A Self-Compassion Intervention for University Students: A DNP Project

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May 10, 2022

Abstract

University students are reporting increased levels of anxiety, depression, and suicidal ideation. Trends for mental health distress among this population have been increasing over the past few years. The COVID-19 pandemic has worsened this trend. It is important to provide college-age students with the knowledge and skills for self-compassion necessary to navigate the difficult transition from high school to university. Self-compassion skills have been shown to positively affect mental health outcomes, specifically anxiety and depression. A brief, two-part intervention was developed focusing on the major components of self-compassion and offered to university students over a two-week period. Results of the intervention did not show a significant increase in self-compassion, self-kindness, common humanity or mindfulness among participants. Similarly, there was no significant decrease in student's self-judgment, isolation or over-identification. Further study is needed to inform future self-compassion interventions in this population.

Keywords: mental health, college students, self-compassion, mindfulness, intervention

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A Self-Compassion Intervention for University Students- A Pilot Project

College-aged students are in need of life skills to improve and preserve mental health. Universities, in turn, should be prepared to offer this skill development as a component of general education. An opportunity exists to partner nurse leaders with a regional state university to provide mental health skill development. The purpose of this proposal is to explore the feasibility of that project.

Background and Significance

There is a need to focus on the mental well-being of students in University settings as they are considered a high-risk population for developing mental disorders (Dawson et al., 2020). Among United States (US) college students, reports of adverse mental health outcomes and conditions have significantly increased (Linden & Stuart, 2020). It is estimated that one-third of undergraduates suffer from significant mental health issues (Oswalt et al., 2020). In two nation-wide surveys, incidence of depression, anxiety, suicidal ideation and suicide attempts has worsened with the incidence of moderate or severe anxiety increasing by 50 percent (Duffy et al., 2019). A meta-analysis conducted by Mortier et al. (2017) representing more than 600,000 college students found that suicidal thoughts and behaviors were common especially for females with a risk ratio around 1.12-1.67. It is important to note that these data were obtained before the COVID-19 pandemic, which has further exacerbated underlying mental health conditions in the general population (Czeisler, 2020).

These statistics point to the fact that colleges and universities face a very real and growing problem. The availability of mental health resources such as clinics and counselors on college campuses is paramount for combatting this problem. In addition, upstream interventions

aimed at recognition and prevention of distress is a prudent means of preventing mental health crises (Gardner & Kerridge, 2019; Wyman et al., 2020). It is important to empower students with the knowledge and skills necessary to effectively cope with the challenges necessary to adapt to university life. There is an opportunity to help alleviate the problem of the worsening mental health of college students. Embedding information and teaching on ways to alleviate stress, anxiety and depression in college courses may be an effective approach to the growing mental health problems seen in this population.

Impact on Student

Challenges to mental health such as stress and anxiety have been shown to negatively impact academic performance (Mortier et al., 2017) as well as to increase maladaptive coping behaviors such as alcohol consumption, smoking and self-injury (Oswalt et al., 2020). Learning effective coping strategies is a protective factor for students' well being and overall academic success.

Impact on Community

The university and community as a whole benefit when its members are achieving to their highest potential. MSC focuses on a sense of shared humanity thereby decreasing feelings of isolation (Neff & Germer). Students who are informed about and practice MSC may participate more in community activities, be more socially active and civically engaged.

Impact on Healthcare System

A physically and mentally healthy population has far reaching benefits to the health care system by reducing the health care burden. Mental health counseling resources have been

strained especially in rural areas. Increasing coping mechanisms through MSC may decrease the burden of outpatient admissions for mental health crises. (Czeisler et al., 2020).

Use of Mindful Self-Compassion

One approach to decreasing university students' stress and anxiety is the practice of mindful self-compassion (MSC). Simply stated, MSC is the practice of reducing stress and anxiety by reframing negative or judgmental thoughts towards oneself. Neff (2003) first described MSC as three interrelated concepts and activities: self-kindness, connection, and mindfulness. Instead of engaging in self-judgment and negativity, MSC encourages self-support, recognition and acceptance of one's common humanity and imperfection. Studies involving the teaching of MSC to university students have shown decrases in anxiety and stress and increases in self-efficacy, happiness, gratitude and well-being (Dundas et al., 2017; Haukaas et al., 2018; Smeets et al., 2014).

