

## An Emotional Intelligence Educational Intervention to Reduce Burnout in Healthcare Profession Students: A Mixed Methods Study

Molly J. Taylor, PhD, ATC

University of Kentucky

Richard Andreatta, PhD

University of Kentucky

Leslie Woltenberg, PhD, MSEd

University of Kentucky

Marc Cormier, PhD, CMPC

University of Kentucky

Johanna M. Hoch, PhD, MPH, ATC

University of Kentucky

### ABSTRACT

**Background:** Burnout and social isolation pose critical threats to health and well-being, with specific detrimental impacts on healthcare profession (HCP) students and providers. Emotional Intelligence (EI) is a learnable skillset demonstrated to improve interpersonal skills, resilience, and well-being and protect against burnout.

**Aim:** Determine the efficacy and impact of a novel evidence-based EI educational intervention and 4-week reflection practice developed to reduce burnout in HCP students.

**Methods:** Mixed methods pilot study; variables of interest included validated assessments of EI, burnout, mindfulness, and sleep health, and qualitative responses to longitudinal reflection prompts and program assessment surveys. Repeated measures analyses of variance, Bonferroni pairwise comparisons, and hedges g effect sizes were used to examine changes in variables of interest over time and differences between student groups, respectively. Thematic analysis was used to identify themes in reflection responses related to student learning and experiences.

**Results:** Student EI, burnout, and mindfulness improved following 4-weeks of intervention content application via structured reflection. Nine primary themes were identified in reflection responses including improved self-awareness, emotion management, and positive strategy adaptations.

**Conclusions:** EI, burnout prevention and resilience, and mindfulness are modifiable skillsets that can be positively influenced via a brief intervention and reflection practice. Structured opportunities for abstract skill application are critical for improvement.

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**Keywords:** stress, emotions, workshop, well-being



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## BACKGROUND

Healthcare profession (HCP) academic disciplines are rigorous educational programs that prepare students for extremely social, high stress careers (Bullock et al., 2017; Taylor et al., 2024). Graduate HCP students suffer higher rates of perceived stress and burnout than age matched peers, a prevalence corroborated by the U.S. Surgeon General's 2022 advisory deeming burnout an urgent public health threat to healthcare workers and the communities they serve (Bullock et al., 2017; Office of the U.S. Surgeon General, 2022). Burnout is a phenomenon comprised of multiple coexisting experiences including emotional exhaustion, depersonalization, cynicism, and low sense of personal accomplishment (Demerouti et al., 2010; Mazerolle et al., 2018; Oglesby et al., 2020). A 2023 survey demonstrated a burnout rate of 63.3% in an interdisciplinary sample of HCP students, with 85% categorized as exhausted (Taylor et al., 2024). These experiences are correlated to negative mental, physical, and behavioral outcomes including diminished academic performance, mental health, quality of life, and empathy with worsening rates of perceived stress as students advance through their programs (Bullock et al., 2017; Kindel & Rafoth, 2020; Smith et al., 2022). There is a critical need to teach HCP students the necessary skills and practices to foster positive mental health and prepare for the socioemotional stressors of a healthcare career. Additionally, recent findings illuminate the powerful influence of social connection on well-being and mortality, alluding to the importance of interpersonal skills and relationship management particularly for healthcare providers (Office of the U.S. Surgeon General, 2023). Higher emotional intelligence (EI) has been demonstrated to protect against burnout in medical residents with positive associations to improved social competence, academic performance, happiness, stress management, and lower burnout scores in HCP students (Karimi et al., 2021; Lindeman et al., 2017; Taylor et al., 2024; Toriello et al., 2021).

EI is a trainable professional skillset that can be defined as an individual's ability to perceive, understand, use, and regulate emotions, both in oneself and in others, and effectively integrate those abilities to enhance thinking and manage environmental demands and stressors (Birks & Watt, 2007; Grewal & Davidson, 2008; Johnson, 2015). Broad categories of educational interventions and workshops have proven effective at increasing EI, but content details and both customization and standardization for specific populations are lacking (Kotsou et al., 2018). Little is known about the potential impact of EI content embedded within curricula on HCP students (Kotsou et al., 2018; Kozlowski et al., 2017). In a recent systematic review, the content, educational activities, and duration of experiences associated with the largest improvements in EI in nursing and medical students were summarized, providing a baseline framework for curricular planning (Taylor et al., 2022). Many of these evidence-based strategies align with competencies endorsed by the Interprofessional Education Collaborative (IPEC), mental well-being practices demonstrated as highly efficacious (e.g. communication, relationship building, and mindfulness), and recommendations from the Surgeon General (IPEC, 2016; Office of the U.S. Surgeon General, 2022; Van Agteren et al., 2021). These competencies naturally align with the subdomains of multiple models of EI, specifically intrapersonal skills or self-awareness, interpersonal skills, relationship management, and adaptability (Bar-On, 2010; Goleman et al., 2002). These combined findings and recommendations provide a theoretical and evidence-based framework for interprofessional educational program design (Taylor et al., 2022).

EI based learning may be considered abstract and theoretical, requiring unique teaching styles to solidify learning and enhance EI skill application. Part of the highly demanding nature of HCP education programs is clinical experiences; the authors developed an intentional theoretical approach to enhance application and assessment of EI skills in these patient care settings. Service-learning (SL), or the pairing of classroom theory learning with community

service and active reflection, has demonstrated positive personal and career-oriented benefits in nursing students but has not been adapted for EI learning or clinical application in place of community service (Marcilla-Toribio, 2022). The Service-Learning model for Emotional Intelligence Development (SLEID) inserts SL theory into HCP learning, capitalizing on existing clinical education experiences (Taylor, 2025) and inducing reflective analysis of clinical scenarios from an emotional perspective; a practice rarely included in current clinical education debriefing practices (Alghamdi et al., 2021; Shepherd, 2017). Evidence suggests that addressing students' emotions in debrief or reflection results in improved confidence, comfort in social interactions, empathy, and reductions in anxiety and stress (Alghamdi et al., 2021). Paired with evidence-based EI program design, SLEID may prove effective in enhancing HCP student EI by allowing application of the concepts while engaged in clinical experiences.

In nursing and medical students, interventions including themes of EI theory, social or interpersonal skills, communication, group problem-solving, and self-awareness demonstrated the greatest improvements in EI, but the relationship between these specific intervention themes and active clinical engagement has yet to be elucidated (Taylor et al., 2022). Moreover, the opportunity for practice of learned concepts and feedback resulted in amplification of post-intervention EI improvements (Taylor et al., 2022). By combining these findings, an evidence-based intervention workshop specifically designed for HCP students with designated opportunities for application and longitudinal emotional reflection has meaningful potential. Therefore, the purpose of this study was to develop and implement a novel educational intervention designed to promote EI, mitigate burnout and foster positive mental health, and determine its effectiveness in HCP students. Additionally, this study served to compare the efficacy of the workshop and reflection practice between clinically active (CA) and non-clinically active (NCA) HCP students to assess the impact of direct opportunities for clinical application on EI, burnout, and mindfulness. Utilizing a multidisciplinary student sample results in a blend of CA and NCA students due to the varying clinical timelines across programs. A secondary purpose was to explore individual student experiences following engagement in the educational intervention to gain an understanding of the intervention's impact on student outcomes through qualitative thematic analysis of student reflections and survey responses.

