Empirical Article

Journal of Adolescent Research
1–32

DOI: 10.1177/07435584211062126
journals.sagepub.com/home/jar
SAGE

Improving Mental Health Among Transgender Adolescents: Implementing Mindful Self-Compassion for Teens

Karen Bluth[1], Christine Lathren[1], Melissa Clepper-Faith[1], Lillia M. Larson[2], Daniel O. Ogunbamowo[3], and Samantha Pflum[1]

Abstract

The purpose of this study was to investigate the feasibility, acceptability, and preliminary outcomes of an online self-compassion intervention for transgender adolescents, with the aim of improving mental health. Participants identified as transgender or gender expansive, were between the ages of 13 and 17, and lived in the U.S. or Canada. The empirically-based self-compassion program, *Mindful Self-Compassion for Teens* (formerly *Making Friends with Yourself*) was implemented in eight 1.5 hour sessions on the Zoom platform by two trained instructors. Surveys were administered pre-, post-intervention, and at 3 months follow-up, and qualitative data were collected through end-of-program interviews and open-ended questions on the post-survey. All protocols were approved by the university IRB. Quantitative data analysis included repeated measures ANOVAs, and qualitative data were

[1]University of North Carolina, Chapel Hill, USA
[2]Middlebury College, VT, USA
[3]Stanford University, CA, USA

Corresponding Author:
Karen Bluth, Department of Psychiatry, University of North Carolina School of Medicine, 101 Manning Dr. #1, Chapel Hill, NC 27514, USA.
Email: bluth@med.unc.edu

analyzed via both inductive and deductive methods. Results indicated that all but one psychosocial measure significantly improved from pre- to post-intervention, which then significantly improved at 3-month follow-up; most other improvements were maintained at follow-up. Four themes emerged from the qualitative data: *virtual safe space; connection to body; personal growth; and recommended course changes* and are discussed. Results suggest that self-compassion interventions can be incorporated into therapy programs to support and improve mental health for transgender adolescents.

Keywords
transgender, gender expansive, self-compassion, adolescents, mindfulness, mental health

Introduction

Adolescents who are transgender, defined here as both those that identify with a gender that is different than the sex they were assigned at birth and those who do not identify with binary constructions of gender, often face enormous mental health challenges. Stressors arising from being part of a stigmatized minority group exacerbate the emotional and social challenges associated with the normative transitions of adolescence. As such, transgender adolescents experience a four-fold higher rate of depression compared to their cisgender (i.e., non-transgender) peers (Hawton et al., 2012; Peterson et al., 2017). Up to 58% of transgender adolescents are diagnosed with depression, and of these, up to 51% experience suicidal ideation, 32% attempt suicide (Grossman & D'Augelli, 2007; Russell & Joyner, 2001), and 40% engage in self-injurious behavior (Peterson et al., 2017). As depressive symptoms are frequently linked to suicide attempts (Berman, 2009), transgender adolescents attempt suicide at a rate five-fold higher than that of their cisgender peers (Clark et al., 2014). Gender dysphoria, defined as the distress arising from experiencing a mismatch between one's identified gender and that which was assigned at birth, can be somewhat alleviated by puberty blockers, hormone replacement therapy, gender-affirming surgery, and psychotherapy, but the emotional toll of transitioning from one gender to another remains enormously psychologically taxing, largely due to an array of minority stressors that transgender adolescents face on a daily basis (Meyer, 2003).

Minority Stress Theory

Minority stress theory (Meyer, 2003) describes how stigmatized, minority social groups experience both distal stressors (i.e., external events and

conditions) and proximal stressors (i.e., internal or relating to one's subjective perceptions and appraisals) that can contribute to poor mental health outcomes. For transgender communities, discrimination, rejection, and victimization (e.g., lack of access to safe bathrooms, being bullied, or misgendered) are common examples of distal stressors (Testa et al., 2015). Meanwhile, examples of proximal stressors include the stress of internalized transphobia (or internalization of society's negative evaluations of transgender individuals), the fear or expectation of rejection or discrimination, and the emotional toll of concealing one's gender identity.

The minority stress theory has been supported by ample research that has demonstrated that lesbian, gay, bisexual (LGB), and transgender individuals experience greater stress as the result of discrimination and subsequently, often suffer from significant psychological distress (Bockting et al., 2013; Burns et al., 2012; Kessler et al., 1999; Mays & Cochran, 2001) and may engage in suicide attempts (Bauer et al., 2010; Clements-Nolle et al., 2006). The minority stress theory also describes protective factors that when present, would buffer against negative outcomes of discrimination, rejection, and victimization. These protective factors include individual coping and resilience resources, group-level resources such as social and community support from others who are from their minority group, and experiencing pride in their identity, often emerging when one engages in a community of those with a similar identity (Meyer, 2003).

Compounding their ongoing experience with minority stressors, transgender adolescents are simultaneously negotiating the developmental task which Erikson (1968) termed as Confusion versus Ego Identity. According to Erikson, from age 12 to 18, adolescents are developing their sense of self, and are in the process of figuring out how they fit into society. They accomplish this through exploring different ways of being in the world and interacting with others, including peers, parents, other family members, social groups, teachers, and whoever else is in their social network. When their interactions result in receiving emotional support and encouragement from others, adolescents are more likely to develop a stable sense of self. However, if they receive negative feedback from others—if they are discriminated against or are the recipient of some type of bias or stigma, for example—they are likely to experience a fractured sense of self and be more prone to adverse mental health. Thus, external events such as misgendering a transgender adolescent can initiate a cascade of proximal stressors, and when compounded by adolescent developmental challenges (such as establishing one's ego identity), can result in negative self-talk and negative beliefs about oneself, eventually leading to depression, and even suicidal ideation.

According to the Interpersonal Psychological Theory of Suicide (Joiner TE et al., 2005; Van Orden et al., 2010), suicidal ideation is predicted by the presence of two factors: thwarted belongingness (i.e., experiencing an unmet need to be accepted and "belong") and perceived burdensomeness (i.e., feeling like one is a burden to others) which have been associated with greater suicide ideation and attempts in both community samples (Van Orden et al., 2006, 2008) and LGBTQ youth (Hatchel et al., 2019). The need to belong was first articulated in Baumeister and Leary's (1995) seminal article which indicated that this need is a powerful motivating force in human behavior and that not having this need met can result in negative health outcomes. Perceived burdensomeness is described as the belief that one's presence is a liability to others, and that others would be better off without you. The concept of perceived burdensomeness is in line with the theory on adolescent suicide developed by Sabbath (1969) who posited that adolescents are more likely to attempt suicide if they perceive themselves to be expendable and a burden to their families. Van Orden et al. (2010) indicated that both thwarted belongingness and perceived burdensomeness need to be present in order for suicide ideation to occur.

For many transgender adolescents, experiencing rejection from peers, family, or society directly contributes to a sense of isolation, leading to thwarted belongingness. Perceived burdensomeness is experienced by transgender adolescents as a feeling of incompetence and unworthiness and believing oneself is so fundamentally flawed that they are a liability to others. In fact, in one study with transgender adolescents, both thwarted belongingness and perceived burdensomeness were significantly associated with suicidal ideation (Grossman et al., 2016).

Self-Compassion: A Potential Protective Factor

Fortunately, self-compassion is a modifiable personal resource that may buffer against both minority-based and developmental stressors that transgender adolescents face. Defined as tending to oneself with kindness and understanding at difficult times, self-compassion is comprised of three interrelated components that engage in a dynamic system: *mindfulness*, or maintaining a balanced perspective amidst challenging circumstances; *self-kindness*, or treating oneself with tenderness and care when one is suffering; and *common humanity*, or recognizing that one is integrally connected and a part of a network of imperfect human beings (Neff, 2003b). Given that self-compassion encourages self-acceptance, emotional regulation, and connection to others in the context of painful experiences, it can provide a direct counterbalance to the negative self-appraisals inherent in perceived burdensomeness and social isolation inherent in thwarted belongingness. Moreover, given that

self-compassion entails providing oneself with warmth and care regardless of external support, it may be particularly beneficial for stigmatized populations, who may lack supportive social connections. As such, self-compassion may be a coping strategy that is well-suited to address the types of stressors that many transgender adolescents face.