Proposed Evidence-Based Solution

Education is needed to increase university students' mental well-being. The proposed evidence-based intervention is the development of an educational intervention, or academic detailing, to increase university students' self-compassion. Academic detailing is a common component of self-compassion interventions (Dundas et al., 2017; Haukaas et al., 2018; Ko et al., 2018; Smeets et al., 2014). The purpose of this evidence-based pilot project is to: (1) develop an educational intervention for first year university students on self-compassion (2) increase students' level of self-compassion (3) to evaluate process outcomes related to the intervention. Increasing students' self-compassion may positively impact their mental health.

Review of Literature and Guiding Theory

The purpose of this integrative review of literature is to review relevant studies related to the use of SC in university students. The PICO question was: What is the effect of an educational intervention comparing pre-and post-self-compassion scores among undergraduate students?

In January, 2022 a review of literature was conducted using CINAHL, Medline and PsychInfo databases. Keywords used were: student, intervention, self-compassion, mindfulness, emotion, anxiety, and depression. Results were refined to include only English-language, peer-reviewed publications in the last seven years. This yielded a result list of 142 publications. These were further filtered to only include empirical trials involving self-compassion and students. This yielded four randomized controlled trials (RCT) and one meta-analysis of RCT's. These studies all represent level I evidence (Polit & Beck, 2020).

In a meta-analysis of RCT's, Ferari et al. (2019) concluded that self-compassion interventions led to significant improvements across 11 different psychological outcomes. The authors performed a systematic search that resulted in 27 RCT using validated psychological instruments to measure the effect of SC. The aggregate effect size, Hodge's g, was large for the following disorders: eating behaviors (g=1.76), rumination (g=1.37). Effect size was moderate for self-compassion (g=0.75), stress (g=0.67), depression (g=0.66), mindfulness (g=0.62), self-criticism (g=0.56), and anxiety (g=0.57). Efficacy was stronger when the intervention was delivered to a group rather than an individual. The meta-analysis supports the use of SC interventions to groups of various populations undergoing psychological distress.

Smeets et al (2014) conducted a RCT to study a three-day self-compassion intervention and its effect on the well-being of female college students. Participants were randomly assigned

to the self-compassion intervention group (n=27) or a group that studied time management techniques (n=22). Multiple variables studied including self-compassion, mindfulness, life satisfaction, connectedness, optimism, self-efficacy, mood, rumination, and worry. Instruments used were the Self-Compassion Scale Short Form (Raes et al., 2010) the Kentucky Inventory of Mindfulness Skills, Diener's satisfaction with Life Scale, the Social Connectedness Scale-Revised, the General Self-Efficacy scale and the Positive and Negative Affect Schedule. The SC intervention taught participants to reframe events in their life in a compassionate and kind way especially when thinking of themselves. Analysis of variance (ANOVA) found no significant differences between the two groups before the intervention. A paired t-test was performed and showed that the intervention group showed significant increases in self-compassion, mindfulness, life satisfaction, connectedness, optimism and self-efficacy in addition to decreases in rumination (all ps<0.5). There were no changes in positive affect or worry. "The study was limited by an all-female sample comprised of only psychology students and was not ethnically diverse" (Smeets et al., 2014). This study contributes to the body of evidence supporting the use of self-compassion education to improve students' mental health.

Another RCT by Dundas et al. (2017) studied a two-week self-compassion intervention with university students (n=158). The sample was comprised mostly of women with a median age of 25 years. Participants were randomized into the intervention group and a waiting list control group who receive no intervention. The researchers were interested in the effect of self-compassion teaching on personal growth, self-efficacy, impulse control, self-judgment and negative self-talk. Instruments used were the Personal Growth Initiative Scale, Self-Control Scale, the Five Facet Mindfulness Questionnaire, the Habit Index of Negative Thinking, the State-Trait Anxiety Inventory, the Major Depression Inventory, and the Self-Compassion Scale.

ANOVA showed an increase in the intervention group in the areas self- efficacy ($F(1.8, 203)=15.33$, $p<0.001$ Cohen's $d=0.74$), impulse control ($F(1.9, 215)=6.73$, $p=0.002$ Cohen's $d=0.49$), and a decrease in self-judgment ($F(2, 228)=14.71$, $p<0.001$ Cohen's $d=0.74$) and negative self-directed thinking ($F(1.8, 201)=13.01$, $p<0.001$ Cohen's $d=0.67$). These changes remained stable at 6 months. The authors note, "Several hypotheses and outcomes were tested in this study. This increases the risk of type I errors. The participants were self-selecting, mostly female and Norwegian" (p.449). These factors limit the generalizability of the results.

The authors conclude that a short course in MSC is beneficial for college students and increases their quality of life.

