# Building Resilience: Piloting a Mindful Self-Compassion and Stress-Management Program for Youth

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Abstract

Anxiety disorders, representing the most prevalent classification of mental health disorders across the world, pose a significant public health problem associated with burdensome costs (Baxter, Vos, Scott, Ferrari, & Whiteford, 2014; Greenberg et al., 1999). Although understanding about the etiology and effective treatments for anxiety disorders has grown, general preventative measures are not well-understood or implemented but are needed to reduce the disability and morbidity associated with this debilitating class of disorders. Research has identified perfectionism and self-criticism as risk factors for the development of anxiety disorders and mindful self-compassion (MSC) as a promising intervention to alleviate anxiety disorders (Dunkley, Blankstein, & Berg, 2012; Germer & Neff, 2013). Laying the foundation for youth to mitigate risks of anxiety disorders should be a top priority for the United States (U.S.) healthcare system. A focus on primary prevention is largely missing from healthcare, and the present paper represents an attempt to bridge this gap through a pilot project. The purpose of this project was to evaluate the efficacy, suitability, sustainability, and potential barriers to implementing a MSC and stress management (MSCSM) program in a nonclinical population of middle school youth. A 12-year old student participant (n=1) endorsed a drop in self-compassion as measured by the SCS-Y (Neff et al., 2021) from 3.76 pre-intervention to 3.35 post-intervention. College mentor participants reported benefitting from the program. Challenges of data collection for middle school participants were identified, benefits and barriers of the program were analyzed, and a sustainability proposal was offered.

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# Building Resilience: Piloting a Mindful Self-Compassion and Stress-Management Program for Youth

## Statement of the Problem

From a public health perspective, anxiety disorders represent a significant challenge to the well-being of society and a significant cost to the healthcare system. Equipping youth with tools to effectively manage stress could go a long way in reducing these problems. Anxiety disorders represent the most prevalent mental health problem globally and are associated with considerable morbidity, comorbidity, mortality, and healthcare as well as social costs (Baxter et al., 2014; Greenberg et al., 1999; Murray et al., 2018; Kessler, Ruscio, Shear, & Wittchen, 2010; Leon, Portera, & Weissman, 1995; National Alliance on Mental Illness [NAMI], 2018; Stein, Scott, de Jonge, & Kessler, 2017). Estimates of the lifetime prevalence of anxiety disorders in the U.S. were 31.2% for adults and 31.9% for adolescents aged 13-18 between 2001 and 2003 (Alegria, Jackson, Kessler, & Takeuchi, 2007; Kessler, Chiu, Demler, Merikangas, & Walters, 2005). Between 1990 and 2016 in the U.S., "anxiety disorders increased by 16.7% and accounted for approximately 1.76 million DALYs [disability-adjusted life years] in 2016" (Murray et al., 2018, p. 1469).

Approximately 8.3% of adolescents with anxiety disorders experience severe impairment (Alegria et al., 2007). Further, as many as 90% of individuals with anxiety disorders have been reported to suffer from comorbid major depressive disorder, which is itself associated with profound negative impacts on well-being and quality of life (Tiller, 2013). The 2010 Global Burden of Disease study (Baxter et al., 2014) found that anxiety disorders were the sixth leading cause of DALYs around the world, at 390 DALYs per 100,000 people, with the burden of disease most strongly impacting women and individuals between 15 and 34 years of age. In

terms of financial burden, Greenberg et al. (1999) estimated that total costs associated with anxiety disorders in the U.S. during the decade of the 1990's surpassed $42 billion. Stein et al. (2017) summed up functional risks associated with anxiety disorders in sharing that results from epidemiological studies on mental health and morbidity, including the National Comorbidity Survey (NCS), the National Comorbidity Survey Replication (NCS-R), and the World Mental Health Surveys (WMHS), uncovered the following:

> anxiety disorders very often precede the onset of other psychiatric disorders, that anxiety symptoms may be a predictor of worse outcome (e.g., suicidality in patients with depression), that anxiety disorders are associated with substantial individual impairment (including reduced educational attainment, more unstable marriage, lower occupational status) and staggering direct and indirect economic costs, and that certain anxiety disorders (e.g., specific phobia) are important in predicting onset or course of other conditions. (p. 131)

Additionally, these results were independent of economic status of nations. Given these statistics, further understanding of anxiety disorders, effective interventions, and prevention become crucial to helping individuals at risk of anxiety disorders achieve and maintain favorable health outcomes. Doing so will not only benefit individuals and populations but also reduce healthcare costs associated with anxiety disorders and their related comorbidities. Saxena, Jané-Llopis, and Hosman (2006) identified resilience-building to be a key prevention strategy for mental health problems in children and adolescents, and the present project represents an attempt to develop a suitable program to address this important need.

## Review of Related Literature

**Dual Capacity-Building Framework for Family-School Partnerships**

The theoretical foundation of this project is built upon Mapp and Kuttner's (2013) Dual Capacity-Building Framework for Family-School Partnerships. This framework aims to connect families and the educational system towards a shared goal of improved student growth and enhanced family-teacher collaboration in support of this growth. Mapp and Kuttner (2013) assert that creating more engaged partnerships with schools and families lead to better outcomes for students. Four values identified as central to achieving this goal are the "4 C's" (p. 10): Capabilities, Connections, Confidence, and Cognitions. Whereas Mapp and Kuttner (2013) focus on the value of confidence at the interpersonal level, this DNP Project focuses on the value of confidence at the intrapersonal level for students and school staff.

**Perfectionism, Self-Criticism, and Neuroticism as Related to Problematic Anxiety**

Research has explored various factors contributing to the etiology and manifestations of anxiety disorders as well as their relief. The DSM-5 (American Psychiatric Association [APA], 2013) is the standard guide for diagnosing mental health disorders in the U.S. Key symptoms shared by the spectrum of anxiety disorders include: excessive worry, obsessive thinking/preoccupation/rumination, fear, restlessness and other somatic symptoms, clinically significant tension, cognitive impairments (e.g., difficulties focusing), and associated impairments in important areas of the person's life that are defining features of all mental health disorders (APA, 2013). Further, the personality predispositions and cognitive styles of perfectionism and/or self-criticism were found to be correlates of various psychological disorders, including anxiety disorders, particularly social phobia, specific phobias, panic disorder, and obsessive-compulsive disorder (OCD), the last of which is no longer classified as

an anxiety disorder in the DSM-5 (Antony, Purdon, Huta, & Swinson, 1998; APA, 2013; Juster et al., 1996; Saboonchi, Lundh, & Ost, 1999).