Empirical studies investigating self-compassion and mental health outcomes have reported associations of self-compassion with psychological health for both adults and adolescents (Baer et al., 2012). For example, greater self-compassion is correlated with lower suicidal behavior and ideation among community adults (Hasking et al., 2019; Rabon et al., 2019), college students (Rabon et al., 2018), and most notably, LGBTQ youth (Hatchel et al., 2019), and has been reported as being inversely associated with depression, anxiety, and stress in adults (see meta-analysis: MacBeth & Gumley, 2012) and adolescents (see review and meta-analysis: Marsh et al., 2018; Pullmer et al., 2019). Importantly, self-compassion has been found to mediate the association between negative affect and suicide ideation/non-suicidal self-injury in undergraduates (Hasking et al., 2019), suggesting that self-compassion has the potential to intervene in the pathway between negative affect and suicidal ideation/non-suicidal injury. Further, self-compassion moderated the effect of depression on self-injury in adolescents, thereby buffering one of the negative effects of depression (Xavier et al., 2016), and predicted lower depressive symptoms, anxiety, stress, and negative affect after an intensive mindfulness retreat (Galla, 2016). Similarly, self-compassion predicted lower depressive symptoms over a 5-month interval in first year psychology students (Raes, 2011), protected against negative self-judgments over the following year in a large sample of Australian ninth graders (Marshall et al., 2015), and exerted a protective effect on trauma-related psychopathology in Israeli high schoolers (Zeller et al., 2015). Finally, self-compassion has been associated with resilience in adolescents (Bluth et al., 2018).

Evidence to date also suggests self-compassion may be a valuable resource in the context of suicidal ideation and its antecedents. Self-compassion has been shown to be inversely related to thwarted belongingness, perceived burdensomeness, and suicide attempts and ideation in both cisgender adults (Rabon et al., 2019) and LGBTQ youth (Hatchel et al., 2019). Furthermore, a systematic review of 18 studies of cisgender adults reported that higher self-compassion significantly correlated with less suicide ideation and self-harm (Cleare et al., 2019); authors emphasized the importance of investigating self-compassion as a potential buffer for suicidal ideation. Collectively, these findings support the premise that self-compassion is protective against an array of mental health challenges among both adults and adolescents, and may be particularly valuable for the challenges transgender adolescents face.

Self-Compassion Interventions

Recognizing the positive associations of self-compassion with mental health, programs designed to cultivate self-compassion have been created for both adults and adolescents and have been empirically tested. A meta-analysis which examined 27 randomized controlled trials of various self-compassion interventions found medium effect sizes for self-criticism, anxiety, depression, and stress (Ferrari et al., 2019). *Mindful Self-Compassion*, an 8-week program for adults, has shown post-intervention increases in happiness, life satisfaction, and decreases in anxiety, depression, fatigue, and stress (Friis et al., 2016; Neff & Germer, 2013; Serpa et al., 2021). Similarly, a study of the adaptation created for adolescents, *Mindful Self-Compassion for Teens (MSC-T; formerly called Making Friends with Yourself)*, reported decreases in negative affect, anxiety, depression, stress and increases in resilience post-intervention (Bluth & Eisenlohr-Moul, 2017; Bluth et al., 2016; Donovan et al., 2021). However, *MSC-T* has not been studied in transgender adolescents. In addition, although online self-compassion intervention delivery has been successfully implemented for geographically-dispersed populations such as young adult cancer survivors (Campo et al., 2017), there is a paucity of data regarding feasibility and acceptability of online program delivery.

Current Study

To address these research gaps, this study uses a mixed method design to explore two research questions regarding online self-compassion training for transgender youth: (1) Is the program feasible and acceptable? (2) Is program participation associated with improvement in psychosocial outcomes? Because of results published with this program elsewhere (Bluth & Eisenlohr-Moul, 2017; Bluth et al., 2016; Donovan et al., 2021), we posited that the program would be both feasible and acceptable to transgender adolescents, hypothesized that psychosocial outcomes would improve from pre- to post-intervention, and anticipated that there would be some waning of effects at 3-month follow-up.

Methods

Participants and Procedure

Participants were recruited through postings on social media platforms such as Facebook, Twitter, and Instagram, including Facebook groups that were specifically for parents of transgender adolescents and organizations for LGBTQIA+ populations. Flyers providing information for the study were also

sent to academic researchers, community psychologists and therapists, LGBTQ advocacy organizations, and three local pediatric and adolescent gender clinics for gender diverse youth. Adolescents and parents/guardians who were interested in the study contacted our study team and were considered eligible if they identified as transgender or gender expansive and were between 13 and 17 years old. Adolescents whose thirteenth birthday occurred during the study period were also eligible for participation. Since the study was conducted online, participants also needed access to a computer or an internet-enabled mobile device. Exclusion criteria included adolescents who were currently hospitalized with a psychiatric diagnosis and those adolescents who planned to begin taking gender affirming or puberty blocking hormones during the study, due to possible changes in mental health related to changing hormone levels. Additionally, adolescents were excluded if they planned to miss more than one course session, or if an adult could not be onsite during Zoom course sessions. Finally, if the adolescent endorsed moderately severe or severe depressive symptoms or thoughts of self-harm in the initial online survey, the study psychologist contacted parents to determine if they were safe to participate.

After determining eligibility, a research team member reviewed the parental permission form and the adolescent assent form over the phone with the parent/guardian and the adolescent. Participants were assigned to one of three cohorts based on which date and time was most convenient for them.

Mixed Methods Design

We chose to include a qualitative component to our study because we wanted to get an in-depth understanding of participants' experience with the program. Prior to this study, MSC-T had not been implemented with transgender adolescents, and therefore we did not know how it would be received by our participants. As transgender adolescents often experience different kinds and greater magnitude of stressors, we were unsure whether transgender adolescents would relate to various components and exercises included in the program. Additionally, due to the lack of availability of trained transgender instructors, the class was led by two trained MSC-T instructors, both of whom were cisgender middle-aged women and therefore limited in their ability to understand the experience of transgender adolescents. We were interested in finding out the extent to which this may have been an obstacle to the adolescents' ability to engage in the program. Finally, as this study was implemented during the COVID-19 pandemic, we conducted it over the Zoom platform. We wanted to understand how this delivery modality affected participants' experience of the program. These reasons contributed to our decision to implement a mixed methods study.

Quantitative data were collected over the course of the program through an online pre-intervention survey, a post-intervention survey, and a 3-month follow-up survey which contained all study measures. All surveys were distributed through secure Qualtrics survey software and parents were informed in advance by email when a survey was to be distributed to the adolescents. Participants received as many as three automatic survey reminders, at 2-day intervals, and received a $30 Amazon gift card as compensation if they completed all three online surveys.

Qualitative data were collected through open-ended questions on the post-survey which inquired about acceptability of the program, and through a post-intervention semi-structured interview in which participants were invited to participate to share their feedback about their experiences of the program. Eleven participants completed audio-recorded interviews performed by one of three research team members, none of whom were instructors, and these audio recordings were then deidentified and transcribed verbatim. Notably, not all participants were willing to provide an interview.

The study was approved by the university IRB.

Measures

Self-compassion scale: Youth (SCS-Y). This 17-item scale assesses self-compassion and was modified from the 26-item self-compassion scale (Neff, 2003a; Neff et al., 2021) to use simpler and therefore more accessible language for youth. Participants respond to items on a 5-point Likert-type scale asking how they treat themselves during difficult times; responses range from "1" (Almost never) to "5" (Almost always). Examples of items are: "I'm kind to myself when things go wrong and I'm feeling bad" and "When I feel I'm not 'good enough' in some way, I try to remind myself that other people sometimes feel this way too." Range of scores is from 1 to 5. Bifactor exploratory structural equation modeling supported a general total self-compassion score and six subscale scores. Construct validity and test-retest reliability have been established (Karakasidou et al., 2021; Neff et al., 2021). Cronbach's alpha for this sample at pre-intervention, post-intervention and follow-up was: .89, .94, .89.

Student life satisfaction scale (SLSS). Life satisfaction refers to a global evaluation of one's wellbeing that is beyond any specific domains, such as school or home life (Huebner, 1991). The student life satisfaction scale is a 7-item scale with a unidimensional factor structure. Examples of items include "I have a good life" and "There are many things that I would like to change about my life." A 4-point Likert-type scale is used, and scores range from 0 (never) to

3 (almost always), with higher scores indicate greater life satisfaction. Range of scores is from 0 to 3. The scale has been modified from the life satisfaction scale for adults (Diener et al., 1985), and has been validated for youth. Construct and discriminant validity have been well-established as well as test-retest reliability (Gilman et al., 2000; Huebner et al., 2000). Cronbach's alpha for this sample at pre-intervention, post-intervention and follow-up was: .89, .91, .88.

Spielberger state anxiety scale-short form. State anxiety was measured using the Spielberger State-Trait Anxiety Inventory-Short Form (ANX-SF; Marteau & Bekker, 1992). Six items measure various symptoms of state anxiety and examples include "I feel tense" and "I am worried." Responses are indicated using a 4-point Likert-type scale of 1 (not at all) to 4 (very much). Range of scores is from 20 to 80. Reliability and validity with the full Spielberger State Anxiety Inventory have been well-established (Marteau & Bekker, 1992; Tluczek et al., 2009). Cronbach's alpha for this sample at pre-intervention, post-intervention and follow-up was: .84, .89, .80.

