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## Feasibility and acceptability of implementing the Making Friends with Yourself intervention on a college campus

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### ABSTRACT

**Objective:** To assess the feasibility and acceptability of Making Friends with Yourself (MFY): A Mindful Self-Compassion Program for Teens and Young Adults with a sample of college students. A secondary objective was to explore changes in psychosocial outcomes. **Participants:** Twenty-five students (23 females; mean age 20.35 years) enrolled in the 8-week intervention. **Methods:** Feasibility was measured by attendance and retention of participants; acceptability was determined through analysis of focus group data. Psychosocial outcomes were assessed through analyses of pre- and post-intervention measures. **Results:** The intervention was feasible as 20 students attended at least seven of eight classes, and 21 completed the program. Students found the intervention acceptable and reported significant increases in mindfulness and self-compassion and decreased perceived stress from pre- to post-intervention. However, academic stress increased. **Conclusions:** MFY may be a feasible and acceptable program to offer to college students. Further piloting in college student populations is recommended.

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### Introduction

US college students report high rates of psychological health issues. From Fall 2017 to Fall 2018, 62% of US college students reported feeling overwhelming anxiety and 41% reported feeling so depressed that it was difficult to function.<sup>1</sup> Interventions that teach college students skills to manage stress and strengthen resilience during this challenging period in their lives are needed.

Transitioning to college life is a difficult adjustment for many students. College students report that stressors such as performing well academically and managing career-related issues, as well as family problems, intimate relationships, finances, and personal appearance are very difficult to handle.<sup>1</sup> Unfortunately, not only does stress leave many students feeling anxious and depressed, but 9.2% of college students surveyed in Fall 2018 reported that they seriously considered suicide within the previous 12 months.<sup>1</sup> A systematic review of factors associated with first-year student success found students' coping self-efficacy, coping skills, sense of belonging, affect, and participation in special first-year programs focused on providing students with social network opportunities and academic support most strongly contributed to first-year students' social-emotional well-being.<sup>2</sup> That is, when students believe that they are able to effectively manage difficult situations, and when they utilize a variety of coping mechanisms (e.g., seeking social support), they are

better able to adjust to college life. Conversely, when students are depressed or lonely, less able to identify and handle their emotions, or are socially anxious, they have a more difficult time adjusting in the first year.<sup>2</sup>

One approach to reducing stress and improving well-being that has received significant attention in recent years, and that may be a particularly good fit for college students, is self-compassion.<sup>3</sup> Self-compassion has been described by Neff<sup>4</sup> as a way of relating to oneself that involves being mindful, kind to oneself during times of distress, and aware that difficult feelings are a part of the human experience. Self-compassion contributes to well-being by replacing maladaptive emotion-regulation strategies (i.e., self-judgment, isolation, rumination, and avoidance of painful thoughts, experiences, and emotions) with more adaptive strategies (i.e., self-kindness, common humanity, and mindfulness).<sup>5</sup> Research on self-compassion has increased exponentially since it was first defined and operationalized<sup>5,6</sup> and meta-analyses with both adults and adolescents indicate that those who have higher self-compassion experience less psychopathology, defined as stress, anxiety, and depression.<sup>7,8</sup> Among college students, self-compassion appears to play an important role in the relationship between distress and depression, as students who are more self-compassionate experience better well-being and less distress.<sup>9</sup> For college women, self-compassion interventions may be particularly relevant as studies show that women tend to be more critical

of themselves and use more negative self-talk compared to men<sup>10,11</sup> and are generally less self-compassionate compared to men.<sup>12</sup>

Furthermore, recent studies have demonstrated that self-compassion is a skill that can be taught. A recent meta-analysis identified 27 randomized controlled trials of self-compassion interventions with 1480 participants that measured their effects on 11 different psychosocial outcomes.<sup>13</sup> Self-compassion interventions led to a significant improvement across a range of psychosocial outcomes compared with controls, including large effect sizes for eating behavior and rumination, and moderate effect sizes for self-compassion, stress, depression, mindfulness, self-criticism, and anxiety.<sup>13</sup> One such intervention is the Mindful Self-Compassion (MSC) program, created by Neff and Germer,<sup>14</sup> which aims to build resilience by teaching individuals how to handle difficult emotions, strengthen mindfulness, become less self-critical, and cultivate self-kindness behaviors. A randomized controlled trial which assessed the 8-week MSC program with 46 adults found that the people who participated in this program experienced increases in self-compassion, mindfulness, happiness, compassion for others, life satisfaction, and social connectedness, and decreases in depression, anxiety, perceived stress, and avoidance of emotions.<sup>14</sup>