The literature lacks consensus on a definition of perfectionism, but generally adopts the view that perfectionism is multifaceted and can be classified as either adaptive or maladaptive, dependent upon the emotional consequences (see Malivoire, Kuo, & Antony, 2019 for an excellent review of perfectionism). To date, there has been more research interest in the maladaptive sequelae of perfectionism, which includes heightened propensity for psychological disorders (Bieling, Israeli, & Antony, 2004; Egan, Wade, & Shafran, 2011). Perfectionism has been described as a dysfunctional cognitive pattern encompassing excessive worry and rumination, which are classic symptoms of anxiety disorders, whereas others described perfectionism in relation to the personality trait of neuroticism (Dunkley et al., 2012; Gilbert & Procter, 2006; Malivoire et al., 2019). In turn, perfectionism and neuroticism are significantly and positively correlated with high levels of self-criticism as well as psychological distress (Gilbert & Procter, 2006; Newby et al., 2017; Xie, Kong, Yang, & Chen, 2019). Despite the established connections among neuroticism, perfectionism, self-criticism, and anxiety, there is a lack of specificity in the literature about the exact nature of the connections in terms of providing predictive utility in mitigating the impacts of such traits on the development of psychopathology. The question of interest is: how can counterproductive perfectionism as related to anxiety disorders be predicted and addressed?

What is clear, according to the literature, is that a significant risk of developing anxiety and other mental health disorders exists for individuals with perfectionistic cognitive and personality tendencies, as measured by standardized instruments such as the Frost Multidimensional Perfectionism Scale (FMPS; Blankstein & Lumley, 2008; Frost, Marten,

Lahart, & Rosenblate, 1990; Limburg, Watson, Hagger, & Egan, 2017; Wänke & Schmid, 1996). This knowledge of a robust risk factor offers the opportunity for early intervention to help youth build resiliency skills, which have the potential to mitigate future harm. Indeed, Graden (2004) advocated delivering primary prevention efforts targeting mental health for youth within the school system, focusing on skills-building and a systems approach as opposed to an individual referral and deficits-focused model. The combination of perfectionism as risk factor and a need for early intervention laid the foundational inspiration for this DNP project.

## Review of Management Strategies

### Treatment as Usual

While effective evidence-based treatments for anxiety disorders, such as first-line treatments consisting of cognitive behavioral therapy (CBT) and/or antidepressant medications, are well-established, further refinement and expanded options are needed to truly decrease the burden of disease (Bandelow, Michaelis, & Wedekind, 2017; Cuijpers et al., 2014; Hofmann & Smits, 2008; Kapczinski, Lima, Souza, & Schmitt, 2003; Tolin, 2010; Tolin, 2017). For instance, Loerinc et al. (2015) conducted a systematic review of the literature on treatment outcomes for anxiety disorders and concluded CBT is efficacious for as few as 50% of all patients, though discrepancies in defining response rates could have biased these results. Even so, based on their findings they predicted that more uniform criteria, focused on clinically significant change, would potentially *lower* response rates.

Still, CBT remains the most successful of the psychotherapy modalities for anxiety disorders. Tolin (2010) conducted a meta-analytic review that demonstrated the superiority of CBT over other theoretical orientations for the treatment of anxiety disorders in adults. A review study by Crowe and McKay (2017) reported that CBT demonstrates small to moderate effect

sizes for treating anxiety disorders in children and adolescents. These findings converge with the meta-analytic findings of Wang et al. (2017).

Despite relative agreement on some factors involved in the etiology of anxiety disorders as well as established treatment approaches, there remains a need for advancements, in terms of prevention and treatment, to improve outcomes. Only with such measures can there be hope to engage those individuals at risk earlier, reduce relapse rates, and to benefit those unresponsive to standard first-line treatments. Fortunately, the element of high levels of self-criticism identified as a subcomponent of perfectionistic tendencies appears to respond well to a promising mindfulness-based intervention that has gained research support over the past 20 years: mindful self-compassion. This, in combination with established treatments, could fill some of these gaps in the US healthcare system with regards to alleviating the burden of anxiety disorders. The present project provided preliminary evidence of potential benefits and challenges of implementing mindful self-compassion in schools.

Adjuncts and innovations in treatment options are necessary, given the prevalence and burden of anxiety disorders. There is room for improvement and such advances, including preventative measures, are needed to effectively minimize the burden of anxiety disorders. In the past few decades, mindfulness and meditation have been growing in popularity and applied effectively to various mental health disorders in addition to physical ailments (Miller, Fletcher, & Kabat-Zinn, 1995).

**Defining and Exploring Mindful Self-Compassion**

Mindful self-compassion (MSC; Neff, 2003a) is a form of mindfulness practice that has shown promise in applicability to the realm of mental health problems, but its adoption into standard practice is not widespread. MSC was derived from Buddhist psychology and, according

to Neff (2003b), consists of: approaching oneself with kindness rather than judgment and criticism; conceptualizing one's pain and suffering as unifying with the human condition; and containing one's distressing thoughts and emotions in mindful awareness.

MSC's applications in Western psychology grew, in part, due to recognition of the pitfalls of the self-esteem movement. Further, it built on the roots of self-psychology and self-relationship concepts, such as self-efficacy (Bandura, 1997; see also Mapp & Kuttner, 2013). In particular, self-esteem is noted to rely too heavily on social comparisons, is largely impervious to change, and both too much and too little self-esteem lead to problematic psychological effects, such as narcissism, prejudices, low self-worth, and depression (Coopersmith, 1967; Neff, 2003b). The birth of mindfulness applications to psychological well-being in Western psychology traces back to Kabat-Zinn and Chapman-Waldrop (1988), with the introduction of mindfulness-based stress reduction programs to treat mental illness and the subsequent exploration of mindfulness practices (Kabat-Zinn, 1994).