Patient health questionnaire-depression module (PHQ-9). Patient health questionnaire-depression module is a nine-item scale that assesses depression; items are based on depressive disorder symptoms as indicated in the DSM-IV (Spitzer et al., 2000). Respondents are asked how often they experienced the symptoms over the last 2 weeks using a Likert-type scale with scores ranging from "0" (not at all) to "3" (nearly every day). Examples of items include "Feeling tired or having little energy" and "Trouble falling asleep or staying asleep or sleeping too much." Range of scores is from 0 to 27. Reliability, construct and criterion validity have been well-established for this scale in both clinical and general populations (Kroenke et al., 2001; Martin et al., 2006; Spitzer et al., 2000). Cronbach's alpha for this sample at pre-intervention, post-intervention and follow-up was: .87, .91, .88.

Interpersonal needs questionnaire (INQ). The 15-item INQ is grounded in the Interpersonal Theory of Suicide (Joiner, 2005; Van Orden et al., 2010; 2012). The INQ assesses two proximal causes of suicide desire, thwarted belongingness and perceived burdensomeness, which comprise two subscales. An example of a thwarted belongingness item is "These days, I feel disconnected from other people" and an example of a perceived burdensomeness item is "These days, I think the people in my life wish they could be rid of me." Respondents elect a response on a seven-item Likert-type scale that ranges

from "1" (Not at all true for me" to "7" (Very true for me). Range of scores on the thwarted belongingness subscale is 9 to 63 and range of scores on perceived burdensomeness subscale is 6 to 42. Reliability and validity have been established (Hill & Pettit, 2014; Hill et al., 2015; Van Orden et al., 2012). Cronbach's alpha for this sample at pre-intervention, post-intervention and follow-up for the full scale was: .92, .91, .94, for the subscale thwarted belongingness was: .87, .88, .92, and for the subscale of perceived burdensomeness was: .92, .96, .93.

Brief resilience scale (BRS). The 6-item Brief Resilience Scale is based on the concept of resilience as the ability to bounce back or recover from stress (Smith et al., 2008). Examples of items on this unidimensional scale include "I tend to bounce back quickly after hard times" and "I usually come through difficult times with little trouble." Respondents use a 5-point Likert-type scale ranging from 1 (strongly agree) to 5 (strongly disagree). Range of scores is from 1 to 5. Test-retest reliability, convergent and discriminant predictive validity were also established (Smith et al., 2008). Cronbach's alpha for this sample at pre-intervention, post-intervention and follow-up was: .89, .89, .89.

Acceptability Questions at End of Post Survey

To determine acceptability of the program, participants were invited to respond to the following open-ended questions at the end of the post-survey:

- What did you like about the self-compassion class?
- What recommendations do you have to help us improve the class to address the needs of transgender or gender expansive teens?
- Is there anything about the class that you did not like or felt uncomfortable with?
- What recommendations do you have for improving study procedures (e.g., contacting participants, home practice, timing of classes, questionnaires, etc.)?

They were then invited to share anything that was not addressed previously.

Intervention

In the current study, MSC-T was taught online over eight sessions; each session was 1.50 hours long. The first cohort was held over 8 days

(1 session/day) because it was during summer break. The second two cohorts were held twice a week in the evenings for 4 weeks. Results of MSC-T with other adolescent populations have been published elsewhere (Bluth & Eisenlohr-Moul, 2017; Bluth et al., 2016; Donovan et al., 2021). MSC-T was taught by one of the developers of the program (KB) and a trained co-teacher, who had undergone an intensive 6-day training and an additional follow-up of 10 hours of consultation training.

Each class began with a brief mindfulness art activity which provided a "settling in" transition opportunity for participants to orient to the session. Classes include developmentally appropriate hands-on exercises, short videos, games, mindful movement, and music meditation, and home practice was encouraged to reinforce practices. Slight modifications were made to accommodate the needs of transgender adolescents; for example, the body scan was omitted as it was determined that attention to certain body parts could be triggering, and participants would not be able to resolve the emotional distress arising from the experience. All classes were held over Zoom. Each session of the program has a different theme:

Session 1: Discovering Mindful Self-Compassion—Introduction to concepts of mindfulness and self-compassion; safety measures for class established; both informal and formal practices are introduced.
Session 2: Paying Attention on Purpose—Concept of mindfulness and wandering mind are discussed; mindful eating, Soles of the Feet and Palm of the Hand meditations are presented.
Session 3: Lovingkindness—Lovingkindness is defined and lovingkindness practice is introduced; participants create their own lovingkindness phrases; adolescent brain development is discussed.
Session 4: Self-Compassion—Exercise encourages teens to turn from the Inner Critic toward the Compassionate Voice; music meditation is introduced.
Session 5: Self-Compassion versus Self-Esteem—Difference between these two is elucidated, perils of social comparison are discussed.
Session 6: Living Deeply—Core values exercise; Giving and Receiving meditation is introduced.
Session 7: Managing Difficult Emotions—Soften, soothe, allow practice is introduced; tools to contend with anger and unmet needs are practiced; two developing systems of the adolescent brain are explained.
Session 8: Embracing Your Life with Gratitude—Gratitude and self-appreciation practices are presented; wrap-up of course takes place via writing an online letter to oneself that will be delivered a month later.

Validity Questions

Three validity questions were embedded at various points in the surveys to determine if participants were carefully reading the survey. If students answered two out of the three questions incorrectly, we assumed they were not reading carefully and would be excluded from all analyses. The three questions were: (1) Click "not at all" for your answer to this question.; (2) Click "never true" for the answer to this question; and (3) Please indicate the extent to which you agree with each of the following statement by using the scale: strongly disagree, disagree, neutral, agree, strongly agree: "Four plus three is twenty." Failure on questions one and two would be indicated by clicking anything other than the choice that was requested (i.e., "not at all" or "never true"), and failure on question three would be indicated by endorsing "disagree" or "strongly disagree."

Analytic Strategy

To measure feasibility, we used attendance and retention data. Using prior literature with adolescents as a guide, feasibility was established if 80% of participants attended six out of eight of the classes, and retention was set at 70%. Acceptability was determined by analysis of qualitative data.

Prior to conducting the main analysis, we determined whether any participants failed the validity check. Next, we conducted descriptive analyses to determine means and standard deviations across all time points. One-way repeated measures ANOVAs were conducted to compare the effects of the self-compassion intervention on self-compassion, mindfulness, depression, anxiety, perceived burdensomeness, thwarted belongingness, resilience, and life satisfaction at pre-, post-, and 3-month follow-up. We used Mauchly's test of sphericity to determine if assumption of sphericity was met, and then used Bonferroni's post hoc test to probe whether the significant differences between time points were between pre- and post-intervention, pre- and 3-month follow-up, or post-intervention and 3-month follow-up. All analyses were conducted in SPSS v.26 (IBM Corporation, New York, NY).

Qualitative data analysis followed six steps suggested by Braun and Clarke (2012) for thematic analysis, which includes familiarization, initial coding, searching for themes, reviewing themes, defining and naming themes, and report writing. Two team members (MCF and CL) independently reviewed 11 transcripts and a compilation of comments from the open-ended survey items. Using Atlas-Ti software, coders developed initial codes, using both inductive (content-driven) and deductive (researcher-derived, based on questions within the interview guide) coding (Saldana, 2013). Using an

iterative consensus-based approach similar to Cascio et al. (2019), coders independently developed initial code lists within two transcripts from cohort 1, and then met to examine their coding and reach agreement on areas of discrepancy. After two additional rounds of coding by consensus applied to randomly selected sets of transcripts in cohorts 2 and 3, coders developed a preliminary common codebook with 18 codes and definitions. Examples of codes included favorite practices, instructors, group connection, and body/voice. This code list was reviewed and revised by a third author and MSC instructor to create a final codebook. After application of the final codes to all transcripts and comments, the two coders used a consensus approach (as described above) to ensure final codes were similarly applied. The coders then collaborated to group the codes within four overarching themes, which were defined and shared with the full research team.

Results

Forty-one participants completed the pre-intervention survey, 29 participants completed the post-intervention survey, and 28 completed the 3-month follow-up survey. Twenty-six participants provided data at all three time points, and therefore these 26 were used in the repeated measure ANOVA and Bonferroni post hoc analyses. Demographics for participants are in Table 1.

Preliminary Analyses

None of the participants failed any of the validity questions at any of the three timepoints, and therefore no cases were eliminated from analyses. Descriptive statistics (i.e., means, standard deviations) at all time points can be found in Table 2.

Attendance and Retention

Of the nine participants who were enrolled in Cohort 1, one dropped prior to the first class, and two dropped after the first class (one because of conflict with another online class, another who felt stressed about talking about personal subjects and felt she was not representative of the demographic, and one for unknown reasons). Of the six remaining participants, five attended all eight classes and one attended seven classes. In Cohort 2, 15 participants were enrolled; 3 dropped after 3, 4, and 5 classes (one transfemale saw herself as "female" and not transgender, one because of a busy schedule, and one because she felt the program wasn't right for her). Of the remaining 12 participants, 7 attended all 8 classes and 5 attended 7 classes. In Cohort 3, 17

Table 1. Demographics of Total Sample and Qualitative Subsample.

	Total	Qualitative sample
	N = 41	*N* = 11
Characteristics	*M* (*SD*) or *N* (%)	
Demographic		
Age	14.5 (1.49)	14.5 (1.04)
Gender		
Transfemale (male to female)	9 (22.0)	0
Transmale (female to male)	18 (43.9)	8 (72.7)
Non-binary	12 (29.3)	2 (18.2)
Gender fluid	3 (7.3)	1 (9.1)
Questioning	2 (4.9)	0
Agender	1 (2.4)	0
Race[a]		
White	33 (80.5)	7 (63.6)
Black/African American	4 (9.8)	1 (9.1)
Asian	1 (2.4)	1 (10.0)
Hispanic/Latino/a	5 (12.2)	3 (27.3)
Other: Mixed	1 (4.9)	1 (9.1)
Highest level of mother/female guardian education		
Some high school/high school degree/some college	4 (13.3)	3 (27.3)
College degree	17 (55.7)	3 (27.3)
Master's degree	5 (16.7)	4 (36.4)
Doctorate or professional degree	4 (13.3)	0
Highest level of father/male guardian education		
Some high school/high school degree/some college	14 (34.1)	7 (63.6)
College degree	15 (36.6)	3 (27.3)
Master's degree	9 (22.0)	1 (9.1)
Doctorate or professional degree	3 (7.3)	0

Note. [a]Participants were allowed to choose multiple categories for race; therefore frequencies are greater than total number of participants and percentages are greater than 100.

were enrolled and 5 dropped; 2 prior to the first class (one because of anxiety, one for unknown reasons), 2 after attending 1 class (one because of a busy schedule, one for unknown reasons), and 1 after 4 classes (due to increasing distress related to body dysphoria). Of the 12 remaining participants, 9 attended all 8 classes, 2 attended 7 classes, and 1 attended 6 classes. Overall, 100% of those participants who were retained in the study attended 75% of the classes. Further, retention over the 3 cohorts was 73%, or 67% for Cohort 1, 80% for Cohort 2, and 75% for Cohort 3.

Table 2. Means, Standard Deviations, and Effect Sizes (Hedges *g*) for All Variables ($n = 26$).

	1. Pre-intervention	2. Post-intervention	3. 3-Month follow-up	Hedges *g*	
		M (*SD*)		1 v. 2	1 v. 3
Self-compassion	2.44 (0.65)	3.10 (0.72)	3.14 (0.61)	0.93	1.08
Mindfulness	15.69 (7.84)	20.81 (7.80)	21.42 (7.56)	0.64	0.72
Depression	15.12 (6.77)	11.42 (7.48)	10.62 (6.54)	0.50	0.66
Thwarted belongingness	34.46 (11.78)	30.46 (10.80)	28.39 (10.87)	0.94	1.08
Perceived burdensomeness	20.31 (10.20)	15.19 (9.96)	15.27 (8.44)	0.49	0.52
Anxiety	50.77 (13.58)	42.18 (14.39)	44.62 (12.69)	0.60	0.60
Resilience	2.44 (0.83)	2.92 (0.83)	2.83 (0.88)	0.55	0.43
Life satisfaction	2.22 (0.63)	2.51 (0.72)	2.47 (0.72)	0.41	0.35

Main Analyses

Overall, there was a main effect of time for all constructs across the study, and the changes that were significant were between pre- and post-intervention and/or pre- and follow-up, but none of the changes were significant between post-intervention and 3-month follow-up (see Figure 1 for plots). Means and standard deviations for all constructs and effect sizes between time points are found in Table 2. Specifically:

For self-compassion, there was a main effect of time $F(1.605, 40.13) = 16.83$, $p < .0001$. Bonferroni post hoc test indicated a significant increase in self-compassion between pre-intervention and post-intervention ($p < .0001$) and between pre-intervention and 3-month follow-up ($p = .001$).

For mindfulness, there was a main effect of time $F(2, 50) = 11.54$, $p < .0001$. Bonferroni post hoc test indicated a significant increase in mindfulness between pre-intervention and post-intervention (15.69–20.81, $p = .004$) and between pre-intervention and 3-month follow-up (15.69–21.42, $p = .001$).

For depression, there was a main effect of time $F(2, 50) = 9.89$, $p < .0001$. Bonferroni post hoc test indicated a significant decrease in depression between pre-intervention and post-intervention (15.12–11.41, $p = .004$) and between pre-intervention and 3-month follow-up (15.12–10.62, $p = .002$).

For anxiety, there was a main effect of time $F(1.73, 43.33) = 7.22$, $p = .003$. Bonferroni post hoc test indicated a significant decrease in anxiety between pre-intervention and post-intervention ($p = .006$), but this difference was no longer observed at 3-month follow-up ($p = .09$).

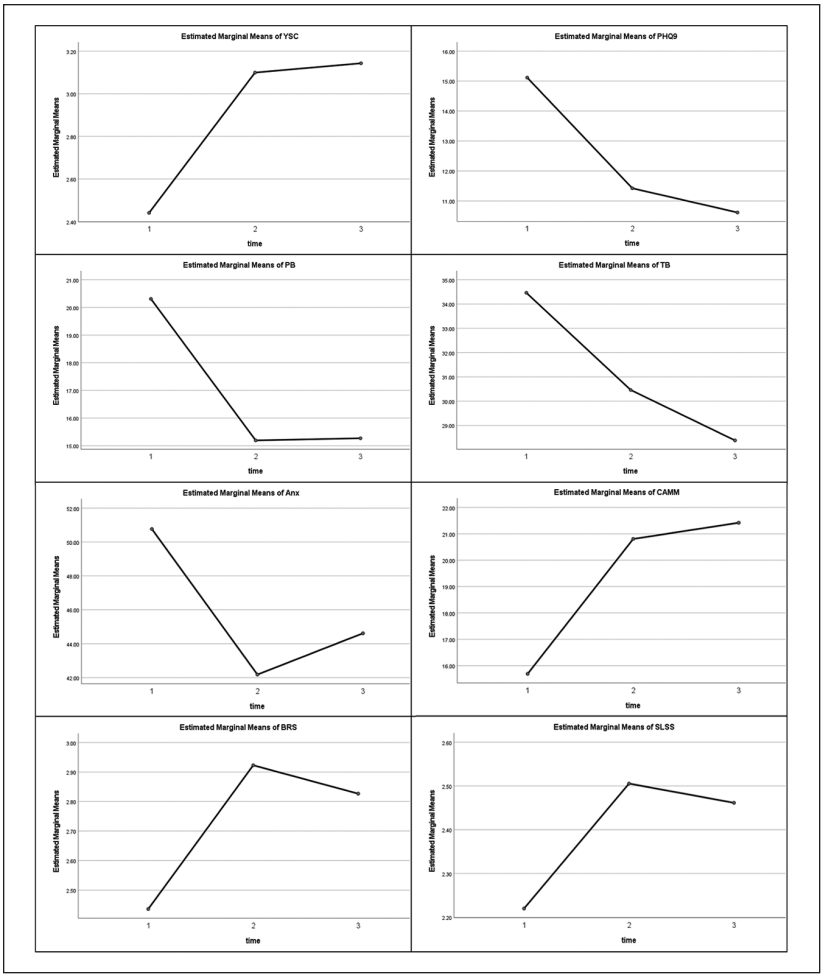

Figure 1. Plots of psychosocial outcomes across three time points.
Note. Pre-intervention (1), post-intervention (2), and 3-month follow-up (3). YSC = self-compassion; PHQ9 = depression; PB = perceived burdensomeness; TB = thwarted belongingness; ANX = anxiety; CAMM = mindfulness; BRS = resilience; SLSS = life satisfaction.

For perceived burdensomeness, there was a main effect of time $F(1.69, 41.21) = 9.80$, $p = .001$. Bonferroni post hoc test indicated a significant decrease in perceived burdensomeness between pre-intervention and post-intervention (20.31–2.02, $p = .002$) and between pre-intervention and 3-month follow-up (20.31–15.27, $p = .012$).

For thwarted belongingness, there was a main effect of time $F(1.68, 42.11) = 7.26$, $p = .003$. Bonferroni post hoc test indicated that there was a non-significant decrease in thwarted belongingness between pre-intervention and post-intervention (34.46–30.46, $p = .101$) but there was a significant decrease between pre-intervention and 3-month follow-up (34.46–28.38, $p = .009$).