## METHODS

### Study Design

For this mixed methods, repeated measures pilot study, data were collected and managed using Research Electronic Data Capture (REDCap) tools hosted at the University of Kentucky (Harris et al., 2009; Harris et al., 2019). REDCap is a secure, web-based software platform designed to support data capture for research studies, providing 1) an intuitive interface for validated data capture; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for data integration and interoperability with external sources (Harris et al., 2009; Harris et al., 2019). Variables of interest were self-reported levels of EI, burnout, mindfulness, sleep health, and qualitative responses to reflection prompts and program assessment surveys. The current study was approved by the institutional review board (Protocol #87092) and informed consent was obtained via REDCap prior to completion of the included questionnaires.

## Participants

Individuals were eligible to participate if they were able to read and understand English and were students currently enrolled in one of the following professional programs: Master of Science in Athletic Training, Doctor of Physical Therapy, Master of Science in or Doctor of Occupational Therapy, Doctor of Medicine, Master of Science in Physician Assistant Studies, Bachelor of Science in Nursing, Doctor of Nurse Practitioner Studies, or Master of Science in Speech-Language Pathology.

## Procedure

Students were recruited through their enrollment in healthcare profession programs at a large academic medical campus. Recruitment strategies included print advertisements, emails, virtual advertisements, in-person recruitment on-campus through course offerings, and word of mouth. Students who wished to participate received an email or QR code from study personnel containing a link to a secure REDCap survey: the first page served as informed consent where participants read the letter and clicked “I certify” to electronically sign the document and consent to participate. After informed consent, and one week preceding the workshop, participants completed the following questionnaires: demographics form, the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF), the RU-SATED sleep health scale, the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R), and the Oldenburg Burnout Inventory-Student (OLBI-S) via REDCap. All participants then engaged in a 3-hr in-person workshop intervention developed by the PI, which started with a pre-workshop survey to assess mood and motivation/attitude. After completion of the workshop, participants immediately completed the TEIQue-SF, CAMS-R, OLBI-S, and a post-workshop program assessment (Likert-type scales) via REDCap. For the 4-weeks after the workshop, participants engaged in guided critical reflection via REDCap twice a week that intentionally mapped to core objectives stated in the workshop. The TEIQue-SF, RU-SATED, CAMS-R, OLBI-S, and a final program assessment and qualitative reflection survey were also administered at the end of the 4-week reflection. Participants were given 1-week to complete these final post-reflection surveys and sent up to 3 reminder emails via REDCap.

## Instrumentation

### *TEIQue-SF*

The TEIQue-SF is a 30-item questionnaire that assesses global trait emotional intelligence using a 7-point Likert scale from 1 (*completely disagree*) to 7 (*completely agree*) with items 2, 4, 5, 7, 8, 10, 12, 13, 14, 16, 18, 22, 25, 26, and 28 reverse coded. The short form is based on the TEIQue full form and includes two items from each of the 15 EI facets of the full form. Items were chosen based on correlations to total facet scores to ensure broad coverage of the full sampling domain of each facet. The scale demonstrated excellent test-retest reliability in a related interdisciplinary sample of HCP students ( $ICC = .921$ ) (Taylor, 2025). The TEIQue-SF also has acceptable internal consistency across various populations including our related sample of HCP students with a Cronbach’s alpha of 0.88 (Cooper & Petrides, 2010; Petrides, 2009; Taylor, 2025). The TEIQue-SF is one of the most widely utilized self-report EI instruments with over 2,000 citations (O’Connor et al., 2019). Higher scores indicate increased self-perception of emotional intelligence. A

psychometric reliability analysis performed by the authors in a separate sample of HCP students determined a minimal detectable change (MDC) of 20.66 points (Taylor, 2025). The MDC represents the lowest change in score that a student must exhibit for researchers or educators to ensure that the change is not due to chance or error (Van Kampen et al., 2013).

### ***RU-SATED***

The RU-SATED scale is a 6-item questionnaire that assesses 6 aspects of sleep health using a 3-point Likert scale from 0 (*rarely/never*) to 2 (*usually/always*). The 6 aspects include sleep regularity, satisfaction, timing, duration, efficiency, and alertness during the day. This scale was demonstrated to be a valid and distinct assessment of sleep health in adults. The RU-SATED has acceptable concurrent validity with significant negative association to ISI (Insomnia Severity Index,  $r = -0.66$ ) and positive association to the SSE (Sleep Self-Efficacy Scale,  $r = 0.62$ ) and self-reported sleep ratings ( $r = 0.54$ ) (Ravyts et al., 2021). The scale has acceptable internal consistency with an inter-item correlation of 0.22 and Cronbach's alpha of 0.64. The suboptimal Cronbach's alpha coefficient could be explained by both the small number of items and the distinct dimensions of sleep assessed by each question (Ravyts et al., 2021). Higher scores indicate improved sleep health.

### ***Cognitive and Affective Mindfulness Scale-Revised***

The alternate CAMS-R is a brief yet comprehensive 10-item assessment of mindfulness using a 4-point Likert scale from 1 (*rarely/not at all*) to 4 (*almost always*). A 12-item CAMS-R was revised from the original 18-item CAMS; the 10-item CAMS-R is highly correlated to the 12-item ( $r = .97$ ) and is a further abbreviated version that omits items 2 and 7 which were found to be less impactful (Feldman et al., 2007). The CAMS-R conceptualizes mindfulness through 4 domains: attention, present-focus, awareness, and acceptance/non-judgement (Feldman et al., 2007). The scale's overall mindfulness score demonstrates acceptable internal consistency (Cronbach's alpha from 0.61-0.81) and good convergent validity with moderate correlations to alternative mindfulness scales including the FMI (Freiburg Mindfulness Inventory), MAAS (Mindfulness Attention Awareness Scale), and KIMS (Kentucky Inventory of Mindfulness Skills) (Feldman et al., 2007; Park et al., 2013). Additionally, the scale demonstrates good divergent validity with inverse associations to distress as measured by the MASQ (Mood and Anxiety Symptom Questionnaire) as well as difficulties in emotion regulation (Park et al., 2013). Higher scores indicate increased mindfulness or mindful approaches to thoughts and emotions (Feldman et al., 2007).

### ***Oldenburg Burnout Inventory-Student (OLBI-S)***

The OLBI-S is a 16-item questionnaire assessing burnout through 2 subscales: exhaustion and disengagement. The scale is comprised of 8 positively and 8 negatively worded questions on a 5-point Likert scale from 1 (*strongly agree*) to 5 (*strongly disagree*) with items 2, 3, 4, 6, 8, 9, 11, and 12 reverse coded. The OLBI-S demonstrated good test-retest reliability in a related sample of HCP students ( $ICC = .834$ ) with previous literature exhibiting excellent reliability ( $ICC = 0.916-0.955$ ) (Smith et al., 2022). Additionally, the scale has acceptable internal consistency in related student samples (Cronbach's alpha = 0.833-0.868) (Smith et al., 2022). The OLBI-S has good convergent validity to the

emotional exhaustion ( $r = 0.741$ ) and disengagement/cynicism ( $r = 0.766$ ) subscales of Maslach's Burnout Inventory (MBI), a widely used, validated, but costly instrument. The OLBI-S is a reliable and free alternative to MBI that has been validated in physical therapy students and an analogous interdisciplinary sample of HCP students (Smith et al., 2022; Taylor, 2025). Higher scores indicate an increased level of burnout. Psychometric reliability analyses performed by the authors in a separate sample of HCP students determined an MDC of 8.70 points (Taylor, 2025).

