Being Kind to Yourself: Investigating the Effects of a Brief Self-Compassion Intervention on Self-Oriented Perfectionism in Post-Secondary Students

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Abstract

Perfectionism is prevalent among post-secondary students and is often associated with psychological distress, reduced self-efficacy, and diminished well-being. Self-compassion includes being kind to oneself in the same way one might be compassionate toward a friend. However, perfectionists often face challenges in adopting self-compassionate practices. The current project aimed to investigate the effects of a five-week self-compassion practice, completed multiple times per week, on self-oriented perfectionism, academic self-efficacy, and psychological well-being among post-secondary students ($N = 55$). Analyses of the effectiveness of the intervention revealed that the brief self-compassion intervention had significant impacts on enhancing self-compassion, academic self-efficacy, and well-being, and reducing self-oriented perfectionism. Implications of these findings suggest that a brief self-compassion intervention demonstrates similar effects to formal self-compassion interventions, highlighting the potential benefits of employing an accessible, time-efficient self-compassion practice on post-secondary student well-being.

Keywords: self-compassion; self-oriented perfectionism; intervention; well-being; academic self-efficacy; students

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Scholars describe perfectionism as the tendency to have exceptionally high standards and being overly critical when these standards are not met (Hewitt & Flett, 1991). Recent research has shown a surge in perfectionism, primarily in student populations, over the last three decades (Curran & Hill, 2019). The authors suggest this surge in perfectionism is related to the pressures young adults face in terms of achieving their academic and career goals with these pressures stemming from feeling the need to be successful in their endeavours. Additionally, for students who possess high standards in regard to their academics, experiencing barriers that hinder the ability to achieve these standards can result in feelings of psychological distress and burnout (Deng et al., 2022). These feelings often perpetuate the negative feelings associated with not meeting expectations imposed upon oneself or from others, which are behaviors associated with perfectionism (Hewitt & Flett, 1991). Post-secondary students who are high in maladaptive perfectionism tend to have lower academic self-efficacy (Yao, 2009), which is associated with experiencing poorer mental health outcomes (Cao & Lui, 2024; Hitches et al., 2022; Safarzaie et al., 2022). Considering that post-secondary students are often overwhelmed with course work, assignments, and other responsibilities (Pitt et al., 2017), finding ways to establish balance can be a challenge. With this in mind, it is important to support post-secondary students' well-being and foster self-kindness despite the stressors of student life. The current study aimed to discover how a brief self-compassion intervention impacts self-compassion through a short, five-minute a day practice, while also examining its role in supporting students' academic self-efficacy, well-being, and reducing maladaptive perfectionism.

Perfectionism

Hewitt and Flett (1991) developed the Multidimensional Model of Perfectionism that identifies three categories of perfectionistic behaviour, which are categorized based on the direction of the perfectionistic expectation (i.e., toward the self, others, or expectations from others). *Self-oriented perfectionism* describes those who place unrealistic standards on themselves and are highly critical of their own performance. This element of perfectionism is believed to be driven by intrinsic motivations to strive towards perfection while also avoiding failure and is often associated with significant psychological distress involving increased levels of anxiety, depression, and eating disorders (Hewitt & Flett, 1991). Similarly, *other-oriented perfectionism* describes individuals who place unrealistic standards on other people rather than the self and are highly critical of the performances of others. This element is associated with holding negative feelings towards others, resulting in increases in loneliness and interpersonal relationship problems (Hewitt & Flett, 1991). Lastly, *socially prescribed perfectionism* describes individuals who possess a high concern with meeting the standards and expectations imposed by others, resulting in feeling external pressures to enact perfection. Much like self-oriented perfectionism, this element is also associated with psychological distress involving anger, anxiety, and depression (Hewitt & Flett, 1991).

Maladaptive and Adaptive Perfectionism

Perfectionism has both adaptive and maladaptive dimensions. *Adaptive perfectionism* is described as the 'healthy' form of perfectionism as it involves striving for high standards, but it is associated with feeling content with the efforts involved in achieving those standards (Alanna et al., 2022). In contrast, *maladaptive perfectionism* is described as 'unhealthy' perfectionism as it involves striving for high standards, but feeling as though these standards will never be met (Alanna et al., 2022). Research has shown that individuals who portray maladaptive perfectionist behaviours often experience more negative outcomes in comparison

to adaptive perfectionists or non-perfectionists (Alanna et al., 2022). These negative outcomes can be related to increases in psychological distress (Alanna et al., 2022; Koutra et al., 2023; Sher et al., 2023; Tan, 2023; Tobin & Dunkley, 2021; Molnar et al., 2019), procrastination (Yao, 2009), and academic burnout (Fong & Loi, 2016). Maladaptive perfectionism has also shown to be associated with decreases in academic self-efficacy (Chemers et al., 2001; Yao, 2009), self-esteem (Park & Jeong, 2015), and physical well-being (Molnar et al., 2019) in students. In contrast, adaptive perfectionism is often associated with positive mental health (Alanna et al., 2022). Alanna and colleagues (2022) suggest this association can be attributed to the adaptivity element involved with this type of perfectionism, more so than the perfectionistic behaviours of adaptive perfectionism. Additionally, adaptive forms of self-oriented perfectionism can be beneficial for post-secondary students, particularly when it comes to involvement and engagement in their academics (Parveen & Khan, 2024). These findings are likely attributed to the natural desire to succeed and meet personal goals relating to academics or perceiving academic related tasks as ‘challenges’ rather than ‘stressors’ (Hitches et al., 2022). These results highlight how, although perfectionism can result in negative outcomes related to well-being, promoting more positive and adaptive approaches to perfectionism can be beneficial in student populations, particularly in regard to their psychological well-being (Koutra et al., 2023).

Perfectionism is often considered a stable personality trait that is reluctant to change, but various intervention methods have been found to significantly decrease maladaptive perfectionism (Arana et al., 2017; Lui, S. et al., 2023; Visvalingam et al., 2022; Woodfin et al., 2021). A study conducted by Arana et al. (2017), for example, utilized cognitive behavioral approaches in an attempt to reduce perfectionistic concerns in students through a five-week intervention program. The results found the intervention was able to significantly reduce maladaptive perfectionism in participants, as well as decrease other distressing

symptoms such as anxiety and depression. Similar results were found in a two-hour online intervention method that implemented ways to increase mindfulness and self-compassion in university students (Visvalingam et al., 2022). These findings suggest that, although perfectionism is frequently considered difficult to shift, recent intervention methods indicate otherwise. Such approaches show promise for reducing maladaptive trait perfectionism across a range of demographics.