Building on this foundational work, a MSC program was developed for a clinical sample of adults and later adapted for adolescents. Results with adolescents included increased psychological well-being and lowered levels of anxiety compared to controls (Bluth & Eisenlohr-Moul, 2017; Cunha, Xavier, & Castillo, 2016; Neff & Germer, 2013; Neff & McGehee, 2010). Self-compassion was shown to be a mediator of psychological distress in populations of both adults and adolescents, and it has preliminary evidence of utility in treating chronic depression and anxiety (Germer & Neff, 2013). Marsh, Chan, and MacBeth (2018) performed a meta-analysis that yielded large effect sizes, concluding that levels of self-compassion in adolescents were inversely related to levels of psychological distress, which was broadly defined as problems with anxiety, depression, and stress. This replicates a previous

meta-analysis that reported higher self-compassion levels in adults to be correlated with enhanced well-being, in terms of both subjective and psychological well-being (Zessin, Dickhäuser, & Garbade, 2015). Whether MSC can be effectively incorporated into a prevention-focused MSCSM program for non-clinical youth populations remains to be seen, but the evidence supporting MSC and its benefits are promising.

In conclusion, literature and statistics reveal the widespread negative impact of unmitigated anxiety disorders, perfectionism, and self-criticism. Justification exists for a preventative approach using MSC training to reduce the negative impact of anxiety and perfectionism on quality of life, and evidence supports application of MSC skills training for adolescents. This DNP project was a pilot, the purpose of which was to develop, implement, and evaluate an adapted mindful self-compassion and stress management (MSCSM) program using teachable skills to build youth resilience. The aims were to assess changes in self-compassion levels for the youth before and after implementation as well as to evaluate the applicability, sustainability, and potential barriers to implementation of the program in a middle school setting. Projected benefits included building psychological resilience and serving as a potential prevention-focused intervention for anxiety disorders. Lastly, a budget proposal to sustain the program in the middle school was developed.

## Method

### Design

This was a translation of research into practice pilot project, using quantitative and qualitative evaluation methods. A pre- and post-test design was employed to gather quantitative data, and a qualitative post-intervention survey was used to assess the suitability of the MSCSM program within an academic middle school context. The MSCSM program consisted of four

modules adapted for middle school participants. Specifically, this project draws on the research of Neff and Germer (2013), who developed an eight-week MSC program with adults, which found that the program enhanced levels of self-compassion, as measured by the empirically-validated Self-Compassion Scale (Neff, 2003a). Additionally, Bluth, Gaylord, Campo, Mullarkey, and Hobbs (2016) adapted Neff and Germer's (2013) MSC program to suit an adolescent population (ages 14-17) in a six-week format, yielding similar results, including decreases in anxiety corresponding to higher self-compassion levels. The present project builds on this body of work by extending the principles of MSC to pre-teenage youth (i.e., age 12) in a four-week, virtually-delivered format.

**Setting**

The MSCSM program was implemented with youth enrolled in an extracurricular social-emotional leadership cohort sponsored by a university community engagement (UCE) program at a Seattle-area public middle school. This project took place within the context of the leadership program, which ran for 10 weeks. Setting approval was granted from the UCE administration prior to implementation. The middle school is in an urban area with a diverse population of students; the school enrolls students in grades six through eight.

Racial makeup of students at this school are: 37.0% White, 22.6% African American, 16.7% Asian, 12.9% two or more races, 10.1% Hispanic or Latino, 0.7% Pacific Islander, and 0.2% American Indian (Washington Office of Superintendent of Public Instruction, n.d.). Students at this school are 46.0% female, 53.6% male, and 0.3% gender X. Approximately 38.0% of students at the school receive a free or discounted lunch, and the student-to-teacher ratio is 18.2 (School Digger, n.d.). Given these demographics, the student population is at relatively higher risk of poor physical and mental health from the standpoint of social

determinants of health. This was a primary reason for selecting this school, as the MSCSM program may be a helpful tool in mitigating the increased susceptibility to health problems.

The setting for the intervention was online, using Zoom video conference interface, and the modules were delivered synchronously, allowing for interaction. Participants took part in the program from their own homes on a computer, tablet, or phone with internet access and had the choice to turn their cameras and microphones on or off; the primary investigator (PI) also facilitated from their private residence with video and microphone enabled continuously.

**Participants**

There were two cohorts of participants in this project: middle school student participants and adult (college mentor) participants. Initially, a cohort of three middle school students (hereafter referred to as "students") were recruited. Data was submitted by only one of the three students. The student participant (n= 1) was a Hispanic/Latinx female eighth grade student who attended a Seattle-area middle school, and her age was 12. Student participants' race/ethnicity, age, and sex were obtained from their enrollment forms upon completion of the fourth module. Student participants were recruited via informational flyers, arranged by the UCE staff. There were four (n= 4) college mentor participants. These college mentor participants were undergraduates and UCE employees, who observed all MSCSM program modules and provided their feedback via the Post-Intervention SU Staff Survey to address the sustainability and efficacy of the program. Thus, both pools of participants drew from convenience samples.

**Ethical Considerations and Human Subjects**

Approvals of the project were granted by the SU College of Nursing and by the SU Institutional Review Board prior to project implementation. Recruitment, informed consent, and minor participant assent processes ran from August 2020 through October 2020 via paper and

email forms, which were coordinated by the UCE program administrator. Due to the fact that this project dealt with mental health and had the potential to trigger uncomfortable emotions, students were offered resources to pursue should they need mental health counseling or crisis intervention in each module session.

**Intervention**

The intervention, consisting of four modules, involved brief lectures in 5-10 minute segments, discussions, questions, informational YouTube videos on mindfulness and MSC, 2-18 minute guided MSC meditations, and brief exercises (e.g., writing exercises and yoga stretches). Most guided meditations used were from either Karen Bluth (n.d., see https://insighttimer.com/karenbluth) or Kristin Neff (n.d., see https://self-compassion.org/category/exercises/#guided-meditations) and are available online. See Table 1 for an outline of the intervention content. Each module was one hour in length, and one module was completed each of four weeks.