Acknowledging that the adolescent period can be tremendously challenging, these positive results with MSC led to an adaptation of this program specifically for a younger age group. Making Friends with Yourself: A Mindful Self-Compassion Program for Teens and Young Adults (MFY)<sup>15</sup> is an 8-week program that, like MSC, focuses on teaching skills to build resilience and improve emotional well-being. In a pilot study of the 6-week intervention with 34 participants aged 14–17, increases in self-compassion and life satisfaction and decreases in depression were reported in the intervention group when compared to a waitlist control, with trends toward greater mindfulness, social connectedness, and lower anxiety.<sup>15</sup> When findings from the waitlist control group, (after they had participated in the intervention), were combined with that of the first intervention group, within-group changes indicated significantly greater mindfulness and self-compassion, and significantly less anxiety, depression, stress, and negative affect post-intervention.<sup>15</sup>

Another study examined the outcomes of five cohorts of adolescents who completed MFY over several years.<sup>16</sup> Multilevel growth analyses revealed main effects of time on perceived stress, resilience, gratitude, curiosity, and exploration (i.e., positive risk-taking) post-intervention. In addition, mindfulness co-varied with decreases in anxiety, and increases in self-compassion co-varied with resilience and curiosity/exploration; both mindfulness and self-compassion co-varied with depressive symptoms and perceived stress. This suggests that increases in self-compassion and mindfulness across the intervention may be responsible for the positive outcomes that were evidenced. Even though MFY<sup>15</sup> was created to be relevant to both adolescents and young adults, the program has not yet been empirically assessed with college students.

**Table 1.** Participant characteristics.

Characteristic	Frequency	Percent
Gender		
Male	1	4%
Female	23	92%
Other	1	4%
Ethnicity <sup>a</sup>		
White/Caucasian	24	96%
Black/African American	2	8%
Asian/Pacific Islander	1	4%
Age (years)		
	Mean: 20.35 (SD: 1.68)	

<sup>a</sup>Participants could choose multiple characteristics.

Given the high levels of stress that college students experience,<sup>1</sup> there is reason to believe that MFY may be beneficial for college students. The goal of this study was to evaluate the feasibility and acceptability of delivering MFY to college students for the first time, and to explore any changes in the psychosocial outcomes of mindfulness, self-compassion, perceived stress, and perceived academic stress.

## Method

### Design

We chose a single-group design to pilot test the intervention in a new population<sup>17</sup> and address our main goals of learning whether students would attend all sessions and whether they would find the intervention relevant to their lives. The design was a mixed methods approach. As in the work by Bluth et al.,<sup>15</sup> feasibility and preliminary investigation of psychosocial outcomes were assessed using quantitative data collection, including attendance and retention data, and quantitative measures. Whereas, qualitative methods, (i.e., three focus groups), were used to assess whether students found the program to be acceptable.

### Participants

Twenty-five students (23 females; mean age 20.35 years) enrolled in the 8-week intervention. Inclusion criteria required participants to be (1) 18–25 years old, (2) enrolled in college fulltime, and (3) able to attend one of two weekly meeting times. Fifty-four students were screened; 20 students were not eligible due to scheduling conflicts. Another student was screened out as she was over 25 years old. Of the 33 who were eligible, 25 completed a consent form and attended the first session. Of these 25 students, three did not return after the first session and so were not included in any of the analyses. No information was gathered from the three non-attenders about why they did not return. See Table 1 for a description of participant characteristics.

### Procedure

Students were recruited from a US college with a women's undergraduate program and a co-ed graduate program. A variety of techniques were used to raise awareness about the study: announcements to students in classes; emails sent to

students by three departments' administrators (psychology, nursing, and physical therapy) and by representatives of student leader groups (residential assistants and health ambassadors); advertisements posted on student Facebook groups; flyers posted around the academic and residential campuses; flyers displayed at the University's annual student club fair; and an advertisement included in a newsletter for nursing majors.

Students who indicated they were interested in participating were encouraged to email a study researcher. Within a day of receiving such an email, the researcher responded via email with screening questions (i.e., age, fulltime status, ability to attend one of two weekly meeting times). Within a day of receiving an email response to the screening questions, the researcher responded either that the student did not meet the inclusion criteria, or the student was emailed an invitation to participate in the study. In the latter case, along with the invitation, a description of the study and a consent form were emailed to the prospective participant. On the first day of the intervention, students returned the signed consent form and completed the preintervention psychosocial assessments. Immediately after the last session, students were invited to stay in the meeting room and complete postintervention psychosocial assessments. Within ten days of the last of the eight weekly sessions, students were invited to participate in one of three different focus groups that were held at three different times to maximize the likelihood that students could attend. Focus groups were led by a female researcher (ED) who had not previously met with the participants. Two research assistants took notes. Focus groups were audio-recorded and transcribed verbatim. Participants were compensated with gift cards for completing the preintervention assessment, postintervention assessment, and attending a focus group (\$20, \$30, and \$50 respectively). The 8-week sessions began in September 2018 and ended in November 2018. The study was approved by the university Institutional Review Board (IRB).