Self-Compassion

The concept of self-compassion is derived from the idea of compassion, which involves approaching the suffering of others in an accepting, non-judgmental way that allows the receiving person's suffering to be acknowledged and understood (Neff, 2003a). In relation to this, Neff (2003a) describes *self-compassion* as a process that involves approaching and bringing awareness to one's own suffering in such a way that promotes kindness and understanding. Self-compassion also includes the idea that suffering and hardship is embedded in the human experience and should be perceived in a way that discourages the belief that these experiences are isolating. Neff's (2003a) model of self-compassion consists of three main concepts that relate to an individual's approach towards experiences of suffering or hardship: self-kindness, mindfulness, and common humanity. The element of self-kindness refers to the importance of being kind and understanding of one's hardships rather than being harsh and engaging in unnecessary self-criticism. Mindfulness refers to being aware of one's negative emotions that arise from experiences of failure or hardship, but not over-identifying with them. Lastly, common humanity consists of the idea that individuals' struggles are part of the human experience and should not be perceived as isolating. Neff (2003a) highlights how these three components are interconnected with one another, despite each element being conceptually different from one another; practicing one facet by itself ultimately leads to practicing the others indirectly.

Similar to perfectionism, self-compassion can be measured in both trait and state form (Svendsen et al., 2016). Trait self-compassion can be changed over time, typically through the consistent use of various self-compassion-based practices. For example, research has demonstrated that people can learn to be more compassionate to themselves by practicing self-compassion-related activities such as guided meditations (Lui, C. et al., 2023), attending workshops (Ko et al., 2018), through university courses (Bearden et al., 2024), in self-compassion practice groups (Smeets et al., 2014), and with journaling practices (Mckay et al., 2024). Importantly, previous studies, such as the ones mentioned, have demonstrated that it is possible to enhance compassion for the self, specifically in post-secondary student populations (Bearden et al., 2024; Ko et al., 2018; Lui, S. et al., 2023; Mckay et al., 2024; Smeets et al., 2014; Ward & Wheaton, 2022). Put differently, it is indeed possible to facilitate change wherein individuals learn to become more self-compassionate, suggesting that self-compassion is not just a static trait but rather something that can be enhanced to perhaps even improve overall well-being.

Self-Compassion and Perfectionism

People may be motivated to increase their self-compassion because self-compassion is associated with a variety of outcomes related to psychosocial well-being (e.g., Bag et al., 2021; Ferrari et al., 2019; Han & Kim, 2023; Macbeth & Gumley, 2012; McKay & Walker, 2021; Zessin et al., 2015). More specifically, self-compassion has associations with perfectionism: research has found a significant relationship between self-compassion and maladaptive perfectionism on the effects of psychological well-being in post-secondary students. These relationships demonstrate how individuals who exhibit more maladaptive perfectionist behaviors, such as characteristics related to self-oriented perfectionism, often report being less self-compassionate and more anxious and depressed (Alanna et al., 2022; Biskas et al., 2022; Tan, 2023; Tobin & Dunkley, 2021; Sher et al., 2023). In relation to other

findings, these negative mental health outcomes can be attributed to low levels of self-compassion in individuals with high maladaptive perfectionist behaviours (Biskas et al., 2022; Sher et al., 2023; Tobin & Dunkley, 2021), which has been found to be especially true in post-secondary student populations (Tan, 2023). Research suggests that individuals who exhibit more maladaptive characteristics of perfectionism tend to possess more negative views of self-compassion, including viewing those who practice self-compassion in a more negative light (Biskas et al., 2022). Put differently, those high in maladaptive perfectionism do not view the practice of being compassionate with oneself favourably. Based on their findings, Sher and colleagues (2023) found that perfectionists, specifically those who exhibit more maladaptive characteristics in perfectionism, were less likely to respond to their hardships with self-compassion as they possessed stronger fears of self-compassion. Likely due to the self-critical nature of perfectionism, these fears of self-compassion stem from a lack of confidence in one's own abilities to be self-compassionate (Biskas et al., 2022), which creates barriers to receiving the benefits of practicing self-compassion.

Academic Self-Efficacy and Perfectionism

In student populations, high rates of perfectionism are a concern, given its negative association with academic self-efficacy (Damian et al., 2016). Academic self-efficacy is based upon the model outlined by Bandura (1997) which describes self-efficacy as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments" (p. 3). Thus, *academic self-efficacy* is the belief in one's capabilities to accomplish academic-related tasks (Chemers et al., 2001). Students who exhibit more maladaptive perfectionist behaviours tend to have lower levels of academic self-efficacy compared to students who demonstrate more adaptive perfectionism (Yao, 2009). Yao (2009) suggests low levels of academic self-efficacy in students who are high in maladaptive perfectionism can be attributed to the pressures exerted by high standards that are imposed

upon oneself, which reflect the characteristics that closely align with self-oriented perfectionism. Possessing high concern about meeting these standards or personal goals is associated with a lack of confidence in abilities to accomplish those tasks, thus decreasing academic self-efficacy. (Yao, 2009). Low academic self-efficacy has shown to be associated with poorer self-esteem (Cao & Lui, 2024) and academic performance (Hitches et al., 2022), as well as burnout and higher stress, particularly stress related to academic tasks (Hitches et al., 2022; Safarzaie et al., 2022). Additionally, the results of a recent study suggest that self-oriented perfectionism is associated with lower academic self-efficacy in post-secondary students (Hawkins & Mackinnon, 2024). These negative mental health outcomes highlight how students struggle to achieve their academic goals and be successful in their academic careers due to setting exceptionally high standards on oneself.