Table 1. Intervention Content by Module/Week

| Module/Week | Session Content | Example Practices |
|---|---|---|
| 1 | Stress, Coping Skills, Mindfulness, and Introduction to MSC | Box Breathing and Soothing Touch Meditation |
| 2 | Mindfulness, MSC, Taking a Moment for Oneself | Loving Kindness Meditation and Compassionate Messages |
| 3 | Self-Kindness, Common Humanity, and Grounding Oneself | Journaling, Guided Common Humanity Meditation, and Soles of the Feet Meditation |
| 4 | Self-Compassion Break, Acceptance, Yoga Stretching | Self-Compassion Break Meditation, Soften/Soothe/Allow Meditation, and Yoga Stretches |

Participants were also asked to practice some of the learned meditations, which were made available via links and recordings, between sessions daily for at least 5 minutes per day. Project implementation began with the first MSCSM program module in early October 2020.

## Measures

In line with both the adult (Neff & Germer, 2013) and adolescent (Bluth et al., 2016) MSC studies, the present investigation involved collecting a baseline survey of self-compassion levels, as measured by the Self-Compassion Scale for Youth (SCS-Y; Neff et al., 2021), which was completed prior to module one, and a follow-up SCS-Y survey, completed at the conclusion of the fourth module of the MSCSM program. A survey measuring perceived efficacy and sustainability, the Post-Intervention SU Staff Survey, was also delivered after the fourth module to assess the assets, barriers, and ability to adapt such a program in public education curricula.

### *Self-Compassion Scale for Youth (SCS-Y; Neff et al., 2021)*

This instrument is a 17-item, 5-point Likert scale and measures self-compassion levels in youth; it is valid to use with individuals aged 10-14. Each item is rated by the youth from 1 (almost always) to 5 (almost never), with a resulting mean indicating level of self-compassion (i.e., from 1 to 5). Self-compassion was defined as adopting an attitude of, and actions aligned with, kindness towards oneself, especially in times of difficulty or shortfalls as opposed to harshly criticizing oneself; an ability to see one's tribulations as connected to that of the human experience rather than alienating experiences; and bearing painful thoughts or emotions in mindful awareness rather than overidentifying with them (Neff, 2003a). Example items include, "when I notice things about myself that I don't like, I get really frustrated" (Neff et al., 2021, p. 96) and, "when things aren't going well, I keep in mind that life is sometimes hard for everyone" (p. 96). As reported by Neff et al. (2021), the overall test-retest reliability was strong ($r$= .83,

$p<.01$), as was construct validity for a global self-compassion score corresponding to subscale scores of self-compassion in expected directions (e.g., self-kindness, $r= .82$, $p<.01$, resilience, $r= .65$, $p<.01$, and the reverse-scored self-judgment, $r= .80$, $p<.01$). Given the recommendations of Neff (2003a) and Neff et al. (2021), global self-compassion scores, rather than subscale scores, were the score of interest in this project. Permission for use of this scale by student researchers was specified on the author's website (see Self-Compassion: https://self-compassion.org/self-compassion-scales-for-researchers/). The PI also contacted the author by email and received a reply with a copy of the scale attached to use.

***Post-Intervention SU Staff Survey***

A post-intervention survey questionnaire was completed by college mentor participants, who assisted with facilitation of the four modules. This survey took place after conclusion of project implementation. This tool assesses the accessibility and sustainability of the MSCSM program, participants' perceptions of its efficacy in its intent, and their thoughts on ability versus barriers to integrate it into an educational curriculum more widely. Example items include, "In 3-5 sentences, please respond to each of the following questions: What, if anything, was useful about the Mindful Self-Compassion and Stress Management Program from your perspective;" and, "In your opinion, did the students understand and/or benefit from the program?"

**Data Collection Procedures**

Both the SCS-Y (Neff et al., 2021) and the Post-Intervention SU Staff Survey were facilitated via Qualtrics® (2005-2020) online survey interface. Student participants were assigned a unique identifier to anonymize their responses, though with a final participant count of one, anonymity was not possible. Prior to the first module, the participant completed the SCS-Y to gather baseline self-compassion data. At the conclusion of the fourth module, the participant

was again administered the SCS-Y to gather her post-intervention self-compassion level. The Post-Intervention SU Staff Survey was completed anonymously by college mentor participants involved in the project at the end of the fourth module. No demographic information, direct, or indirect identifiers were collected on the survey for these participants.

### Data Analysis

Quantitative data analysis of the SCS-Y (Neff et al., 2021) responses took place at the conclusion of the MSCSM program content. Means of student participants' self-compassion scores were originally planned to be compared before and after the intervention and analyzed using a paired-samples *t*-test to determine the impact of the program. However, due to a small sample size (n= 1), evaluating statistical probability was not possible. Therefore, descriptive statistics were more meaningful in representing results of this pilot project. Results were shared with the coordinating UCE staff and SU College of Nursing.

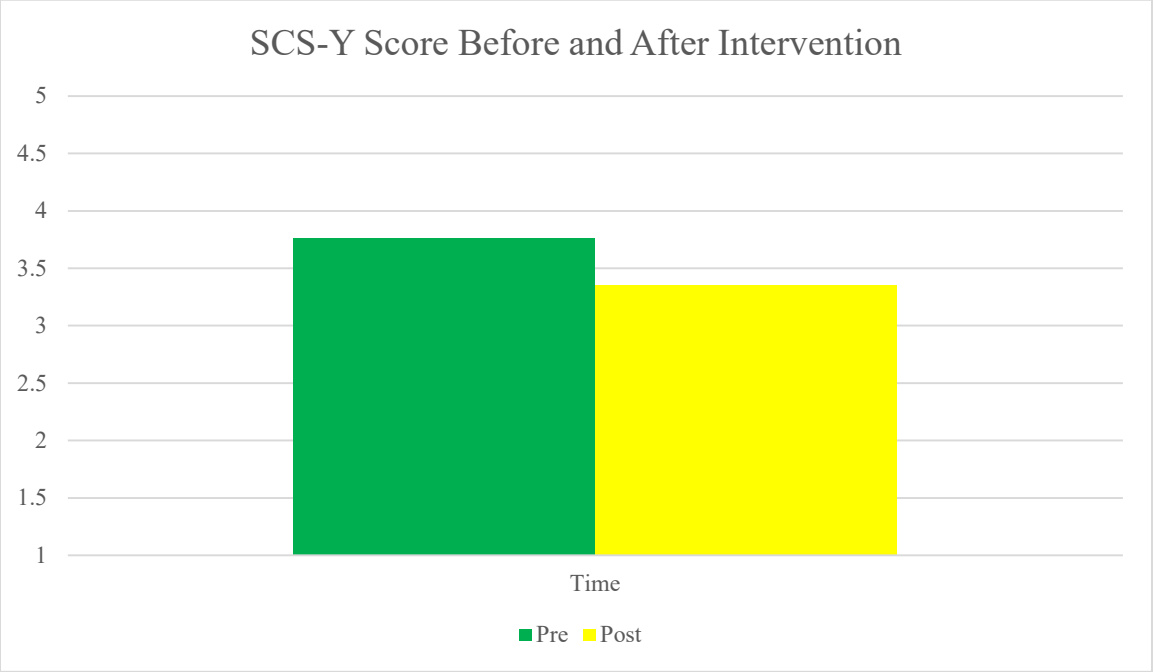
Data analysis of the qualitative feedback tool, the Post-Intervention SU Staff Survey, relied on thematic analysis, as outlined by Braun and Clarke (2006). This analysis shed light on themes among the college mentor participants' responses with regard to the efficacy, appropriateness, and sustainability of the four-week MSCSM program. Insights and practical lessons learned are outlined in the Discussion section and contributed to program evaluation. Specifically, the PI paid particular attention to whether this brief pilot intervention was effective in raising self-compassion levels for youth, any barriers to incorporating a MSCSM program in middle school curricula, whether any changes needed to be made to improve its efficacy and suitability, and how such programs were perceived by individuals involved in youth education.

## Results

### Quantitative Results

The student participant (n= 1) scored a mean of 3.76 on the SCS-Y (Neff et al., 2021) prior to beginning the MSCSM program and a mean of 3.35 at the conclusion of the program. The college mentors also participated in the module activities but only in support roles, and no quantitative data were collected from them. Refer to Figure 1 for a graph of the student participant's score change from pre-to-post intervention.

*Figure 1.* Individual SCS-Y (Neff et al., 2021) Score




**Qualitative Results**

Analysis of the college mentor participants' responses to the Post-Intervention SU Staff Survey revealed two broad themes: the MSCSM program was beneficial (Theme 1), and the MSCSM program requires resources (Theme 2). Subthemes of Theme 1 included: teaches important skills (i.e., meditation/MSC, stress-management, and social-emotional balance) and fosters growth for both middle schoolers and college-age mentors (i.e., cognitive, spiritual, and emotional growth). This theme and subthemes addressed the project questions: What, if anything, was useful about the MSCSM program from your perspective? In your opinion, did the

students understand and/or benefit from the program? Subthemes of Theme 2 included: training in MSC (i.e., needed for facilitators/teachers), time (i.e., needed for training and within the school curriculum), and relationship safety/trust needed. This theme and subthemes addressed the project questions: What would it take to incorporate the MSCSM program into a regular middle school curriculum as part of an ongoing curriculum? What barriers, if any, would need to be addressed? All questions asked for three to five sentence responses.

Exemplar statements for Theme 1 are included in Table 2. Exemplars for Theme 2 are included in Table 3.

Table 2. Exemplars for Theme 1

| **MSCSM Program was Beneficial** |
| --- |
| "*It taught the scholars about meditation and the idea of destressing through mindfulness."* |
| *"I enjoyed learning the different breathing exercises and different mindful activities I could implement to keep my mental health stable."* |
| *"The whole program was useful not only to the middle school scholars but also to me as a college student."* |
| *"This was the first time I had done mindful self-compassion in a way that stuck with me."* |
| *"I think in session all the scholars benefitted, but the meditation becomes easier to get into and has some deeper meaning for me with repetition."* |
| *"Stress is so real in middle school and I think it's essential to understand how to deal with it."* |
| *"They positively impacted our scholars."* |
| *"Our mentors have shared how they have taken so much from them."* |

Table 3. Exemplars for Theme 2

| **MSCSM Program Requires Resources** |
| --- |
| *"It can make people feel vulnerable."* |
| *"I think it was extremely helpful to go through the practices together as a cohort."* |
| *"It would require a lot of training and practice."* |
| *"It would also ask for commitment from the teachers and faculty as they would have to find time within their schedule."* |
| *"The biggest hurdle I think would be planning and organization."* |
| *"I think it would take time to train teachers or time to plan when trained individuals would come."* |
| *"Barriers such as access to resources and asking permission from parents and caregivers to approve the implementation of the program would need to be addressed."* |

## Discussion

The student participant exhibited a 0.41 point drop in their self-compassion score from pre-to-post intervention (i.e., from 3.76 to 3.35). This indicates that their endorsed level of self-compassion was slightly higher before starting the intervention than at its conclusion. For reference, a score of 3.0 indicates the middle level on the SCS-Y (Neff et al., 2021). Given that there was only one participant, this result is not particularly useful on its own. However, possible contributors and explanations for this observed result are explored in the "Limitations" section.

Analysis of college mentor participants' responses yielded insights about the benefits, improvements, and potential barriers of the MSCSM program and its ability to be effectively integrated into a middle school curriculum. Benefits of the MSCSM program identified by the college mentor participants included: learning meditation, MSC, and stress-management skills in a safe, supportive environment, practicing these skills, and enhancements of social-emotional-psychological growth. According to the college mentor participants, the benefits of the MSCSM

program could be maximized by ensuring consistent, balanced practice, helping students become comfortable with meditating, and delivering the program in larger groups of students, where trust has been built. Identified barriers to implementation of the MSCSM program in a middle school included: finding time, space, and resources to fit it into established school curricula as well as training teachers/mentors in not only delivering the program effectively but also resources to mitigate any difficult emotions that may arise for students.

Together, these insights emphasize the benefits that the college mentors gained from passive observation and participation alongside the middle school participants, suggesting that such a program may be useful in this population, which converges with previous research (e.g., Neff & McGehee, 2010). Further, training the college mentors in MSCSM prior to delivery to student (middle school) participants may provide greater benefit than starting a four-week program with middle schoolers without prior orientation for supporting staff. This is an avenue for future projects to investigate. This may enhance the efficacy of the program for the middle schoolers themselves in addition to the college mentors. Another insight gained from this project is the importance of time, resources, and coordination to incorporate the MSCSM program in a middle school curriculum. Formal eight-week MSC training exists for adult learners as does a teen version, but these are generally open to the public community at large rather than a within-school focus. Differences may exist in terms of motivation level and readiness for such programs.

**Limitations and Future Directions**

There were limitations encountered in this project that would need to be addressed in future projects. First, the timing of project implementation was less than ideal, as the Covid-19 pandemic made in-person delivery of the project, the PI's preferred method, impossible. This

project had to be prepared for an entirely digital delivery and evaluation as a result. This was likely a reason for the low sample size, as families were dealing with extra stressors in trying to navigate online schooling for their children on top of financial and other stressors. Another potential explanation was that coordinating parental consent and student assent signatures in an online format was difficult for school staff, the PI, and families/participants to coordinate, which likely hindered recruitment. The small sample size, with three student participants and only one student participant completing data collection, made inferential statistics and generalizability impossible. Additionally, the remote format could have been less effective than an in-person format, but again the small sample size prohibits comparisons with previous in-person investigations.

The quantitative results of this project were not in the expected direction, given previous research findings. The student participant's self-compassion score decreased from pre to post intervention. Various factors were considered as contributing to this finding. For instance, the participant's developmental stage (i.e., age 12) placed her at the transition from concrete operations (ages 7-11) to formal operations (ages 12 and up) and could have implications for the suitability of the program content. Abstract thinking and self-reflection may not be well-developed capacities for this participant or others of the same age (Piaget, 1971). Most research in the MSC literature is focused on adolescents ages 14 and older. The possibility of a challenging cognitive leap should not be ruled out in this case. Even so, this age group was selected precisely to help them prepare for the stressful transition to teenage years. Alternatively, it is possible that going through the MSCSM program increased the participant's self-reflection capabilities and thus led to more reflective responding, yielding slightly decreased confidence in

consistently practicing self-compassion at the conclusion of the program compared to the beginning.

Another possibility is that external factors contributed to the observed decrease in self-compassion for this 12-year old participant. For example, other stressors, such as schoolwork demands as the semester progressed or the Covid-19 pandemic-related stressors, could have impacted this young adolescent in a manner that decreased their self-compassion score on the day of the post survey. Other considerations that could have yielded the observed decrease in self-compassion for the student participant include: other familial stressors, trying to engage in the program from their home environment, lack of follow-up with the assigned home practices, or time of day that the content was delivered (i.e., evening after school).

Limitations for the qualitative component of the project, the Post-Intervention SU Staff Survey, include lack of psychometric validation of the scale, small sample size, potential bias of the college mentor participants in wanting the program to be beneficial for the middle schoolers, and possibly less familiarity with the core eighth grade curriculum and processes for developing new curricula. Future projects should include a wider sample of school staff in evaluating the feasibility and sustainability of the MSCSM program. Addressing the identified barriers of training, costs, and time are important considerations for future projects.

## Conclusions and Recommendations

This project offers among the first insights into integration of MSCSM in middle schools when considering academic literature. Despite the decrease in self-compassion endorsed by the student participant, perceptions of the program were positive by all involved. PI observations of the three youth who participated in the modules indicated the students engaged in the activities, interacted with the facilitator, and verbalized learning from and enjoying the modules. In

addition to overall themes, important practical takeaways gained from this project included: the importance of emotional/psychological safety in MSCSM work, benefits of a group format assuming such safety, and the potential importance of cognitive development in mediating self-compassion receptivity and ability/willingness to meditate regularly. The program was well-received by the middle school participants as well as the college mentor participants, indicating the value of the program.

Several helpful suggestions were presented and would need to be addressed for future projects or in order to deliver the MSCSM program to schools as planned. Ensuring adequate preparation, expertise to deliver the program, social-emotional safety, and buy-in from key stakeholders (e.g., school systems and families) are primary issues to address to that end. Augmenting the program with these considerations in mind could go a long way in enhancing the scope of future projects and incorporating MSCSM in the schools.

**Sustainability Proposal**

A project sustainability proposal was developed and shared with UCE program staff. The proposal contains three elements: budget, training, and family-school partnerships. First, costs for adult training from the Center for Mindful Self-Compassion (CMSC, 2020) are generally between $350 and $575, with fluctuating discounts and scholarships available to offset costs. Each adult trained in MSC would pay this price. CMSC is currently offering online sessions, making them accessible throughout the country with an internet connection, though this would be a barrier for those without internet. Additional costs of implementing the MSCSM program are minimal and most are optional: about $15 per participant for The Self-Compassion Workbook for Teens: Mindfulness and Compassion Skills to Overcome Self-Criticism and Embrace Who You Are (Bluth, 2017); MSC meditations can be found online or on apps for free;

possible costs of using certain spaces or technology vary if not already accessible. Training would require at least one teacher/mentor or other adult to be trained in MSC. There are also eight-week trainings that instruct adults in how to deliver the eight-week MSC program, but this would not be needed to deliver the current MSCSM project. This brings the total cost to approximately $365- $1180 for one to two adults to go through the training and purchase at least one workbook.

Finding training, resources, and time in school curricula may vary by school district and could be seamless in some areas and problematic in others. Further evidence of the utility of programs like the MSCSM program are needed to demonstrate the benefits to stakeholders (e.g., students, school staff, and families). Family-school partnerships are important to develop, as outlined by Mapp and Kuttner (2013), and this was evident in this project. While the UCE has developed strong partnerships, recruitment of students enrolled in the mentorship program remained difficult.

Thus, the sustainability proposal for continued MSCSM module integration in the UCE program is to deliver a presentation about the MSCSM modules to families prior to implementation. This presentation will describe their purpose, benefits, and risks, in order to engage families in participation. In doing so, it is hoped that motivation will be enhanced and benefits could be maximized. Finally, conclusions about the utility of this program as a preventative tool for anxiety and other mental health disorders are in the early stages and remain to be seen. Making these suggested alterations to the MSCSM program could go a long way to ensure the program is faithfully executed and benefits to the participants enhanced.

References

Alegria, M., Jackson, J. S., Kessler, R. C., & Takeuchi, D. (2007). National Comorbidity Survey Replication (NCS-R). *Harvard Medical School.* Retrieved April 1, 2019, from https://www.hcp.med.harvard.edu/ncs/ftpdir/NCS-R_Lifetime_Prevalence_Estimates.pdf

American Psychiatric Association (APA). (2013). *Diagnostic and statistical manual for mental disorders* (5th ed.). Washington, DC: Author.

Antony, M. M., Purdon, C. L., Huta, V., & Swinson, R. P. (1998). Dimensions of perfectionism across the anxiety disorders. *Behaviour Research and Therapy, 36*(12), 1143–1154.

Bandelow, B., Michaelis, S., & Wedekind, D. (2017). Treatment of anxiety disorders. *Dialogues in Clinical Neuroscience*, *19*(2), 93–107. https://doi.org/10.31887/DCNS.2017.19.2/bbandelow

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 2, 191-215.

Baxter, A. J., Vos, T., Scott, K. M., Ferrari, A. J., & Whiteford, H. A. (2014). The global burden of anxiety disorders in 2010. *Psychological Medicine, 44*(11), 2363-2374.

Bieling, P. J., Israeli, A. L., & Antony, M. M. (2004). Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Personality and Individual Differences, 36*(6), 1373-1385.

Blankstein, K. R., & Lumley, C. H. (2008). Multidimensional perfectionism and ruminative brooding in current dysphoria, anxiety, worry, and anger. *Journal of Rational Emotive and Cognitive-Behavior Therapy, 26*(3), 168–193.

Bluth, K. (2017). *The self-compassion workbook for teens: Mindfulness and compassion skills to overcome self-criticism and embrace who you are.* Oakland, CA: New Harbinger Publications.

Bluth, K. (n.d.). *Insight Timer: Teacher Karen Bluth.* Retrieved from https://insighttimer.com/karenbluth

Bluth, K., Eisenlohr-Moul, T. A. (2017). Response to a mindful self-compassion intervention in teens: A within-person association of mindfulness, self-compassion, and emotional well-being outcomes. *Journal of Adolescence, 57*, 108-128. doi:10.1016/j.adolescence.2017.04.001

Bluth, K., Gaylord, S. A., Campo, R. A., Mullarkey, M., & Hobbs, L. (2016). Making friends with yourself: a mixed methods pilot study of a mindful self-compassion program for adolescents. *Mindfulness, 7*(2), 479–492.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Center for Mindful Self-Compassion (CMSC). (2020). *CMSC offerings: Live online MSC.* Retrieved from https://centerformsc.org/lomsc/

Coopersmith, S. (1967). *The antecedents of self-esteem.* San Francisco: Freeman.

Crowe, K., & McKay, D. (2017). Efficacy of cognitive-behavioral therapy for childhood anxiety and depression. *Journal of Anxiety Disorders, 49*, 76-87.

Cuijpers, P., Sijbrandij, M., Koole, S., Huibers, M., Berking, M., & Andersson, G. (2014). Psychological treatment of generalized anxiety disorder: A meta-analysis. *Clinical Psychology Review*, *34*(2), 130–140.

Cunha, M., Xavier, A., & Castillo, P. (2016). Understanding self-compassion in adolescents: Validation study of the Self-Compassion Scale. *Personality and Individual Differences, 93*, 56-62.

Dunkley, D. M., Blankstein, K. R., & Berg, J. L. (2012). Perfectionism dimensions and the Five-Factor Model of personality. *European Journal of Personality, 26*, 233- 244.

Egan, S. J., Wade, T. D., & Shafran, R. (2011). Perfectionism as a transdiagnostic process: A clinical review. *Clinical Psychology Review, 31*(2), 203–212

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*(5), 449–468.

Germer, C., & Neff, K. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology: In Session, 69*(8), 856-867.

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology and Psychotherapy, 13*, 353-379.

Graden, J. L. (2004). Arguments for change to consultation, prevention, and intervention: Will school psychology ever achieve this promise? *Journal of Educational and Psychological Consultation, 15*(3-4), 345-359.

Greenberg, P. E., Sisitsky, T., Kessler R. C., Finkelstein, S. N., Berndt, E. R., Davidson, J. R… Fyer, A. J. (1999). The economic burden of anxiety disorders in the 1990s. *Journal of Clinical Psychiatry, 60*(7), 427-435.

Hofmann, S. G., & Smits, J. A. (2008). Cognitive-behavioral therapy for adult anxiety disorders: a meta-analysis of randomized placebo-controlled trials. *Journal of Clinical Psychiatry, 69*(4), 621–32.

Juster, H. R., Heimberg, R. G., Frost, R. O., Holt, C. S., Mattia, J. I., & Faccenda, K. (1996). Social phobia and perfectionism. *Personality and Individual Differences, 21*(3), 403–410.

Kabat-Zinn, J. (1994). *Wherever you go there you are*. New York, NY: Hyperion.

Kabat-Zinn, J., & Chapman-Waldrop, A. (1988). Compliance with an outpatient stress reduction program: Rates and predictors of program completion. *Journal of Behavioral Medicine, 11*, 333–352.

Kapczinski, F., Lima, M. S., Souza, J. S., & Schmitt, R. (2003). Antidepressants for generalized anxiety disorder. *The Cochrane Database of Systematic Reviews*, *2*, CD003592.

Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 617-627.

Kessler, R. C., Ruscio, A. M., Shear, K., & Wittchen, H. U. (2010). Epidemiology of anxiety disorders. *Current Topics in Behavioral Neuroscience, 2,* 21-35.

Leon, A. C., Portera, L., & Weissman, M. M. (1995). The social costs of anxiety disorders. *The British Journal of Psychiatry, 166*(27), 19-22.

Limburg, K., Watson, H. J., Hagger, M. S., & Egan, S. J. (2017). The relationship between perfectionism and psychopathology: A meta-analysis. *Journal of Clinical Psychology, 73*(10), 1301-1326. doi:10.1002/jclp.22435

Loerinc, A. G., Meuret, A. E., Twohig, M. P., Rosenfield, D., Bluett, E. J., & Craske, M. G. (2015). Response rates for CBT for anxiety disorders: Need for standardized criteria. *Clinical Psychology Review, 42*, 72-82.

Malivoire, B. L., Kuo, J. R., & Antony, M. M. (2019). An examination of emotion dysregulation in maladaptive perfectionism. *Clinical Psychology Review, 71*, 390-50.

Mapp, K. L., & Kuttner, P. J. (2013). *Partners in education: A dual capacity-building framework for family-school partnerships*. Southwest Educational Development Laboratory. Retrieved March 15, 2020, from: https://nam02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.sedl.org%2Fpubs%2Fframework%2FFE-Cap Building.pdf&data=02%7C01%7Chinrich5%40seattleu.edu%7C1041b254dc694243e4d008d7ec5ade1c%7Cbc10e052b01c48499967ee7ec74fc9d8%7C0%7C0%7C637237747321840267&sdata=dZ89QgSzh26vN52qk8VMKD6CQdqssCV2o4g%2B8qkAHjs%3D&reserved=0

Marsh, I., Chan, S., & MacBeth, A. (2018). Self-compassion and psychological distress in adolescents—a meta-analysis. *Mindfulness, 9*(4), 1011-1027. doi:10.1007/s12671-017-0850-7

Miller, J. J., Fletcher, K., & Kabat-Zinn, J. (1995). Three-year follow-up and clinical implications of a mindfulness meditation-based stress reduction intervention in the treatment of anxiety disorders. *General Hospital Psychiatry, 17*(3), 192-200.

Murray, C. J. L., Mokdad, A. H., Olsen, H. E., Mullany, E., Glenn, S., Ballesteros, K.,… & Frank, T. (2018). The state of US health, 1990-2016: Burden of diseases, injuries, and risk factors among US states. *JAMA, 319*(14), 1444-1472. doi:10.1001/jama.2018.0158

National Alliance on Mental Illness (NAMI). (2018). *FY 2018 funding for mental health.* NAMI. Retrieved May 7, 2020, from: https://www.nami.org/getattachment/Get-Involved/NAMI-National-Convention/Convention-Program-Schedule/Hill-Day-2017/FINAL-Hill-Day-17-Leave-Behind-Appropriations.pdf

Neff, K. D. (n.d.). *Self-compassion guided meditations and exercises.* Retrieved from https://self-compassion.org/category/exercises/#guided-meditations

Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223-250. doi:10.1080/15298860309027

Neff, K. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*, 85-101.

Neff, K. D., Bluth, K., Tóth-Király, I., Davidson, O., Knox, M. C., Williamson, Z., & Costigan, A. (2021). Development and validation of the Self-Compassion Scale for Youth. *Journal of Personality Assessment*, *103*(1), 92-105.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the Mindful Self-Compassion program. *Journal of Clinical Psychology, 69*(1), 28-44.

Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity, 9*, 225-240.

Newby, J., Pitura, V. A., Penney, A. M., Klein, R. G., Flett, G. L., & Hewitt, P. L. (2017). Neuroticism and perfectionism as predictors of social anxiety. *Personality and Individual Differences, 106*, 263- 267.

Piaget, J. (1971). *The theory of stages in cognitive development.* In D. R. Green, M. P. Ford, & G. B. Flamer, *Measurement and Piaget.* New York, NY: McGraw-Hill.

Saboonchi, F., Lundh, L. G., & Ost, L. G. (1999). Perfectionism and self-consciousness in social phobia and panic disorder with agoraphobia. *Behaviour Research and Therapy, 37*(9), 799–808.

Saxena, S., Jané-Llopis, E., & Hosman, C. (2006). Prevention of mental health and behavioural disorders: Implications for policy and practice. *World Psychiatry, 5*(1), 5-14.

School Digger (n.d.). *School rankings.* https://www.schooldigger.com/go/WA/schools/0771001259/school.aspx#:~:text=Compare%20Details%20Student%20population%20at,%25)%2C%20Asian%20(18%25).&text=Compare%20Details%20The%20student%2Fteacher,the%20Seattle%20Public%20Schools%20District.

Self-Compassion (n.d.). https://self-compassion.org/self-compassion-scales-for-researchers/

Stein, D. J., Scott, K. M., de Jonge, P., & Kessler, R. C. (2017). Epidemiology of anxiety disorders: From surveys to nosology and back. *Dialogues in Clinical Neuroscience, 19*(2), 127-136.

Tiller, J. W. (2013). Depression and anxiety. *Medical Journal of Australia, 199*(6), S28-S31.

Tolin, D. F. (2010). Is cognitive-behavioral therapy more effective than other therapies? A meta-analytic review. *Clinical Psychology Review, 30*, 710-720.

Tolin, D. F. (2017). Can cognitive-behavioral therapy for anxiety and depression be improved with pharmacotherapy? A meta-analysis. *Psychiatric Clinics of North America, 40*(4), 715-738.

Wang, Z., Whiteside, S., Sim, L., Farah, W., Morrow, A. S., Alsawas, M., … Murad, M. H. (2017). Comparative effectiveness and safety of cognitive behavioral therapy and pharmacotherapy for childhood anxiety disorders: A systematic review and meta-analysis. *JAMA Pediatrics, 171*(11), 1049-1056.

Wänke, M., & Schmid, J. (1996). Rumination: When all else fails. In R. S. Wyer Jr. (Ed.). Advances in social cognition ruminative thoughts. Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.

Washington Office of Superintendent of Public Instruction. (n.d.). *Report card: Enrollment by student demographics.* https://washingtonstatereportcard.ospi.k12.wa.us/ReportCard/ViewSchoolOrDistrict/101167.

Xie, Y., Kong, Y., Yang, J., & Chen, F. (2019). Perfectionism, worry, rumination, and distress: A meta-analysis of the evidence for the perfectionism cognition theory. *Personality and Individual Differences,139*, 301-312. doi:10.1016/j.paid.2018.11.028

Zessin, U., Dickhäuser, O., & Garbade, S. (2015). The relationship between self-compassion and well-being: A meta-analysis. *Applied Psychology: Health and Well-Being, 7*(3), 340-364. doi:10.1111/aphw.12051