## **Educational Intervention**

Findings from a systematic review of EI interventions, a meta-analysis of mental well-being interventions, and research from allied health professions were aggregated to develop an evidence-based educational workshop highlighting subdomains of EI (Krause et al., 2017; Taylor et al., 2022; Van Agteren et al., 2021). A 4-module intervention was delivered in a lecture-style classroom over the course of 3-hours. For each module, students were presented with the learning objectives, learning outcomes, and supportive literature and resources associated with each of the modules. After the content was delivered, each module included group activities for students to discuss the content, recognize significance, and apply theory in real-time. Titles, brief summaries, and learning outcomes for each of the modules can be found in Table 1.

## **Qualitative Reflection**

Utilizing the SLEID framework (Taylor, 2025), after completion of the workshop, the four-week longitudinal critical reflection used pre-determined reflection prompts aligned with the module objectives and learning outcomes to be completed by the end of each week. CA students received 2 weekly reflection prompts with language aimed at clinical experiences and NCA students received 2 weekly reflection prompts with open language.

### **Program Assessment**

Likert-type program assessment items and general workshop assessment questions were embedded within the REDCap surveys at both T2 and T3. This survey was used to assist in evaluating how the program was received and assessing the participant's thoughts on the worth of the content to inform future educational intervention development and design. The post-workshop program assessment survey asked the participants to rate three domains of the workshop on a 0-4 Likert scale: (1) Organization, (2) Content, and (3) Usefulness as well as rate the likelihood that they would recommend the workshop to another HCP student. The participants were also asked to use their own words to describe which aspects/practices (if any) from the workshop: (1) They found most useful or informative and (2) They may research or utilize moving forward. At the 4-week follow-up, participants were asked a series of questions that examined the extent of their agreement with statements on a 1-5 sliding Likert scale across six domains that were addressed in the workshop: The workshop and/or reflection practice (1) Improved my understanding of emotional intelligence, (2) Helped me reduce my perceived stress and feelings of burnout, (3) Enhanced my self-awareness, (4) Helped me better identify and understand my emotions, (5) Gave me new skills or practices that make me a better clinician/healthcare provider, and (6) I will continue to utilize reflection practices regarding emotional and social aspects of my personal and/or professional life.

**Table 1***Workshop Modules*

Module	EI Subdomain(s) (Bar-On, 2010; Bar-On et al., 2007)	Evidence-based Themes (Taylor et al., 2022)	Brief Description
1. Introduction to Emotional Intelligence	Intro to Bar-On, Goleman, and Mayer/Salovey EI subdomains	-EI Dimensions & Theories -Self-Awareness	Presentation of mixed-model EI definition and varying subdomains. Evaluation of EI in the literature and associated positive outcomes.
<i>Module 1 Learning Outcomes</i>	<p>1.1. Understand the concept of emotional intelligence and its utility as a learnable personal and professional skillset.</p> <p>1.2. Connect the impact of greater emotional intelligence on stress, burnout, and social connection.</p> <p>1.3. Recognize the importance of self-awareness and how to improve it.</p> <p>1.4. Acknowledge the benefits of pursuing higher emotional intelligence through evidence-based research.</p>		
2. Affect Labeling	Intrapersonal, Interpersonal, Stress Management, Self-Management, Self-Awareness	-Self-Awareness -Group Problem-Solving	Introduction to the process of affect labeling (naming emotions) and demonstration of evidence-based support including neurophysiological changes and positive outcomes.
<i>Module 2 Learning Outcomes</i>	<p>2.1. Understand and apply the practice of Affect Labeling by identifying and labeling one's own emotions.</p> <p>2.2. Recognize the neurophysiology and benefits of labeling your emotions.</p> <p>2.3. Reflect and connect emotions to cognitive thinking, behaviors, and outcomes.</p>		
3. Social Connections & Well-being	Interpersonal, Social Awareness, Relationship Management, Social Awareness, Social Skills	-Social / Interpersonal -Communication	Introduction to the science of human connection, consequences of loneliness and social isolation, and its relatedness to EI. Application of social connection to self, others, and patient care.
<i>Module 3 Learning Outcomes</i>	<p>3.1. Recognize the necessity of social connectedness and the link to health and well-being.</p> <p>3.2. Understand the emotional and psychological consequences of reduced social inclusion and loneliness.</p> <p>3.3. Appreciate the influence of social connections in everyday life and realize how to apply these findings to improve your personal and professional life.</p>		
4. Mindfulness & Self-Health	Intrapersonal, Adaptability, General Mood, Self-Awareness	-Self-Awareness	Introduction to mindfulness practices and factors associated with self-health including sleep habits. Demonstration of mindfulness in the literature and associated neurophysiology and positive outcomes.
<i>Module 4 Learning Outcomes</i>	<p>4.1. Understand the meaning of mindfulness and opportunities to practice it in your everyday life.</p> <p>4.2. Recognize the health benefits and physiological impacts of mindfulness and its overlap with emotional intelligence.</p> <p>4.3. Identify evidence-based habits that enhance mental and physical health.</p>		

**Quantitative Data Analysis**

Descriptive statistics (means  $\pm$  standard deviations) were determined for each outcome measure and the program assessment surveys. Separate repeated measures analyses of variance (ANOVA) were performed to examine changes in TEIQue-SF, CAMS-R, and OLBI-S scores for all students across the three timepoints (baseline [T1], post-workshop [T2], 4-week follow-up [T3]). Gender (male, female, or nonbinary/non-conforming) and sleep health as measured by the RU-SATED were examined as potential covariates. Bonferroni pairwise comparisons were utilized post-hoc to establish significant differences in group means. Due to the limited number of CA students that participated in the study, differences in TEIQue-SF, OLBI-S, and CAMS-R scores between CA and NCA students were examined graphically and compared to the average scores for all students regardless of clinical status (combined

NCA and CA). Additionally, Hedges g effect sizes were utilized to examine the magnitude of the difference between timepoints between groups (All, CA, NCA) for all significant post-hoc pairwise comparisons. Hedges g effect sizes were interpreted as small (.20), medium (.50), and large (.80) (Cohen, 1988). Significance was set a priori  $p < 0.05$ . All analyses were performed in SPSS software (v23.0, SPPS, Inc., Chicago, IL., USA).

## Qualitative Analysis

A thematic analysis was conducted based on Braun and Clarke's six-phase process: 1. Familiarizing yourself with the data, 2. Generating initial codes, 3. Searching for themes, 4. Reviewing themes, 5. Defining and naming themes, and 6. Producing the report (Braun & Clarke, 2006). Prior to data collection, the PI (MJT) engaged in reflexivity journaling to bracket previous experiences, preconceived notions, biases, and assumptions regarding the research question, reflection prompts, final survey, and proposed outcomes. This allowed the PI to neutralize personal experiences or beliefs that could influence or bias the analysis process. To reduce this bias, the reflection prompts and final qualitative survey were reviewed by two other authors (JMH, LW) prior to data collection. Coding of student reflections followed a deductive approach through identification of themes based on the research questions and objective to evaluate learning outcomes associated with the workshop. Additionally, realist, explicit level thematic analysis was utilized by reporting the experiences and reality of the participant responses and interpreting significance of patterns in relation to the learning experience. All participant responses were coded to ensure evaluation of the full data set. In Phase 1, all qualitative authors (MJT, JMH, LW) familiarized themselves with the reflection prompts for initial impressions. In Phase 2, the PI carried out systematic, manual coding for each of the 8 reflection prompts across all participants; the other two authors aggregated surface level codes for discussion and comparison and all authors worked together to resolve any questions/conflicts to assure cohesion across evaluators. In Phase 3, codes were re-analyzed by the PI and collapsed into initial themes. In Phase 4, all authors reviewed and refined themes, designating subthemes and ensuring that the data interpretations were valid, unbiased, and bound within the workshop/reflection process. In Phase 5, final themes were defined by the PI and agreed upon by all authors. In Phase 6, the PI reported the thematic findings and the other two authors reviewed for coherence, logic, and validity. The authors communicated and collaborated within shared data sets throughout the process, improving the rigor and interrater reliability of the study. Credibility and trustworthiness were further established through the use of continued reflexivity journaling, prolonged engagement with the data, and maintenance of an audit trail for decisions reached during data analysis (Nowell et al., 2017). Results were reported in aggregate to maintain confidentiality of the respondents. Likert-type program assessment items were analyzed qualitatively to evaluate and discuss intervention content and student perceptions.