### Intervention

MFY<sup>15,16</sup> is adapted from the adult Mindful Self-Compassion Program.<sup>14</sup> The 8-week program is designed to be delivered once weekly in 1 h and 45 min sessions. In this study, the program was facilitated by a clinical psychologist (TMC) who had undergone a 50-h MFY training.

As described by Bluth and Eisenlohr-Moul,<sup>16</sup> each weekly session of MFY had a theme, and followed a similar structure, beginning with a settling-in art activity (e.g., mindful drawing), and one or two guided self-compassion meditations and/or skill building exercises, and periodic video clips. Many of the skills were offered in small breakout groups or pairs, followed by a group discussion. Each week students shared how they may have practiced the skills between group sessions. A few minor modifications were made when delivering the intervention to college students. Students opted not to have a break, and thus met for 90 min instead of the allotted 1 h and 45 min. Any other minor modifications are noted below.

*Session 1: Discovering Mindful Self-Compassion:* This session asks students to define self-compassion as a discussion point, followed by formal definitions offered by the teacher. The intent is to familiarize students with a conceptual understanding of self-compassion; for example, students engage in an activity designed to demonstrate that it is a human tendency to treat ourselves more harshly than we would our friends in times of difficulty. Another intention in this session is to promote the understanding that we all have within us the capacity to be kinder to ourselves. A minor modification expanded the range of challenging situations discussed to include more stressors likely to be experienced by college students (e.g., difficulty getting along with a roommate; financial stress). Key practices include meditations and exercises such as learning about the benefits of a soothing touch (e.g. by placing hands over one's heart).

*Session 2: Paying Attention on Purpose.* This session asks students to define mindfulness and is followed by a formal definition by the teacher. Basic mindfulness skills are introduced in a variety of ways. Key practices include mindful listening (paying attention with intention to a chime as well as sounds in the room) and mindful eating (using all senses when eating a raisin). Participants are also taught to notice the sensations of their feet on the ground and are introduced to a guided compassionate body scan meditation, as a way to cultivate mindfulness of physical sensations with affection and gratitude for parts of the body.

*Session 3: Lovingkindness.* In this session, students share what they already know about the developing adolescent brain and learn about the stress response and the human inclination to unconsciously scan for threats, sometimes referred to as the negativity bias. A lovingkindness meditation is introduced as a way to give oneself kindness for the multitude of stressors and emotionally challenging experiences that may be encountered as an emerging adult. A key practice is cultivating personalized lovingkindness phrases.

*Session 4: Self-Compassion:* The definition of self-compassion is further unpacked, and the three components (mindfulness, self-kindness, and common humanity) are presented. A deeper exploration of self-criticism vs. self-compassion is offered, including reflection on one's "inner critic." A key practice focuses on compassionate movement, which involves moving in a way that feels good.

*Session 5: Self-Esteem/Self-Compassion:* The similarity and differences of these two ways of relating to oneself are presented. Discussions of the cost of negative social comparison and experiences of rejection and failure are offered. The concept of common humanity is illuminated as a way to highlight universal human needs and experiences and that one is not alone when faced with difficult emotions. A key practice is a meditation which focuses on developing compassion by recognizing that we are similar to others in important ways.

*Session 6: Living Deeply:* Discovering the universality of suffering and the human capacity for compassion is explored, as well as the importance of self-care. Building resilience and inner strengths through an exploration of one's core values is introduced. Key practices include a

meditation that focuses on giving and receiving and an activity that uses the metaphor of a house to uncover one's core values.

*Session 7: Working with Difficult Emotions:* Building on the foundation of the previous sessions, a deeper discussion of the biological basis of emotions is introduced. The discussion centers on how to skillfully respond to feeling states by creating safety and containment, and learning to turn toward and befriend difficult emotions, like anger. Key practices include labeling emotions and cultivating awareness of emotions in the body.

*Session 8: Embracing Your Life with Gratitude:* The final session offers an opportunity to reflect and appreciate the positive experiences in one's life, through gratitude and self-appreciation. These concepts provide a vehicle to cultivate happiness and well-being on a daily basis. Students share photos and images that have brought them moments of joy over the previous week. This session includes a closing activity for the program in which students write a letter to themselves expressing what they would like to take away from the program. Key practices in this final session include a gratitude exercise and a self-appreciation exercise.

## Measures

Feasibility was assessed through attendance and retention data. As with previous studies, 75% attendance and 80% retention was established as a measure of feasibility.<sup>15,18,19</sup>

Acceptability was assessed via qualitative data collected through focus groups after the last class. Participants were asked about their interest in the various program activities and beliefs about the structure and timing of the groups. Given that this was the first time that the intervention had been tested with college students, participants were also asked about the relevance of the activities to their lives and suggestions for refinement and future implementation of this program.

