Research

This open-access article is distributed under Creative Commons licence CC-BY-NC 4.0.

The role of South African undergraduate medical education in the development of emotional competence in junior doctors: A qualitative study

M Muller,[1] MB ChB, MRCGP, M Phil (HPE), Dip HIV Man; **S van Schalkwyk,**[2] BA Hons, M Phil, PhD

[1] *Department of Family Medicine and Rural Health, Faculty of Medicine and Health Sciences, Walter Sisulu University, East London, South Africa*
[2] *Department of Health Professions Education, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa*

Corresponding author: *M Muller (mmuller@wsu.ac.za)*

Background. Doctors require both clinical and socio-emotive skills to navigate emotionally charged encounters, yet emotional skills training in undergraduate medical education is often described as inadequate. While some South African (SA) medical schools have introduced programmes to address this gap, it is unclear whether these efforts sufficiently prepare interns for managing emotionally charged encounters in clinical settings.
Objective. To explore how 12 medical interns perceive the contribution of their undergraduate medical education to the development of their emotional competence in regulating challenging emotions in themselves and others in clinical settings.
Methods. A qualitative research design was employed, using semi-structured interviews with 12 junior doctors from eight medical programmes in SA who had completed a 2-month rotation in a rural district hospital setting in the Eastern Cape Province. Data were coded and subsequently analysed thematically.
Results. Interns described limited formal teaching on emotional competence at medical school, with some benefit from sessions such as role-play and case discussions. Emotional learning often occurred informally through observation of clinicians, extra-curricular activitie and personal experiences. However, high-pressure clinical environments, hierarchical academic structures and a culture they experienced as dismissive of emotion hindered development. Interns emphasised the need for structured, practical and safe training spaces from the first year. Emotional skills were seen as essential for effective patient care, personal wellbeing and professional functioning across all areas of a junior doctor's life.
Conclusion. Developing emotional competence in clinicians should begin during undergraduate education through structured, evidence-based programmes integrated throughout medical training. Such initiatives should ideally start in the first year and evolve alongside clinical skills development. A key challenge is the shortage of emotionally competent educators and clinical supervisors to guide students effectively. Therefore, postgraduate training is essential to equip senior colleagues to lead these efforts and serve as role models. Building a workforce of emotionally competent clinicians could enhance healthcare delivery, improve patient outcomes, and support the mental wellbeing of doctors.
Keywords. clinicians, emotional competence, SouthAfrica.

Afr J Health Professions Educ 2026;18(3):e3959. https://doi.org/10.7196/AJHPE.2026.v18i3.3959

Globally, it is acknowledged that doctors require clinical and socio-emotive skills, including the ability to manage their own emotions and those of their patients and colleagues in highly stressed, emotion-laden encounters.[1-5] Clinicians are frequently exposed to highly charged clinical environments, often characterised by interpersonal and professional conflicts, with high rates of burnout and emotional exhaustion[6]; this is compounded when clinicians are providing care in rural or resource-constrained settings.[7] Clinicians who are able to regulate and manage emotions are less likely to experience burnout,[6,7] have better relationships with their patients, experience higher patient satisfaction,[8] and ultimately achieve improved clinical outcomes with a reduced chance of medical error.[4]

Despite the acknowledged importance of socio-emotive competencies, concerns remain regarding their limited representation and instruction in medical education.[1,3-7,9] There is a growing attempt, both globally and in South Africa (SA), to incorporate the training of socio-emotive skills into medical education curricula,with a variety of methodologies recommended to support the development of competencies such as emotional intelligence and empathy.[10-13] It is unclear what the most effective way to teach emotional skills is. The development of medical curricula recognises important competencies, such as communication skills, that need to be achieved. However, the choice of teaching methodology to achieve this is mostly left to the relevant institutional programme committee.[3,10] Some training programmes have very few curricular activities pertaining to emotional competence,[9,12] resulting in doctors feeling ill-equipped to, for example, attend to patients' emotional needs.[9] There is an urgent need to develop evidence-based, effective educational strategies for developing emotional skills such as emotional competence.[14]

It has also been difficult to determine how effective these programmes are[12,15] and how they should be assessed.[5] There are some educational interventions, such as mindfulness training and reflection, that show promise[16,17]; however, a major barrier to advancing research and curricular development has been the lack of consensus on a clear definition and conceptual framework for social and emotional skills. Emotions and how we manage them are highly individualistic, and there are various perspectives on emotional management skills. Constructs such as emotion, empathy, emotional intelligence, continue to be interpreted through diverse theoretical perspectives.[4,12,14,18,19]

All these areas of investigation have generated a plethora of theories, particularly, regarding the importance of these skills. However, without a clear unifying framework, an understanding of how best to teach these

emotional skills remains lacking and has been identified as a major challenge to advancing this field.[12,19,20]

The theory of emotional intelligence, first proposed by Mayer and Salovey[21] suggests that an individual with greater emotional regulation (ER) skills employs a wide range of strategies to reduce or adapt to undesirable emotions in themselves and others. The components of emotional intelligence are defined by a recent Association for Medical Education in Europe (AMEE) guide as the capacity to recognise, understand, regulate and respond effectively to emotions in oneself and others.[22] However, there are different schools of thought regarding whether emotional intelligence is best understood as an inherent trait, a skill that can be taught or a combination of both.[12,19,22,23] Regardless of their differences, what is central to the various frameworks on socio-emotive skills is the ability to manage and regulate emotions appropriately, both on an interpersonal and intrapersonal level.[19,20,22-26]

Gross[27] defined ER as 'efforts to influence which emotions one has, when one has them, and how one experiences or expresses these emotions' and includes both self-directed and other-directed strategies. There has been an increase in research on understanding and unpacking ER over the past two decades.[28] Gross[27] identified four stages of ER: the identification, selection, implementation and monitoring of specific ER strategies. ER challenges and their relationship to clinical reasoning, burnout and mental health have been noted within medical education.[29-33]

Not all ER strategies are necessarily useful. The findings of a systematic review in which the relationship between burnout and ER was examined highlighted that a strategy such as surface acting, which involves suppressing negative emotions, may have a stronger relationship to emotional exhaustion than other strategies.[29] It is therefore important for the clinician to have appropriate skills in regulating and managing difficult emotions. The concept of emotional competence resolves the ambiguity in the trait versus skill debate[23,34] and emphasises the importance of consistently applying ER skills. For doctors, emotional competence can therefore be viewed as the ability to choose appropriate ER strategies to reduce or adapt to undesirable emotions within the workplace.

In their second year of internship, newly qualified doctors in SA typically spend two months in a rural, resource-constrained district hospital as part of their family medicine rotation. Doctors who have trained in relatively protected tertiary and regional hospitals will now, possibly for the first time, encounter challenging and emotionally draining situations with much less support. It is unknown whether junior doctors in SA feel that they have been adequately prepared for emotionally charged clinical encounters, particularly in sparsely supported, high-stress environments.[12,15] We believe it is important to understand whether the teaching methodologies being adopted at medical schools in SA are fit for purpose and provide doctors with the essential skills they need to navigate challenging emotional encounters within the clinical environment.

This study sought to answer the following research question: To what extent does undergraduate medical training prepare interns to manage their emotions and those of others in complex, emotionally charged encounters in resource-constrained hospitals in a rural province in SA?

Methods

Study design

This article was written from an interpretivist, constructivist perspective. As it sought to delve into the experiences and emotions of interns, an explorative, qualitative study design was used, enabling in-depth engagement with participants during semi-structured interviews.[35] A semi-structured interview guide was developed to explore interns' experiences of emotionally challenging clinical encounters.[36] The development of the guide was informed by our reading of the literature and experience of the clinical space. Participants were asked to describe a difficult emotional situation they had faced, how it affected them and others involved and the extent to which they felt their medical training had prepared them for managing such experiences. The interviews were conducted at a regional hospital in the Eastern Cape Province, SA. The first author (MM) is a white, female senior lecturer and, at the time the interviews were being conducted, was providing mentoring and training, but not assessment, within the family medicine department. The study population comprised 24 second-year interns who were rotating through the family medicine department from January to June 2024 and who had completed a two-month rotation in one of four rural district hospitals. All the interns were invited to participate. After two rounds of email invitations, 12 interns had agreed to participate. This number was considered in line with the conventions for qualitative exploratory studies.[35] A criterion for sufficiency rather than saturation was used to ensure the sample sizes were adequate.[37,38] After 12 interviews, enough information had been gathered to ensure that meaningful conclusions could be drawn.[38]

Ethical considerations

Ethics approval was granted by the Faculty of Medicine and Health Sciences Health Research Ethics Committee at Stellenbosch University (ref. no. S24/02/044). Permission for implementation of the study protocol was obtained from the Eastern Cape Department of Health and the governing body of the hospital. Each participant gave written informed consent prior to recruitment into the study. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Data collection

MM, who is also a trained interviewer, conducted all 12 semi-structured individual interviews using an interview schedule with prompts to explore how the interns' medical education had prepared them for managing difficult emotional encounters in the clinical workplace. Interviews took place between May and August 2024 and lasted between 42 and 72 minutes. The aim was to elicit rich, in-depth descriptions by using open-ended questions.[39]

The interviews were recorded using the software Otter.ai 2024 (Otter.ai Inc., USA). All interviews were conducted in English, the medium of communication among the participants. Interviews were conducted by MM, while the co-author SS reviewed the coding process and contributed to the development of themes.

Data analysis

The voice-to-text transcription was checked for accuracy within 24 hours of each interview. The data were coded using ATLAS.ti version 24, 2024 (ATLAS.ti Scientific Software Development GmbH, Germany).

Thematic analysis was employed to identify, analyse and report on various patterns in the data using the six phases of thematic analysis outlined by Braun and Clarke,[40] which include familiarising oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and finally producing a report with the final

results. Coding was data-driven, using an interpretative approach based on the participants' verbal reports. MM first familiarised herself with the data and then generated initial codes to organise the data. SS coded the first interview in parallel with MM; this was followed by a discussion to resolve differences. After an in-depth, iterative process of data engagement, four themes and eight subthemes (Table 1) were constructed that represent the data in relation to the research questions.[35,40]

Measures to ensure trustworthiness

Following recommendations given by Guba and Lincoln[41] and Patton[35] to ensure the trustworthiness of the data, a range of measures was applied. To enhance credibility, SS, who has extensive qualitative research experience, provided investigator triangulation through both coding and final identification of themes. The detailed description of the research process should promote transferability of the findings and the provision of quotes fosters dependability. MM is a consultant in the family medicine department where the study was conducted and was responsible for providing mentoring and support to interns during their rotation. It was therefore important to demonstrate reflexivity throughout the study and to ensure that the interviews were conducted in a safe and supportive environment to mitigate against the possible impact of power dynamics on the process. It was essential to be mindful of the researcher's own assumptions about the interns' experiences. The interviews focused on allowing the participants' voices to dictate the narrative.

Results

The final group was representative of the typical spread of interns who rotate through the department and included diversity in terms of race, gender, age and medical universities attended. To protect anonymity, detailed demographics of this group are not provided, but the race and age distributions were representative of the larger group of interns. The group included four women and eight men, with a median age of 26. The participants had each completed their medical undergraduate training in 2022 at one of eight SA medical universities. Two students had participated in the Nelson Mandela Fidel Castro Medical Programme, spending the first five years of their training in Cuba before completing their training at an SA university.

Table 1. Summary of themes and subthemes

Theme	Subtheme
1. Formal medical education and emotional skills development	1.1. Experiential learning
	1.2. Observational learning and role modelling
2. Extramural influences on emotional growth	2.1. Extra-curricular contributions
	2.2. Life experiences
	2.3. External mentors
3. Systemic barriers to emotional development in medical training	3.1. Unsupportive academic environments
	3.2. The culture of emotional dismissal in medicine
	3.3. The high-stakes clinical environment
4. The imperative of emotional competence training in medicine	

Theme 1 explores how interns learnt about emotions at medical school through experiential and observational learning. Theme 2 adds insights into the impact of life experiences and role models outside medical school. Theme 3 highlights how both academic and learning environments potentially hinder emotional development, and Theme 4 explores the interns' views and recommendations on supporting emotional needs during their medical training.

Theme 1. Formal medical education and emotional skills development

Interns reported a variety of ways in which they learnt about ER at medical school as part of the structured medical curriculum.

Subtheme 1.1. Experiential learning

Most participants did not recall formal educational activities during their undergraduate medical training that were focused on managing emotions or behaviour. Some remembered only occasional sessions on *breaking bad news* or *managing the aggressive patient,* which they found particularly helpful.

> 'I can't remember like, a specific … topic or a subject or like a course that we did. We spoke a lot about grief and aspects like that, like discussing breaking bad news … Like there wasn't anything specific on how to communicate. Nothing on self-reflection, personal development stuff.' (I4)

A few participants outlined a specific structured programme at each of their universities. Only a few disclosed that this programme had a powerful impact on their emotional development, while others considered it theoretical and irrelevant to the clinical setting. The most useful educational activities mentioned were those involving role-playing scenarios (with feedback from the 'patient') or group case scenario discussions, especially when they were about real-life scenarios that had occurred.

> 'I think the role-play sessions were useful because you also get feedback from … the actor [who played the patient]. They tell you how they felt. And then you also get feedback from other people watching the session. ... It's also good to hear from … the patient's perspective. How the way you talk to them makes them feel.' (I3)

Subtheme 1.2. Observational learning and role modelling

Students learnt not only by being taught to deal with their emotions and by applying these principles in role-play, but also by observing others in the clinical context. Role modelling in the clinical environment was critical for the acquisition of emotional skills.

> 'It was always refreshing to see a senior clinician who, even when he's teaching at a bedside tut, is always considering the patients; you know, how they feel in the moment, just being respectful, always speaking to them. Soft spoken, just very nice bedside manner. That stuff sticks to you. I want to be like that, not just their skill and academic level.' (I5)

However, interns reported that at times, the lack of positive role modelling and the emotional insensitivity displayed by some senior doctors were discouraging.

> 'Even the way sometimes they speak to patients, it almost comes off as condescending. In the way they address patients, or even, like, showing any form of compassion.' (I10)

Theme 2. Extramural influences on emotional growth

Many participants were of the opinion that their personal growth occurred outside the formal medical school environment, either through specific extra-curricular activities (Subtheme 2.1), life experiences (Subtheme 2.2), or by the example and mentoring of important people in their lives (Subtheme 2.3).

Subtheme 2.1. Extra-curricular contributions

Specific activities outside of their medical education had a significant impact on some interns. These included church and university societies that fostered discussion and debate.

> 'So, there were lots of extracurricular debate, things that we used to do, especially in our different forums … I think it is important that we should talk about all that stuff. We did religion … feminism ...' (I5)

> 'That [a university society] kind of made me a bit more educated on, like, certain topics and how to approach certain scenarios. So, I think a lot of engagement that I have with patients is, like, indirectly influenced by that.' (I9)

Subtheme 2.2. Life experiences

Several participants described how experiences in their personal lives were key to their emotional development. The influence of the home environment was frequently mentioned. For some, parents and a highly supportive home environment were strong positive influences. By contrast, others disclosed how a difficult childhood in a highly dysfunctional family had helped them to become emotionally fit. One intern, who described a difficult home scenario with parental substance abuse, expressed the following:

> 'So, I think the situation at home made me strong, to be emotionally fit. Like, you see other families, and you wish my mother was like that.' (I6)

Some described how applying skills in real-life situations and reflecting on events were key to their development.

> 'And then further, I think the only other way where we sort of learnt, is you learn on the … job or … during consultations and when you see patients and like that . You try to apply and to practise and you think about what you did wrong and what could have been done better.' (I2)

Subtheme 2.3. External mentors

The interns provided many examples of how others had supported their development, including parents, friends, counsellors and/or psychologists.

> 'So, leadership, I would say, like, my dad … he's one of those people that always tries to be professional . I kind of learnt those habits … from him, and then tried to make my own transformation.' (I12)

> 'That's when I got to interact with other people, other personalities, and learnt more about myself … so that certain things … it brings them to attention, certain things that you individually have to work on.' (I8)

Theme 3. Systemic barriers to emotional development in medical training

Participants reported a variety of factors during their training that they felt had a detrimental effect on their development of emotional skills as well as their emotional wellbeing.

Subtheme 3.1. Unsupportive academic environments

The participants were of the opinion that the academic environment at medical school was often unsupportive of the development of emotional competence. Hierarchical structures in medical education were often experienced as an unsafe space to express emotions, as voiced in the following extract:

> 'It's, [sighs] … very difficult. I mean, generally, because … there's a hierarchy that you deal with, that will restrict you, they treat you like small … because you're just a student.' (I10)

> 'There were a few cases in different departments at university where you are kind of too scared to say anything, too scared to do anything.' (I1)

Some university departments were described as competitive, with a risk of victimisation when complaints were raised, as expressed in the following extract:

> 'I feel like it's sometimes competitive, and people are just, I don't know, trying to come across as better than other people ... So, it can get a little toxic.' (I4)

One participant described a ward round incident in their final rotation at medical school, when a professor expressed the following:

> 'I think if you're too weak for this profession … rather go choose another occupation. Don't come and waste my time.' (I1)

Subtheme 3.2. The culture of emotional dismissal in medicine

Most interns experienced their university culture as dismissive of emotion, making it difficult to express emotions or learn to manage difficult encounters.

> 'We need to sort of be able to compartmentalise your interactions with the patient … if there are negative emotions … to try and push them away, not take them with you. So, you sort of create a box. Everything that is negative that you are noticing during the interaction, you throw it away ...' (I10)

A common request was the availability of overt professional support for students during their academic years as well as in their clinical practice.

> 'If every department has that, but also something tangible that shows that you can be supported ...' (I5)

The participants suggested that someone should monitor and identify struggling students early rather than waiting for them to request assistance. In addition, they suggested that mental health screening should be available from the first year of medical school.

> 'And then beside that, even having like a lecturer that will be able to talk with you, able to listen to you, listen to your problems, and then evaluate the issues that you have.' (I6)

Subtheme 3.3. The high-stakes clinical environment

The participants regarded the high-pressure work environment of their clinical rotations as a major hindrance to emotional development. The pressure contributed to the constant lack of time, fatigue and the initiation of stressful incidents.

> 'I think it is difficult because it's a pressured environment. You have a lot of theoretical and practical things to get through. So, the emotional component is kind of, you know, side-lined.' (I3)

The interns' internalised expectations of knowledge and capability compounded the stressful environment. Several interns described the need to perform, excel and prove themselves, especially when they sensed that their senior doctors were prejudiced against them because of, for example, race or gender.

> 'So already, subconsciously, there's that feeling that you are inefficient, and of course, that you have to prove yourself, prove yourself as a female, black [person] ...' (I8)

Theme 4. The imperative of emotional competence training in medicine

All the junior doctors emphasised the need for more training on socio-emotive skills and for emotional skills to be incorporated into the medical undergraduate curriculum from as early as possible.

> 'It [emotional management skills] is super important. I would actually say it's key to a lot of things. It's key to how you interact with your colleagues. It is key to how you interact and deal with patients, like normal and aggressive patients. Because if you don't have that, it's going to be difficult for you to manage that, because now it's going to be two people with an emotional problem at the same time. So, I would say that it [emotional management skills] … is the first step, which needs to be reinforced, from … first year of studying.' (I7)

The interns recognised that emotions affected their behaviour and identified specific skills that needed to be included in training: being able to listen to the patient and not be talkative, being able to reflect on personal behaviour, being confident enough to speak up and being able to focus on the patient's needs.

> 'And if you're unhappy or you're anxious, you take it out on patient[s]. It doesn't do any good, because at the end of the of the day, … a patient is going to suffer.' (I11)

The participants were of the view that emotional skills improved overall competence in fulfilling their duties proficiently and reduced patient suffering. In addition, emotional management skills were perceived to contribute to other spheres of a junior doctor's life, including mental wellbeing, confidence, leadership, academic performance and intimate relationships.

> 'I mean the things … before you are forced to deal with, you need to have your own emotions in check to deal with terrible, terrible things. It's very easy to sort of, like, crumble in the scenarios that we face . Like, you could easily spiral ... go into a depression ... if you are not in the right place.' (I10)

> 'Emotional well-being is very important because you can't … perform well and thrive in your studies or … workplace if … emotional regulation is not there.' (I3)

The participants suggested that certain topics be included, namely, a course on how to manage their own mental health, and on dealing with difficult colleagues or family members (not only patients). The following extract refers:

> 'I think ... maybe like a course on dealing with difficult colleagues or difficult family members, and how you approach that situation . I think that that is a big problem in, like, busy casualties … we are so busy focusing on the patient that we forget to tell the family what's going on.' (I3)

Most interns mentioned the usefulness of interactive discussions of case scenarios and emphasised the importance of safe and confidential spaces, including reflection on difficult interactions.

> 'If something comes up in those [in consultations] at the end, then the [seniors] … bring the students together and they discuss the things that occurred in that interaction, and … show, ok this is what happened. This is what's supposed to happen. This is how it was not supposed to happen, so, like, applied to real life.' (I10)

Discussion

This article explored how interns perceived the contribution of their medical undergraduate training to managing emotionally charged clinical encounters upon beginning work as junior doctors in a rural resource-constrained setting. To the best of our knowledge, it is the first study to provide insight into the views of junior doctors on the emotional component of the training they received at medical school.

The key finding is that junior doctors who participated in this study did not feel adequately prepared to manage the emotional challenges they encountered during their rotations at district hospitals. When reflecting on their medical training, only a few doctors could highlight specific activities, such as role-play, that they considered useful at the time; however, these did not provide them with the skills they needed to navigate difficult emotions both in themselves and in those around them in the clinical setting and were difficult to apply when facing real-life scenarios. Participants did not perceive their training as fit for purpose and expressed a need for more specific, relevant training activities to prepare them to meet challenging emotional encounters.

The doctors in this study considered the inclusion of training on emotional management and regulation in medical school important. They believed that it would not only enhance their patient interactions but also reduce burnout and have a positive impact on performance. The contribution of socio-emotive skills to clinical wellbeing and an improved ability to provide high-quality care is well recognised.[5,9,42,43]

This does not mean that junior doctors entirely lacked emotional skills. However, they felt that most of these skills were not the result of formal training in medical school, but rather of life experiences and extra-curricular activities that fostered reflection on social and emotional issues. Of particular importance was observing emotional skills being modelled by parents, teachers, senior colleagues and mentors, which the literature supports as crucial for learning socio-emotive skills.[44-46]

Emotional skills, such as emotional intelligence, ER, and emotional maturity, are recognised as essential to include in our medical education, and yet medical education still struggles to incorporate them into undergraduate medical curricula.[1,3,4,9,10,12] Specific educational activities – for example, on communication – are included, but these engagements are often sparse, skewed towards patients with mental health issues, and brief, including little in the way of practical application.[21]

The experiences of junior doctors highlight the need for reform of our undergraduate medical curriculum to better prepare them to manage emotionally challenging interactions in clinical practice. Firstly, the teaching of socio-emotive skills needs to form part of an educational framework that spans the entire medical undergraduate curriculum, rather than being isolated activities in specific rotations such as mental health. Participants requested that these activities be introduced in the

first year of study, which aligns with recommendations that socio-emotive learning be integrated across the entire curriculum and be incorporated in all aspects of medical training.[1-6]

Secondly, activities need to be fit for purpose and translatable to situations the doctors encounter in the clinical workplace. The participants in this study highlighted certain educational activities as potentially useful, such as role-playing scenarios in which students received constructive feedback on their performance from fellow students. Interactive discussions of real-life scenarios following a consultation that the student has witnessed, or in relation to a paper-based case scenario centred on real-life incidents, ensure skills are applicable.[3] Participants requested that specific areas be covered, including negotiating conflict with colleagues, patients and their families; managing personal mental health; assertiveness and advocacy for patients; and managing strong emotions such as anxiety and anger. Some junior doctors found structured reflection helpful. According to Imperato and Strano-Paul[47] and Miller *et al.*[48] reflection is a powerful tool for developing emotional skills such as empathy.

Thirdly, as medical educators, we urgently need to review clinical learning environments, which are often ill-disposed to emotional development, promoting stoicism and a suppression of emotion.[9,49] High-pressure work environments and high-performance expectations do not allow the safety, time, or space to focus on emotional skills.[46] Junior doctors reported how rude or unsupportive behaviour on the part of lecturers or senior clinicians negatively affect emotional learning and the willingness to speak up when difficulties occur. The literature emphasises the negative impact of toxic work environments on the wellbeing of clinicians and patient care, especially within hierarchical, top-down structures.[49,50] Of major concern is the negative way in which it affects interns' willingness to seek advice or admit to mistakes that they might have made, placing the safety of patients at risk.

Finally, revising and upgrading our medical curricula to include integrated, effective and comprehensive training on emotional skills will require the training and capacitating of our faculty and clinical supervisors. Junior doctors emphasised that teaching sessions that cover socio-emotive skills should take place in safe spaces with an experienced facilitator who can model advanced levels of emotional competence. Clinical learning environments require emotionally skilled trainers who can demonstrate their skills in an appropriate educational, ecological environment, underscoring the need for faculty development.[5] Teachers who have received formal training in emotional management skills are more likely to teach it.[9]

What is not known is how clinicians develop emotional competence, and what effective, evidence-based educational strategies can be incorporated into undergraduate medical training to match the needs of students and junior doctors at various stages of their medical training.[12,51] Ongoing research is necessary to gain a deeper understanding of how to effectively teach these essential competencies.

Study limitations

This study focused on interns who had completed their undergraduate medical training at universities in SA and were working in four rural district hospitals in the Eastern Cape Province. The context may be more or less transferable to elsewhere in SA. The data collection and analysis were performed by a single researcher, with a co-investigator providing inputs on codes and themes. The study focused on descriptions of interns' experiences of the role of medical undergraduate training in the acquisition of emotional management skills, and it is not intended to be generalised to medical training in SA as a whole.

Conclusion

Undergraduate medical education is not adequately preparing junior doctors to manage their own emotions and those of others in the complex, emotionally charged encounters they must navigate in the workplace. Emotional competence for doctors, which describes the ability of a clinician to choose appropriate ER strategies to reduce or adapt to undesirable emotions within the workplace, is a valuable and essential skill that should form part of medical undergraduate curricula. There is an urgent need to develop comprehensive training in emotional skills, integrated into the curriculum from the first year of medical school, to teach practical skills applicable to real-life scenarios faced by junior doctors can be taught. Achieving this requires intensive training and capacity building of faculty in academic environments and trainers in clinical learning environments. Fostering emotionally competent doctors requires emotionally competent role models.

A workforce of clinicians with high-level socio-emotive skills would improve service delivery, clinical outcomes and the mental health of doctors. Medical education needs to urgently review undergraduate medical curricula and consider how to best develop these critical skills in clinicians.

Data availability statement. Data are available from the corresponding author on reasonable request, subject to ethical and institutional requirements.
Declaration. None.
Acknowledgements. This study would not have been possible without the commitment and experiences of the 12 interns who volunteered their time for the interviews. This article was based on research conducted as part of MM's MPhil in Health Professional Education at Stellenbosch University, which was supervised by SS. The research assignment was reworked, revised, and adapted into a journal article for publication. The present article uses the same interview dataset as a previously published article, but addresses a distinct research question, focusing on the role of South African undergraduate medical education in developing emotional competence in junior doctors. Different aspects of the interview data were selected and analysed according to the respective research questions. The related article explored the experiences of medical interns in emotionally charged workplace encounters during rural rotations: Muller M, Adeniyi OV, van Schalkwyk S. Experiences of medical interns of emotionally charged workplace encounters: A qualitative exploration of their rural rotation. Afr J Prim Health Care Fam Med 2026;18(1). https://doi.org/10.4102/PHCFM.v18i1.5435.The authors have transparently disclosed the use of the shared interview dataset and confirm that the present article addresses a distinct research question and provides a separate analysis and scientific contribution. The related publication is appropriately acknowledged and cited.
Author contributions. MM was responsible for conceptualisation, data curation, formal analysis, investigation, methodology, project administration, resources, software, visualisation, writing – original draft, and writing – review and editing. SS was responsible for data curation, supervision and validation. Both authors reviewed the article, contributed to the discussion of results, approved the final version for submission and publication and take responsibility for the integrity of its findings
Funding. None.
Conflicts of interest. None.

1. Shapiro J. Perspective: Does medical education promote professional alexithymia? A call for attending to the emotions of patients and self in medical training. Acad Med 2011;86(3):326-332. https://doi.org/10.1097/acm.0b013e3182088833
2. Satterfield JM, Hughes E. Emotion skills training for medical students: A systematic review. Med Educ 2007;41(10):935-941. https://doi.org/10.1111/j.1365-2923.2007.02835.x
3. Baessler F, Zafar A, Schweizer S, et al. Are we preparing future doctors to deal with emotionally challenging situations? Analysis of a medical curriculum. Patient Educ Couns 2019;102(7):1304-1312. https://doi.org/10.1016/j.pec.2019.02.024
4. Sancho-Cantus D, Cubero-Plazas L, Botella Navas M, Castellano-Rioja E, Canabate Ros M. Importance of soft skills in health sciences students and their repercussion after the COVID-19 epidemic: Scoping review. Int J Environ Res Public Health 2023;20(6):1-10. https://doi.org/10.3390/ijerph20064901
5. Hsu WC, Fuh LJ, Liao SC. Tickling the heart: Integrating social emotional learning into medical education to cultivate empathetic, resilient, and holistically developed physicians. Front Med (Lausanne) 2024;11:1368858. https://doi.org/10.3389/fmed.2024.1368858
6. Mills LM. Expanding the discourse on emotion in health professions education. Med Educ 2022;56(5):470-472. https://doi.org/10.1111/medu.14746
7. Mills LM, Boscardin C, Joyce EA, Ten Cate O, O'Sullivan PS. Emotion in remediation: A scoping review of the medical education literature. Med Educ 2021;55(12):1350-1362. https://doi.org/10.1111/medu.14605
8. Roberts C, Aruguete M. Task and socioemotional behaviours of physicians: A test of reciprocity and social interaction theories in analogue physician-patient encounters. Soc Sci Med 2000;50(3):309-315. https://doi.org/10.1016/s0277-9536(99)00245-2
9. Schwartz R, Osterberg LG, Hall JA. Physicians, emotion, and the clinical encounter: A survey of physicians' experiences. Patient Educ Couns 2022;105(7):2299-2306. https://doi.org/10.1016/j.pec.2022.03.001
10. Patel S, Pelletier-Bui A, Smith S, et al. Curricula for empathy and compassion training in medical education: A systematic review. PLoS One 2019;14(8):e0221412. https://doi.org/10.1371/journal.pone.0221412
11. Irlam J, Pienaar L, Reid S. On being agents of change: A qualitative study of elective experiences of medical students at the Faculty of Health Sciences, University of Cape Town, South Africa. Afr J Health Professions Educ 2016;8(1):41-44. https://doi.org/10.7196/ajhpe.2016.v8i1.540
12. Toriello HV, Van de Ridder JMM, Brewer P, et al. Emotional intelligence in undergraduate medical students: A scoping review. Adv Health Sci Educ Theory Pract 2022;27(1):167-187. https://doi.org/10.1007/s10459-021-10079-2
13. Jacobs C, Van Schalkwyk S. What knowledge matters in health professions education? Teach in Higher Educ 2022;27(8):1068-1083. https://doi.org/10.1080/13562517.2022.2111207
14. Tiffin PA, Roberts RD. The cross-cutting edge: Medical selection and education viewed through the lens of emotional intelligence. Med Educ 2024;58(4):382-391. https://doi.org/10.1111/medu.15244
15. Carney PA, Palmer RT, Fuqua Miller M, et al. Tools to assess behavioral and social science competencies in medical education: A systematic review. Acad Med 2016;91(5):730-742. https://doi.org/10.1097/acm.0000000000001090
16. Jones SM, Hansen W. The impact of mindfulness on supportive communication skills: Three exploratory studies. Mindfulness 2014;6(5):1115-1128. https://doi.org/10.1007/s12671-014-0362-7
17. Raut A, Gupta S. Reflection and peer feedback for augmenting emotional intelligence among undergraduate students: A quasi-experimental study from a rural medical college in central India. Educ Health 2019;32(1):3-10. https://doi.org/10.4103/efh.efh_31_17
18. Huang R, Zhou Z, Liu Y, et al. Empathy in undergraduate medical students: A multi-center cross-sectional study in China. BMC Psychiatry 2024;24(1):414. https://doi.org/10.1186/s12888-023-05350-2
19. Hall JA, Duong F, Schwartz R. On the proliferation of the empathy concept in healthcare and medical education research. Patient Educ Couns 2024;119:108041. https://doi.org/10.1016/j.pec.2023.108041
20. Zhou YC, Tan SR, Tan CGH, et al. A systematic scoping review of approaches to teaching and assessing empathy in medicine. BMC Med Educ 2021;21(1):292. https://doi.org/10.1186/s12909-021-02697-6
21. Mayer JD, