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**Keywords:** high-achieving students, perfectionism, negative affectivity, social–emotional well-being, CBT-P

For decades, positive stereotyping surrounding the high-achieving student population has continued to promote the misconception that high-achieving students do not face problems or social–emotional challenges (Colangelo & Wood, 2015; Peterson, 2009). Yet, a growing body of literature has led researchers to conclude that high-achieving students are not immune to mental health concerns (Kennedy & Farley, 2018; Suldo et al., 2018). In fact, high-achieving students are more likely to struggle with perfectionism, internalize expectations and problems, and maintain a façade to avoid expressing their needs (Peterson, 2009). Left undetected, mental health problems may impact academic and social–emotional success (Luthar et al., 2020).

With mental health problems increasing among adolescents, there is a growing interest in expanding strategies and early intervention programs to improve mental health outcomes (Divin et al., 2018). The school system plays an essential role in addressing adolescents’ social–emotional and academic needs, with many schools adopting multi-tiered systems of support (MTSS) to implement and evaluate schoolwide interventions (O’Brennan et al., 2019). Prevention and intervention programs being utilized within MTSS need to be tailored to meet the student populations’ needs (Dai et al., 2015). Tailoring programs is essential when considering interventions to support high-achieving students, as they typically perform well enough academically in accelerated courses to maintain enrollment, but their emotional health problems may go undetected by counselors and educators (Suldo et al., 2018). Additionally, many of the programs available to support high-achieving students’ needs are the same as those offered to general education students (O’Brennan et al., 2019), and there is little empirical evidence linking these programs or practices to positive outcomes for this population (Colangelo & Wood, 2015).

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Arielle Bendit, Melissa Mariani, Paul Peluso, Elisa Calabrese

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Early college high schools are an innovative way for high school students to earn both high school degrees and college degrees simultaneously. These schools are on the rise (Song et al., 2021) and meet many high-achieving students’ academic and social–emotional needs (Dai et al., 2015). However, the literature on early college high schools also highlights themes of increased academic pressure, stress, adjustment concerns, and anxiety (Dai et al., 2015; Peters & Mann, 2009). Unfortunately, the needs of high-achieving students in accelerated curricula are often not prioritized in research and there is a lack of attention in counselor education programs given to the social–emotional development of the high-achieving population (O’Brennan et al., 2019; Suldo et al., 2018). Therefore, further research is needed to demonstrate effective interventions targeted to meet high-achieving students’ unique emotional health needs.

High-Achieving Students and Mental Health

The term high-achieving refers to students who “exhibit outstanding intellectual ability, or promise, and are capable of extraordinary performance and accomplishment” (McClain & Pfeiffer, 2012, p. 59). Unfortunately, the high-achieving population has been surrounded by positive stereotyping for years (Peterson & Lorimer, 2011), leaving them vulnerable to social isolation, stigmatization, and psychological distress. Researchers studying high-achieving students specifically have identified many concerns, including anxiety, perfectionism, suicidal ideation, bullying, academic underachievement, poor coping skills, and trauma (Peterson, 2009; Tang & Fisher, 2012). There are a number of situations, compounded by the additional factor of high ability, that put high-achieving students at a more unique risk for developing mental health problems (Colangelo & Wood, 2015; Cross & Cross, 2015). For example, high-achieving students may face challenges related to asynchronous development, which is when cognitive development outpaces the physical and social–emotional domains (Papadopolous, 2020). This disparity may cause issues in how high-achieving students experience and relate to the world (Colangelo & Wood, 2015), which can lead to social anxiety and peer rejection (Cross & Cross, 2015). Further, increased levels of stress stemming from high-ability characteristics such as over-commitment, fear of making mistakes, and high expectations are common in this population (Cross & Cross, 2015).

High-Achieving Students and Perfectionism

Perfectionism is a personality disposition characterized by the act of striving for precision and having exceedingly high standards of performance accompanied by relentless self-criticism while in pursuit of those standards (Frost et al., 1990; Tang & Fisher, 2012). Several researchers have proposed that there are two higher-order dimensions of perfectionism: perfectionistic strivings and perfectionistic concerns (Leone & Wade, 2018; Strickler et al., 2019). Perfectionistic strivings are high personal standards and the belief that being perfect is important to oneself (Hewitt & Flett, 1991), whereas perfectionistic concerns include the fear of making mistakes, expressing self-doubt about one’s abilities, and perceiving that others expect perfection of oneself (Frost et al., 1990; Mofield & Parker Peters, 2015).