Changes in the psychosocial outcomes of mindfulness, self-compassion, perceived stress, and perceived academic stress were explored with pre- and post-assessment of the following measures.

### Mindfulness

The Cognitive and Affective Mindfulness Scale – Revised (CAMS-R)<sup>20</sup> is a 12-item measure designed to capture a broad conceptualization of mindfulness with language that is not specific to any particular type of meditation training. Participants respond on a Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Examples of items include: “I can tolerate emotional pain” and “I can accept things I cannot change.” Internal consistency is acceptable ( $\alpha = .76$ ).<sup>20</sup> For the current sample, Cronbach's alpha was .79.

### Self-compassion

The Self-Compassion Scale, Short Form (SCS-SF)<sup>21</sup> is comprised of 12 items. Participants respond on a Likert scale

ranging from 1 (*Almost never*) to 5 (*Almost always*) to items such as “I try to see my failings as part of the human condition” and “When I'm going through a very hard time, I give myself the caring and tenderness I need.” Reliability for this scale is good with reported Cronbach's alphas  $\geq .75$ .<sup>21,22</sup> For the current sample, Cronbach's alpha was .71.

### Perceived stress

Perceived stress was measured using the 10-item Perceived Stress Scale<sup>23</sup> with responses indicated on a Likert scale ranging from 0 (*Never*) to 4 (*Often*). Examples of items include: “In the last month, how often have you felt that things were going your way?” and “In the last month, how often have you felt that you were unable to control the important things in your life?” Reported reliability is .91 in college and community samples<sup>23</sup> and .89 in a sample with college students.<sup>24</sup> For the current sample, Cronbach's alpha was .88.

### Perceived academic stress

The Perception of Academic Stress Scale (PAS)<sup>25</sup> measures the perception of academic stress among undergraduate students. Participants respond on a Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*) to items such as “I believe that the amount of work assignment is too much”; and “I am unable to catch up if getting behind the work.” This instrument consists of 18 items with an internal consistency of .70.<sup>25</sup> For the current sample, Cronbach's alpha was .78.

## Data analysis

Attendance was reported with descriptive statistics (means, standard deviations, and frequencies). Acceptability was assessed by analyzing themes from focus groups. Three members of the research team (ED, HS, and MM) conducted the qualitative analyses, incorporating principles of the immersion-crystallization method.<sup>26</sup> This qualitative approach consists of individually reviewing the interview transcripts several times, then discussing the data together to determine emerging themes. The research team independently reviewed each transcript, noting emerging themes, and discussed impressions during several research team meetings. Once the three main themes had been identified, the three research team members again independently reviewed transcripts and met to discuss, and agree upon, subthemes within each main theme. Any discrepancies that emerged during group meetings were discussed and resolved. Paired-samples *t* tests were used to assess changes in psychosocial outcomes.

## Results

### Feasibility

To determine the feasibility of the intervention for a college student population, we measured attendance and retention.

Mean attendance was good ( $M = 6.72$ ,  $SD = 2.17$ ). For the program to be considered feasible, 75% ( $n = 19$ ) of the students needed to complete the program, which meant attending six (80%) of the eight classes.<sup>15</sup> According to this criterion, the program was considered feasible as 84% ( $n = 21$ ) attended at least six classes. Moreover, 80% of students ( $n = 20$ ) attended at least seven of the eight classes.

### Acceptability

To determine acceptability, we analyzed qualitative data collected from focus groups attended by 22 participants. Three overarching themes emerged to describe the acceptability of the intervention: (1) favorite elements of program; (2) suggestions for changes; and (3) suggestions for implementation on a college campus. Subthemes emerged within each of these major themes.

#### *Favorite elements of the program*

Participants articulated that several elements contributed to their benefiting from the program: structure of the program, practices flexible enough to fit into a college student's life, and concepts that were broadly applicable to a range of challenges. These are described in greater detail in the following sections.