## RESULTS

### Quantitative Results

A total of 28 HCP students (age  $23.9 \pm 3.1$  yrs.) were included in the analysis (7 CA, 21 NCA). All participants completed all reflection prompts and all surveys at each of the timepoints. Participant demographics are listed in Table 2.

**Table 2**  
*Participant Demographics (mean  $\pm$  SD or count)*

	CA	NCA	Total
<i>n</i>	7	21	28
Age (yrs. $\pm$ SD)	$24.71 \pm 4.35$	$23.67 \pm 2.67$	$23.93 \pm 3.11$
Cis Male (ct)	1	4	5
Cis Female (ct)	6	17	23
White/Caucasian (ct)	4	18	22
Black (ct)	2	0	2
Asian (ct)	1	3	4
Athletic Training (AT) (ct)	2	0	2
Physical Therapy (PT) (ct)	1	2	3
Physician (MD) (ct)	2	8	10
Physician Assistant (PA) (ct)	0	10	10
Speech Language Pathology (SLP) (ct)	1	0	1
Registered Nurse (RN) (ct)	1	1	2
Previous EI Ed (ct)	0	3	3
Mindfulness px (ct)	5	11	16

*Note.* Cisgender = Cis; previous EI or emotion skills education/training = previous EI Ed; engage in mindfulness practices = Mindfulness px; count = ct.

### *Emotional Intelligence*

Descriptive statistics for all outcome measures at all 3 timepoints (T1, T2, T3) are listed in Table 3. A repeated measures ANOVA was conducted to examine the effect of time on emotional intelligence (TEIQue-SF) scores in HCP students following the brief intervention and 4-week reflection practice. Mauchly's test indicated violation of sphericity; therefore, Greenhouse Geisser correction was applied. The main effect of time was significant:  $F(1.44, 1) = 4.826, p = .022$ . Bonferroni pairwise comparisons revealed a significant mean difference between T2 and T3 TEIQue-SF scores ( $p = .002$ ) (Table 3). All other post-hoc comparisons were insignificant.

**Table 3***Descriptive Statistics for Outcome Measures*

	<b>T1: Baseline</b> (mean $\pm$ SD)	<b>T2: Post Intervention</b> (mean $\pm$ SD)	<b>T3: 4-wk. Follow Up</b> (mean $\pm$ SD)
<b>TEIQue-SF</b>	153.71 $\pm$ 13.38	154.07 $\pm$ 15.86	160.68 $\pm$ 18.21
<b>OLBI-S</b>	40.07 $\pm$ 5.81	38.89 $\pm$ 5.49	36.54 $\pm$ 6.03
<b>CAMS-R</b>	26.07 $\pm$ 4.30	25.79 $\pm$ 4.13	27.96 $\pm$ 5.03

Note. Trait Emotional Intelligence Questionnaire Short Form = TEIQue-SF; Oldenburg Burnout Inventory Student = OLBI-S; CAMS-R = Cognitive and Affective Mindfulness Scale-Revised.

The mean difference between the post-workshop and 4-week follow-up scores did not exceed the previously calculated MDC of 20.66 points. Graphical representation of changes in EI across all 3 timepoints can be visualized in Figure 1.

**Figure 1***Changes in TEIQue-SF Scores*

Note. Trait Emotional Intelligence Questionnaire Short Form = TEIQue-SF; Oldenburg Burnout Inventory Student = OLBI-S; Combined group = All; Non-clinically Active = NCA; Clinically Active = CA.

Hedges  $g$  effect sizes ranged from small to medium (0.32-0.56) with confidence intervals that encompassed zero (Table 4).

**Table 4***Hedges  $g$  Effect Sizes and Confidence Intervals for Significant Post-hoc Pairwise Comparisons*

	<b>NCA (n=21)</b>	<b>CA (n=7)</b>	<b>All (n=28)</b>	
<b>TEIQue-SF:</b>	T2-T3	0.32 (-0.29, 0.92)	0.56 (-0.51, 1.62)	0.38 (-0.15, 0.91)
<b>OLBI-S:</b>	T1-T3	-0.50 (-0.11, 1.12)	-0.54 (-0.53, 1.60)	-0.59 (0.05, 1.12)*
	T2-T3	-0.41 (-0.20, 1.02)	-0.27 (-0.78, 1.32)	-0.40 (-0.13, 0.93)
<b>CAMS-R:</b>	T2-T3	0.38 (-0.23, 0.99)	0.66 (-0.42, 1.73)	0.46 (-0.07, 1.00)

Note. Combined group = All; non-clinically active = NCA; clinically active = CA.

\*Confidence interval that does not encompass zero

### **Burnout**

A separate repeated measures ANOVA was conducted to examine the effect of time on burnout (OLBI-S) scores in HCP students following the same brief intervention and reflection practice. Mauchly's test indicated violation of sphericity; therefore, Greenhouse Geisser correction was applied. The main effect of time was significant  $F(1.57, 1) = 9.343, p = .001$ . Bonferroni pairwise comparisons revealed a significant mean difference between T1 and T3 ( $p = .005$ ) and T2 and T3 OLBI-S scores ( $p = .003$ ). T1 to T2 comparison was insignificant. The significant mean differences between T1 to T3 and T2 to T3 did not exceed the previously calculated MDC of 8.70 points (Taylor, 2025). Graphical representation of changes in burnout across all 3 timepoints can be visualized in Figure 2. Hedges g effect sizes ranged from small to medium (0.27–0.59) with one medium effect size (0.59) confidence interval that did not encompass zero from T1 to T3 in the group of all participants (Table 4).

### **Figure 2**

*Changes in OLBI-S Scores*



Note. Trait Emotional Intelligence Questionnaire Short Form = TEIQue-SF; Oldenburg Burnout Inventory Student = OLBI\_S; Combined group = All; Non-clinically Active = NCA; Clinically Active = CA.