Perfectionism is one of the most frequently cited traits in high-achieving individuals (G. A. Horowitz et al., 2012; Papadopoulos, 2020) and one of the most common concerns expressed by their parents (Stricker et al., 2019). Damian and colleagues’ (2017) study was one of the first to provide evidence that high academic ability is a common factor in developing perfectionism. For many high-achieving students, pursuing perfection is a way to preserve positive self-worth, reduce shame, or gain a sense of control (Flett et al., 2002). Further research exploring perfectionism dimensions in high-achieving students found that perfectionistic strivings are associated with more positive outcomes such as happiness, increased self-esteem, life satisfaction (Chan, 2011), and greater academic self-concept (Dixon et al., 2004). In contrast, perfectionistic concerns are associated with more negative outcomes such as poor coping skills, psychological health concerns, and underachievement (Dixon et al., 2004; Stricker et al., 2019).
Universal Complete Mental Health Screening

Comprehensive school counseling programs are intended to integrate data-driven MTSS to address academic and behavioral concerns (Belser et al., 2016). Within MTSS, all students receive universal core instruction (Tier 1). These universal programs provide approximately 80% of students with what they need to be academically, socially, and emotionally successful. Common Tier 1 supports and programming include reward systems, explicit social–emotional learning lessons, daily mindfulness activities, and modeled schoolwide expectations. With that, approximately 20% of students who receive core instruction may need additional Tier 2 (small group or mentoring) or Tier 3 (individual counseling or community referral) supports to be successful (O’Brennan et al., 2016).

MTSS efforts are critical in the early identification and prevention of long-term mental and behavioral health problems (von der Embse, 2018). As such, universal screening data is used to inform which students are in need of additional services beyond Tier 1 (Moore et al., 2019). Additionally, universal screening data helps to align counseling services and supports to the appropriate intensity needed at each tier to meet students’ social–emotional needs (Belser et al., 2016). With advancements from the positive psychology movement, universal mental health screeners have adopted a more strengths-based approach, termed complete mental health screening, to include both psychological distress and strength indicators (Furlong et al., 2018; Moore et al., 2019).

Using this approach, students are classified into one of four different mental health groups, according to their severity of psychological distress and their positive strength indicators (Suldo & Shaffer, 2008). The complete mental health group (high strengths, low distress) is typically the largest mental health group to emerge across samples (Suldo et al., 2016) and refers to individuals with optimal wellness (Suldo & Shaffer, 2008). Students with complete mental health are often successful in terms of academic skills and emotional engagement and are likely to only need Tier 1 support (Moore et al., 2019). The symptomatic group has elevated distress and strengths (Moore et al., 2019). Although research on this group is inconsistent, it suggests that the presence of positive strength indicators may act as a protective factor despite the presence of psychological distress (Suldo et al., 2016). The troubled group experiences high distress and low levels of strengths and often has the worst outcomes of the four groups (Moore et al., 2019). Finally, the vulnerable group is those who report low levels of distress and low levels of strengths (Moore et al., 2019). Students in this group are typically excluded from intervention services using traditional screening methods because of their lack of psychopathology (Suldo & Shaffer, 2008). Therefore, incorporating both psychopathology and strengths-based measures provides a more comprehensive conceptualization of students’ functioning (Furlong et al., 2018) and is more accurate in identifying students at each level of MTSS (Suldo & Shaffer, 2008).

Despite favorable findings, complete mental health screening is not widely used in school-based assessment practices (Suldo & Shaffer, 2008); in fact, most schools do not use any sort of universal screening tool (Wood & McDaniel, 2009). In contrast to screenings, many schools rely on office discipline referrals to determine whether at-risk students are in need of supplemental support services (Bruhn et al., 2014). However, discipline referrals only identify students who “act out” or struggle academically, and they do not capture students with internalized problems (Bruhn et al., 2014). Therefore, given the prevalence of internalizing concerns such as anxiety and depression among high-achieving students (Sanzone & Perez, 2019), coupled with their reluctance to seek help (Peterson, 2009), early college high school programs should use complete mental health screenings to identify and support at-risk, high-achieving students.
The Cognitive Behavior Therapy for Perfectionism Small Group Intervention

Perfectionism has emerged as a critical vulnerability factor for a variety of maladjustments and mental health disorders (Flett & Hewitt, 2014; Speirs Neumeister, 2018). Flett and Hewitt (2014) found that interventions with an explicit focus on decreasing perfectionism were more effective in reducing negative aspects of perfectionism than general prevention programs. Further, Feiss and colleagues (2019) conducted a meta-analysis to evaluate the efficacy of school-based programming aimed at reducing internalizing mental health problems in adolescents and found that targeted programming was more effective than universal programming. Overall, interventions for Tier 2 and Tier 3 can provide additional support for at-risk students, who are more likely to access mental health treatment when referred to school-based services (Biocati et al., 2017). When delivered in a group format, identified students are likely to find peers they can relate to and connect with (J. L. Horowitz et al., 2007).

