11	.07	.20	.51**	.34**	1.00				
PANPPo	.23**	.24**	.34**	.20**	.22**	.37**	.07	.09	.06	.38**	.62**	.52**				
PANNPre	.11	.02	.06	-.01	-.10	-.10	.08	.04	.12	-.44**	-.31**	-.14*	1.00			
PANNPo	-.07	-.12	-.10	-.14	-.15*	-.24**	-.09	-.01	.01	-.40**	-.54**	-.18*	.48**	1.00		
BPMPre	-.01	-.08	-.08	-.09	-.15*	-.22**	.05	.01	.07	-.41**	-.35**	-.23**	.51**	.44**	1.00	
BPMPo	-.05	-.12	-.09	-.13	-.11	-.18*	-.03	.01	-.03	-.39**	-.49**	-.19**	.29**	.54**	.60**	1.00

Note. * = $p < .05$. ** = $p < .01$. STA1 = Student therapeutic alliance at time point 1 (week 3). STA2 = Student therapeutic alliance at time point 2 (week 7). STA3 = Student therapeutic alliance at time point 3 (week 10). GC1 = Group cohesion at time point 1 (week 3). GC2 = Group cohesion at time point 2 (week 7). GC3 = Group cohesion at time point 3 (week 10). LTA1 = Leader therapeutic alliance at time point 1 (week 3). LTA2 = Leader therapeutic alliance at time point 2 (week 7). LTA3 = Leader therapeutic alliance at time point 3 (week 10). SLSSPre = Student Life Satisfaction Scale pre-intervention. SLSSPo = Student Life Satisfaction Scale post-intervention. PANPPre = Positive and Negative Affect Scale: Positive Affect Scale pre-intervention. PANPPo = Positive and Negative Affect Scale: Positive Affect Scale post-intervention. PANNPre = Positive and Negative Affect Scale: Negative Affect Scale pre-intervention. PANNPo = Positive and Negative Affect Scale: Negative Affect Scale post-intervention. BPMPre = Brief Problem-Monitor pre-intervention. BPMPo = Brief Problem-Monitor post-intervention.