Haukaas et al. (2018) conducted a RCT to study attention training and SC for Norwegian students with depression and anxiety. The intervention lasted for three sessions. The sample contained 81 undergraduate and graduate students with an age range of 18-36 years. The majorities of the participants were female and had self-report of anxiety and depression. Participants were randomized into an attention training (n=40) or an MSC group (n=41). Instruments used were Patient Health Questionnaire-9, Generalized Anxiety Disorder-7, Self-Compassion Scale Short Form, Detached Mindfulness Questionnaire, and the Five Facet Mindfulness Questionnaire. Repeated measures ANOVA revealed that the SC intervention group had reduced depression and anxiety symptoms (d=0.53-0.71). There was an increase in self-compassion (d=0.55), attention flexibility (d=0.73) and mindfulness (d=0.53). The authors note that limitations included self-selected convenience sample, majority of female participants and small sample size. However, the researchers conclude that a brief intervention on MSC is valuable for reducing anxiety and depressive symptoms in college students.

Ko et al. (2018) studied the effect of compassion on student self-compassion, mindfulness and well-being in a RCT with 41 participants, mostly female, whose mean age was 19.8 years. Students were randomized into a seminar on compassion or a control-waiting list that receive no intervention. Pre-intervention, students' self-reported measures on stress, anxiety, depression and well-being. A sample of salivary amylase (SA), a stress marker, was also obtained. Instruments used were the Five Facet Mindfulness Scale, Self-Compassion Scale, Compassion Scale, and the Center for Epidemiologic Studies-depression Scale, the State-Trait Anxiety Inventory and the Perceived Stress Scale. Post-intervention, there were significant increases in mindfulness and self-compassion. Changes in self-report of depression, anxiety and stress were not significantly different than at pre-test. SA levels significantly decreased in the intervention group ($F(1,32)= 4.625$, $p<0.05$). The authors explain that the intervention was not designed to address stress, depression or anxiety and this could account for the lack of change in self-report in these variables. Limitations include a small sample size and data were collected over a period of two years. This RCT demonstrates that a brief intervention on compassion is effective at increasing self-compassion and mindfulness in addition to decreasing biologic markers for stress.

To summarize, all studies showed a positive impact on mental health in general after a self-compassion intervention. Among a diverse population, Ferrari et al. (2019) demonstrated that increased self-compassion led to decreased rumination, anxiety, stress and self-criticism and increased levels of self-compassion, and mindfulness. Four RCT's showed increases in students' self-compassion and mindfulness (Dundas et al., 2017; Haukaas et al., 2018; Ko et al., 2018; Smeets et al., 2014). Decreased negative self-talk was demonstrated by Dundas et al. (2017). Two studies showed increased self-efficacy (Dundas et al., 2017; Smeets et al., 2014).

Depression and anxiety were reduced in studies by Dundas et al., (2017) and Haukaas et al. (2018). Strengths of the studies included quantitative, empirical methodology, use of validated psychological instruments, and randomization. Limitations included a mostly female convenience sample of non-US origin. The most commonly used instruments were the Self-Compassion Scale (Raes et al., 2011), State-Trait Anxiety Scale (Spielberger et al., 1970), the Five Facet Mindfulness Questionnaire (Baer et al., 2006), and the Patient Health Questionnaire-9 (Kroenke et al., 2001). Simply stated, there is clear evidence to support the proposed intervention.

Guiding Theory

Principles from Malcolm Knowles' (1978) adult learning theory may be used to organize and inform the development of an educational intervention targeted to university students. Knowles' theory is primarily concerned with the internal processes and contextual factors that affect adult learning. Teaching adults requires an approach that takes into account their development and individual needs which differ from younger learners. This framework is referred to as *androgogy, or* adult learning, as contrasted with *pedagogy, or* child learning (Knowles, 1978).

The assumptions underlying *adrogogy* are rooted in the fact that adults have achieved knowledge and experience that change the way they perceive the world and their need for understanding it. Similarly, the degree to which they perceive knowledge as applicable to their current life drives their motivation and readiness to learn. Knowles, Swanson and Holton (2005) summarized six core traits shared by adult learners:

- The adult learner has a need to know.

- The adult learner is autonomous and self-directed.
- The adult learner has prior experiences that serve as resource and mental model.
- The adult learner's readiness to learn is related to their life's activities.
- The adult learner's orientation to learning is problem-centered.
- The adult learner's motivation to learn is intrinsic.