Shafran and colleagues (2002) proposed a cognitive behavioral conceptualization of perfectionism that helps to guide counselors in assessment and treatment. Specific structured protocols were outlined by the authors as an extension of the protocols developed in the treatment studies by Steele et al. (2013) and Handley et al. (2015). Despite having structured sample protocols, all cognitive behavior therapy for perfectionism (CBT-P) treatment strategies should be used flexibly and be focused on individualized formulation (Egan & Shafran, 2018). A series of clinical trials in different settings and formats evaluated the treatment efficacy of CBT-P (Egan & Shafran, 2018; Egan et al., 2014; Handley et al., 2015). Handley and colleagues (2015) conducted the first randomized control trial to determine the efficacy of CBT-P in a group format. Participants had a range of disorders, including anxiety, depression, obsessive-compulsive disorder, and eating concerns. Those in the treatment group, who received the CBT-P group protocol, demonstrated significant large effect size (Cohen’s $d = 1.2$) reductions in disorders compared to those in the control group. However, only a few studies have examined the efficacy of CBT-P in adolescents, and no studies have examined CBT-P on high-achieving students within a school-based setting.

Purpose of the Present Study

The primary purpose of this quasi-experimental, pre-post design study was to determine the effectiveness of a modified version of the CBT-P small group intervention on perfectionism, negative affectivity, and social–emotional well-being in grade 9 to 12 early college high school students. The following research questions were addressed:

RQ1. Is there a decrease in the levels of perfectionism in grade 9 to 12 early college high school students after participating in the modified CBT-P group counseling intervention?

RQ2. Is there a decrease in negative affectivity (anxiety, depression, stress) in grade 9 to 12 early college high school students after participating in the modified CBT-P group counseling intervention?

RQ3. Is there an increase in the social–emotional well-being of grade 9 to 12 early college high school students after participating in the modified CBT-P group counseling intervention?

Method

Participants and Selection

The study was approved by both the school district and the researchers’ university IRB. The participants represented in this study were grade 9 to 12 high school students enrolled in one diverse
early college high school program in the Southeastern United States. This school is the only public, accelerated pre-collegiate program with all of its students working toward a high school diploma and a cost-free bachelor’s degree simultaneously. By grade 10, students take a minimum of 12 college course credits with the general undergraduate population at a large Southeastern public university. Admission into the program is highly selective, with an 18% acceptance rate. As a result, students enrolled in the program are uniquely advanced, with exceedingly high academic achievement and initiative. As of August 2021, the student body (668 students) demographic breakdown included 35% White non-Hispanic, 27% Hispanic, 17% Asian or Pacific Islander, 13% Black non-Hispanic, and 7% Multiracial students. Across the student body, 58% identified as female and 42% identified as male.

Participants were selected from the sample population through the use of universal complete mental health screeners. Students with parental consent were instructed, as a part of their school’s comprehensive counseling program, to complete the mental health screeners in the third week of the school semester. One group of students participated in the fall 2021 semester and another group participated in the spring 2022 semester. The administered instruments were completed via computer-based administration and took approximately 10 to 15 minutes to complete. The school counseling team then sorted the students into four distinct mental health groups based on negative affectivity scores, assessed by the Depression Anxiety Stress Scale (DASS-21), and social–emotional well-being scores, assessed by the Social Emotional Health Survey-Secondary (SEHS-S). T-scores determined the criteria for high versus low scores. Table 1 includes the breakdown of the results.

**Table 1**

.Groups Yielded From a Dual-Factor Model of Mental Health

<table>
<thead>
<tr>
<th>Semester</th>
<th>Negative Affectivity</th>
<th>Low SEWB</th>
<th>Average to High SEWB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2021</td>
<td>Low</td>
<td>II. Vulnerable 91</td>
<td>I. Complete Mental Health 336</td>
</tr>
<tr>
<td>Spring 2022</td>
<td></td>
<td>51</td>
<td>197</td>
</tr>
<tr>
<td>Fall 2021</td>
<td>High</td>
<td>IV. Troubled 14</td>
<td>III. Symptomatic but Content 92</td>
</tr>
<tr>
<td>Spring 2022</td>
<td></td>
<td>13</td>
<td>48</td>
</tr>
</tbody>
</table>

