

THE ROLE OF EMOTIONAL INTELLIGENCE IN PREPARING MEDICAL PROFESSIONALS TO WORK WITH POST-TRAUMATIC STRESS DISORDER

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Abstract

Introduction. The growing burden of post-traumatic stress disorder (PTSD) in conflict-affected societies has intensified demands on healthcare systems and placed new pressures on the professional preparation of medical personnel. Among the competencies increasingly recognized as essential for effective trauma-focused clinical work, emotional intelligence (EI) occupies a central yet systematically underutilized position in contemporary medical education.

Aim. To examine the role of EI in the professional preparation of medical specialists for clinical work with patients diagnosed with PTSD and to propose evidence-based recommendations for integrating EI-focused training into medical education curricula.

Materials and methods. A mixed-methods study involving 124 medical professionals from clinical institutions and medical higher education establishments in Ukraine. EI was assessed using the Schutte Self-Report Emotional Intelligence Test (SSEIT), professional readiness was measured with Professional Readiness Scale (PRS-PTSD), burnout and compassion fatigue were evaluated using the ProQOL-5 scale. Quantitative data were analyzed with IBM SPSS Statistics v.26.0; qualitative data underwent reflexive thematic analysis. A subgroup of 42 participants completed a four-week EI development training program with pre- and post-training assessment.

Results. Significant positive correlations were identified between total SSEIT scores and all three PRS-PTSD subscales ($p < 0.05$). Clinicians with higher EI demonstrated greater cognitive, emotional, and communicative readiness for PTSD care. Participants in the EI training program showed significant improvements in SSEIT scores and PRS-PTSD subscales post-intervention. Qualitative analysis revealed four major themes: emotional regulation under clinical pressure, barriers to empathic engagement, professional identity and resilience, and perceived gaps in EI-focused education.

Conclusions. EI is a trainable and measurable professional competency directly linked to PTSD care readiness. Systematic integration of EI development into undergraduate and postgraduate medical curricula is strongly warranted. A multimodal, longitudinal approach combining reflective practice, simulation, and trauma-informed communication training is recommended.

Keywords: emotional intelligence, post-traumatic stress disorder, medical education, trauma-informed care, compassion fatigue, professional readiness, burnout

INTRODUCTION

Post-traumatic stress disorder (PTSD) is among the most clinically demanding mental health conditions in contemporary medical practice, affecting an estimated 10-20% of individuals exposed to significant psychological trauma [1]. In the context of armed conflicts, mass casualty events, and widespread social upheaval, the burden of PTSD on individuals and healthcare systems has grown substantially, creating

urgent demands on clinical training and professional preparation.

Despite this growing prevalence, medical education has historically prioritized biomedical knowledge and procedural competencies over the relational and affective skills that are essential for trauma care [2]. Effective work with PTSD patients demands the capacity to establish therapeutic trust, regulate one's own emotional responses, communicate empathically, and sustain professional

resilience – capacities that collectively fall within the domain of emotional intelligence (EI).

EI, defined as the ability to perceive, understand, manage, and effectively use emotions in oneself and others, was formally conceptualized by Salovey and Mayer [3] and further developed by Goleman [4] and Bar-On [5]. In medical settings, higher EI has been consistently associated with improved patient-provider communication, greater clinical empathy, and reduced professional burnout [6, 7, 8]. Furthermore, EI has been shown to serve as a protective factor against secondary traumatic stress and compassion fatigue – occupational hazards particularly prevalent among clinicians who work with trauma survivors [9, 10].

Despite this evidence, few medical training programs have systematically incorporated EI development into trauma-focused curricula, and the empirical base linking EI training to improved PTSD care competencies remains limited. The present study addresses this gap by examining the role of EI in preparing medical professionals to work with PTSD patients and by proposing evidence-based recommendations for integrating EI development into medical education.

AIM

The aim of the study is to examine the role of EI in the professional preparation of medical specialists for clinical work with patients diagnosed with PTSD, and to develop evidence-based recommendations for the integration of EI-focused training into medical education curricula.

The specific objectives of the study are as follows:

1. To analyze the theoretical frameworks and empirical evidence underpinning the relationship between EI and trauma-informed clinical care.
2. To assess the current level of EI among medical professionals working with PTSD patients.
3. To determine the correlation between EI competencies and clinicians' perceived readiness, empathic capacity, and professional resilience in trauma-intensive settings.
4. To evaluate the effectiveness of EI-oriented educational interventions in improving clinical preparedness for PTSD care.
5. To formulate practical recommendations for incorporating EI development into the training programs of medical professionals.