For resilience, there was a main effect of time $F(1.69, 42.12) = 7.37$, $p = .003$. Bonferroni post hoc test indicated a significant increase in resilience between pre-intervention and post-intervention (2.44–2.92, $p = .004$), but this difference was no longer observed at 3-month follow-up (2.44–2.83, $p = .07$).

For life satisfaction, there was a main effect of time $F(1.61, 40.14) = 6.38$, $p = .007$. Bonferroni post hoc test indicated a significant decrease in anxiety between pre-intervention and post-intervention (2.22–2.51, $p = .004$), but this difference was no longer observed at 3-month follow-up (2.22–2.46, $p = .10$).

Qualitative Data

Four overarching themes emerged that described the experiences of participants in the MSC-T program. These included: *virtual safe space; connection to body; personal growth; and recommended course changes.*

Virtual safe space. This theme describes the ways in participants experienced, or did not experience, the course as a safe and supportive space, including the benefits and challenges of virtual participation.

Creation of a safe and welcoming space was crucial for participants to feel comfortable about discussing their experiences; this was particularly important for these gender minority adolescents who may have experienced ostracization and isolation in their social settings. Participants described the course atmosphere as feeling "at home," "comforting," "relaxed," and without "judgment". Many factors contributed to the safety and comfort of this environment.

One aspect that contributed to the safe space was the connection participants developed with one another. Some participants expressed their pleasure at being in contact with other transgender adolescents since they were unaware of other transgender adolescents in their schools or localities. One commented "It made me realize that I am totally not alone," and another said, "I liked having people who were there just like me, it made me feel a lot more in a safe space." When asked about participation with other transgender people, one participant stated, "I think it was nice because I don't know very many trans people and gender expansive people . . .where I live, and it's nice to have people to relate to." The diversity of the group in ages, stages of transition, and gender identity was also primarily viewed as supportive of group

learning and connection. Some described being able to offer advice or share the wisdom with others who lacked their experience as empowering, while others benefited from new perspectives and insights from those at different stages from themselves.

The presence of supportive instructors also contributed to the sense of safety. Importantly, the instructors revealed at the beginning of the first class that they were not transgender and wanted to know more about the transgender experience to make the course as beneficial as possible to the transgender youth community. Therefore, they were there to learn from the participants as well. This authenticity, combined with their lack of judgment, openness, patience, and willingness to learn, set participants at ease and helped many feel understood. For example, one said "our instructors were a lot like us already, you know, they made us all feel at home." While several described initially distrusting and feeling skeptical toward the cisgender instructors, these feelings subsided as the course progressed. One participant expressed surprise that they [the cisgender instructors] "actually care about transgender lives and compassion." Another described feeling more "involved" and "smart" because "it sort of felt like we were teaching them [the instructors] something as much as they were teaching us something." Likewise, the instructors were flexible and showed genuine interest in what the participants had to say, rather than sticking to their agenda, which also seemed to promote trust:

> *"I liked the openness of the discussions, and how freely we were able to deviate from what we were "supposed" to be talking about, and to return to that once people's thoughts were fully expressed. I liked that the adults allowed us to be ourselves and approached the setting with an open mind, prepared to learn. . .. I felt very safe during every session and I felt like my input was valuable whenever I gave it. . ."*

Thus, many participants described feeling accepted, respected, and valued by the instructors, which in turn facilitated their sense of safety and comfort.

For some, the virtual setting enhanced the creation of a safe space. Adolescents who participated from their homes had access to comfort items such as blankets, snacks, and pets. Additionally, while body and voice dysphoria contributed to some adolescents' reluctance to show themselves or speak out on screen, the Zoom's chat function enabled those with voice dysphoria to more easily express themselves in the group setting. One stated, "It (Zoom) was nice because you know, with dysphoria, you don't really like talking, so it's good having the chat," and "I really don't like the way my voice sounds. So it really helped me with not being dysphoric during the

course." Likewise, although participants are encouraged to remain visible on-screen for safety reasons, the ability to move off-screen was described as an advantage over in-person participation: "I do think that Zoom helped a lot because I think a lot of trans people aren't comfortable with showing their face, especially if they haven't physically transitioned yet."

However, the virtual environment also had some downsides. Some participants described increased social anxiety with the use of technology, "Zoom makes [anxiety] worse. Because I like reading people's expressions. And seeing how they are reacting to the certain things that I do, so that I can take mental notes and not do it again." Poor internet connection and audio quality also detracted from the experience at times. Other participants expressed their preference for in-person classes: "If I were able to do it [again] I think I'd definitely want to do it in person with everyone. And, I guess, to hear their voices, you know, so it's not super awkward about everything. So, you know, you can actually touch people."

Despite their shared experience of being a gender minority, a few felt they had little else in common with other participants and expressed a lack of commonality with other adolescents in their group. One participant stated that "anyone can be trans," regardless of their beliefs or other attributes, and that you may have being trans in common with someone who holds very different values, interests or beliefs than you do. Although this participant stated that the people in the class "were all nice," he did not feel connected to them or that he had much in common with them. Thus, a strong group connection was not every participant's experience.

Connection to the body. This theme describes the benefits and challenges of participants' connecting to their bodies during the course.

The MSC-T curriculum includes practices to promote awareness of and connection to the body; these include a body scan practice that encourages gratitude and appreciation for one's body, mindful walking to promote grounding in physical sensations, and supportive touch which allows participants to explore different ways of soothing oneself through touch, such as gentle hand or arm rubbing, or placing a hand on the heart. Given that many transgender adolescents have body dysphoria, and sustained attention to the body may cause distress, instructors chose to modify the curriculum to omit the compassionate body scan practice. The remaining practices that encouraged body kindness and awareness were generally well received. Bringing attention to the soles of the feet or palms of hands promoted grounding and helped to "calm"; another participant shared that they used body awareness to quell school anxiety and panic attacks. Others regularly used supportive touch during stressful moments to soothe and "move forward." One

participant described how poignant and beneficial learning to comfort oneself through touch is for many transgender individuals:

> *"The compassionate touch struck such a chord with a lot of us, and I think it's because trans people aren't often told to be kind to our bodies. A lot of medical transition is focused on what we want to change about ourselves, or what we dislike about our bodies. . . . .Being told to be kind to my body, to touch it in a way that was not malicious or self-deprecating, was really meaningful to me."*

On the other hand, not all participants felt comforted by the supportive touch or body/breath awareness practice. One person described the presence of scars on their hand which made hand touching painful; another felt strong negative emotion with breath awareness. Indeed, for some, tuning into the body compounded distress: "I don't like my body the way it is and touching sometimes just makes me feel more dysphoric." This prompted one participant to recommend that instructors check in with participants prior to the class about potential sensitivities to activities.

Personal growth. This theme describes the ways in which some participants experienced (or did not experience) positive change in their lives in response to the self-compassion program.

One common change involved the development of a new way of coping with difficulties in a more self-supportive way. For example, participants were encouraged to talk to themselves like a good friend, and while some participants admitted they were skeptical or had trouble remembering this new approach at first, this became easier and more helpful with time and practice. Others mentioned an improved ability to recognize and accept their emotional state, even if unpleasant, with one person saying these emotions now have "less of an impact". As a result, they were "more able to care for [their] needs" and better at handling "stress and [their] emotions." In particular, mindful art, music meditations, supportive touch, and compassionate friend practices offered enjoyable ways to relax, feel calm and cope with daily challenges.

Relatedly, some participants described shifts in their perspective on themselves and their lives, including their self-worth, sense of belonging, and life satisfaction. For example, one person said the course helped them to "feel better about [themselves]" and another felt "less out of place" and "better with [their] self-image." Several participants who felt isolated prior to the course subsequently recognized that they are "totally not alone" in their challenges and that "other people struggle in similar ways." Another described learning to appreciate and value their life, while a second described that the

skills from the course had a daily positive impact: "It actually really made a difference. . .in my day-to-day life. Like, I'll just be doing things and I'll remember stuff from the course. . .I found myself enjoying things a lot more."

Another area of growth related to self-identity and acceptance. One participant described how the course helped them to know themselves better, which they felt was a prerequisite to transgender adolescents' capacity to be compassionate toward themselves:

> *"I'd say the biggest issue that trans people have, particularly transgender teenagers. . . is self-compassion. It feels like they have no self-compassion because it feels impossible to love yourself whenever it feels like you're not even yourself. But I'd say that this class really does kind of help with that. It helps you kind of find yourself and it helps you grow along with yourself."*

Some participants also resonated with an exercise that introduced the Japanese art of kintsugi, in which the cracks of broken pottery are repaired with gold, thus enhancing their beauty. The exercise is meant to be a metaphor that emphasizes self-acceptance and self-worth, showing that humans are flawed, yet made more beautiful and valuable by the challenges they experience. One participant described how this exercise impacted them: "That [exercise] kind of stood out to me because. . .I'm kind of broken, but I'm good cause I have that thing. It kind of patched me over with gold paint."