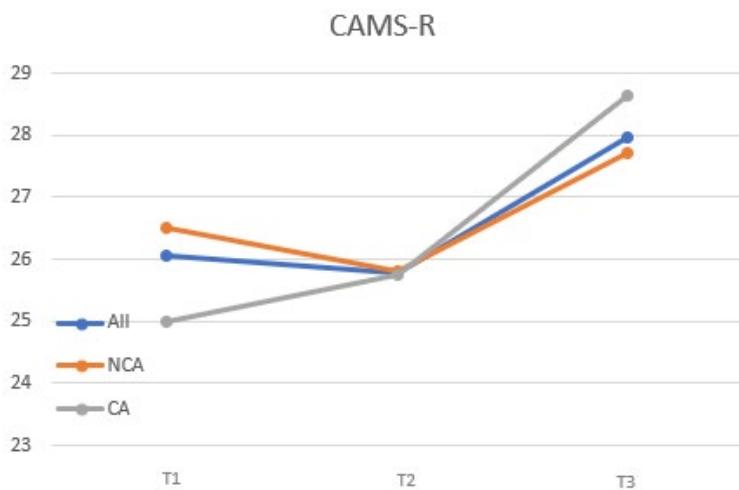
### **Mindfulness**

A third repeated measures ANOVA was conducted to examine the effect of time on mindfulness (CAMS-R) scores in HCP students following the same intervention and reflection practice. Mauchly's test again indicated violation of sphericity; therefore, Greenhouse Geisser correction was applied. The main effect of time was significant  $F(1.397, 1) = 3.779, p = .046$ . Bonferroni pairwise comparisons revealed a significant mean difference between T2 and T3 CAMS-R scores ( $p = .006$ ). All other post-hoc comparisons were insignificant. Graphical representation of changes in

mindfulness across all 3 timepoints can be visualized in Figure 3. Hedges  $g$  effect sizes ranged from small to medium (0.38-0.86) with all confidence intervals that encompassed zero (Table 4).

### Figure 3

*Changes in CAMS-R Scores*

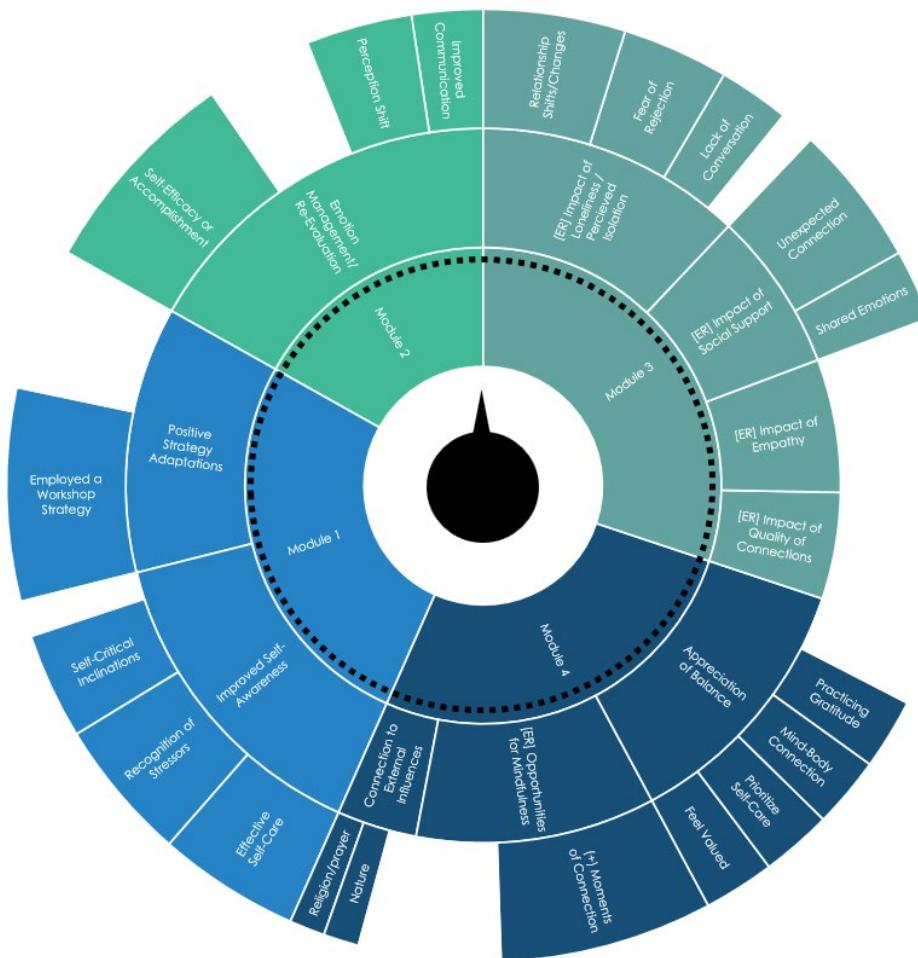


*Note.* Cognitive and Affective Mindfulness Scale Revised (CAMS-R), combined group (All), non-clinically active (NCA), clinically active (CA).

### Qualitative Results

#### *Reflection Prompt Responses*

Primary themes can be visualized in Figure 4. Themes include (1) Improved self-awareness, (2) Positive strategy adaptations, (3) Emotion management/re-evaluation, (4) Connection to external influences, (5) Appreciation of Balance, (6) Impact of empathy, (7) Impact of social support and quality of connections, (8) Impact of perceived isolation/loneliness, and (9) Opportunities for mindfulness (themes 6-9 represent an “enhanced recognition” of importance/impact, denoted [ER]). Subthemes are discussed below in tandem with each of the primary themes. Themes were consistent regardless of clinical status. However, sentiments were applied to different populations or scenarios. Supportive and exemplar reflection excerpts representing each primary theme can be found in Appendix 1.

**Figure 4***Sunburst Diagram of Primary Themes & Subthemes*

*Note.* While many of the primary themes map to specific modules, several were identified to overlap across multiple module reflection prompts or learning outcomes. Therefore, consider the center of the figure like a rotating dial, with the four modules able to turn and align with varying themes.

**Improved Self-Awareness.** A primary theme across multiple prompts was evidence of improved self-awareness, including recognition of personal stressors (internal and external) and improved perspective on effective self-care habits. In tandem with these reflections on self-learning, additional subthemes included self-critical inclinations, self-degradation, and experiences of imposter syndrome when asked to reflect on stress-inducing scenarios and unsatisfactory outcomes. These subthemes were identified in both didactic and clinical scenarios.

**Positive Strategy Adaptations.** Reflection often led to recognition of opportunities for improvement. This resulted in an adapted plan/future strategy for tackling triggering social scenarios and stressors, including application of a workshop strategy and/or recognition of potential benefits of a modified response in future cases.

**Emotion management/re-evaluation.** Reflecting on emotional scenarios and naming emotions allowed students to move through those emotions more effectively, sometimes including a sense of self-accomplishment or efficacy, a shift in perception/perspective, and improved ability to communicate with others. When asked to reflect on a memorable social interaction and name the contributing emotions, students reflected 4:1 on negative or

unpleasant interactions to positive or pleasant interactions. However, pride and/or self-accomplishment in management of emotions in response to unpleasant scenarios was a common occurrence.

**Connection to External Influences.** Students reflected on the importance of external influences including religion/prayer and time in nature as facilitators to moments of mindfulness and more positive/better days.

**Appreciation of Balance.** When asked to reflect on their best and worst days recently, a primary theme was students' ability to appreciate the balance between both experiences. Additionally, feeling valued, prioritizing self-care and the mind-body connection, practicing gratitude, feeling productive or learning something, and actively aiming to enhance their self-awareness all contributed to better days.

**Enhanced Recognition.** Four primary themes were identified representing enhanced recognition (ER) of varying concepts that students acknowledged as influential on stress, well-being, and other aspects of daily life.

**[ER] Impact of empathy.** Students' recognition of the influence of empathy (both their own and others) was a recurring theme across reflections from all 4 modules; students recognized the positive impact (both on the self and others) of displaying empathy and acknowledged its influence on stress, connection, emotional experiences, loneliness, and recovery/healing of patients.