An effective learning experience for adults must start with a facilitator who is engaged and knowledgeable about the subject without using an authoritarian, lecturing approach. Conveying respect for the learners' needs and knowledge is critical to establishing rapport and constructing an environment conducive to learning. Relevant material should be presented in a way that complements existing knowledge about a specific subject while adding to the learner's knowledge base (Knowles, 1980).

This project applied principles from Knowles' adult learning theory by presenting relevant material on self-compassion. A teaching style was used that was appropriate for university students. Knowledge gaps were addressed by giving factual, evidence-based information that is readily applicable to the student's life. Opportunities were given for the learners to engage the facilitator and classmates with examples from their own experiences.

Organizational Description

The organization for implementation of the project was a public, co-educational university with an enrollment of around 12,000 students. The setting of the campus is rural. The mission of the university is to be a "premier university dedicated to innovative student engagement and success, advancing Kentucky, and impacting the world." The university's strategic plan includes academic excellence, commitment to student success, institutional

distinction, financial strength, campus revitalization and service to communities and region. The university has an on-site student health center where students have access to a mental-health provider if needed and a campus counseling center for any other mental-health needs.

There are no relevant policies that impact the DNP project.

The primary stakeholders in this pilot project were health and science students residing in a living/learning center housed in a university dormitory. Other stakeholders included the faculty, the university, the students' families and the community.

An organizational assessment was performed using a SWOT analysis in the context of improving the mental health of students attending the university. Strengths of the organization included: a commitment to student success, an opportunity-oriented mission and values and an overall vision for excellence. Weaknesses included: a poorly articulated consideration of student mental health, the lack of upstream initiatives that address student mental health, the lack of interactive web-based information and opportunities to improve student mental health literacy. Opportunities included: the creation of embedded, upstream academic content available to first-year students and the building of student mental health literacy and confidence. Threats included: organization is too slow to adapt to students' changing mental health needs, deteriorating student mental health, decreased retention and attrition due to lack of student success and engagement.

The organization's mission and values reflect a commitment to excellence and initiatives to support student success. Part of the learning that needs to take place among university students is how to cope with the challenges of transition from high school to college (Fong & Loi, 2015). A student body that is mentally unprepared for the rigors of post-secondary education is a threat not only to their own success but also to the university's mission of becoming a premier

institution. Increasing student mental health strengthens the university community and helps to achieve its mission and values.

Methodology

The aims of the proposed project were to impact self- compassion of the university students by giving them life skills. To accomplish this aim, the following objectives were constructed:

(1) develop an educational intervention for first year university students on self-compassion

a. Develop a two-part series of PowerPoint presentations on the components of self-compassion i.e. self-kindness, common humanity and mindfulness (Germer & Neff, 2019).

(2) increase students' level of self-compassion

b. Measure participants' self-compassion using the Self-Compassion Scale (Appendix A) before and after the intervention

3) Assess impact of self-compassion to evaluate process outcomes related to the intervention. Increasing students' self-compassion may positively impact their mental health.

c. collect demographics and a short survey on the intervention

Implementation Framework

The Plan-Do-Study-Act (PDSA) framework for quality improvement from the Institute for Healthcare Improvement (2017) served as the implementation framework for this project. The PDSA cycle was developed to ensure continuous process improvement and can be used to guide practice change within the healthcare environment. In the "Plan" stage, a change initiative

is developed. At this stage, one gathers existing data about a potential or actual problem and develops a best-practice initiative to solve it. During the "Do" phase the initiative is put into place. After cycling through the first two phases, measurements are taken about the phenomenon of interest. The third or "Study" phase analyzes the data collected to measure and evaluate changes that have occurred. Finally, during the "Act" phase the problem is revisited in light of the data collected.

For this DNP project, the "Plan" phase occurred through consultation with the organization's faculty. The lack of upstream mental health interventions was identified as an opportunity for change. Stakeholders met to discuss possible solutions and agreed that an educational intervention would best suit the organization's needs and culture. The DNP student continued to meet with faculty to establish specific goals, to discuss outcome measures and to determine the best setting for the pilot. It was determined that the health and science living/learning center on campus would be the optimal setting for implementation and that the project would focus solely on education related self-compassion as a means of decreasing mental health distress. During the "Do" phase the educational intervention was implemented and self-compassion and process outcomes were measured. The measurements were analyzed and interpreted during the "Study" phase and then reported to organizational stakeholders and the EKU academic community during the "Act" phase.