MATERIALS AND METHODS

The study employed a mixed-methods research design, combining quantitative assessment with qualitative analysis

in order to provide a comprehensive understanding of the relationship between EI and professional preparedness for working with PTSD patients. The quantitative component involved psychometric testing and statistical analysis, while the qualitative component incorporated semi-structured interviews and reflexive thematic content analysis of participants' reflective narratives.

The study sample consisted of 124 medical professionals from clinical institutions and higher medical education establishments in Ukraine. Participants included practicing physicians, psychiatrists, psychotherapists, emergency medicine specialists, and medical interns completing clinical rotations in psychiatry or emergency care. Inclusion criteria required direct professional or educational experience with trauma-related patient populations; individuals with fewer than six months of relevant clinical exposure were excluded. The mean age of participants was 31.4 years ($SD = 7.2$), with 58.1% identifying as female and 41.9% as male. All participants provided written informed consent prior to enrollment.

The level of EI was measured using the Schutte Self-Report Emotional Intelligence Test (SSEIT) [11], a validated 33-item instrument based on the Salovey-Mayer model of EI. The SSEIT assesses four dimensions: perception of emotion, management of own emotions, management of others' emotions, and utilization of emotion. Items are rated on a five-point Likert scale (1 – strongly disagree to 5 – strongly agree). The Ukrainian-language adaptation demonstrated satisfactory internal consistency (Cronbach's $\alpha = 0.83$).

Clinicians' preparedness was evaluated by an author-developed Professional Readiness Scale (PRS-PTSD), that comprised 20 items across three subscales: cognitive readiness (knowledge of PTSD symptomatology and treatment), emotional readiness (capacity to manage personal emotional responses during trauma-focused work), and communicative readiness (ability to establish therapeutic rapport). Content validity was verified through expert review by five specialists in psychiatry and medical education.

The Professional Quality of Life Scale (ProQOL-5) [12] was administered to assess levels of compassion satisfaction, burnout, and secondary traumatic stress, allowing analysis of the protective function of EI against occupational psychological hazards.

Semi-structured interviews were conducted with a purposively selected subsample of 20 participants. Interview questions explored participants' subjective experiences of working with PTSD patients, perceived emotional challenges, coping strategies, and attitudes toward EI training. Interviews were audio-recorded with participants' consent, transcribed verbatim, and subjected to thematic analysis following the approach of Braun and Clarke [13].

Data collection was conducted between February and September 2025. Quantitative instruments were administered anonymously during scheduled professional development sessions. Qualitative interviews, which lasted 25–55 minutes, were conducted individually in a private setting. A subgroup of 42 participants additionally completed a four-week EI development training program incorporating reflective practice, emotion regulation exercises, trauma-informed communication skills, and case-based group supervision. Pre- and post-training assessments using the SSEIT and PRS-PTSD were conducted to evaluate the intervention's effectiveness.

Quantitative data were analyzed using IBM SPSS Statistics, version 26.0. Descriptive statistics were calculated for all continuous variables. Distribution normality was assessed using the Shapiro–Wilk test. Pearson's correlation coefficients were computed to examine associations between SSEIT subscale scores and PRS-PTSD subscale scores. Group differences (by specialty, gender, and level of clinical experience) were assessed using independent-samples *t*-tests and one-way ANOVA with post hoc Tukey corrections. Pre- and post-training changes were evaluated using paired-samples *t*-tests. Statistical significance was set at $p < 0.05$. Qualitative data were analyzed using reflexive thematic analysis by two independent researchers; intercoder reliability was established through discussion and consensus.

A systematic literature search was conducted across PubMed/MEDLINE, Scopus, Web of Science, PsycINFO, and Google Scholar, supplemented by grey

literature from WHO, APA, and SAMHSA. Keywords included combinations of «emotional intelligence», «PTSD», «trauma-informed care», «medical education», «compassion fatigue», and «burnout» with Boolean operators (AND/OR/NOT). The search covered January 2020 to December 2025, with seminal pre-2000 works included regardless of publication date. Of 1,147 initial records, 79 sources were retained for final analysis following duplicate removal, title and abstract screening, and full-text eligibility assessment.