**[ER] Impact of social support and quality of connections.** Unexpected moments of connection, the perception of a shared emotional experience, and pleasant interpersonal interactions were highly memorable. Additionally, students recognized the influence of the quality or health of their social relationships on their overall well-being and the well-being of friends, colleagues, or patients.

**[ER] Impact of perceived isolation/loneliness.** Students recognized when they felt socially isolated and when perceptions of loneliness (their own or others) impact the quality of a connection. Additionally, identified subthemes include student perceptions that fear of rejection as well as shifts or changes in substantial relationships can be contributing factors to experiences of loneliness, and many students identified distance from their partners and/or social support as a notable influence. A final subtheme that emerged was the lack of conversation with personal or professional colleagues surrounding relationships in their lives.

**[ER] Opportunities for mindfulness.** In reflecting on moments of feeling present, students were more apt to observe previously unnoticed opportunities for mindfulness throughout their day. Additionally, an overpowering majority of reported moments of mindful presence were tied to positive moments of connection with others or experiences of feeling valued in personal and professional settings.

## Program Assessment

The Likert-type program assessment items utilized at least 5 categories and were treated as continuous variables, therefore descriptive statistics for the post-workshop and 4-week follow-up program assessments can be found in Table 5 (Harpe, 2015). The students' mean ratings of the organization, content, and usefulness of the workshop were 3.9, 3.8, and 3.7 out of 4, respectively. Following 4-weeks of reflection, students most notably perceived changes in their understanding of EI and their self-awareness with a mean rating of 4.5 out of 5. Additionally, when questioned about the most useful and informative aspects of the workshop, the top recurring responses included labeling emotions, peer to peer interaction/discussion, learning the physiology/evidence behind the practices, and the importance of relationships/connections. Finally, students listed affect labeling, mindfulness/meditation, emotional exploration/awareness, and intentional social connection/effort as the practices they would like to research further

or utilize moving forward with the majority of students agreeing or completely agreeing that they would continue to utilize reflection practices moving forward.

**Table 5***Program Assessment Likert-Type Responses*

<b>Post-Workshop Survey (T2)</b>								
How would you rate the following? (0-4)	Mean							
	NCA	CA	All	±SD	Med.	Min	Max	n
Organization of the workshop	3.9	3.9	3.9	±0.36	4	3	4	28
Content of the workshop	3.8	3.9	3.8	±0.42	4	3	4	28
Usefulness of the workshop	3.7	3.9	3.7	±0.46	4	3	4	28
How likely is it that you would recommend this workshop to another HCP student?	3.6	3.6	3.6	±.50	4	3	4	28
<b>4-Week Follow-Up Survey (T3)</b>								
To what extent do you agree with the following statements? (1-5)	Mean							
	NCA	CA	All	±SD	Median	Min	Max	n
The workshop and/or reflection practice enhanced my understanding of emotional intelligence	4.3	4.9	4.5	±0.58	4.5	3	5	28
The workshop and/or reflection practice helped me reduce my perceived stress and feelings of burnout	3.8	3.9	3.8	±0.61	4	3	5	28
The workshop and/or reflection practice enhanced my self-awareness	4.4	4.7	4.5	±0.58	4.5	3	5	28
The workshop and/or reflection practice helped me better identify and understand my emotions	4.0	4.1	4.1	±0.60	4	3	5	28
I will continue to utilize reflection practices regarding emotional and social aspects of my personal and/or professional life	4.3	4.4	4.3	±0.72	4	3	5	28
The workshop and/or reflection practice gave me new skills or practices that make me a better clinician/healthcare provider	3.9	4.6	4.1	±0.81	4	2	5	28

## DISCUSSION

The purpose of this study was to develop and implement a novel educational intervention designed to promote EI, mitigate burnout, and foster positive mental health, and determine its effectiveness in HCP students. Additionally, this study served to compare the efficacy of the workshop and reflection practice between clinically active and non-clinically active HCP students; due to the nature of pilot study research and vastly unequal clinical group sample sizes, our comparative analysis was limited to descriptive and graphical exploration. However, our quantitative findings demonstrate significant positive changes in overall student EI, burnout, and mindfulness following 4-weeks of reflection. Our secondary purpose was to explore individual student experiences following engagement in the educational intervention to gain an understanding of the intervention's impact on student outcomes through qualitative thematic analysis of student reflections and survey responses. While the statistically significant changes in EI and burnout failed to exceed MDC, the 9 identified themes reinforce the quantitative findings and demonstrate fulfillment of many of the workshop's stated learning outcomes (Table 1).

### Longitudinal Reflection/Application

The significant improvement in all primary outcome measures from T2 to T3 demonstrates the necessity of allowing time and opportunity for application of emotional and social skills for positive adaptations to occur. Additionally, this finding advocates for the SLEID theoretical approach as an effective strategy for solidifying abstract learning and enhancing recall and utilization of learned practices. Previous literature tracking longitudinal post-intervention changes in EI align with these findings, demonstrating amplified score changes with time (3 months, 6 months, 1-year post-intervention) (Abe et al., 2013; Kim & Lee, 2021; Shahbazi et al., 2018). Previous findings also demonstrate increased effect sizes from interventions that included 10-15 hours of structured learning over 8-12 weeks (Taylor et al., 2022); however, time and financial barriers often make implementation of long term extra-curricular interventions challenging. If short-duration EI-based trainings increase opportunity for pilot implementation, the current findings further demonstrate the efficacy of this intervention style. However, it is recommended that researchers/educators include some form of longitudinal skill practice to enhance application of learned concepts, build positive habits, and improve probability of significant change. Existing evidence demonstrates that addressing students' emotions in debrief or reflection results in improved confidence, comfort in social interactions, empathy, and reductions in anxiety and stress (Alghamdi et al., 2021). The current study's longitudinal reflection practice mirrored many of these benefits. Structured weekly reflections encouraged students to recall concepts from the brief workshop, lengthening learning exposure and resulting in a broad range of benefits including improvements in student perceptions of self-awareness and self-care, emotion management, communication, and acknowledgement of emotional and social impacts. Additionally, weekly reflections helped students appreciate the balance between their best and worst days and recognize the differentiating factors. Students adapted their strategies for responding to challenging situations and effectively applied practices learned during the in-person workshop, further demonstrating the importance of structured application following intervention.

## Emotional Intelligence

While the significant improvements in EI post-reflection did not exceed the MDC and therefore could be due to chance, the program assessment results suggest that student perceptions of their understanding of EI improved. The dominant qualitative theme of improved self-awareness may be the strongest demonstration of improved EI. This includes student reports of improved ability to manage emotions and enhanced recognition of personal stressors and self-care strategies. Quantitative analysis in the current study only accounted for increases in EI scores. However, by acknowledging self-awareness as a central tenet of EI, future research may consider the importance of any change in EI as a beneficial adaptation in response to educational intervention. Increases or decreases in self-perceived EI may signify a shift in self-perceptions and self-awareness that could prove helpful for individualized growth; even if students are rating their emotional competencies or skills lower than pre-intervention, a score change may represent an enhanced understanding of one's emotional/social strengths or weaknesses. This information may help guide forward efforts in social and emotional self-understanding and growth. Educators in particular may take this into account when evaluating student changes and addressing opportunities for improvement moving forward.