Setting & Recruitment

The setting for the pilot intervention was an on-campus living/learning community of health services majors in a public, co-education university located in rural Kentucky. Recruitment of participants will take place in the dormitory that houses the living/learning

community. All health and science students in the dormitory (n=180) will be eligible for participation on a voluntary basis. Participation goal is 5-10 students. Exclusion criteria will include students who do not complete both the pre- and post- intervention surveys and any student who drops the course before the intervention is complete. Access to the participants was obtained through the director of the living/learning center who requested the intervention be given. Before the intervention, a flyer (Appendix B) will be posted in the dormitory and an email sent out to students with a letter of introduction (Appendix C).

IRB Approval and Protection of Subjects

Since this project posed no more than minimal risk to participants, it qualified for expedited review from the Eastern Kentucky University (EKU) IRB. Documents required at the time of submission included: IRB application, CITI training certificate, instruments used for measurement, and recruitment materials. IRB approval #4540 was obtained on March 24, 2022. The DNP student obtained informed consent from the participants prior to implementing the group intervention. The surveys were identified by a code unique to each participant. The DNP student did not know the identities of the participants. The unique code served as a means to identify participants for statistical analysis purposes. The surveys contained no personally identifiable information. The participants were given the opportunity to ask any questions that they had during the initial class meeting. It was explained that participation was voluntary and completely anonymous. The participants were made aware that they could choose to leave at any time.

Implementation Process

Following approval by the School of Nursing Chair, and EKU IRB, a brief, two-part educational presentation was presented to students in the health and science living/learning center on campus. The intervention was informed by Germer & Neff's *Teaching the mindful self-compassion program* (2019). Specific topics included: self-compassion or the practice of being kind and understanding towards oneself, common humanity or seeing how one's experiences whether positive or negative fit into a larger picture, and mindfulness or staying present with uncomfortable feelings. This information was made into two PowerPoint presentations. Each of these were vetted by two doctorally-prepared psychiatric mental health nurse practitioners and delivered approximately one week apart. Homework was given to students to complete after each session. A week later the homework assignment was discussed in class along with a review and discussion (Appendix H).

Instruments & Data Collection

Demographic Survey.

A demographic survey (Appendix D) developed by the DNP student served to help describe the sample's age, gender, major, and previous experience with MSC.

Self-Compassion Scale-Short Form. The Self-Compassion Scale-Short form (Raes et al., 2011) was used to measure students' self-compassion before and after the intervention. It is a 12 item, Likert-type survey that measures self-kindness (items 2,6), self-judgment (items 11,12), common humanity (items 5,10), isolation (items 4,8), mindfulness (items 3,7) and over-identification (items 1,9). Subscale scores are obtained by calculating the mean of responses. Items that measure self-judgment, isolation, and over-identification (1,9,4,8,11) are negatively

scored. Higher mean scores indicate higher levels of self-compassion. The instrument has been psychometrically validated with a Chronbach's alpha of >0.86 for all samples (Raes et al, 2011). A tool was also developed by the DNP student for process evaluation of the content and presentation of the intervention (Appendix E).

Debrief & Process Evaluation.

The DNP student designed a debriefing and process evaluation survey to be given to students after the second part of the intervention. The survey consisted of yes/no and open-ended questions related to the learning objectives of the intervention as well as the student's experience of the usefulness of the intervention in their daily lives.

Data Analysis & Security

Data were entered into IBM SPSS Statistics for Macintosh, Version 22.0. Statistical significance will be set at 0.05 (Pallant, 2016). Descriptive statistics were calculated and and after a test of data normality a paired t-test was computed on mean pre- and post-intervention scores for the Self-Compassion Scale-Short form. Cohen's d values were also be computed to estimate effect size.

Paper survey forms will be stored in a lock filing cabinet located in 236 Rowlett Building at Eastern Kentucky University. Only the DNP student and members of the DNP committee will have access to these documents. De-identified data will be stored on the DNP student's computer in a password-protected file. Files will be kept for 5 years before being destroyed.

Budget

The project was carried out by the DNP student who developed all educational materials related to the intervention. Direct costs included copying costs of the pre- and post- surveys ($10.00), folders, clip boards and pens ($64.00) and mileage to and from the agency ($25.00). The total cost of implementing this pilot project including direct and indirect costs is approximately $99.00.

Results

A voluntary, convenience sample of six students was recruited and after informed consent was obtained, demographic data were collected. Ages ranged from 18-20 years, M=18.5 years. Eighty percent of the participants were female. Fifty percent of the participants were freshman and 50 percent sophomores. Majors identified were: Forensics (33%), Nursing (33%), and Biology (33%).