Psychological Distress and Perfectionism

Pursuing a post-secondary education involves hard work and dedication from students. With this, the pressure exerted onto students to be successful in their academic careers often leads to students experiencing immense levels of distress (Acharya, 2018; Saleh et al., 2017). Considering that perfectionism is commonly found amongst student populations (Curran & Hill, 2019), the impacts of setting exceptionally high standards can amplify these distressing feelings, leading to extreme adverse mental health effects. Maladaptive forms of perfectionism have been found to be linked with higher levels of psychological distress in post-secondary students, specifically academic burnout (Fong & Loi, 2016), anxiety, depression, and stress (Koutra et al., 2023; Tobin & Dunkley, 2021; With et al., 2024). These psychological distress symptoms are found to be associated with maladaptive perfectionists who score low on self-compassion measures, thus increasing psychological distress (Koutra et al., 2023; Tobin & Dunkley, 2021). Conversely, the results from Koutra and colleagues (2023) found adaptive perfectionism to be negatively associated with psychological distress.

This relationship was found to be mediated by implementing a more self-compassionate attitude with oneself and, as a result, reduced the risk of experiencing psychological distress.

Self-Compassion and Well-Being

Self-compassion has shown to exhibit numerous benefits relating to positive mental health when practiced (Bluth & Neff, 2018). In relation to student populations, practicing self-compassion has shown to have significant effects on perfectionism (Bearden et al., 2024), academic self-efficacy (Khodapana & Tamannaeifar, 2022; Manavipour & Saeedian, 2016; Martin et al., 2019; Yao, 2009), and psychological well-being (Fong & Loi, 2016; Yao, 2009). In relation to students who possessed high levels of perfectionism, practicing self-compassion has shown to decrease maladaptive behaviours related to perfectionism (Alanna et al., 2022; Bearden et al., 2024). Research by Biskas and colleagues (2022) highlighted how individuals who were more open and positive about approaching one's suffering with self-compassion were more likely to respond to their future suffering with self-compassion and had an easier time enacting self-compassion. Additionally, studies have found that students who demonstrated high levels of self-compassion towards their academics were more likely to be more academically self-efficacious (Khodapana & Tamannaeifar, 2022; Manavipour & Saeedian, 2016; Martin et al., 2019; Yao, 2009), which also yielded higher levels of happiness and positive mental health outcomes (Yao, 2009). Research has also highlighted the mediating effects of self-compassion on psychological distress in post-secondary students (Fong & Loi, 2016). Fong and Loi (2016) discovered that high levels of self-compassion were related to low levels of psychological distress, and that self-compassion mediated this relationship.

Self-Compassion Intervention Strategies

As mentioned previously, self-compassion intervention strategies, administered in varying forms, have shown to elicit significant increases in self-compassion in participants

(Bearden et al., 2024; Ko et al., 2018; Lui, S. et al., 2023; Mckay et al., 2024; Smeets et al., 2014; Ward & Wheaton, 2022). Not only do these interventions promote self-compassion in participants, but they have shown to have positive impacts on other aspects such as perfectionism, academic self-efficacy, and well-being, particularly in student populations. Previous studies have shown intervention strategies that implement self-compassion practices significantly reduce maladaptive perfectionism in students, which in turn increases psychological well-being and academic self-efficacy (Bearden et al., 2024; Bluth & Eisenlohr-Moul, 2017; Dundas et al., 2017; Lui, S. et al., 2023). These interventions in students have shown to produce significant decreases in behaviours relating to maladaptive perfectionism, specifically self-oriented perfectionism (Bearden et al., 2024), as well as significant increases in mental health outcomes (Bearden et al., 2024) and self-efficacy (Dundas et al., 2017). Self-compassion interventions that have yielded significant reductions in perfectionism (Bearden et al., 2024), increases in mental health outcomes (Bluth & Eisenlohr-Moul, 2017; Dundas et al., 2017) and self-efficacy in students have typically been eight weeks in length (Bearden et al., 2024; Bluth & Eisenlohr-Moul, 2017), but significant results have been found in interventions in as little as two weeks (Dundas et al., 2017). During the eight-week interventions, participants completed an average of one hour and 45 minutes of self-compassion per week. Additionally, the two-week intervention involved participants completed three 90-minute sessions, totalling 4.5 hours of self-compassion completed during the study. Interestingly, a study that conducted an online single-session intervention that implemented self-compassion techniques did not find significant reductions in maladaptive perfectionism in post-secondary students (Ward & Wheaton, 2022), which suggests consistently practicing self-compassion over an extended period of time is crucial to see significant changes in maladaptive forms of perfectionism.

A recent study aimed to investigate the effectiveness a four-week self-compassion intervention had on college students with imposter syndrome, while also measuring maladaptive perfectionism and psychological distress (Lui, S. et al., 2023). Imposter syndrome involves having feelings of self-doubt, especially in terms of intellectual and academic abilities (Pákozdy et al., 2023). Students who report being high in imposter syndrome have shown to have low levels of self-efficacy and well-being, and high levels of perfectionism (Pákozdy et al., 2023). In their study, Lui, S. and colleagues (2023) highlighted the similarities in behaviours between imposter phenomenon and maladaptive perfectionism, which suggests reducing the effects of imposter phenomenon using self-compassion would also reduce maladaptive perfectionist behaviours and psychological distress in students. This intervention involved participants completing approximately 45 minutes of self-compassion each week through the usage of online self-compassion modules. The results found that the self-compassion modules significantly reduced imposter syndrome levels within participants in the intervention group, as well as showed significant reductions in maladaptive perfectionism. The significant reductions found within this study suggest that completing self-compassion for less amount of time, as compared to other interventions that involve more intensive self-compassion practices (Bearden et al., 2024; Bluth & Eisenlohr-Moul, 2017), can yield similar results.

The Present Study

The purpose of the current study was to determine whether completing a five-minute audio self-compassion practice multiple times a week would impact self-oriented perfectionism, academic self-efficacy, and psychological well-being in post-secondary students. Specifically, the current study aimed to explore whether a brief and accessible daily self-compassion practice yielded changes in the target variables. The question this study aimed to investigate was how completing self-compassion for approximately five minutes a

day impacted self-oriented perfectionism in participants, and whether this brief intervention had beneficial impacts on self-reported scores of self-compassion, academic self-efficacy, and psychological well-being. It was hypothesized that the brief self-compassion intervention would show decreases in self-oriented perfectionism, and increases in self-compassion, academic self-efficacy, and psychological well-being in participants. Differences in these measures were distinguished between the data collected from the pre- and post-test surveys.