## Burnout

The included findings reveal significant reductions in burnout scores both immediately post-workshop and at 4-week follow up. While the differences did not exceed the calculated MDC, these differences were associated with a medium effect size from T1 to T3 that did not cross 0. The program assessment revealed that while students trended towards agreement that the workshop/reflection practice reduced their perceived stress or burnout (3.8 out of 4 Likert-type scale mean), this was the lowest rated perceived change of all items, suggesting disconnection between the perceptions of EI benefits and their capacity to reduce stress and burnout. Future researchers and educators may consider being more intentional with tying the content and practices to stress-reduction. This may include implementing weekly “challenges” or assignments to actually practice the strategies with demonstrated associations to reduced stress and improved well-being (e.g. assigning 10-minute guided meditations or group discussions related to affect labeling versus solely prompting reflections retroactively). Overall, the significance of time suggests that more notable perceptions of stress reduction may also be reported after longer term engagement with the learned practices. As previously stated, time and structured opportunity for application enhances changes in EI (Mattingly & Kraiger, 2019), these amplified changes may in turn influence long term reductions in experiences of stress and burnout as practices become habits.

Additionally, qualitative analysis demonstrated the importance of feeling valued; this identifies an important alignment with literature exploring drivers of professional fulfilment and burnout in healthcare providers. Student reports of feeling valued were linked to enhanced mindful presence and contributed to better days in personal, professional, and academic settings. This aligns with recent research conducted with healthcare providers demonstrating that perceptions of being appreciated or valued was one of the leading factors associated with professional fulfilment, a construct notably correlated to reduced thoughts of attrition (Lu et al., 2022). Academic and clinical attrition is a risk that threatens many healthcare students and providers suffering from burnout (De Hert, 2020; Office of the U.S. Surgeon General, 2022; Lu et al., 2022). Future research should explore the specific factors that contribute to student perceptions of feeling valued with the knowledge that this experience is prevalent in professional careers.

## Mindfulness

There was also a significant improvement in mindfulness scores from T1 to T3. MDC for the CAMS-R instrument was not previously ascertained, therefore true meaningfulness of the detected score changes in this sample are unknown. However, the quantitative findings are notably reinforced by student reflections where acknowledgement and recognition of previously missed opportunities for being intentionally present shone through as a primary theme. The subthemes merging feelings of social connection into these moments of mindfulness and recognition of the diverse array of mindful opportunities support the inclusion of both social connectivity and mindfulness content into EI education.

## Clinical Status

Effect size analysis and graphical representation demonstrate larger changes in EI and mindfulness in our CA students. Interestingly, when prompted with the final program assessment rating question: “The workshop and/or reflection practice gave me new skills or practices that make me a better clinician/healthcare provider,” CA students’ average rating was 4.6 compared to NCA students’ average rating of 3.9. Students able to actively apply EI-based skills into their clinical experiences may be more prone to recognize the potential benefits to their professional skillset than NCA students. Together, these findings are scrutinized with caution due to sample size discrepancies and the use of unvalidated Likert-type items, but do suggest merit in continued exploration of the influence of clinical status on clinical translatability of abstract skills. Overall, these findings demonstrate benefits in all students regardless of active opportunities for clinical application, supporting implementation of EI-based interventions across all years/phases of HCP curricula.

## Content

From a teaching and learning perspective, it is imperative to recognize the impact of personal stressors on student levels of emotional exhaustion, burnout, and student success and allow space for that processing alongside didactic and clinical stressors. Student reflections regarding memorable social interactions, stressful or triggering scenarios, bad days, or experiences of social isolation were more often linked to non-academic sources of stress. A recent survey demonstrated that nearly 86% of HCP students are exhausted (emotionally and/or physically) but did not identify specific contributing factors; the current study’s qualitative analysis suggests that personal life stressors heavily influence that high prevalence (Taylor et al., 2024). There was conscious effort made to establish a psychologically safe culture of inclusivity, openness, and vulnerability during the workshop which was echoed by the honesty and depth of student reflection responses. Therefore, specific attention should be given to creating this type of welcoming environment when approaching emotional and social skill learning. A notable number of students also reflected on living apart from their partners or primary social support systems due to their graduate schooling, often contributing to feelings of isolation. Given the profoundly negative impacts of social isolation or loneliness on health and well-being, it is important for educators to take note of which students may be more prone to these experiences (Office of the U.S. Surgeon General, 2023). Additionally, when prompted to consider suboptimal or unsatisfactory outcomes from social scenarios or recall stressful encounters, the reported experiences of imposter syndrome and self-degradation suggest a need to address identity and confidence, particularly related to academic circumstances (didactic

or clinical). Therefore, inclusion of discussion and strategies for professional identity development should be considered in future educational intervention designs.

Qualitative analysis also demonstrates the impact of including affect labeling content and practice as well as the physiological underpinnings of EI-based practices into interventions of this nature. The practice of labeling emotions and improving their emotional language capabilities enabled students to better process and manage their emotions which often resulted in improved self-efficacy and interpersonal communication. The language utilized within the reflection prompts also proved to be influential: students were far more likely to reflect on unpleasant interactions when openly prompted to recall memorable social interactions. These unpleasant interactions were often paired with pride and self-accomplishment, however, if educators or researchers are seeking positive reflections on pleasant encounters or achievements, language choice is crucial. This is further demonstrated by the differentiation in clinical or personal reflection responses when students were prompted specifically in one direction instead of being given the flexibility to recall scenarios based on impact rather than setting.

Finally, when asked to describe the most useful or informative aspects of the workshop, 50% of students alluded to the group activities and/or level of interaction with multidisciplinary peers, demonstrating the positive influence of an interprofessional, interactive design. In addition, the identified themes of enhanced recognition of the impact of social support, quality of connections, and perceived isolation/loneliness as well as subthemes highlighting the positive outcomes of unexpected connection, empathy, and shared emotional experiences demonstrate the power of including social connectivity research and activities in EI-educational frameworks. Multiple students also noted a lack of daily conversation with acquaintances regarding social connections, suggesting the need for increased attention to relationship skills and health in both personal and professional capacities.

## Limitations

There are several limitations to the current study. Sample size and large group discrepancies limit extrapolation on the included findings. However, as a mixed methods pilot study intended to explore the efficacy of a brief intervention, utilizing the current results to guide future educational intervention iterations and research is justified. Additionally, due to the pilot nature of the study, no hypotheses were tested and the small sample size was warranted for feasibility and implementation. EI, burnout, and mindfulness were captured via self-report instruments which can be susceptible to invalid reporting, social desirability bias, and response bias (Demetriou et al., 2015). Additionally, self-reported data reflect self-perceptions and may not accurately reflect true levels or external representations of each construct. Qualitative analyses sought to counter this limitation by expanding on subjective experiences and self-perceptions. The pre-survey instructional language for the OLBI-S instrument was adapted from the original format to better fit the sample population, but the scale itself was not modified. Due to the language specifications for CA students to apply their reflections solely to clinical encounters, it is unknown if they would have chosen personal or didactic foci if given more flexibility which could have influenced the thematic analysis. Finally, findings may not be generalizable to non-HCP student populations or practicing clinicians.