Although less common, not every participant described positive growth as a result of participation. In one case, the participant felt that self-esteem and coping were not difficulties they had, so learning these skills was not needed. Another said they could understand why it would be helpful for others, but they didn't find it helpful to address their depressive symptoms. Thus, perceived growth varied amongst participants.

Recommended changes. Participants suggested changes to tailor self-compassion programing to be most beneficial for transgender adolescents.

First, although there was consensus that the instructors were kind, nonjudgmental and open to learning about transgender experience, some participants recommended having at least one transgender instructor available, when possible. A transgender instructor would more fully relate to the hardships participants face, and could serve as an adult role model for integrating self-compassion into daily life.

Others suggested providing time to discuss trans-specific topics. For example, one participant requested more time to explore everyone's gender

identities and related views on topics like hormones, and another suggested asking for participants' names and pronouns at the start of each session, as these may change from week to week. A few expressed the desire to have older trans people, who were farther along in their transition, participate to hear their experiences and perspectives.

Some participants expressed discomfort with certain practices or scenarios, including breath awareness, supportive touch, and the silence during meditations. A few recommended that instructors connect with participants individually prior to the course to ask about both potential challenges and what is helpful to them, so that the course could be more personalized and sensitive to the needs of the participants.

Finally, an area of mixed opinions was requiring camera use and limiting chat functionality during the course. As previously noted, some participants found video and audio use exacerbated their dysphoria and anxiety. In one cohort, while the cameras were always required for safety reasons, chat became a main mode of communication. However, because the instructors found participants were becoming distracted by the chat, they decided to only open chat during discussions. For some, limiting the chat to specific times helped them focus on the material and was beneficial; for others, the lack of chat ability was frustrating.

Discussion

This mixed-methods study investigated the feasibility, acceptability, and psychosocial outcomes of a self-compassion program that has previously been implemented successfully in general adolescent populations but had not been implemented in specifically transgender adolescent populations. Due to the high rate of depression and suicidal ideation in transgender adolescents, our aim was to determine if this self-compassion program could help to alleviate these mental health challenges. Quantitative analysis provided data to determine feasibility via attendance and retention data, as well as providing preliminary information as to whether psychosocial outcomes were improving, and qualitative analysis allowed us to get a fuller and more in-depth understanding of the adolescents' experience in the program and whether the program was acceptable for this population.

Regarding our first research question as to whether the intervention was feasible and acceptable, our criterion for feasibility was met through both attendance and retention data. Specifically, our criterion had been that 80% needed to attend 6 or more classes (out of 8), and our results indicated that 100% of the participants who completed the study attended 6 or more classes. Second, our criterion for retention was that 70% of those who initially

enrolled in the study would complete the study; we retained an average of 73% across the three cohorts.

Although this retention rate is acceptable, in future studies, retention could be improved by considering the participants' recommendations for changes to the program. For example, having at least one transgender instructor, whose life experience may feel more familiar to trans participants, might improve both recruitment and retention, as several participants noted the importance of having instructors who can fully relate to the transgender experience. In order to accomplish this, self-compassion teacher trainings should continue efforts to recruit gender-diverse instructors. Another area that may improve program satisfaction and retention entails establishing clear online audio and video protocols in the first session. Although we experimented with different protocols regarding when and how chat functioning would be available to the participants, ultimately, the most balanced and well-received scenario entailed establishing chat norms at the start of the cohort (e.g., chat will be open during group discussions and closed during other activities) and providing open chat socializing time at the beginning and end of classes.

In addition, we learned that providing an additional staff member to monitor and assist with chats allowed instructors to focus on content. Similarly, although we were aware that requiring videos to be kept on might exacerbate gender dysphoria, we decided they needed to be kept on for safety reasons. However, in the first class, we encouraged participants to "hide self-view" so that they didn't have to view their own image during class, explaining that we normally don't see ourselves when conversing with a group. Still, one participant voiced that she was disturbed by seeing her image all through class. In future programs, instructors could remind participants more frequently to hide their own image to reduce possibilities of dysphoria. Also, one participant recommended that instructors meet individually with participants prior to the first class to learn more about them and specifically how they are triggered; this could also improve retention. Finally, several participants enrolled but did not come to the first class. Being clearer about what the study involves prior to enrolling may help participants not drop out before the start of class. However, as adolescents' life circumstances change (new employment, Covid restrictions lifted) and their availability is difficult to predict, it is understandable to have moderate retention in adolescent studies.

Our second research question addressed whether psychosocial outcomes would improve post-program and be retained at 3-month follow-up. With the exception of thwarted belongingness, all psychosocial outcomes improved significantly from pre- to post-intervention, and change in thwarted belongingness was significant at 3-month follow-up. These improvements are similar to those evidenced in other self-compassion

interventions with both adolescents (Bluth & Eisenlohr-Moul, 2017; Bluth et al., 2016) and adults (Campo et al., 2017; Friis et al., 2016). Although follow-up studies are needed to confirm these findings, the magnitude of changes from pre- to post-intervention suggest bolstering self-compassion may be a particularly effective method of addressing the mental health concerns that transgender adolescents face. These findings are also in line with cross-sectional studies which show self-compassion is a valuable resource for transgender populations (Keng & Liew, 2017; Vigna et al., 2018). Though not unexpected, it was encouraging that five of the eight outcomes were significantly improved at 3 months follow-up, despite the fact that no booster sessions or supportive communication was offered over the 3-month interval. In future studies, improvements can be supported via weekly or monthly booster sessions, social media private groups, or even the availability of a self-compassion app.

The qualitative data more fully captured participants' experiences and elucidated possible explanations as to why and how psychosocial outcomes improved. For example, the creation of a safe space where participants felt comfortable sharing their experiences and at times being vulnerable to the group was likely an instrumental factor in achieving positive outcomes. Feeling that they had something valuable to share with one another and were even able to teach the instructors about the transgender experience was empowering, and particularly salient for adolescents who often feel isolated, unworthy, and ostracized. In addition, the qualities of the instructors (as kind, non-judgmental, flexible) contributed to this safety and modeled the qualities participants were encouraged to develop toward themselves; the instructor-participant connection, therefore, is an important aspect of the program. As many of the participants acknowledged that they lived in an area where they didn't know other transgender adolescents, being with others who shared their experiences made them realize that they were not alone. This experience of common humanity was also reported in Lathren et al. (2018) in a study of young adult cancer survivors who had participated in an online self-compassion program. Like the transgender adolescents, the young adult cancer survivors often lived in areas where they did not know other cancer survivors their age and voiced that they finally were among others who understood their struggles, which helped them to feel less alone. In both groups, feeling less alone and isolated undoubtedly contributed to improved mental health.

Although not true for all participants, encouraging being kind to one's body was helpful for many in that they were accustomed to rejecting and dismissing their body. Instructors were careful not to refer to *accepting* one's body as this could be misinterpreted as conveying that one should accept their sex assigned at birth yet used terminology such as being kind to one's

body. As our bodies are part of who we are, being able to move toward greater kindness toward the body may have helped participants recognize that although some of their body parts have betrayed them, other body parts have not. By accepting parts of their bodies, they may have been more able to accept themselves. Similarly, Lathren et al. (2018) reported that some of the young adult cancer survivors felt betrayed by their bodies and engaging in self-compassion exercises helped them to have a better relationship with their bodies and appreciate the parts of their bodies that did function well.

Finally, participants articulated that the program helped them get to know themselves better. In a world that is replete with stressors, ranging from a pandemic to laws limiting the rights of the transgender community, in addition to the normative challenges of adolescence, it is difficult to find a quiet and accepting space and the time to get to know oneself. For some participants, the program provided this space, allowing this process to unfold, and thereby promoting the important adolescent task of identity development. For example, recognizing that that what they may have perceived as their "broken parts," such as the stressful experiences of being transgender, were interpreted through the Japanese bowl exercise as ways that would ultimately make them stronger, more beautiful, and more whole. In another study which implemented an adolescent self-compassion program, one participant expressed this sentiment of self-acceptance with the statement "I always felt that I had to have someone to prove that I can do something. But I have myself, and that is someone!" (Bluth et al., 2016). Delaney (2018) also reported acceptance to be a theme in the qualitative analysis of a study which described the implementation of a self-compassion program with nurses.

There are several limitations to this study that may limit generalizability. First, the sample was relatively small. Second, there was no control group, which makes it impossible to conclude causality. Third, parents or guardians were required to consent to have their adolescent participate in the study, which meant that only those adolescents with parents or guardians who supported their gender transition could be involved. As parental support is a key factor in positive transitioning of transgender adolescents (Simons et al., 2013), results may have been different had parental support not been present. Fourth, all adolescents needed to have access to a computer or mobile device and have online capability, which may have limited the demographic available for this study. Finally, only 11 of the 41 participants provided interviews; it is unknown how the qualitative findings would have been different if all perspectives were accounted for. Interestingly, no transfemales provided interview feedback; future studies should examine if program acceptability or outcomes vary by gender identity.