The Self-Compassion Survey-Short Form was administered before and after the intervention. A paired-samples t-test was performed to measure the impact of the intervention on students' overall self-compassion scores and subscales measuring self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification.

Scores on the Self-Compassion Survey-Short Form did not significantly increase from time one to time two with a mean difference of 0.32, $t(5) = 0.598$, $p=0.57$. Cohen's d statistic was 0.24 indicating a small effect size. Likewise, subscale scores also failed to reach significance (see Table 1, Appendix). There was no significant increase on students' mean scores for self-kindness, common humanity and mindfulness. There were no significant decreases in students' mean scores for self-judgment, isolation and over-identification.

A Likert-type survey was given after the final educational session to measure students' confidence in using self-compassion skills and their likelihood to apply the skills in their daily lives. Students indicated that they were somewhat confident in using the skills (M=3.33, SD=0.81, N=6) and somewhat likely to use the skills in their daily lives (M=3.5, SD=0.84, N=6).

Discussion

Reasons for the lack of significant impact on students self-compassion scores could be due to the fact that the intervention was offered at the end of the semester when students have competing priorities and resources are stretched. The students' self-awareness of the impact that stress has on their life was low. Prior to the first session students denied any stressors or any difficulty managing their stressors. In general, they were reluctant to self-disclose much information about their daily lives.

These findings contrast with the published literature on the subject. The findings are not generalizable due to a small, convenience sample. They do however offer meaningful insights about the intervention. For example, the intervention requires motivated participants who are self-aware. It would be better suited to a classroom or a more structured environment where participants could receive regular feedback. Participation should be encouraged. Only one student completed the homework assignment. Feedback and support from facilitators could improve participation. The guiding theory should be changed from a learning theory to a behavioral change theory. Knowledge of the concepts is not enough.

Implications

Practice

A change in practice is needed. Reliance on an over-burdened mental health care system alone puts students at risk. Although the partnering university has mental health counseling available, no upstream interventions exist to teach life skills such as coping with the inherent stressors students encounter. The results of this project provide evidence that more study is needed to refine the evidence-based curriculum on self-compassion for better uptake among the student population.

Policy

Policy should reflect an ongoing commitment to students' well-being. Learning effective coping strategies is a protective factor for students' well-being and overall academic success. The university benefits when students are engaged and academically successful. Students with poor mental health are less likely to succeed academically potentially resulting in poor graduation and retention rates. At an organizational level more advocacy for improved student mental health is needed to strengthen the university as a whole.

Quality and Safety

Without robust upstream interventions that positively impact students' well-being, quality and safety may be negatively impacted. Further revision of the intervention taking into account student behaviors rather than knowledge alone should be considered. University students are a high-risk population for mental health crises and upstream interventions should be tailored to deliver an impactful influence on their lives.

Education

The implications for education include raising student awareness of how stressors impact their lives, motivating students to change behaviors and empowering them with the skills necessary to do so. Students should be given plenty of time to assimilate the concepts into their lives. Educators should advocate for curriculum changes that include classes and seminars on emotional well-being.

Sustainability

The project is feasible and sustainable. It is congruent with the organization's mission and values and there is ample buy-in from leadership. It is easily implemented and understood. Opportunities exist to embed the content into already existing courses aimed at first year healthcare students. It does require an in-person facilitator to give feedback and guidance in order to keep students motivated.

Future Scholarship

Findings and insights from the project will be further disseminated to stakeholders at an organizational level. Further study is needed to determine facilitators and barriers to student engagement with implementing self-compassion skills. There is interest in embedding the intervention in already existing classes which would allow another PDSA cycle to be completed.

Conclusion

Self-compassion is at the core of self-care. National data suggest that university students are experiencing serious mental health issues (Czeisler et al., 2020; Duffy et al., 2019, Elharake et al., 2021). College and universities face a very real and growing problem in this respect. Evidence supports the use of self-compassion to improve student mental health outcomes.

Education, however, is not enough without also influencing behaviors and engagement. Further study is needed to refine the project with a larger sample over a longer period of time.