**Structure of the program.** Students commented that the structure of the intervention worked well, including the length and pacing of the sessions, and the fact that the sessions ended before finals began. (Of note, the students opted to give up the 15-min break and have a 1 h and 30-min class.) Despite students' often busy schedules, one student commented that she quickly adapted to the weekly meetings:

*I think I liked the eight weeks, I wouldn't want it any shorter just 'cause it was a nice break in my week. I looked forward to it like, okay now I'm feeling really happy and in a good mood. [I was] able to handle the rest of the week – Focus Group 2, Participant 1*

Students also commented that they appreciated the small group size, as one student explained:

*We kinda became friends during it, like before we wouldn't really talk and then while we were waiting to do something else we would make more conversations with each other and be more comfortable with each other because a lot of times we were sharing kind of personal things and talking about how our week went and stuff. I think it's better to have a small group – Focus Group 2, Participant 6*

**Practices were flexible enough to fit into a college student's daily life.** Some students commented that living with roommates in small dorm rooms and with little time between classes did not provide them with much space for the more formal practices. They appreciated the flexible nature of the activities, and in particular, the informal meditations which could be done anywhere at any time. One student explained:

*I kinda liked when we did the soles of the feet meditation... you can walk and I don't know just take a moment to breathe and I thought that was nice because it was something you can easily do when you're like walking to academics [campus] in the morning*

*or that type of thing. Because I know sometimes– I live with three other people so there's not really many times when I'm like in the room by myself where I would be able to sit down and practice like a meditation or something, so I like the types that you can do in different situations. – Focus Group 3, Participant 1*

#### *Concepts were broadly applicable to a range of challenges.*

Students also commented that the skills they learned could be applied to a range of concerns, such as relationships, financial struggles, balancing college work and outside work, and worries about the future. One student described the flexible applicability of the practices to these different life domains:

*I think the strengths of the program is that, in general terms... if you're fighting with a friend or you got a bad grade, the techniques are all very broadly applicable. Which I think is good – Focus Group 2, Participant 2*

Another student expressed how she used a practice to deal with a difficult family visit while on a break from college:

*Yes, I was seeing my parents and I hadn't seen them in a while, and I was just feeling really overly emotional and I just like, kept crying and I had like a panic attack, and I just tried really hard to calm myself down and kind of the first place my mind went when I was like in that panic attack was 'okay, well what are some things we've learned to deal with this. I know we didn't specifically talk about how to deal with a panic attack but I just kind of did the motions and I tried to like slow down my breathing. – Focus Group 1, Participant 7*

Another student described using a practice she learned to deal with new daily experience of using the subway:

*Yeah, I go back to soothing touch too. It's just very personal and I know if I'm about to board the [subway] and it's very crowded and I'm usually a little bit stressed because I am claustrophobic so I use the soothing touch and it's just very, I don't know how to describe it, it's like a moment for me. It makes me calm down and forget that there's people around. – Focus Group 1, Participant 3*

Of note, between the 2nd and 3rd sessions the students experienced an active shooter alert on campus. The teacher (TMC) allowed time for students to process this event and used this opportunity as an inquiry into whether they used some of the skills. For instance, one student said that the A Moment for Me breathing exercise was helpful, and another student used hands on heart (soothing touch) to calm herself when she felt afraid.

*I really like the soothing touch too and right after the campus incident of the shooting, that was like my initial reaction, the soothing touch. And we discussed it in the class following that week and [facilitator] expressed that she was glad that that was my first instinct and that it was something I was practicing actively. Focus Group 3, Participant 5*

#### *Suggestions for changes*

Participants also articulated ways in which they felt the program could be better adapted to college students.

#### *Some activities were a distraction from the overall message.*

One theme that emerged to describe aspects of the intervention that did not work well was that a few of the activities (e.g., video clips, and mindful drawing as a settling-in

exercise) were perceived not as a complement but as a distraction from the week's content, as one woman described:

*I think there was like a social pressure to pay attention when a teacher is teaching you something. I was definitely paying more attention when [facilitator] was speaking than when the videos were playing. And also, she has such a nice voice. It's very calming and I like it so yeah. And I felt like I understood concepts better when she was speaking than when a video was being shown – Focus Group 3, Participant 2*

### **Suggestions for future implementation of the program on a college campus**

Participants' suggestions for modifying the program included offering a wider range of stressors as examples when discussing challenges faced by young adults. Also, participants felt that it would be important to make the program more widely available, but not mandatory. These suggestions are discussed below.

#### **More focus on the range of challenges facing young adults.**

When discussing how the program could best be implemented in the future, students continued to emphasize the small class size and around 90-min weekly meeting time as positives. In addition, many students discussed the need to expand even further the examples of stressors that college students face. Students suggested that future iterations of the program include broader examples of stressors, as one student explained:

*Maybe less academia and more with personal relationships. I know a lot of people from my group discussions had roommate troubles or fights with friends, and I think it would be more relevant to bring stuff like that in. – Focus Group 1, Participant 3*

Another student described her stress from worrying about money:

*I know a lot of my stress comes from drowning in debt. So that's a huge part of my stress is like money." – Focus Group 1, Participant 7*

Yet another student explained that learning to cope with added responsibilities was stressful:

*This is the first year that I'm living off campus, so learning to really live on my own is kind of stressful, like learning to pay my own bills, like everything is my own now. Like learning how to go through those motions." – Focus Group 1, Participant 5*

These quotes reflect the clear developmental challenge that young adults face: that of transitioning from living with parents to living on their own, and thus managing the day-to-day responsibilities of adapting to the adult world. In this sense, having a program that made a direct connection between these stressors and tools that could manage these stressors would better tailor the program to the unique developmental needs of this population.