Future research would benefit from addressing these limitations. Studies should utilize larger samples and a control group. It would also be advantageous to reach adolescents who do not necessarily have parental support for their transition. With available funding, future studies could provide a mobile device and WiFi hotspot so that adolescents without internet capability could participate. Furthermore, participant feedback indicates that transgender adolescents desire more knowledge about common trans issues and connection to others who are farther along in the transition process. Thus, self-compassion programing offered in conjunction with adolescent/young adult transgender support groups might accentuate the program benefits more than with either type of intervention alone. The positive mental health outcomes for transgender adolescents found in this study may be generalizable to other LGBTQIA+ adolescents, or other groups of adolescents who struggle with mental health challenges.

Acknowledgments

We are grateful for the invaluable contributions of our participants. We also would like to thank Dr. Karen Putnam, who reviewed the quantitative results.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Karen Bluth https://orcid.org/0000-0001-7535-6405

References

Baer, R. A., Lykins, E. L. B., & Peters, J. R. (2012). Mindfulness and self-compassion as predictors of psychological wellbeing in long-term meditators and matched nonmeditators. *The Journal of Positive Psychology*, *7*(3), 230–238. https://doi.org/10.1080/17439760.2012.674548

Bauer, G., Boyce, M., Coleman, T., Kaay, M., Scanlon, K., & Travers, R. (2010). *Who are trans people in Ontario?* (Report No. 1 (1)). Trans PULSE E-Bulletin.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.4135/9781446263051.n2

Berman, A. L. (2009). Suicide and depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (pp. 510–530). The Guilford Press.

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*, 108–118. https://doi.org/10.1016/j.adolescence.2017.04.001

Bluth, K., Gaylord, S. A., Campo, R. A., Mullarkey, M. C., & 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. https://doi.org/10.1007/s12671-015-0476-6

Bluth, K., Mullarkey, M., & Lathren, C. (2018). Self-compassion: A potential path to adolescent resilience and positive exploration. *Journal of Child and Family Studies*, *27*(9), 3037–3047. https://doi.org/10.1007/s10826-018-1125-1

Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, *103*(5), 943–951.

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper (Ed.), *APA handbook of research methods in psychology* (2nd ed., pp. 57–71). American Psychological Association.

Burns, M. N., Kamen, C., Lehman, K. A., & Beach, S. R. H. (2012). Minority stress and attributions for discriminatory events predict social anxiety in gay men. *Cognitive Therapy and Research*, *36*(1), 25–35. https://doi.org/10.1007/s10608-010-9302-6

Campo, R. A., Bluth, K., Santacroce, S. J., Knapik, S., Tan, J., Gold, S., Philips, K., Gaylord, S., & Asher, G. N. (2017). A mindful self-compassion videoconference intervention for nationally recruited posttreatment young adult cancer survivors: Feasibility, acceptability, and psychosocial outcomes. *Supportive Care in Cancer*, *25*, 1759–1768. https://doi.org/10.1007/s00520-017-3586-y

Cascio, M. A., Lee, E., Vaudrin, N., & Freedman, D. A. (2019). A team-based approach to open coding: Considerations for creating intercoder consensus. *Field Methods*, *31*(2), 116–130. https://doi.org/10.1177/1525822X19838237

Clark, T. C., Lucassen, M. F., Bullen, P., Denny, S. J., Fleming, T. M., Robinson, E. M., & Rossen, F. V. (2014). The health and well-being of transgender high school students: Results from the New Zealand adolescent health survey (Youth'12). *Journal of Adolescent Health*, *55*(1), 93–99. https://doi.org/10.1016/j.jadohealth.2013.11.008

Cleare, S., Gumley, A., & O'Connor, R. C. (2019). Self-compassion, self-forgiveness, suicidal ideation, and self-harm: A systematic review. *Clinical Psychology & Psychotherapy*, *26*(5), 511–530. https://doi.org/10.1002/cpp.2372

Clements-Nolle, K., Marx, R., & Katz, M. (2006). Attempted suicide among transgender persons: The influence of gender-based discrimination and victimization. *Journal of Homosexuality*, *51*(3), 53–69. https://doi.org/10.1300/J082v51n03_04

Delaney, M. C. (2018). Caring for the caregivers: Evaluation of the effect of an eight-week pilot mindful self-compassion (MSC) training program on nurses' compassion fatigue and resilience. *PLoS One*, *13*(11), e0207261.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*, 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Donovan, E., Bluth, K., Scott, H., Mohammed, M., & Cousineau, T. M. (2021). Feasibility and acceptability of implementing the making friends with yourself intervention on a college campus. *Journal of American College Health*, 1–8. https://doi.org/10.1080/07448481.2021.1891077

Erikson, E. (1968). *Identity: Youth in crisis*. Norton.

Ferrari, M., Hunt, C., Harrysunker, A., Abbott, M. J., Beath, A. P., & Einstein, D. A. (2019). Self-compassion interventions and psychosocial outcomes: A meta-analysis of RCTs. *Mindfulness*, *10*(8), 1455–1473. https://doi.org/10.1007/s12671-019-01134-6

Friis, A. M., Johnson, M. H., Cutfield, R. G., & Consedine, N. S. (2016). Kindness matters: A randomized controlled trial of a mindful self-compassion intervention improves depression, distress, and HbA1c among patients with diabetes. *Diabetes Care*, *39*(11), 1963–1971. https://doi.org/10.2337/dc16-0416

Galla, B. M. (2016). Within-person changes in mindfulness and self-compassion predict enhanced emotional well-being in healthy, but stressed adolescents. *Journal of Adolescence*, *49*, 204–217. https://doi.org/10.1016/j.adolescence.2016.03.016

Gilman, R., Huebner, E. S., & Laughlin, J. E. (2000). A first study of the multidimensional students' life satisfaction scale with adolescents. *Social Indicators Research*, *52*(2), 135–160. https://doi.org/10.1023/A:1007059227507

Grossman, A. H., & D'Augelli, A. R. (2007). Transgender youth and life-threatening behaviors. *Suicide and Life-Threatening Behavior*, *37*(5), 527–537. https://doi.org/10.1521/suli.2007.37.5.527

Grossman, A. H., Park, J. Y., & Russell, S. T. (2016). Transgender youth and suicidal behaviors: Applying the interpersonal psychological theory of suicide. *Journal of Gay & Lesbian Mental Health*, *20*(4), 329–349. https://doi.org/10.1080/19359705.2016.1207581

Hasking, P., Boyes, M. E., Finlay-Jones, A., McEvoy, P. M., & Rees, C. S. (2019). Common pathways to NSSI and suicide ideation: The roles of rumination and self-compassion. *Archives of Suicide Research*, *23*(2), 247–260. https://doi.org/10.1080/13811118.2018.1468836

Hatchel, T., Merrin, G. J., & Espelage, A. D. (2019). Peer victimization and suicidality among LGBTQ youth: The roles of school belonging, self-compassion, and parental support. *Journal of LGBT Youth*, *16*(2), 134–156. https://doi.org/10.1080/19361653.2018.1543036

Hawton, K., Saunders, K. E., & O'Connor, R. C. (2012). Self-harm and suicide in adolescents. *Lancet*, *379*(9834), 2373–2382. https://doi.org/10.1016/S0140-6736(12)60322-5

Hill, R. M., & Pettit, J. W. (2014). Perceived burdensomeness and suicide-related behaviors in clinical samples: Current evidence and future directions. *Journal of Clinical Psychology*, *70*(7), 631–643. https://doi.org/10.1002/jclp.22071

Hill, R. M., Rey, Y., Marin, C. E., Sharp, C., Green, K. L., & Pettit, J. W. (2015). Evaluating the interpersonal needs questionnaire: Comparison of the reliability,

factor structure, and predictive validity across five versions. *Suicide and Life-Threatening Behavior*, *45*(3), 302–314. https://doi.org/10.1111/sltb.12129

Huebner, E. S. (1991). Initial development of the Student's life satisfaction scale. *School Psychology International*, *12*(3), 231–240. https://doi.org/10.1177/0143034391123010

Huebner, E. S., Funk, B. A., & Gilman, R. (2000). Cross-sectional and longitudinal psychosocial correlates of adolescent life satisfaction reports. *Canadian Journal of School Psychology*, *16*(1), 53–64. https://doi.org/10.1177/082957350001600104

Joiner, T. (2005). *Why people die by suicide*. Harvard University Press.

Joiner TE, T. E., Jr, Brown, J. S., & Wingate, L. R. (2005). The psychology and neurobiology of suicidal behavior. *Annual Review of Psychology*, *56*, 287–314. https://doi.org/10.1146/annurev.psych.56.091103.070320

Karakasidou, E., Raftopoulou, G., Pezirkianidis, C., & Stalikas, A. (2021). Validity, reliability and factorial structure of the self compassion scale-youth version in the Greek population. *Psychology*, *12*(4), 536–553.

Keng, S.-L., & Liew, K. W. L. (2017). Trait mindfulness and self-compassion as moderators of the association between gender nonconformity and psychological health. *Mindfulness*, *8*(3), 615–626. https://doi.org/10.1007/s12671-016-0639-0

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, *40*, 208–230. https://doi.org/10.2307/2676349

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606–613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

Lathren, C., Bluth, K., Campo, R., Tan, W., & Futch, W. (2018). Young adult cancer survivors' experiences with a mindful self-compassion (MSC) video-chat intervention: A qualitative analysis. *Self and Identity*, *17*(6), 646–665.

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, *32*(6), 545–552. https://doi.org/10.1016/j.cpr.2012.06.003

Marshall, S. L., Parker, P. D., Ciarrochi, J., Sahdra, B., Jackson, C. J., & Heaven, P. C. L. (2015). Self-compassion protects against the negative effects of low self-esteem: A longitudinal study in a large adolescent sample. *Personality and Individual Differences*, *74*, 116–121. https://doi.org/10.1016/j.paid.2014.09.013

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

Marteau, T. M., & Bekker, H. (1992). The development of a six-item short-form of the state scale of the Spielberger State—Trait Anxiety Inventory (STAI). *British Journal of Clinical Psychology*, *31*(3), 301–306. https://doi.org/10.1111/j.2044-8260.1992.tb00997.x

Martin, A., Rief, W., Klaiberg, A., & Braehler, E. (2006). Validity of the brief patient health questionnaire mood scale (PHQ-9) in the general population.

General Hospital Psychiatry, *28*(1), 71–77. https://doi.org/10.1016/j.genhosppsych.2005.07.003

Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health*, *91*(11), 1869–1876.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Neff, K. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*, 85–101. https://doi.org/10.1080/15298860309032

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

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. https://doi.org/10.1080/00223891.2020.1729774

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. https://doi.org/10.1002/jclp.21923

Peterson, C. M., Matthews, A., Copps-Smith, E., & Conard, L. A. (2017). Suicidality, self-harm, and body dissatisfaction in transgender adolescents and emerging adults with gender Dysphoria. *Suicide and Life-Threatening Behavior*, *47*(4), 475–482. https://doi.org/10.1111/sltb.12289

Pullmer, R., Chung, J., Samson, L., Balanji, S., & Zaitsoff, S. (2019). A systematic review of the relation between self-compassion and depressive symptoms in adolescents. *Journal of Adolescence*, *74*, 210–220. https://doi.org/10.1016/j.adolescence.2019.06.006

Rabon, J. K., Hirsch, J. K., Kaniuka, A. R., Sirois, F., Brooks, B. D., & Neff, K. (2019). Self-Compassion and suicide risk in veterans: When the going gets tough, do the tough benefit more from self-compassion? *Mindfulness*, *10*(12), 2544–2554. https://doi.org/10.1007/s12671-019-01221-8

Rabon, J. K., Sirois, F. M., & Hirsch, J. K. (2018). Self-compassion and suicidal behavior in college students: Serial indirect effects via depression and wellness behaviors. *Journal of American College Health*, *66*(2), 114–122. https://doi.org/10.1080/07448481.2017.1382498

Raes, F. (2011). The effect of self-compassion on the development of depression symptoms in a non-clinical sample. *Mindfulness*, *2*(1), 33–36. https://doi.org/10.1007/s12671-011-0040-y

Russell, S. T., & Joyner, K. (2001). Adolescent sexual orientation and suicide risk: Evidence from a national study. *American Journal of Public Health (N Y)*, *91*(8), 1276–1281.

Sabbath, J. C. (1969). The suicidal adolescent–the expendable child. *Journal of the American Academy of Child Psychiatry*, *8*, 272–289. https://doi.org/10.1016/S0002-7138(09)61906-3

Saldana, J. (2013). *The coding manual for qualitative researchers* (2nd ed). Sage.

Serpa, J. G., Bourey, C. P., Adjaoute, G. N., & Pieczynski, J. M. (2021). Mindful self-compassion (MSC) with veterans: A program evaluation. *Mindfulness*, *12*(1), 153–161. https://doi.org/10.1007/s12671-020-01508-1

Simons, L., Schrager, S. M., Clark, L. F., Belzer, M., & Olson, J. (2013). Parental support and mental health among transgender adolescents. *Journal of Adolescent Health*, *53*(6), 791–793. https://doi.org/10.1016/j.jadohealth.2013.07.019

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194–200. https://doi.org/10.1080/10705500802222972

Spitzer, R. L., Williams, J. B., Kroenke, K., Hornyak, R., & McMurray, J. (2000). Validity and utility of the PRIME-MD patient health questionnaire in assessment of 3000 obstetric-gynecologic patients: The PRIME-MD patient health questionnaire obstetrics-gynecology study. *American Journal of Obstetrics and Gynecology*, *183*(3), 759–769. https://doi.org/10.1067/mob.2000.106580

Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the gender minority stress and resilience measure. *Psychology of Sexual Orientation and Gender Diversity*, *2*(1), 65–77. https://doi.org/10.1037/sgd0000081

Tluczek, A., Henriques, J. B., & Brown, R. L. (2009). Support for the reliability and validity of a six-item state anxiety scale derived from the state-trait anxiety inventory. *Journal of Nursing Measurement*, *17*(1), 19–28. https://doi.org/10.1891/1061-3749.17.1.19

Van Orden, K. A., Cukrowicz, K. C., Witte, T. K., & Joiner, T. E. (2012). Thwarted belongingness and perceived burdensomeness: Construct validity and psychometric properties of the interpersonal needs questionnaire. *Psychological Assessment*, *24*(1), 197–215. https://doi.org/10.1037/a0025358

Van Orden, K. A., Lynam, M. E., Hollar, D., & Joiner, T. E. (2006). Perceived burdensomeness as an indicator of suicidal symptoms. *Cognitive Therapy and Research*, *30*(4), 457–467. https://doi.org/10.1007/s10608-006-9057-2

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner Te, Jr. (2010). The interpersonal theory of suicide. *Psychological Review*, *117*(2), 575–600. https://doi.org/10.1037/a0018697

Van Orden, K. A., Witte, T. K., Gordon, K. H., Bender, T. W., & Joiner, T. E., Jr. (2008). Suicidal desire and the capability for suicide: Tests of the interpersonal-psychological theory of suicidal behavior among adults. *Journal of Consulting and Clinical Psychology*, *76*(1), 72–83. https://doi.org/10.1037/0022-006X.76.1.72

Vigna, A. J., Poehlmann-Tynan, J., & Koenig, B. W. (2018). Does self-compassion facilitate resilience to stigma? A school-based study of sexual and gender minority youth. *Mindfulness*, *9*(3), 914–924. https://doi.org/10.1007/s12671-017-0831-x

Xavier, A., Pinto-Gouveia, J., & Cunha, M. (2016). The protective role of self-compassion on risk factors for non-suicidal self-injury in adolescence. *School Mental Health*, *8*(4), 476–485. https://doi.org/10.1007/s12310-016-9197-9

Zeller, M., Yuval, K., Nitzan-Assayag, Y., & Bernstein, A. (2015). Self-compassion in recovery following potentially traumatic stress: Longitudinal study of at-risk youth. *Journal of Abnormal Child Psychology*, *43*(4), 645–653. https://doi.org/10.1007/s10802-014-9937-y

Author Biographies

Karen Bluth is a research professor whose research interest primarily focuses on developing and investigating self-compassion interventions in adolescent populations, with the goal of improving mental health.

Christine Lathren is a research professor and focuses her work on how mindfulness and self-compassion programs can improve relationships within the family and optimize family health. Additionally, she investigates ways in which these programs can reduce caregiver stress.

Melissa Clepper-Faithis a pediatrician and researcher interested in resilience and the effects of early life adversity on mental and physical health across the lifespan. In particular, Dr. Clepper-Faith focuses on vulnerable pediatric populations and ways to improve mental health during the adolescent developmental stage.

Lillia M. Larson is an undergraduate with a double major in psychology and German and is interested in pursuing a career in research in moral and positive psychology.

Daniel O. Ogunbamowois a recent graduate of the University of North Carolina at Chapel Hill, and currently a social science research coordinator in the Stanford Social Neuroscience Lab. His research interests lie in social and affective neuroscience.

Samantha Pflumis a child clinical psychologist and provides gender-affirming services to youth and families at the UNC Gender Equity and Wellness Initiative. Specialties include providing affirming care to the LGBTQ community, primarily transgender and gender expansive youth, as well as children and adolescents coping with medical diagnoses, depression, and anxiety.