RESULTS

The mean total SSEIT score across the full sample was 127.3 ($SD = 14.6$), that has indicated a moderate-to-high overall level of EI. Psychiatrists and psychotherapists demonstrated the highest EI scores ($M = 134.7$, $SD = 12.1$), while emergency medicine specialists scored lowest ($M = 121.4$, $SD = 15.8$); this difference was statistically significant ($F(3, 120) = 4.87$, $p = 0.003$).

Significant positive correlations were observed between total SSEIT scores and all three PRS-PTSD subscales: cognitive readiness ($r = 0.54$, $p < 0.001$), emotional readiness ($r = 0.67$, $p < 0.001$), and communicative readiness ($r = 0.61$, $p < 0.001$). The strongest association was observed between the «managing own emotions» EI subscale and emotional readiness ($r = 0.72$, $p < 0.001$), underscoring the centrality of self-regulation for trauma-focused clinical work (Fig. 1).

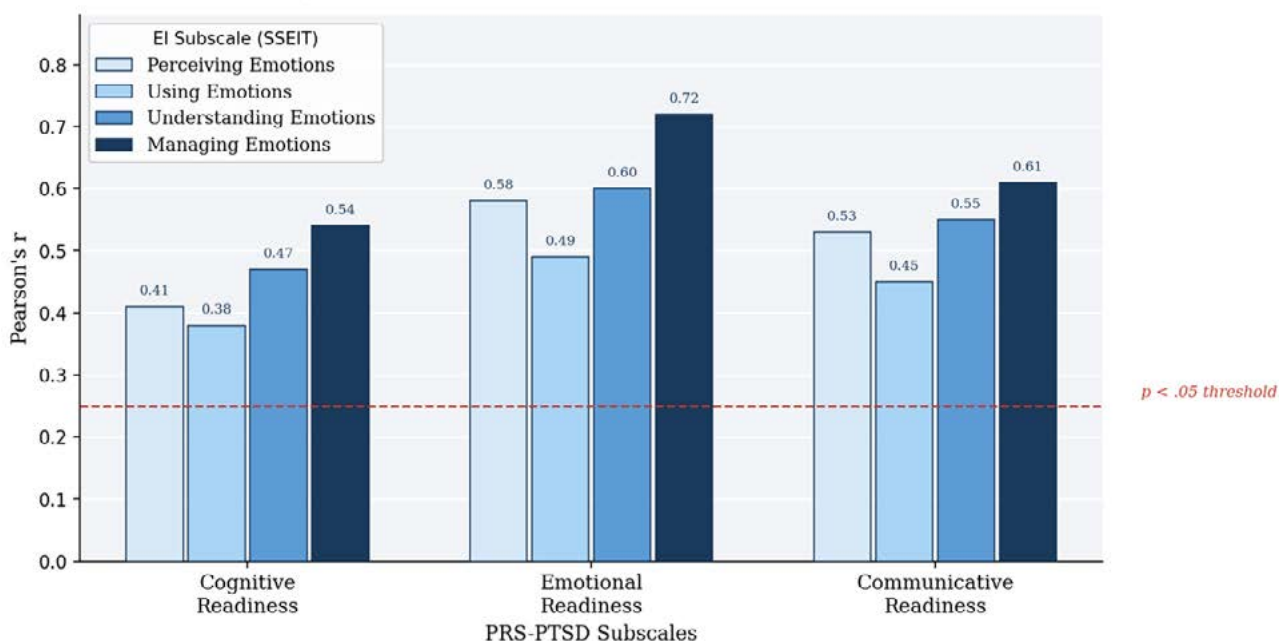


Figure 1. Pearson correlations between EI subscale (SSEIT) scores and professional readiness (PRS-PTSD) subscale scores. All correlations were statistically significant ($p < 0.05$). The dashed line indicates the significance threshold.

ProQOL-5 analysis revealed that participants with SSEIT scores above the sample median reported significantly higher compassion satisfaction ($M = 39.4$ vs. 33.1 , $t(122) = 4.23$, $p < 0.001$) and significantly lower secondary traumatic stress scores ($M = 22.7$ vs. 28.6 , $t(122) = -3.91$, $p < 0.001$). Burnout scores were also lower in the high-EI group, though this difference approached but did not reach statistical significance ($p = 0.07$).