**Make it widely available, but not mandatory.** Many students described ways that more students could be invited to participate in the program such as offering the program for course credit or offering it through the health center,

commenting that the skills taught were important for all students to learn. However, many students agreed that the group would not be as helpful if students did not really want to be there, as one student articulated:

*I wonder if it could be almost just like an option, you can take the [University's required first year course] or this course. Because I felt like it almost has to be voluntary for the group to feel safe with each other. Because if there's people there like "oh I don't want to do this, I don't want to be here" it makes it almost feel like you're being judged for participating. Focus Group 2, Participant 1*

### **Psychosocial outcomes**

To investigate whether the participants reported any changes in psychosocial outcomes after participating in the program, paired-sample *t* tests were conducted to compare mindfulness, self-compassion, perceived stress, and perceived academic stress before and after participating in the intervention. Three students did not return after the first session; therefore, *t* tests were conducted with data from the 22 students who took the pre- and post-tests. For several of the outcomes, the students reported positive changes. There was a significant increase in mindfulness from pre- ( $M = 23.54$ ,  $SD = 6.31$ ) to post-intervention ( $M = 28.0$ ,  $SD = 5.98$ ),  $t(21) = -4.49$ ,  $p < .001$ ; and self-compassion from pre- ( $M = 31.00$ ,  $SD = 4.61$ ) to post-intervention ( $M = 40.23$ ,  $SD = 4.64$ ),  $t(21) = -8.89$ ,  $p < .001$ , as well as a significant reduction in perceived stress from pre- ( $M = 21.55$ ,  $SD = 5.16$ ) to post-intervention ( $M = 18.60$ ,  $SD = 6.05$ ),  $t(21) = 2.32$ ,  $p < .001$ . However, students also reported an increase in perceived academic stress from pre- ( $M = 58.86$ ,  $SD = 11.80$ ) to post-intervention ( $M = 66.28$ ,  $SD = 8.19$ ),  $t(21) = -4.41$ ,  $p < .001$ .

### **Discussion**

The college years are a stressful period for many students, marked by numerous changes and heightened sensitivity to achievement, performance, relational rejection/acceptance, and future success and stability. Results from the current study extend the growing body of literature around self-compassion, suggesting that it may be feasible and acceptable to deliver the MFY intervention to emerging adults on a college campus.

Most of the participants in the current study attended the majority of the eight sessions. Given that college students report balancing multiple demands,<sup>1</sup> it is encouraging that students continued to see value in committing to eight weeks of training sessions. The focus groups were key for discerning insights into why students found the intervention valuable. Although coursework and exams can be stressful, the participants in our study emphasized that academics were but one of many stressors they experience. They appreciated that the MFY program also used a range of examples as causes of significant stress and suggested that even more time should be devoted to addressing the range of developmental stressors in young adulthood (e.g., roommate

difficulties; living with debt, and worries about the future). In addition, many of the students in this study lived in small, shared, dorm rooms, with little space or privacy. The participants appreciated that practices introduced during the intervention could be used outside of their living space, such as while walking to class, or between classes, and the skills learned in the program were perceived as fitting into their busy lives. Interestingly, while many students reported that the MFY program should be made available to more students, they had a strong preference that requiring students to take the course would be detrimental to the trust and warmth experienced as a member of the group. Finally, students reported increases in mindfulness and self-compassion and a decrease in perceived stress after participating in the intervention. These results are encouraging and suggest that further exploration of these outcomes may be warranted.

Students also reported increased academic stress after the intervention. One explanation for this finding may be that as students neared the end of the semester, their perceived academic stress levels increased as a result of mounting academic pressure from finals, projects, and assignments that were soon due. Similarly, Bluth and Eisenlohr-Moul<sup>16</sup> found less of a decrease in perceived stress post-intervention at the end of the Spring semester for high school students compared to that of the Fall semester, when academic stress is lower. Future research with a controlled study design will help to resolve whether this increase in academic stress is due to external factors or an element within the program itself. As there was a decrease in perceived stress overall, we would expect that the MFY group would learn mindfulness and self-compassion practices that could offer skillful means to find more calm, balance, and self-care during this stressful time of the academic year. Still, when offering the program to college students, a useful modification may be to incorporate discussion of perceived stress associated with the rhythm of the semester and practices designed to buffer against increasing stress, such as short breathing exercises, or mindful movement.