Method

Participants

The participant sample consisted of undergraduate students enrolled in a first-year psychology course at Red Deer Polytechnic. A total of 107 students initially expressed interest in participating in the study, and 73 participants completed both surveys to be included as part of the final analysis. In the intervention sample (n = 41), a total of eight participant responses were removed. Responses were removed due to incompletion (n = 2), completing the incorrectly assigned survey (n = 1), and reporting extensive mindfulness practice (n = 1). Participants who reported existing 'extensive mindfulness practice' were removed as this study intended to explore the impacts of introducing a mindfulness-based practice (i.e., self-compassion) to a sample of undergraduate students who were considered to be inexperienced with this practice. Four responses were also excluded from the MANOVA analysis as a difference score was not computed due to not answering all questions on the specific scales in the survey. Similarly, ten responses were excluded from the control group (n = 32) due to incompletion (n = 1), practicing extensive mindfulness (n = 8), and a lack of computed difference score (n = 1). The final data consisted of 55 responses between the intervention (n = 33) and control (n = 22) conditions. Of the entire sample (N = 55), descriptive statistics indicated that the sample was composed of primarily first year students

(n = 49) who were Caucasian (n = 43) and female (n = 46), which was representative of the student population at RDP. The mean age of participants in the experimental and control conditions were 22.53 years (n = 32, SD = 7.74) and 24.33 years (n = 21, SD = 7.74), respectively. Additional participant demographics are summarized in Table 1.

Table 1

Participant Demographics at Post-Test

Baseline characteristics	Intervention		Control		Full Sample	
	n	%	*n*	%	*n*	%
Gender						
Female	31	83.8	15	65.2	46	83.6
Male	2	5.4	6	26.1	8	14.5
LGBTQ+	3	8.1	1	4.3	4	7.3
Prefer not to say	1	2.7	1	4.3	2	3.6
Ethnicity[1]						
Caucasian[2, 3]	28	75.5	15	65.2	43	78.2
Black	2	5.4	1	4.3	3	5.5
Asian	2	5.4	3	13.0	5	9.1
Indigenous[2, 3]	4	10.8	7	30.4	11	20.0
Hispanic/Latinx[3]	0	0	1	4.3	1	1.8
Mixed	1	2.7	1	4.3	2	3.6
Prefer not to say	2	5.4	0	0	2	3.6
Year of Study						
First Year	32	88.9	17	73.9	49	89.1
Second Year	2	5.6	4	14.4	6	10.9
Third Year	2	5.6	2	8.7	4	7.3

Notes. [1]One participant response was removed from analysis in the intervention (n = 36)
[2]One participant in the intervention identified as Caucasian and Indigenous
[3]One participant in the control condition identified as Caucasian, Indigenous, and Hispanic, and three identified as Caucasian and Indigenous

Procedure

After obtaining ethics approval from the Red Deer Polytechnic Research Ethics Board, participants were notified of the study through recruitment materials describing the opportunity to participate in a self-compassion-based research study for students enrolled in an introductory level psychology course during the winter 2025 semester. The researchers

also made appearances in various classes to discuss the details of the project and answer any questions potential participants may have had regarding their participation. Those who were interested in participating were instructed to contact the co-researcher via email by a specified date, providing their instructor's name and their course and section. Each class was randomly assigned to be the intervention and control groups, thus allocating participants to the designated condition based on which class they were enrolled in. Interested participants were sent an email containing the appropriate pre-test survey, as assigned based on their course section. The pre-test survey, as well as the post-test survey, also contained an informed consent form that participants were required to read before proceeding to the survey. They were instructed to complete this survey by a specified date before they could continue participation in the project; those who did not complete the pre-test survey in either condition were not sent additional project resources.

For five weeks, participants assigned to the intervention condition were asked to complete a self-guided audio practice that was approximately five minutes in length. At the beginning of each week, a survey link containing a new self-compassion practice was sent to participants via their RDP email. Participants completed a new self-compassion practice each week to promote ongoing engagement; all self-compassion practices were similar in length (ranging from 4-8 minutes each). With this, participants were asked to aim to complete the practice approximately five times throughout the week. At the end of each week, participants were sent a survey link and were asked to record how many times they completed a guided audio self-compassion practice. Participants were encouraged to honestly report their weekly practices for the accuracy of data collection, and informed that there would be no penalties for completing fewer than five days of self-compassion practice. After the five-week period, a post-test survey was sent to participants in both the intervention and control group. As

compensation, participants were eligible to receive up to a two percent bonus in their class for each survey they completed (one percent for the pre-test and one percent for the post-test).

Measures

Self-Compassion Scale (SCS)

The Self-Compassion Scale (SCS; Neff, 2003b) assesses levels of self-compassion in the form of three bimodal components: being kind to oneself (as opposed to self-criticism), recognizing one's 'common humanity' (as opposed to feelings of isolation), and mindfulness (an awareness of one's painful emotions as opposed to overidentification; Neff, 2003a). The SCS is made up of 26 items which include items such as, 'I'm kind to myself when I am experiencing suffering.' Participants responded to each item using a five-point Likert scale (1 = *almost never,* 5 = *almost always*), aligning their responses with the option that best reflects their experiences. The scale included six subscales that pertained to the three components of self-compassion in addition to a total self-compassion score. Total average scores on all six subscales of this measure ranged from 1-5, with higher scores indicating greater self-compassion. Chronbach's α values of the total scale in the current study suggested high internal reliability and consistency between the experimental (α = .92) and the control group (α = .96)

Multidimensional Perfectionism Scale (MDPS)

The Multidimensional Perfectionism Scale (Hewitt & Flett, 1991) is a 45-item scale that is comprised of three subscales that measure socially prescribed perfectionism, other-oriented perfectionism, and self-oriented perfectionism (e.g. 'One of my goals is to be perfect in everything that I do'); each subscale consisted of 15 statements. Participants were asked to respond to each statement by selecting the option they felt best reflected their experiences (1 = *strongly disagree*, 7 = *strongly agree*). For this particular study, the self-oriented perfectionism subscale of the Multidimensional Perfectionism Scale was used. The scores for

each subscale ranged from 15-105 with higher scores indicating higher levels of perfectionism. In this case, higher scores on the self-oriented perfectionism subscale would indicate higher levels of self-oriented perfectionism. Chronbach's α values from the self-oriented perfectionism subscale indicated this scale demonstrated high internal consistency and reliability between the experimental (α = .90) and the control group (α = .91).

Academic Self-Efficacy Scale (ASES)

The Academic Self-Efficacy Scale (Chemers et al., 2001) is a nine-item scale that evaluates one's experiences in various academic tasks. Statements such as 'I am a very good student' and 'I usually do very well in school and at academic tasks' were included in this scale. Participants were asked to rate how true each statement is to them on a 7-point Likert scale (1 = *very untrue*, 7 = *very true*). Total scores for this measure ranged from 10-63 with high scores indicating high levels of academic self-efficacy. Chronbach's α values from this scale showcased high internal consistency and reliability between the experimental (α = .90) and control conditions (α = .92).

Brief Inventory of Thriving (BIT)

The Brief Inventory of Thriving (BIT; Su et al., 2014) is a condensed 10-item scale of the 54-item Comprehensive Inventory of Thriving (CIT) that aims to measure individuals' psychological well-being. Statements such as 'I can succeed if I put my mind to it' and 'What I do in life is valuable and worthwhile' were used to gauge a general understanding of an individual's level of 'thriving'. Participants responded to each item by selecting the answer that best reflected their personal experience (1 = *strongly disagree*, 5 = *strongly agree*). Total scores for this measure ranged from 10-50 with higher scores of this scale reflecting high levels of thriving. The reported Chronbach's α values for this scale in the current study demonstrated high internal reliability and consistency between the experimental (α = .91) and control group (α = .88).

Self-Guided Audio Self-Compassion Practices

Dr. Kristen Neff's self-compassion website includes pre-recorded guided audio self-compassion practices that were implemented in this study. The chosen guided self-compassion practices were: the '*General Self-Compassion Break*,' which focuses on using the three components of self-compassion to address a current struggle, the '*Tender Self-Compassion Break*,' which helps manage difficult emotions by practicing self-kindness, the '*Providing Self-Compassion Break*,' which helps one focus on what they need to be fulfilled and happy, the '*Motivating Self-Compassion Break*,' which promotes motivation towards reaching a goal or making a change, and the '*Protective Self-Compassion Break*,' which focuses on using bravery to speak up, set boundaries, and/or protect oneself. Each week of the study used a different guided self-compassion practice (see Appendix D).

Open-Ended and Demographic Questions

In the post-test survey for the intervention group, open-ended questions were included to evaluate the experiences of participants with completing self-compassion practices, and to assess their likelihood of continuing self-compassion after the intervention was complete. Additional demographic questions were also included in the post-test survey.

Results

Weekly Self-Compassion Practice Completions

During the five-week intervention, participants in the experimental group reported completing, on average, approximately three self-compassion practices a week (Table 2). With this, participants completed between 15-25 minutes of self-compassion each week, depending on the length of the practice for that week. Participant attrition was evident throughout the intervention with Week 4 having the lowest number of participant responses.

Week 3 demonstrated the highest mean number of self-compassion practices completed throughout the intervention.

Table 2

Average Number of Self-Compassion Practices Completed During the Intervention

	Mean number of practices completed (SD)	Length of practice (mins)	*n*
Week 1	3.04 (1.26)	5:13	46
Week 2	3.10 (1.21)	4:39	39
Week 3	3.90 (1.12)	6:46	30
Week 4	2.96 (1.85)	7:07	27
Week 5	3.30 (1.72)	8:28	33

Note. The RDP reading break occurred during Week 4, which may explain why attrition was the lowest during this week of the intervention.

Repeated-Samples *t*-Tests

Repeated-samples *t*-tests were used to analyze differences in mean pre- and post-test scores in each of the four target variables between the experimental and control groups. Analyses revealed that the experimental group demonstrated significant increases in self-compassion, academic self-efficacy, and well-being at post-test relative to pre-test means. The experimental group was also significantly lower in self-oriented perfectionism at the post-test compared to the pre-test. In contrast, the control group demonstrated no significant differences in self-compassion, academic self-efficacy, or self-oriented perfectionism between pre-test and post-test mean scores. Interestingly, well-being significantly increased in the control group at the post-test coInterestingly, well-being significantly increased in the control group at the post-test (M = 37.30, SD = 7.14) compared to the pre-test (M = 34.52, SD = 7.10), $t(22) = -2.45$, $p = .011$ (see Table 3). Differences in pre- and post-test scores of the target variables are presented in Figures 1-4.

Table 3

Comparison in Pre-Test and Post-Test Means Between the Experimental and Control Group

	Experimental Pre-test Mean (SD)	Experimental Post-test Mean (SD)	Control Pre-test Mean (SD)	Control Post-test Mean (SD)
SC	2.62 (.50)	3.24 (.55)*	2.67 (.81)	2.79 (.81)
SOP	76.12 (14.09)	69.62 (15.43)**	76.09 (13.31)	72.50 (15.61)
ASE	46.03 (9.27)	49.08 (9.24)*	45.09 (10.08)	46.35 (11.25)
Well-being	36.91 (7.06)	40.29 (7.19)*	34.52 (7.10)	37.30 (7.14)***

Notes. *Denotes a statistically significant difference, $p < .001$
**Denotes a statistically significant difference, $p = .004$
***Denotes a statistically significant difference, $p = .011$
Abbreviations: SC, self-compassion; SOP, self-oriented perfectionism; ASE, academic self-efficacy

Figure 1

Mean Pre- and Post-Test Scores of Self-Compassion Between Conditions

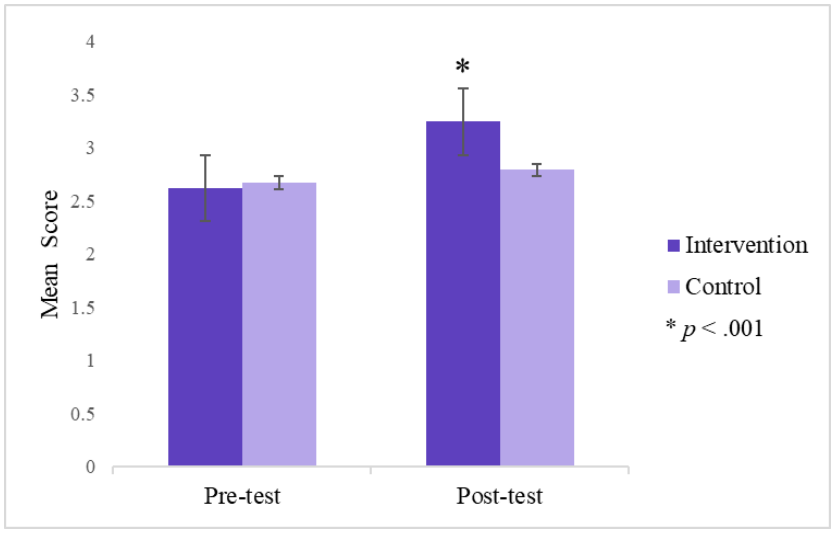


Figure 2

Mean Pre- and Post-Test Scores of Self-Oriented Perfectionism Between Conditions

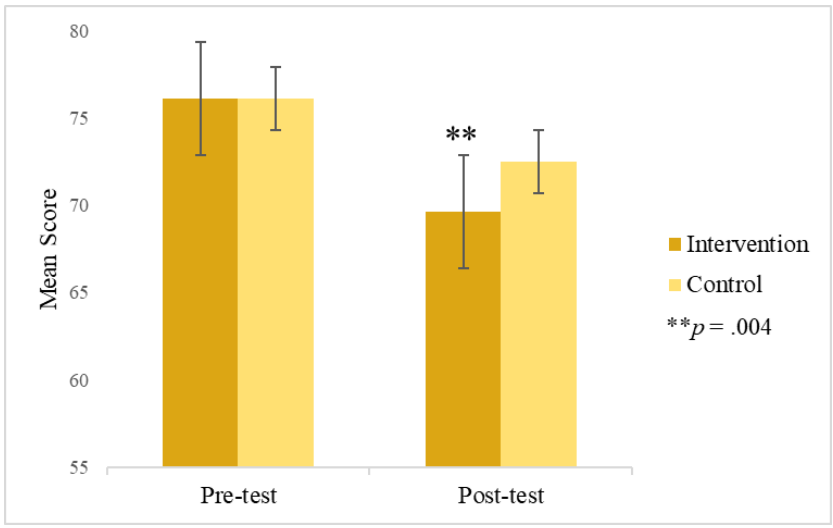


Figure 3

Mean Pre- and Post-Test Scores of Academic Self-Efficacy Between Conditions

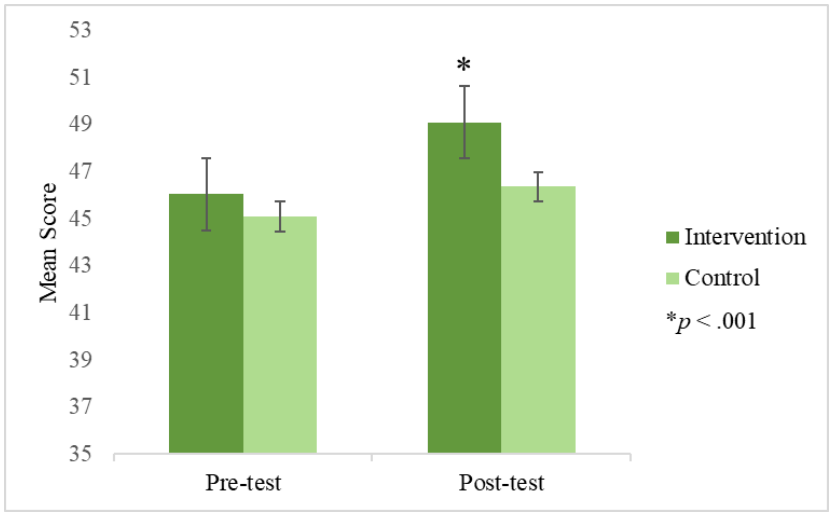
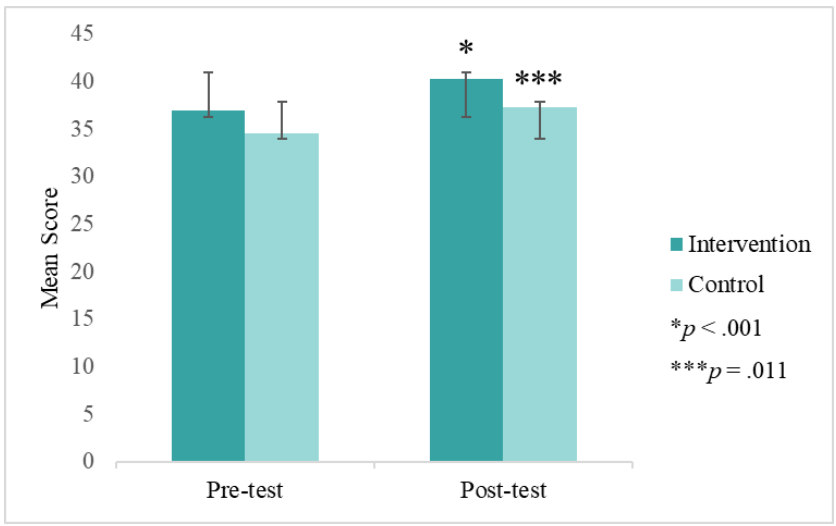


Figure 4

Mean Pre- and Post-Test Scores of Thriving Between Conditions



MANOVA

Differences in self-compassion, self-oriented perfectionism, academic self-efficacy, and psychological well-being between the experimental and control conditions from pre- to post-test were determined using a Multivariate Analysis of Variance (MANOVA). The results of the assumption checked indicated that the assumption of homogeneity of variance-covariance was insignificant with Box's M = 18.70, F (9462.71, 10) = 1.71, p = .073, indicating that covariance matrices of the dependent variables were equal between the intervention and control conditions. The results of the MANOVA analysis indicated there was a significant multivariate main effect of the intervention, with Roy's Largest Root Θ = .34, F (4, 50) = 4.27, p = .005, η^2_p = .26. The large effect size, as suggested by the criteria proposed by Cohen (1988), demonstrates that approximately 26% of variance of the dependent variables was attributed to the intervention.

The results of the MANOVA were followed-up with a discriminant analysis, which revealed one significant discriminant function that explained 100% of the variance, canonical R = .51. This is due to only one variate being considered in this analysis (i.e., the self-compassion intervention). This discriminant significantly differentiated between the testing variables, Wilks' λ = .075, χ^2 (4) = 14.99, p = .005. An examination of the discriminant loading values indicated that participants in the experimental and control conditions differed in self-compassion, self-oriented perfectionism, academic self-efficacy, and psychological well-being. More specifically, the results showed that participants involved in the intervention reported higher levels of self-compassion, academic self-efficacy, and psychological well-being, and lower levels of self-oriented perfectionism, as compared to the participants in the control group. Statistical analyses were performed using the IBM SPSS statistical software package.

Open-Ended Responses

Participants in the experimental group were asked several open-ended questions at the conclusion of the intervention to decipher experiences with completing the self-compassion practices. Questions aimed to investigate the perceived benefits and difficulties with completing the intervention practices, and whether participants had intentions of completing self-compassion in the future. Participants reported, for example, noticed an increase in self-reflection and awareness. Participant #5 stated, "I found that I became more in touch with my feelings, and how to accept them more often," and participant #3 added, "It was a very interesting perspective, it allowed me to think more deeply about my thoughts towards myself." Additionally, participants recognized how engaging in the intervention practices provided a break to relax and decompress, which is evident in the response from participant #11: "It just gave me time to calm down, especially if I've had a rough day, and it helped me to just take a second to breathe." Furthermore, participant responses reflected how engaging in the intervention practices increased self-compassion. For example, the response from participant #23**,** "[The practices] made me believe that I'm able to strive in my work and that it's important to make sure you are not hard on yourself whenever you are going through a hard time in your life," reflecting an increase in self-kindness; A response from participant #63 reflects an increase in common humanity: "It made me think about how we all go through hard times and self-doubt, even when someone else's life seems perfect compared to ours"; Participant #25 mentioned, "I think it helped me temporarily feel more grounded," reflecting an increase in mindfulness.

Participants did report some difficulties in completing the practices regularly, citing time management as one reason. For instance, participant #63 said, "It felt like one more thing to add to the to-do list on busy days," which was echoed by another participant (#18) who

mentioned that, “Sometimes, work and other things just got in the way, and before I knew it, it was past midnight and I hadn’t done the practice for the day.” Another difficulty reported involved feeling disengaged from the practices or found it challenging to connect with the practice. This was evident in the responses from participant #25, “Some of them didn’t feel overly relevant to me so I struggled to connect,” and participant #16, “Sometimes it was difficult to stay engaged for the entire practice.” Participants also reported difficulties with remembering to complete the practices or struggling to be consistent with the practices. This was reflected in the response from participant #6: “I found it hard to remember to do the practices, only remembering when the end of the week email was sent out.” With that being said, some participants did not report having any difficulties in completing the self-compassion practices.

Most participants reported a high likelihood of practicing self-compassion in the future but perhaps using different methods. Participant #30, for example, stated, “I see myself continuing to practice self-compassion in the future, however I think I prefer to use another method other than the guided audio,” and participant #28 added, “I see the benefit in it but I’m not sure if I will actually do so. I might try in other ways or when I really need it.” Moreover, participants reported they plan on continuing to practice self-compassion as it provided calming and regulatory effects. This was reflected in the responses from participant #7 and participant #4, which stated, respectively, “I found the self-compassion exercises very helpful in not spiraling while thinking of issues that I see in myself,” and “It calmed my nervous system and helped decompress.” Participants also reported wanting to practice self-compassion in the future as it aided in promoting self-improvement. For instance, participant #23 stated, “It motivates me to want to be the better version of myself in the future.” Overall, participant responses reflected positive experiences with completing the self-compassion practices included in the intervention.

Discussion

The current study aimed to investigate the effects a brief, five-week self-compassion intervention had on post-secondary students in terms of their self-oriented perfectionism, self-compassion, academic self-efficacy, and well-being. It was hypothesized that participants in the experimental group would demonstrate decreases in self-oriented perfectionism, and increases self-compassion, academic self-efficacy, and psychological well-being compared to the control group. The findings support these predictions entirely. Considering the relatively small sample size, these findings make an important contribution to the current literature as it furthers the understanding of the utility of brief self-compassion interventions on post-secondary students.

Intervention Effects

At post-test, participants in the experimental group demonstrated significant decreases in self-oriented perfectionism compared to those in the control group. These findings are consistent with other self-compassion intervention methods that have shown reductions in maladaptive perfectionism (Bearden et al., 2024; Lui, S. et al., 2023; Woodfin et al., 2021). As maladaptive perfectionism is often associated with decreased academic self-efficacy (Damian et al., 2016) and psychological well-being (Fong & Loi, 2016; Koutra et al., 2023; Tobin & Dunkley, 2021), results of these interventions also found significant increases in these variables, which also align with the findings of the current study. Interestingly, post-test analyses revealed both the experimental group and the control group showed significant increases in well-being (Figure 4). Enhancement of well-being in both groups may have been attributed to students returning to school after a week-long break during the final week of the intervention. Also, at the pre-test, both groups reported moderate well-being, which could reflect the well-being of participants being relatively stable to begin with.

Additionally, participants in the experimental group demonstrated significant increases in self-compassion because of the self-compassion intervention. These findings reflect similarities with other self-compassion interventions within post-secondary student populations (e.g., Bearden et al., 2024; Ko et al., 2018; Mckay et al., 2024). The findings also correspond well with other findings from brief self-compassion interventions (Dundas et al., 2017; Lui et al., 2023; Smeets et al., 2014), highlighting how brief self-compassion interventions can yield similar results as longer, formal self-compassion interventions. With this, however, the findings of the current study differ from previous self-compassion interventions, specifically in terms of how much self-compassion is practiced. For instance, the brief self-compassion intervention conducted by Lui et al., (2023) involved participants completing 45-minute self-compassion modules each week over a four-week period, totalling 180 minutes (or 3 hours) of self-compassion completed by the end of the intervention. Additionally, a two-week self-compassion intervention conducted by Dundas et al. (2017) involved participants completing three 90-minute self-compassion modules, totalling 270 minutes (or 4.5 hours) of self-compassion during the intervention. The participants of the current study completed, on average, 15-25 minutes of self-compassion a week for five weeks, totalling to approximately 75-125 minutes (or 1.25-2 hours) of self-compassion completed during the intervention. The current findings reflect how practicing less self-compassion can still yield significant changes in self-compassion, as compared to other brief self-compassion interventions.

As indicated by the findings of this study, self-compassion has demonstrated to have significant impacts on academic self-efficacy, self-oriented perfectionism, and well-being, but self-compassion has shown to be associated with other positive benefits, too; self-compassion has shown to increase self-esteem (Muris & Otgaar, 2023), emotional regulation (Paucsik et al., 2022), emotional intelligence (Şenyuva et al., 2013), and interpersonal relationship

satisfaction (Dong et al., 2022; Körner et al., 2024; Lathren et al., 2021; Neff & Beretvas, 2013; Yarnell & Neff, 2013). Self-esteem has shown to be positively correlated with self-efficacy (Bhatt & Bahadur, 2018), which can be applied to increases in academic self-efficacy and well-being in student populations (Stupnisky et al., 2013). Moreover, increases in emotional regulation and intelligence are related to increased relationship satisfaction, specifically in terms of romantic relationships (Körner et al., 2024; Neff & Beretvas, 2013), friendships (Dong et al., 2022), and familial relationships (Lathren et al., 2021). Research has shown that enhancement of interpersonal relationships can combat feelings of loneliness and isolation (Goodfellow et al., 2022), a positive benefit that mirrors the importance of recognizing one's common humanity in self-compassion. These studies highlight how practicing self-compassion is associated with other positive benefits, suggesting that the post-secondary student participants in this study may have also experienced enhanced well-being in areas beyond what was measured in the present study.

Considering post-secondary students are often under immense levels of stress with primary sources of stress relating to academics, finances, and managing interpersonal relationships (Pitt et al., 2017), dedicating time to engaging in formal self-compassion practices, such as workshops or courses, may not be feasible. With this surge of mental health issues amongst students (Linden et al., 2021), institution mental health supports are struggling to meet the mental health demands of students (Watkins et al., 2011), making it challenging for students to access the mental health services they require. As the findings of this study suggest, practicing self-compassion for five minutes a day can have significant benefits on psychological well-being in students, among other benefits relating to self-oriented perfectionism and academic self-efficacy. With this, a brief self-compassion intervention may be a useful tool that can help support students' mental health while they wait to access formal mental health services.

Open-ended Responses

Participant responses regarding their experiences with the self-compassion practices used in the current study were primarily positive. Firstly, participants explained how they derived various benefits from completing the practices that enhanced their perceptions of themselves. More specifically, the benefits derived from the practices highlighted increases in the three elements of self-compassion: self-kindness, common humanity, and mindfulness. Participants reported that expressing kindness to oneself, recognizing they are not alone in their feelings, and feeling more grounded led to increases in self-compassion. Additionally, completing the self-compassion practices gave participants an opportunity to take a break to focus on themselves. Participants reported that taking a moment to decompress allowed them to feel less stressed and more relaxed, highlighting how the self-compassion practices aided in enhancing mental health and well-being of those in the experimental group. Furthermore, participants reported that by engaging in these practices, they now feel more prepared to approach their emotions in a more positive light, focusing on the importance of being kinder to oneself when experiencing hardship.

Participants did report experiencing some difficulties when completing the self-compassion practices with a primary barrier involving finding time to complete the practices. Considering students are busy with numerous other things (Pitt et al., 2017), this is to be expected. With this, however, participants who completed a few practices a week still noticed benefits from completing them. This suggests that completing a small amount of self-compassion can still yield positive impacts on the well-being of students.

Limitations and Future Directions

Like with all research, limitations were present within the study. Firstly, due to the timelines of this project (given that it was conducted as part of a fourth-year psychology student independent research project), further follow-up analyses are not able to be conducted

to determine the long-term effectiveness of the intervention. Future studies should implement a longitudinal approach to evaluate levels of self-compassion, self-oriented perfectionism, academic self-efficacy, and well-being after the intervention is complete. With this, considerations should be made regarding whether participants continued to practice self-compassion after the intervention. This would determine if the intervention alone was effective, or if participants are required to continue practicing self-compassion after the intervention. Secondly, the study relied on self-report measures for the pre- and post-test surveys as well as the weekly reporting of the self-compassion practices completed. Although it was reiterated that responses should be accurate and participants would not receive penalties for not completing the recommended number of practices each week, social desirability bias remains a potential issue in regard to accuracy of reporting. Thirdly, future studies should focus on including a larger, more diverse sample of participants. Since the sample primarily consisted of Caucasian females, including a wider variety of participants in terms of gender identity, ethnicity, age, etc. would create a better understanding of how a brief self-compassion intervention impacts a broader demographic of individuals. Furthermore, some participant feedback mentioned how the self-guided audio practices used in this study were disengaging and were difficult to connect with. Future studies could consider implementing various self-compassion practices such as journaling, meditations, or performing self-care, into a brief self-compassion intervention. This would be helpful to gauge whether any differences between the effectiveness of each technique arise, leading to the possibility that one technique may be more effective in a brief self-compassion intervention setting.

Conclusion

With increasing levels of perfectionism in post-secondary students (Curran & Hill., 2019), students are in need of accessible ways to combat the effects associated with

perfectionism, specifically in terms of their academic success and mental health. Recent studies highlight the importance of self-compassion and how it can be used to enhance a multitude of aspects relating to well-being (e.g., Bearden et al., 2024; Lathren et al., 2021; Muris & Otgaar, 2023), especially in post-secondary students. The present study sought to explore whether brief self-compassion interventions may have comparable results to longer, more time intensive efforts to increase self-compassion. Indeed, the present study did demonstrate that engaging in a brief self-compassion intervention can yield significant impacts on self-compassion, academic self-efficacy, self-oriented perfectionism, and well-being in post-secondary students, which align with findings from other self-compassion interventions (e.g., Dundas et al., 2017; Lui, S. et al., 2023). Practicing self-compassion for a few minutes a day can be a useful tool to enhance students' well-being as it has demonstrated to significantly reduce self-oriented perfectionism and increase academic self-efficacy and self-compassion. Further research is required to determine the long-term effectiveness of engaging in 15-25 minutes of self-compassion a week, aiming to include a larger, more diverse sample of participants to increase the generalizability of the results. Overall, the findings of this study contribute to the existing literature on the effects a brief self-compassion intervention has on post-secondary students, specifically in terms of its impacts on self-oriented perfectionism, academic self-efficacy, and well-being.

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