Paired t-test analysis of the training subgroup ($n = 42$) demonstrated significant improvements in total SSEIT scores following the four-week intervention (pre- $M = 124.8$ vs. post- $M = 131.0$; $t(41) = -5.14$, $p < 0.001$). All three PRS-PTSD subscales improved significantly, with the largest gain observed in communicative readiness (pre- $M = 28.3$ vs. post- $M = 32.9$; $t(41) = -4.88$, $p < 0.001$) (Fig. 2).

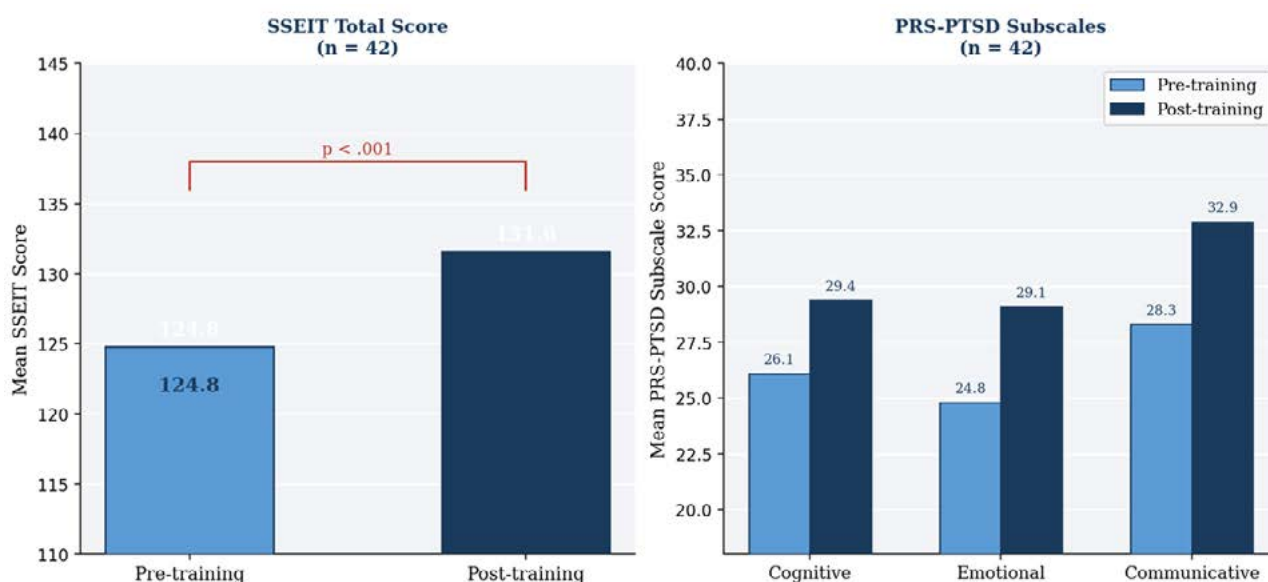


Figure 2. Pre- and Post-Training Comparison of SSEIT Total Scores and PRS-PTSD Subscale Scores Following a Four-Week EI Development Program ($n = 42$). Error bars indicate SD. All differences significant at $p < 0.001$.

Reflexive thematic analysis of interview transcripts yielded four major themes: (1) emotional regulation under clinical pressure – participants described self-monitoring and distancing techniques as central coping strategies; (2) barriers to empathic engagement – participants identified both institutional time constraints and insufficient supervision as major barriers; (3) professional identity and resilience – EI was perceived as integral to sustainable professional functioning; and (4) perceived gaps in EI-focused education – the majority of participants reported receiving no formal training in emotion regulation or trauma-informed communication during their undergraduate education.

DISCUSSION

The findings of the present study provide empirical support for the conceptualization of EI as a dynamic, trainable professional competency with measurable implications for PTSD care readiness. The strong correlations observed between EI subscale scores and all three dimensions of professional readiness are consistent with the broader literature demonstrating EI's contribution to patient communication, therapeutic alliance formation, and ethical clinical decision-making [6, 14].

The ability-based model of EI proposed by Mayer, Salovey, and Caruso [15] organizes EI competencies hierarchically – from basic emotion perception to sophisticated reflective regulation. The present data support this framework empirically: the strongest predictor of overall PTSD care readiness was the «managing one's own emotions» subscale, suggesting that the capacity for self-regulation is particularly foundational in trauma-intensive clinical settings. This is consistent with the findings of Nightingale et al. [6], who demonstrated that clinicians with higher EI outperformed their peers on assessments of empathic accuracy and clinical reasoning under conditions of emotional complexity (Fig. 3).