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Appendix A

Self-Compassion Scale Short Form (SCS-SF)

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. Indicate how often you behave in the stated manner, using the following scale:

Almost never				Almost always
1	2	3	4	5

1. When I fail at something important to me I become consumed by feelings of inadequacy.

2. I try to be understanding and patient towards those aspects of my personality I don't like.

3. When something painful happens I try to take a balanced view of the situation.

4. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

5. I try to see my failings as part of the human condition.

6. When I'm going through a very hard time, I give myself the caring and tenderness I need.

7. When something upsets me I try to keep my emotions in balance.

8. When I fail at something that's important to me, I tend to feel alone in my failure

9. When I'm feeling down I tend to obsess and fixate on everything that's wrong.

10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

11. I'm disapproving and judgmental about my own flaws and inadequacies.

12. I'm intolerant and impatient towards those aspects of my personality I don't like.

Reference:
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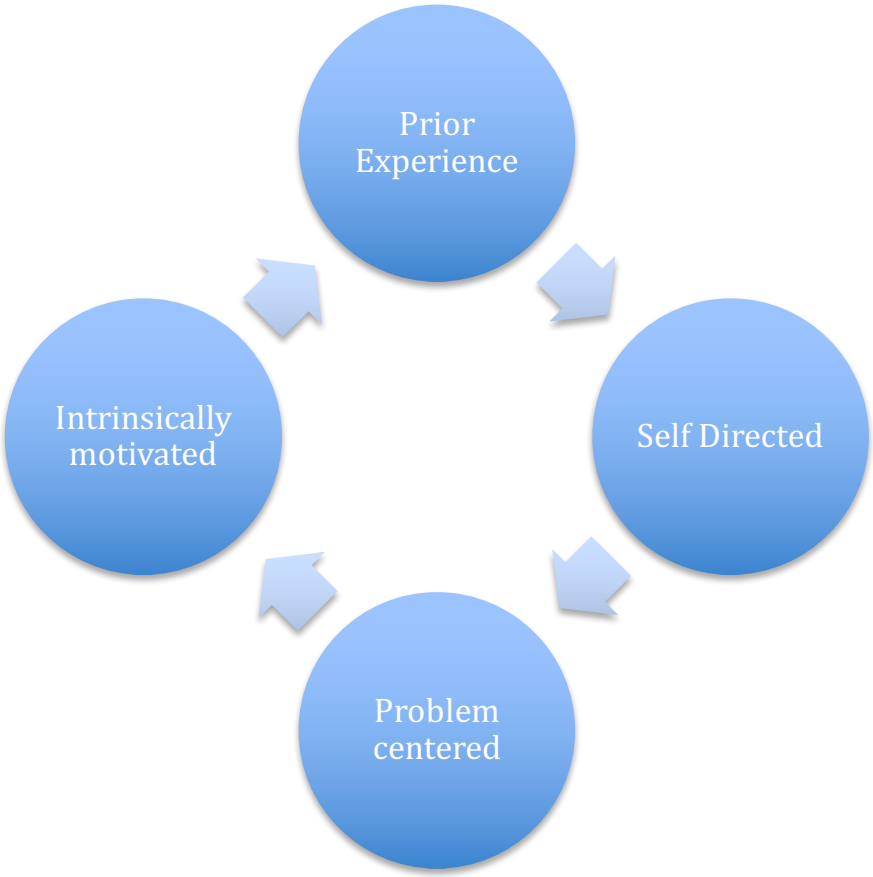
Appendix B

Knowles Adult Learning Theory



Appendix C

Learning Objectives Day 1

1. Students will discuss the impact of stress in their lives before the presentation.

2. Students will review concepts related to MSC (self-kindness, common humanity, and mindfulness) during the presentation.

3. Students will identify elements of MSC in a short case study after the presentation.

Learning objectives Day 2

1. Students will practice using MSC techniques during the week preceding the second presentation.

2. Students will decide which MSC component was most helpful during a stressful event from the previous week.

3. Students will relate MSC techniques to possible future stressful events during class discussion.

Appendix D

Demographic survey

1. What is your gender? (Choose one)
   Male_____
   Female_____
   Non-Binary_____

2. What is your student classification?
   Freshman_____
   Sophomore_____
   Junior_____
   Senior_____

3. What is your major? If undecided, please write “undecided”.
   _____

Appendix E

Thank you for participating in "A Self-Compassion Intervention for University Students: A DNP Project".
Please take a few minutes to answer the following questions as they pertain to your experience.

1. Briefly describe some challenges that you encounter as a student that cause you stress or anxiety.

_____
_____
_____

2. Which self-compassion techniques have you been able to use in your daily life when you have encountered stress or anxiety?

_____
_____
_____

3. How confident are you in using the techniques of self-compassion? (1=not at all confident, 5=very confident

1 2 3 4 5

4. How likely are you to use self-compassion concepts in your daily life in the future (1=not at all confident, 5=very confident)

1 2 3 4 5

4. Are there any topics you would like to know more about related to coping with stress and anxiety?

_____
_____
_____

Thank you for your time.

Appendix F

Recruitment Flyer

Stressed??

Overwhelmed ??

Anxious??

Credit: Shutterstock

You are invited:

Participants are needed for a DNP project to study the effects of self-compassion training on students' well-being.

What:

Two informational sessions on coping with stress and anxiety through the use of self-compassion.

When/Where:

During HSO 100 (Wednesdays 11:15-12:05)

Process:

Give consent, & complete surveys before and after two informational sessions scheduled during regular class time.

Who do I contact to participate?

David Coffey, MSN, APRN-DNP Student/EKU

David.coffey@eku.edu

Appendix G

Cover Letter

Eastern Kentucky University Institutional Review Board

Informed Consent Cover Text for Exempt Studies

Research with human subjects, regardless of the review level, requires that researchers provide information about the study and allow potential participants to make an informed decision about whether they want to voluntarily participate. When a study is approved for exemption, the greatest risk to participants is often a violation of confidentiality. To reduce this risk, having participants sign a formal consent form for studies that would otherwise be anonymous is not necessary. Instead, participants can remain anonymous through the use of cover text provided as an introductory screen to an online survey or activity or a cover page or introduction in a printed survey or activity. The template below is provided for use only with studies that are eligible for exemption. Please complete the highlighted sections based on the instructions in brackets and copy and paste the text at the beginning of your data collection instrument.

A Self-Compassion Intervention for University Students: A DNP Project

You are being invited to take part in a research study on promoting self-compassion in college-aged students. This study is being conducted by David Coffey, a DNP student at Eastern Kentucky University.

If you decide to participate in the study, you will be asked to attend 2 presentations, fill out surveys before the first presentation and after the last presentation. Your participation is expected to take no more than 90 minutes.

This study is anonymous. You will not be asked to provide your name or other identifying information as part of the study. No one, not even members of the research team, will know that the information you give came from you. Your information will be combined with information from other people taking part in the study. When we write up the results of the study, we will write about this combined information.

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

This study has been reviewed and approved for exemption by the Institutional Review Board at Eastern Kentucky University as research protocol number [add protocol number from final approval]. If you have any questions about the study, please contact david.coffey@eku.edu]. If you have questions about your rights as a research volunteer, please contact the Division of Sponsored Programs at Eastern Kentucky University by calling 859-622-3636.

By completing the activity that begins on the following page, you agree that you (1) are at least 18 years of age; (2) have read and understand the information above; and (3) voluntarily agree to participate in this study.

Appendix H

Date:_____

Find a quiet place. Set a timer for 15 minutes.

Become aware of your breathing.

Feel yourself become quieter and more relaxed.

1. Review your day.

What went right?

Give yourself credit for the good you brought to the world

Become aware of that good feeling. Feel the satisfaction.

What went wrong? Sit quietly until something arises

Notice your self-talk.

What is the story you're telling yourself?

What feels bad?

2. Focus on having compassion for yourself as you would a friend.

Stop the story.

Embrace the negative feelings without putting words to them.

Focus on wanting yourself to be soothed and to be happy.

Remind yourself:

Everybody makes mistakes. Every has emotions. You are not alone.

Let go of the judgment. (It's not about you).

Opinions are not facts. Even your own!

Remain focused on the feeling of compassion.

Sit and notice the good feeling of calm and compassion.

3. When you are ready, become aware of your breath. Sit in calm awareness as long as you want to.

After completing the practice answer the following:

How did you feel before the practice?

_____
_____

How did you feel after the practice?

_____
_____

Appendix I

Table 1

Self-Compassion Survey-Short Form Subscales

Subscale	Pre Mean	Post mean	Mean difference	T(5) Score	P-value	Cohen's D
Self-Kindness	2.4 (0.4)	2.3 (0.6)	0.1	0.59	0.57	0.24
Self-Judgment	2.3 (0.9)	2.5 (0.6)	0.2	-0.62	0.56	-0.25
Common Humanity	2.8 (0.7)	3.1 (0.9)	0.3	0.55	0.62	0.21
Isolation	2.7 (1.36)	2.7 (1.32)	0	0	1	0
Mindfulness	2.8 (0.7)	3.1 (0.9)	0.3	-0.52	0.62	-0.21
Over-Identification	2.1 (1.4)	2.4 (0.6)	0.3	-0.63	0.54	-0.26

Note: Standard deviations are in parenthesis.