## CONCLUSION

Less than 11% of students reported previous EI education, demonstrating a notable content opportunity in HCP curricula. EI, burnout prevention and resilience, and mindfulness are modifiable student skillsets that can be significantly influenced following a brief intervention and reflection practice. Structured opportunities for longitudinal abstract skill application are crucial to reap these positive benefits. Weekly reflection practice was demonstrated as an effective application strategy; however more intentional weekly assignments should be explored with the aim to enhance stress-reduction and more robustly influence capacity to safeguard against burnout in HCP student populations. Intervention content including themes of self-awareness, affect labeling or emotion exploration, social connectivity and isolation, and mindfulness were demonstrated as influential and impactful. Continued exploration of intervention duration and application of the aforementioned themes should be explored to attempt to exceed MDC and demonstrate true change in these skillsets. Researchers and educators may consider adding content related to professional identity development to further strengthen an intervention of this nature as well as intentionally allowing for emotional processing of personal life circumstances in tandem to clinical and didactic scenarios and stressors. Additionally, activities including interprofessional student interaction and the cultivation of a safe and inclusive workshop culture were important factors. Further research in the efficacy of short-duration educational interventions and exploration of longer-term interventions may assist advocacy efforts for curricular implementation.

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Address Author Correspondence to:

Molly J. Taylor, PhD, ATC

[molly.taylor@uky.edu](mailto:molly.taylor@uky.edu)

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## Appendix 1

### Supportive/Exemplar Reflection Excerpts for Primary Themes

Theme	Excerpt (s)
Improved Self-Awareness	<p>“My partner and I had a fight about household responsibilities and equity in chores. At the time I felt anger, disrespect, and unheard. Now, I feel mainly unheard in certain regards, but no longer angry or disrespected. I replayed the scenario to re-evaluate if my opinions and statements were correct and not just said in the heat of the moment. I also felt anxious I was in the wrong and I wanted to see if I needed to approach the issues from a different angle. I think doing this intentional reflection makes me more self-aware of how I deconstruct or decompress after an emotional event. Most of the time I do these mental gymnastics without understanding them.”</p>
Positive Strategy Adaptations	<p><i>Subtheme: Employed a workshop strategy</i></p> <p>“My boyfriend and I got into a conflict on Friday night, almost ending a four year relationship. He needed space, but my anxious personality could not walk away without clarity for myself. I think the fact that he would not verbalize his emotions or what he was feeling was hard for me since I literally came from the workshop just hours earlier where we talked about verbalizing what emotions we are feeling. I think in the future, I want to work on saying out loud what emotions I’m feeling as a first step to better regulating how I’m feeling.”</p>
Emotion Management/ Re-evaluation	<p><i>Subtheme: Employed a workshop strategy</i></p> <p>“I have had several moments this week where I have found myself very short fused and quick to react to inconveniences like the dogs running out the door all over the neighborhood to having a jar of pasta sauce explode everywhere...but the interesting thing is that since the workshop, I have been finding these moments where I can feel myself getting upset that I let myself have the 90 seconds and then I am able to move on. And if I am not, I am able to reflect maybe an hour later or so and recognize that there is a lot going on...”</p>
Connection to External Influences	<p>“I felt present this week at church, sitting next to my friend. I felt present because I wasn’t worried about my to-do list, but enjoyed the present moment for what it was. My mind is constantly racing with all that I have to do, so being able to turn that off will help me create more mindful moments.”</p> <p><i>Additional Theme: Self-Awareness, [ER] Opportunities for Mindfulness</i></p> <p>“This week, a quiet walk in nature made me feel truly present. The tranquil surroundings and sounds of nature brought about a sense of calmness and clarity. It was a moment of self-awareness, feeling connected to the environment around me. To create more mindful moments, I plan to schedule regular nature walks and engage in mindfulness practices to remain present in daily activities.”</p>
Appreciation of Balance	<p><i>Additional theme: Connection to External Influences</i></p> <p>“I think I need to learn to be more thankful on my worst days, and remind myself I am SO blessed to be where I am in life and that it always ends up being okay so it’s going to be okay this day too. On my best days I need to remember my worst days and all of the hard work I have put in to have these good days. I need to be praying and thanking God on both of these days.”</p> <p><i>Additional themes: Self-Awareness, Quality of Connections</i></p> <p><b>Subthemes: Feeling productive, Learning something</b></p> <p>“The best day I had recently was going up to Indiana to visit family with my brother and my son who is a toddler. We went out to eat then went up to my aunt’s house to play pickle ball. Her dogs had just had puppies so it was so fun to watch my son play with them. I think it was a great way to recharge after I am taking a course while going through residency interviews. This time is stressful in medicine not knowing where I will end up next year so days where I can take a break are very important for my mental health. One thing that I have realized through self-awareness is that I am happiest when I have a balance of being very productive at work and having days off with my family. I am equally satisfied after having a</p>

productive day at work where I feel I have actively learned a lot, engaged well with others and checked tasks off my to do list. If I did not take breaks to go out of town and spend time with family, my productive workdays would be too exhausting. After a nice long weekend I felt refreshed and ready to tackle a week full of coursework and interviews. I hope to find this balance of productivity and rest time in my future career."

[ER] Impact of Empathy

"I was talking to my girlfriend yesterday and she is considering changing her career path entirely. I felt present in the moment by feeling how she felt. The stress and nervousness of accepting her choice and having to tell her parents was in the air. Just sitting and listening; providing a space for her to talk about her feelings and wishes allowed me to feel connected and help her feel heard. I think in the clinical setting, it is equally as important to sit and listen to what your patients have to say. To be in the moment and offer empathy rather than sympathy."

[ER] Impact of Social Support & Quality of Connections

*Subtheme: Influence on recovery/healing*

"I recently had a conversation with my client about his relationship with his father. I had this conversation to navigate how we could better incorporate functional activities into therapy and gauge the amount of homework that could be done. This relationship is very important to our success in therapy. As a parent, his father is with him day in and day out, whereas we are only with him once a week for an hour. In order for there to be carryover, we need him to work outside of therapy. His father is not very involved in his therapy, so I am concerned that we will not see much carryover in therapy."

*Additional theme: Connection to External Influences*

"I just got back from spending the weekend in Asheville with a friend from college. We went on a hike and spent it reflecting on our lives and the things that have changed and remained the same. I always catch up with her when I see her, but this was an entire weekend of being with each other and talking about ourselves and the things that we have been going through recently. Though these moments are rare, the strengthened connection will easily carry us through until we are able to again step away for a weekend. I can replicate this with others by setting aside time for a meal or a hike where we don't have our phones and are intentionally focused on catching up about whatever the other has had going on recently."

[ER] Impact of Perceived Isolation/Loneliness

"Loneliness is when I feel motionless or adrift socially, mentally, and physically. I have a family member in particular whose loneliness I think has led him towards a more abrasive past unfortunately. It makes it harder for him to see the good in things and focus on the negatives. The loneliness is like a slow progressing boulder that generates more negative consequences as it keeps rolling. Further isolation, dejection, and more. I think the loneliness that this particular family member deals with has resulted in someone bitter moments and leads to negative tones in my relationship with him at times."

Subthemes: Distance from social support

I feel that I am currently lonely in my program. My fiancé lives 2 hours away and the distance has been affecting our relationship. It has been affecting my interactions with friends in my program and friends from back home as well. I have just recently recognized it when a friend from class asked about it.

[ER] Opportunities for Mindfulness

*Additional theme: Connection to External Influences*

"This morning I felt truly present while walking on the treadmill. This is something I do frequently, so it's easy to have my mind wander somewhere else. However, this morning I switched up my routine. I usually watch TV on my phone, but I decided to listen to music instead. This way, I was looking straight out the window instead of at my phone. I caught the exact moment of when the sun rose, and I saw it light up the apartments, cars, and trees. I had never seen that before, and I felt truly present in the moment. I can take this information and remind myself that little moments like that happen all day every day, and I don't want to miss them. This situation is going to be one I try to have more often."