*Note. SEWB = social–emotional well-being.*

In the fall 2021 semester, 192 (36%) out of 533 students were categorized into the high-needs groups (symptomatic, vulnerable, troubled) and identified as needing supplemental intervention. In the spring 2022 semester, 287 students completed the screener, and 90 students (31%) were identified as needing supplemental intervention. After reviewing the results, the researchers prioritized students in the high-need groups with the first opportunity to participate in the study. Students identified in the complete mental health group and considered to have optimal wellness were not prioritized for the study; however, they were still eligible to participate. The CBT-P program and study procedures were described in the informed consent letter to parents and students. Refer to Table 2 for the demographic breakdown for the participants (N = 46) in both the treatment (n = 23) and comparison (n = 23) groups.
Table 2

Treatment and Comparison Group Percentages for Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Treatment  (n = 23)</th>
<th>Comparison (n = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>28%</td>
<td>17%</td>
</tr>
<tr>
<td>Black</td>
<td>4%</td>
<td>17%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>28%</td>
<td>9%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Female</td>
<td>87%</td>
<td>87%</td>
</tr>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 9</td>
<td>35%</td>
<td>22%</td>
</tr>
<tr>
<td>Grade 10</td>
<td>43%</td>
<td>17%</td>
</tr>
<tr>
<td>Grade 11</td>
<td>17%</td>
<td>35%</td>
</tr>
<tr>
<td>Grade 12</td>
<td>4%</td>
<td>26%</td>
</tr>
<tr>
<td>Universal Screener Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete</td>
<td>52%</td>
<td>39%</td>
</tr>
<tr>
<td>Symptomatic</td>
<td>9%</td>
<td>30%</td>
</tr>
<tr>
<td>Vulnerable</td>
<td>35%</td>
<td>22%</td>
</tr>
<tr>
<td>Troubled</td>
<td>4%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Note. n = number of students.

Instrumentation

Depression Anxiety Stress Scale-21

The Depression Anxiety Stress Scale-21 (DASS-21) is a self-report measure designed to assess internalizing symptoms (Lovibond & Lovibond, 1995). Respondents use a 4-point Likert scale ranging from 0 (did not apply to me at all) to 3 (applied to me most of the time) to rate the extent to which each item applied to them over the past week. The 21-item measure consists of three 7-item subscales (Depression, Anxiety, Stress). A total score is created by adding each of the items, with higher scores indicating higher levels of severity (Lovibond & Lovibond, 1995). Among adolescent samples, each subscale had good internal consistency scores (Depression, \( \alpha = .97 \) to .88; Anxiety, \( \alpha = .92 \) to .79; Stress, \( \alpha = .95 \) to .81; total \( \alpha = .93 \)), and strong convergent validity (from .68 to .79; Antony et al., 1998). The DASS-21 demonstrated strong internal reliability (\( \alpha = .93 \)) for this study. For the purpose of this study, the DASS-21 was utilized to assess negative affectivity.
**Social Emotional Health Survey-Secondary**

The Social Emotional Health Survey-Secondary (SEHS-S) is a 36-item self-report survey designed to assess positive psychological dispositions among adolescents ages 13 to 18 (Furlong et al., 2013). The measure has 12 subscales of positive social–emotional health constructs that create four general traits: (a) emotional competence, (b) engaged living, (c) belief in self, and (d) belief in others. These four traits are combined to make up an overall strength score. Participants rate themselves using a 4-point scale (1 = not at all true, 2 = a little true, 3 = pretty much true, 4 = very much true). Participants’ social–emotional health scores are grouped along a continuum of low, low average, average, high average, and high scores based on a validated national sample of students (Furlong et al., 2018). Initial validation reported high internal reliability scores, including emotional competence (α = .78), engaged living (α = .87), belief in self (α = .76), and belief in others (α = .81; Furlong et al., 2013). Calculated reliability for this study was high (α = .94). The measure also demonstrated strong psychometric properties across validation studies with diverse samples (Lee et al., 2016; You et al., 2014).

**Child Adolescent Perfectionism Scale**

The Child Adolescent Perfectionism Scale (CAPS) is one of the most widely used multidimensional measures of perfectionism in children and adolescents (Flett et al., 2016). The CAPS is a 22-item measure designed to assess two subscales: Socially Prescribed Perfectionism (i.e., the perception or belief that others demand perfection from the self) and Self-Oriented Perfectionism (i.e., exceedingly high personal standards). The 22-item measure uses a 5-point scale (1 = false – not at all true of me, and 5 = very true of me), with higher scores indicating greater levels of perfectionism. The CAPS demonstrated good internal reliability, reporting Cronbach’s alpha levels of .86 and .85 for Socially Prescribed Perfectionism and Self-Oriented Perfectionism, respectively. Calculated reliability for this study was .80 for the Socially Prescribed subscale and .76 for the Self-Oriented subscale.

**Procedures**

The study utilized a quasi-experimental, non-equivalent groups research design with pretest and posttest. Participants were identified from the sample population using universal screening measures and then assigned to either the treatment group or comparison group using matching procedures based on demographic data and consideration of student availability and intervention group times. Matching aimed to reduce bias by selecting subsets of the treatment and comparison groups with similar observed covariate distributions (Stuart & Rubin, 2007). Participants in the treatment group received the modified CBT-P small group intervention, while participants in the comparison group did not receive the CBT-P small group intervention. Participants in the comparison group were eligible to receive the CBT-P small group intervention the following semester, once the study was completed.

Participating master’s-level counselors-in-training (CITs), currently fulfilling their internship requirements through the university’s counseling and psychological services, received the CBT-P guide and a 4-hour training on the CBT-P protocols and conceptual framework (Egan et al., 2014). CITs were eligible to participate in the study if they met the following criteria: (a) they had at least 1 year of previous counseling experience; (b) they had weekly individual supervision; (c) they were in good academic standing with their training program; and (d) they attended all CBT-P training. To ensure treatment fidelity, the CITs received 1-hour weekly group supervision for consultation and support and completed a weekly electronic report. The report collected information on the date of each weekly session, participant attendance, start and end times, unanticipated problems or issues, perceived effectiveness, and a completed checklist of session content.
After receiving the training and program materials, CITs co-facilitated weekly CBT-P small group counseling sessions with the treatment groups. Session protocols developed and evaluated by Handley et al. (2015) and Steele et al. (2013) suggested eight 2-hour group sessions; however, to increase feasibility and fidelity, session protocols were pared down to eight 1-hour group sessions to meet the students’ scheduling needs within their school setting. Arielle Bendit, the first author, modified the treatment in accordance with the flexible nature of the CBT-P guidelines (Egan et al., 2014). Table 3 outlines the session modules and components.

Table 3

Sessions and Session Components of CBT-P Group Treatment Protocol

<table>
<thead>
<tr>
<th>Session Component</th>
<th>Session Components</th>
</tr>
</thead>
</table>
| 1. What Is Perfectionism? | • What are the core features of perfectionism?  
| | • Why does perfectionism persist?  
| | • Pros and cons of perfectionism |
| 2. Self-Monitoring | • Domains of perfectionism  
| | • Tips for effective self-monitoring |
| 3. Surveys and Behavioral Experiments | • Develop more functional belief system  
| | • Introduce behavioral experiments |
| 4. New Ways of Thinking | • All-or-nothing thinking  
| | • Moving toward flexibility |
| 5. Broadening Attention, Cognitive Distortions, Diaries | • Challenge distortions  
| | • Increased awareness through use of thought diary |
| 6. Procrastination and Problem Solving | • Ways to challenge and overcome procrastination  
| | • Time management and pleasant activities |
| 7. Values and Reducing Self-Criticism | • How to respond to self-criticism  
| | • Increasing self-compassion |
| 8. Expanding Self–Evaluation, Goals, and Relapse Prevention | • Encourage realistic and flexible goals  
| | • How to deal with setbacks |

Note. Based on protocol developed and evaluated by Steele et al. (2013) and Handley et al. (2015).

Round 1

In August 2021, five CITs completed the CBT-P training. Participating students then completed the CAPS pretest. Bendit then assigned participants (n = 27) to their condition groups, with 14 participants assigned to the treatment group and 13 participants assigned to the comparison group. The CBT-P treatment groups started in October 2021 and ended in December 2021, with all participants again completing the CAPS posttest. Final posttest data were collected in January 2022 when participants completed their second complete universal mental health screener (DASS-21 and SEHS-S).
Round 2

Participants \((n = 19)\) completed the CAPS pretest in January 2022 and then were assigned to the treatment group \((n = 9)\) or comparison group \((n = 10)\). The treatment groups started in February 2022 and met weekly for 8 weeks. The last group session occurred in April 2022, and all participants completed the CAPS posttest. Participants completed the final posttest data (DASS-21 and SEHS-S) in May 2022 as a part of the school’s counseling program.

Preliminary Analysis

Researchers use an analysis of covariance (ANCOVA) when they want to compare two or more groups on one dependent variable at the same time (Heppner & Heppner, 2004). To determine if it is appropriate to use a one-way ANCOVA, the data needs to meet the necessary statistical assumptions. First, Bendit and Paul Peluso determined that the dependent and covariate variables were all measured on a continuous scale and the independent variable consisted of two or more independent groups. Next, Bendit and Peluso determined that independence of observation was met, with the treatment and comparison groups having different participants in each group with no participant being in more than one group. There were two outliers detected (DASS-21 pre and CAPS pre), but we opted to keep these values included. Next, we used Shapiro-Wilk tests to determine that the data met normal distribution. Homogeneity of variances was assessed by a visual inspection of a scatterplot, and there was a linear relationship between pre and post for each intervention type.

Data Analysis

To address the research questions in this study, an alpha level of .05 was set and a series of one-way ANCOVA was used to analyze the effect of the independent variable (CBT-P group; Shafran et al., 2002) on the dependent variables (perfectionism, negative affectivity, social–emotional well-being) between the treatment and comparison groups. Results were reported using the \(F\) statistic and associated \(p\)-value (alpha .05), indicating statistical significance (Heppner & Heppner, 2004). Effect size was also calculated using the partial eta-square statistic \(\eta^2\), with benchmarks set forth to determine small (.01), medium (.06), and large (.14) effect size strength (Maher et al., 2013). We did not include participants’ data in the analysis if they did not attend a minimum of four group sessions or if survey data was missing at posttest.

Results

The treatment and comparison groups’ means, standard deviations, and change scores for the study variables at pretest and posttest are provided in Table 4. To control for differences prior to treatment, the participants’ pretest scores were used as covariates and group as a factor. The first research question explored the impact of the CBT-P group intervention on levels of perfectionism. Results from the one-way ANCOVA revealed a statistically significant difference \([F(1, 38) = 4.94, \ p = .03; \ \eta^2 = .11]\) in Self-Oriented Perfectionism between treatment and comparison groups and no statistically significant difference \([F(1, 38) = .04, \ p = .83; \ \eta^2 = .00]\) in Socially Prescribed Perfectionism between treatment and comparison groups. This significant medium effect finding revealed that using the modified CBT-P small group intervention (Shafran et al., 2002) can positively influence levels of self-oriented perfectionism among early college high school students. Participants in the treatment group \((M = 39.15, \ SD = 5.78)\) reported lower scores for Self-Oriented Perfectionism at posttest as opposed to participants in the comparison group \((M = 43.20, \ SD = 6.50)\), a mean difference of −4.05. The second research question assessed if the students who received the CBT-P group intervention would show a decrease in negative affectivity compared to students in the comparison group who did not receive the intervention. Results from the ANCOVA revealed a statistically significant difference \([F(1, 37) = 10.35, \ p = .003; \ \eta^2 = .22, \ a \ large \ effect]\) between treatment and
comparison groups. Notably, the post hoc test revealed that total negative affectivity was statistically significantly higher in the comparison group \( (M = 65.90, SD = 34.11) \) compared to the treatment group \( (M = 33.80, SD = 21.38) \), a mean difference of 32.10. The final research question tested the hypothesis that students in the treatment group who received the CBT-P group intervention would show an increase in social–emotional well-being compared to students in the comparison group. ANCOVA results revealed no statistically significant differences \[ F(1, 37) = .007, p = .94; \eta^2_p \text{ of .00, no effect} \] between the treatment and comparison groups scores from pretest to posttest.

Table 4

<table>
<thead>
<tr>
<th>Measure</th>
<th>Condition (n)</th>
<th>Pretest M(SD)</th>
<th>Posttest M(SD)</th>
<th>M +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>DASS-21</td>
<td>Treatment (20)</td>
<td>42.80 (25.50)</td>
<td>33.80 (21.38)</td>
<td>-9.00</td>
</tr>
<tr>
<td></td>
<td>Comparison (20)</td>
<td>55.40 (30.12)</td>
<td>65.90 (34.11)</td>
<td>+10.50</td>
</tr>
<tr>
<td>SEHS-S</td>
<td>Treatment (20)</td>
<td>102.80 (17.34)</td>
<td>105.80 (16.19)</td>
<td>+3.00</td>
</tr>
<tr>
<td></td>
<td>Comparison (20)</td>
<td>103.70 (15.45)</td>
<td>106.65 (13.76)</td>
<td>+2.95</td>
</tr>
<tr>
<td>CAPS</td>
<td>Treatment (20)</td>
<td>47.45 (7.88)</td>
<td>39.15 (5.78)</td>
<td>-8.30</td>
</tr>
<tr>
<td></td>
<td>Comparison (21)</td>
<td>47.30 (7.83)</td>
<td>43.20 (6.50)</td>
<td>-4.10</td>
</tr>
<tr>
<td>SOP</td>
<td>Treatment (20)</td>
<td>31.75 (9.27)</td>
<td>29.40 (5.78)</td>
<td>-2.35</td>
</tr>
<tr>
<td></td>
<td>Comparison (21)</td>
<td>31.25 (8.47)</td>
<td>29.85 (7.93)</td>
<td>-1.40</td>
</tr>
</tbody>
</table>

Note. DASS-21 = Depression Anxiety Stress Scale; SEHS-S = Social Emotional Health Survey Secondary; CAPS = Child Adolescent Perfectionism Scale; SOP = Self-Oriented Perfectionism Subscale; SPP = Socially Prescribed Perfectionism Subscale; n = number, M = mean; SD = standard deviation; +/- = mean change score.

Discussion

Findings from this study were consistent with previous studies that demonstrated the successful impact of CBT-P group therapy on perfectionism, anxiety, stress, and depression (Handley et al., 2015; Steele et al., 2013). This study also addressed Egan and colleagues' (2014) recommendation to investigate the effects of CBT-P within other mental health settings by exploring the effects within an early
college high school. With high academic achievement being a common factor in the development of perfectionism (Damian et al., 2017), reducing self-oriented perfectionism is crucial within this population, as students with higher levels of self-oriented perfectionism are less likely to seek formal support and more likely to suffer in silence (Zeifman et al., 2015).

Despite findings that did not support statistically significant differences in socially prescribed perfectionism between treatment and comparison groups, there was a decrease in socially oriented perfectionism for both groups. Additionally, both groups noted lower levels of socially prescribed perfectionism compared to self-oriented perfectionism. Socially prescribed perfectionism is most consistently associated with mental health stigma and concerns around attending counseling (Dang et al., 2020). Therefore, the student’s right to ultimately determine their initial and ongoing participation in the study may indicate they were more comfortable and not as concerned about participating in group counseling services even before the intervention started. Therefore, participants’ lower levels of socially prescribed perfectionism may have skewed the lack of statistically significant differences found between groups and minimal changes between pretest and posttest scores.

Collectively, these findings support the argument that perfectionism is a transdiagnostic process. A transdiagnostic process is “an aspect of cognition or behavior that may contribute to the maintenance of a psychological disorder” (Egan et al., 2014, p. 40). Studies have recognized levels of perfectionism are elevated across disorders (Egan et al., 2014; Handley et al., 2014) and as a maintaining factor across disorders (Egan et al., 2011). Within this study, the finding of a significant large effect size in terms of reducing negative affectivity is fascinating, as the CBT-P intervention does not target these symptoms directly. Overall, this study supports Egan and colleagues’ (2011) claim that CBT-P significantly decreases a wide range of psychological symptoms through its focus on perfectionism (Egan et al., 2011). However, it is important to note that other therapeutic factors of the modified CBT-P small group intervention may have contributed to an overall decrease in negative affectivity. Finally, this study also supports Feiss and colleagues’ (2019) assertion that targeted programming is more effective than universal programming in addressing internalizing symptoms such as anxiety, depression, and stress.

Implications for Practice and Future Research
The findings of this study extend what is known about the underlying factors that impact high-achieving students’ overall well-being and unique needs. The study results offer support for CBT-P as an effective intervention for decreasing negative affectivity and aspects of perfectionism in high-achieving students. However, further research is needed to identify other beneficial, targeted interventions to help support this population (Colangelo & Wood, 2015). Additionally, counselor education programs need more education and training when working with the high-achieving population in accelerated programs (O’Brennan et al., 2019), as adolescents present with the highest prevalence of mental health problems (Corry & Leavey, 2017).

School counselors and other school-based professional counselors are well-positioned to address these problems through intervention. Unfortunately, increased national attention on student academic achievement has challenged school counselors to provide interventions that promote student academic success (Collins, 2014), and the duality of school counselors’ roles in addressing both mental health and academic needs serves as a barrier to providing students with adequate mental health support (Lambie et al., 2019). Yet, school counselors must first address student mental health in order to improve student achievement (Collins, 2014), as students’ unmet mental health needs pose barriers to learning (American School Counselor Association, 2020). Findings from this study could help school counselors
recognize the value of collaborating with training programs and utilizing CITs to meet students’ mental health needs, particularly given high school counselor-to-student ratios. Utilizing additional personnel, such as CITs, can bolster the number of services offered and students served.

Kennedy and Farley (2018) have noted the importance of tailoring treatment approaches to best meet high-achieving students’ needs by acknowledging a students’ giftedness as a part of their identity. Further, it is important to consider how high-achieving students’ abilities may interact with other high achievement factors, such as perfection. The literature on perfectionism demonstrates a strong association with dichotomous thinking patterns, underachievement, and anxiety (Kennedy & Farley, 2018). The modified CBT-P small group intervention (Shafran et al, 2002) specifically addressed these associations and underlying concerns through various treatment strategies. This study verified the importance of understanding contextual factors (such as accelerated curricula) and underlying concerns (such as perfectionism) in high-achieving students when formulating theories and designing and implementing targeted therapeutic support. Therefore, future studies should consider and assess other factors of high achievement when delivering tailored interventions to high-achieving students in early college programs.

Future research should also explore the impacts of universal classroom-based CBT-P interventions, both as stand-alone programs and in conjunction with small-group counseling interventions. A classroom approach has the potential to reach even more high-achieving students, specifically those who are more prone not to seek help or self-disclose mental health concerns (Flett & Hewitt, 2014; Leone & Wade, 2018). Further, research should continue to explore the impact of delivery modality (i.e., in-person or online) of the modified CBT-P small group intervention (Shafran et al., 2002) on early college high school students. Despite the efficacy of online therapy being well established in the treatment of mental health concerns, some studies suggest that students would prefer face-to-face support over online therapy (Horgan & Sweeney, 2010; Sweeney et al., 2019). Although some students prefer in-person groups, because of COVID-19 and IRB barriers, attending an in-person group was not an option for this study.

Limitations

As with any study, this one had limitations. For one, the generalizability of the findings are limited, as the study only included one early college high school in the Southeastern United States. Second, a non-equivalent comparison group design was used because randomization was not possible within the school setting. So future studies might consider a true random assignment of students to the group conditions to control for confounding variables and increase internal validity. Third, the study was also limited to half a school year for both rounds and did not examine the impact of the modified CBT-P intervention over time. Future studies should explore the impact of CBT-P over time with a larger sample size.

Another limitation of the study was the small sample size \( N = 41 \). The original sample size in the study \( N = 46 \) was above the adequate sample size \( N = 42 \) according to the a priori G-power analysis calculation. However, barriers with recruitment and retention existed, resulting in a final total sample size of \( N = 41 \). Missing data can make it more challenging to carry out a true intention-to-treat analysis. Attrition most notably occurred within the treatment group after attending at least one CBT-P small group. Pfeiffer (2021) identified two necessary components that are critical for therapy success for the high achieving: (a) establishing and maintaining a strong therapeutic relationship; and (b) a deep understanding of working with gifted children. Certified school counselors may have more knowledge and training and be better equipped than CITs to develop strong therapeutic relationships within this student population. Therefore, using certified school counselors who are already embedded within the school and have the necessary training could improve participant recruitment and retention.
Also, Bendit was a part of the comprehensive school counseling team and therefore had access to student information, which may have contributed to potential selection bias. However, to adjust for selection bias, Bendit used rigorous criteria to avoid confounding results and matched participants in the study groups as closely as possible. A final limitation surrounded the measures used. The instruments were student self-report and, therefore, are subject to self-report bias. Self-report bias is particularly problematic with high-achieving students, who are more likely to minimize problems (Luthar et al., 2020) and be reluctant to ask for help (Peterson, 2009). Further, the practice effect of taking a pretest may influence the outcome of posttests, which could influence participants to be more responsive to the intervention. Additional research should address other data sources in addition to self-report measures, such as attendance, grades, and parent report. Despite these limitations, the data provides promising preliminary evidence for the effectiveness of the modified CBT-P group intervention for targeting students' levels of self-oriented perfectionism and negative affectivity.

Conclusion

Results of this study supported the prediction that students who received the modified CBT-P small group intervention (Shafran et al., 2002) would show significant differences in negative affectivity and self-oriented perfectionism compared to their counterparts who did not receive the intervention. Overall, this study can help to inform comprehensive school counseling programs and demonstrate the importance of implementing more targeted identification interventions for high-achieving student populations that meet their unique needs.

Conflict of Interest and Funding Disclosure

The authors reported no conflict of interest or funding contributions for the development of this manuscript.

References