The main implication of our study is that the MFY program is not only feasible for adolescents<sup>15</sup> but also for college students with some minor adaptations. Given that positive health benefits are associated with self-compassion in both adults and adolescents,<sup>7,8</sup> this is an important finding with wide-ranging implications. As many college mental health centers are overburdened and understaffed,<sup>27</sup> MFY groups offered by college health centers or as an optional part of a first-year experience may be well-received and useful for college students. Future research may also investigate whether there are benefits to offering self-compassion programs to specific subgroups of college students as self-compassion is an important explanatory variable in a range of areas relevant to college students. Specifically, self-compassion plays a role in the experience of trauma as increased self-compassion is associated with less post-traumatic stress disorder (PTSD) symptomatology.<sup>28</sup> Teaching self-compassion skills may also help to reduce body dissatisfaction.<sup>29</sup> Self-compassion also plays a positive role for men as it buffers the relationship between masculine norm adherence and

help-seeking barriers<sup>30</sup> and increases life satisfaction among gay men.<sup>31</sup>

There are some limitations to our study. First, while the sample size is appropriate for a pilot study, the small sample size, combined with the fact that the participants were predominantly female and White, attending a college campus located in a city in the northeast of the US, limits generalizability to other student populations in other parts of the country. Although the single-group design was appropriate to address our main goals of learning whether students would attend all sessions and believe the intervention to be a good fit for college students,<sup>17</sup> this design does not include a control group. As such, we cannot determine whether the intervention caused the outcomes relative to mindfulness, self-compassion, perceived stress, or perceived academic stress, or whether these results are due to other causes naturally occurring during the timeframe of our study. The changes from pre- to post-test can be interpreted as a meaningful signal,<sup>17</sup> and a future efficacy study which incorporates a control group will provide a clearer understanding of the impact of the intervention.

This study embarks on new ground in that it is the first study to assess the MFY program in a college population. Findings indicate that MFY may be an instrumental program to teach college students resilience skills that will support them in navigating a period in their lives which too often is marked with high stress, anxiety, and depression. Offering these skills to help expand students' repertoire of ways to cope with stress may help to initiate a healthier life-long behavioral trajectory.

### Conflict of interest disclosure

Karen Bluth declares that she is the co-creator of Making Friends with Yourself: A Mindful Self-Compassion Program for Teens and Young Adults, and therefore has a business interest that may be affected by the research reported in the enclosed paper. This interest has been disclosed fully to Taylor & Francis. Other authors have no conflicts of interest to declare. The authors confirm that the research presented in this article met the ethical guidelines, including adherence to the legal requirements, of USA and received approval from the university Institutional Review Board.

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### References

1. American College Health Association. *American College Health Association-National College Health Assessment II: Reference Group Executive Summary Fall 2018*. Silver Spring, MD: American College Health Association Fall; 2018.
2. van der Zanden P, Denessen E, Cillessen AHN, Meijer PC. Domains and predictors of first-year student success: a systematic literature review. *Educ Res Rev*. 2018;23:57-77. doi:10.1016/j.edurev.2018.01.001.
3. Wilson AC, Mackintosh K, Power K, Chan SWY. Effectiveness of self-compassion related therapies: a systematic review and meta-analysis. *Mindfulness*. 2019;10(6):979-995. doi:10.1007/s12671-018-1037-6.

4. Neff KD. The role of self-compassion in development: a healthier way to relate to oneself. *Hum Dev.* 2009;52(4):211–214. doi:10.1159/000215071.
5. Neff KD. Self-compassion: an alternative conceptualization of a healthy attitude toward oneself. *Self Identity.* 2003;2(2):85–101. doi:10.1080/15298860390129863.
6. Neff KD. The development and validation of a scale to measure self-compassion. *Self Identity.* 2003;2(3):223–350. doi:10.1080/15298860309027.
7. Macbeth A, Gumley A. Exploring compassion: a meta-analysis of the association between self-compassion and psychopathology. *Clin Psychol Rev.* 2012;32(6):545–552. doi:10.1016/j.cpr.2012.06.003.
8. Marsh IC, Chan SWY, MacBeth A. Self-compassion and psychological distress in adolescents – a meta-analysis. *Mindfulness (NY).* 2018;9(4):1011–1027. doi:10.1007/s12671-017-0850-7.
9. Fong M, Loi NM. The mediating role of self-compassion in student psychological health. *Aust Psychol.* 2016;51(6):431–441. doi:10.1111/ap.12185.
10. Devore R. Analysis of gender differences in self-statements and mood disorders. *McNair Scholars Res J.* 2013;9(1):7.
11. Leadbeater BJ, Kuperminc GP, Blatt SJ, Hertzog CA. multivariate model of gender differences in adolescents' internalizing and externalizing problems. *Dev Psychol.* 1999;35(5):1268–1282. doi:10.1037/0012-1649.35.5.1268.
12. Yarnell LM, Stafford RE, Neff KD, Reilly ED, Knox MC, Mullarkey M. Meta-analysis of gender differences in self-compassion. *Self Identity.* 2015;14(5):499–520. doi:10.1080/15298868.2015.1029966.
13. Ferrari M, Hunt C, Harrysunker A, Abbott MJ, Beath AP, Einstein DA. Self-compassion interventions and psychosocial outcomes: a meta-analysis of RCTs. *Mindfulness.* 2019;10(8):1455–1473. doi:10.1007/s12671-019-01134-6.
14. Neff KD, Germer CK. A pilot study and randomized controlled trial of the mindful self-compassion program. *J Clin Psychol.* 2012; 69(1):28–44. doi:10.1002/jclp.21923.
15. Bluth K, Gaylord SA, Campo RA, Mullarkey MC, Hobbs L. Making friends with yourself: A mixed methods pilot study of a mindful self-compassion program for adolescents. *Mindfulness (NY).* 2016;7(2):479–492. doi:10.1007/s12671-015-0476-6.
16. Bluth K, Eisenlohr-Moul TA. Response to a mindful self-compassion intervention in teens: a within-person association of mindfulness, self-compassion, and emotional well-being outcomes. *J Adolesc.* 2017;57:108–118. doi:10.1016/j.adolescence.2017.04.001.
17. National Center for Complementary and Integrative Health. *Framework for Developing and Testing Mind and Body Interventions.* Bethesda, MD: National Center for Complementary and Integrative Health; 2017.
18. Mendelson T, Greenberg MT, Dariotis JK, Gould F, Rhoades BL, Leaf PJ. Feasibility and preliminary outcomes of a school-based mindfulness intervention for urban youth. *J Abnorm Child Psychol.* 2010;38(7):985–994. doi:10.1007/s10802-010-9418-x.
19. Sibinga EMS, Stewart M, Magyari T, Welsh CK, Hutton N, Ellen JM. Mindfulness-based stress reduction for HIV-infected youth: a pilot study. *Explore (NY).* 2008;4(1):36–37. doi:10.1016/j.explore.2007.10.002.
20. Feldman G, Hayes A, Kumar S, Greeson J, Laurenceau JP. Mindfulness and emotion regulation: the development and initial validation of the cognitive and affective mindfulness scale-revised (CAMS-R). *J Psychopathol Behav Assess.* 2007;29(3):177–190. doi:10.1007/s10862-006-9035-8.
21. Raes F, Pommier E, Neff KD, van Gucht D. Construction and factorial validation of a short form of the self-compassion scale. *Clin Psychol Psychother.* 2011;18(3):250–255. doi:10.1002/cpp.702.
22. Marshall SL, Parker PD, Ciarrochi J, Sahdra B, Jackson CJ, Heaven PCL. Self-compassion protects against the negative effects of low self-esteem: a longitudinal study in a large adolescent sample. *Pers Individ Differ.* 2015;74:116–121. doi:10.1016/j.paid.2014.09.013.
23. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *J Health Soc Behav.* 1983;24(4):385–396. doi:10.2307/2136404
24. Roberti JW, Harrington LN, Storch EA. Further psychometric support for the 10-item version of the perceived stress scale. *J Coll Couns.* 2006;9(2):135–147. doi:10.1002/j.2161-1882.2006.tb00100.x.
25. Bedewy D, Gabriel A. Examining perceptions of academic stress and its sources among university students: the perception of academic stress scale. *Health Psychol Open.* 2015;2(2):1–9. doi:10.1177/2055102915596714.
26. Crabtree BF, Miller WL. *Doing Qualitative Research.* 2nd ed. Thousand Oaks, CA: Sage Publications; 1999.
27. Center for Collegiate Mental Health. 2018 Annual Report. (Publication No. STA 19-180). University Park, PA: Center for Collegiate Mental Health; 2019.
28. Winders SJ, Murphy O, Looney L, O'Reilly G. Self-compassion, trauma, and posttraumatic stress disorder: a systematic review. *Clin Psychol Psychother.* 2020;27(3):300–329. doi:10.1002/cpp.2429.
29. Braun TD, Park CL, Gorin A. Self-compassion, body image, and disordered eating: a review of the literature. *Body Image.* 2016; 17:117–131. doi:10.1016/j.bodyim.2016.03.003.
30. Heath PJ, Brenner RE, Vogel DL, Lannin DG, Strass HA. Masculinity and barriers to seeking counseling: the buffering role of self-compassion. *J Couns Psychol.* 2017;64(1):94–103. doi:10.1037/cou0000185.
31. Jennings LK, Tan PP. Self-compassion and life satisfaction in gay men. *Psychol Rep.* 2014;115(3):888–895. doi:10.2466/21.07.PR0.115c33z