The finding that a structured four-week EI training program produced significant improvements in both EI scores and professional readiness aligns with earlier intervention studies [16, 17], and challenges the persistent assumption that emotional competencies are innate rather than educable. The particularly strong gains in communicative readiness following training highlight the responsiveness of trauma-sensitive communication skills to structured pedagogical intervention.

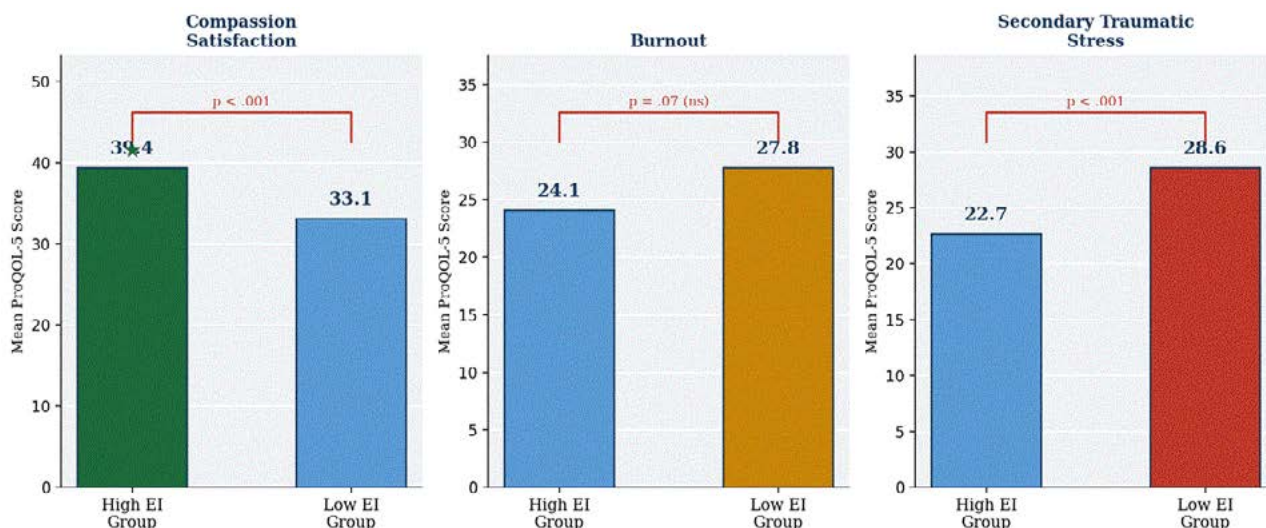


Figure 3. ProQOL-5 Outcomes by EI Level Group (High vs. Low EI; Median Split on SSEIT). High-EI group shows significantly greater compassion satisfaction and lower secondary traumatic stress scores. Burnout difference was non-significant ($p = 0.07$).

CONCLUSIONS

The present study demonstrates that EI is a measurable and trainable professional competency with significant positive associations with PTSD care readiness across cognitive, emotional, and communicative dimensions. Clinicians with higher EI levels exhibit greater professional resilience and are better protected against compassion fatigue and secondary traumatic stress. A four-week structured EI training program produced statistically significant improvements in both EI and professional readiness scores.

These findings underscore the necessity of systematically integrating EI development into undergraduate and postgraduate medical education curricula. The following evidence-based recommendations are proposed:

1. Explicit embedding of EI competencies within CanMEDS-aligned curriculum frameworks, with EI treated as an assessable learning outcome.
2. Implementation of multimodal EI pedagogy, including Balint group supervision, mindfulness-based stress reduction, simulation-based communication training, and narrative medicine.
3. Development of trauma-specific emotional preparation modules that target clinicians in psychiatry, emergency medicine, and rehabilitation.
4. Faculty EI mentorship training to model and reinforce emotionally competent clinical practice.
5. Longitudinal EI assessment throughout medical training using validated ability-based measures alongside reflective portfolios.

Perspectives for further research. Future studies should employ randomized controlled trial designs to

establish causal evidence for the effectiveness of EI training in improving PTSD care outcomes. Cross-cultural comparative studies across conflict-affected and non-conflict healthcare systems are warranted. Development of specialty-specific EI assessment tools calibrated for trauma-intensive clinical contexts represents a priority area. Longitudinal designs tracking EI development and occupational outcomes across medical careers are also needed.

COMPLIANCE WITH ETHICAL REQUIREMENTS

The study was conducted in full accordance with the ethical principles outlined in the Declaration of Helsinki (World Medical Association, 2013) and complied with national regulatory requirements governing research involving human participants. All participants provided written informed consent. Data were anonymized at collection and stored securely with access restricted to the research team.

Primary data and materials. Primary data were collected from 124 medical professionals between February and September 2025 using standardized questionnaires (SSEIT, PRS-PTSD, and ProQOL-5), semi-structured interviews, and pre- and post-training assessments in a subgroup of 42 participants. Quantitative data were analyzed using IBM SPSS Statistics version 26.0, while qualitative data underwent reflexive thematic analysis. A systematic literature search was conducted in PubMed/MEDLINE, Scopus, Web of Science, PsycINFO, and Google Scholar, supplemented by grey literature from WHO, APA, and SAMHSA.

Study limitations. The cross-sectional design of the main survey precludes causal inference regarding the direction of the EI-readiness relationship. The training subgroup was not randomized, limiting internal validity. Self-report measures of EI remain vulnerable to social

desirability bias. Additionally, the sample was drawn exclusively from Ukrainian institutions, which may limit generalizability to other healthcare contexts.

Declaration of use of generative artificial intelligence.

No generative artificial intelligence tools were used in the preparation of this manuscript for text generation or editing, data analysis or interpretation, or the creation of tables, figures, or other visual materials. All components of the article were prepared independently by the authors, who take full responsibility for the accuracy, originality of the content, and compliance with the principles of scientific integrity and ethical publication standards.

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The study did not receive external financial support. The authors declare no conflict of interest.

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Резюме

РОЛЬ ЕМОЦІЙНОГО ІНТЕЛЕКТУ У ФОРМУВАННІ ГОТОВНОСТІ МЕДИЧНИХ ФАХІВЦІВ ДО НАДАННЯ ДОПОМОГИ ПАЦІЄНТАМ ІЗ ПОСТТРАВМАТИЧНИМ СТРЕСОВИМ РОЗЛАДОМ (ПТСР)

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Вступ. Зростання поширеності посттравматичного стресового розладу (ПТСР) в умовах збройних конфліктів та масових надзвичайних ситуацій ставить нові вимоги перед системою охорони здоров'я та підготовкою медичних фахівців. Серед компетентностей, необхідних для ефективної клінічної роботи з пацієнтами, які пережили травму, особливе місце посідає емоційний інтелект (EI) попри його недостатню інтеграцію до сучасних програм медичної освіти.

Мета. Дослідити роль EI у професійній підготовці медичних фахівців до клінічної роботи з пацієнтами із діагнозом ПТСР та розробити науково обґрунтовані рекомендації щодо інтеграції EI-орієнтованого навчання до навчальних програм медичної освіти.

Матеріали та методи. Змішане дослідження за участю 124 медичних працівників клінічних установ і закладів вищої медичної освіти України. Для оцінки рівня EI використовувався опитувальник SSEIT, для оцінки готовності до роботи з ПТСР – авторська шкала професійної готовності (PRS-PTSD), для оцінки вигорання та вторинного травматичного стресу – шкала ProQOL-5. Кількісні дані оброблялися за допомогою IBM SPSS Statistics v.26.0; якісні дані аналізувалися методом рефлексивного тематичного аналізу. Підгрупа з 42 учасників пройшла чотиритижневу програму розвитку EI.

Результати. Виявлено статистично значущі позитивні кореляції між показниками SSEIT і всіма трьома субшкалами PRS-PTSD ($p < 0,05$). Учасники з вищим рівнем EI демонстрували вищий рівень задоволення від роботи та нижчий рівень вторинного травматичного стресу. Після навчальної програми спостерігалось значне покращення показників EI та професійної готовності.

Висновки. EI є такою, що піддається розвитку, і вимірюваною професійною компетентністю, безпосередньо пов'язаною з готовністю до роботи з ПТСР. Рекомендовано систематичну інтеграцію розвитку EI до навчальних програм додипломної та післядипломної медичної освіти шляхом мультимодального, поєднаного підходу.

Ключові слова: емоційний інтелект, посттравматичний стресовий розлад, медична освіта, травмо-інформована допомога, вторинний травматичний стрес, професійна готовність

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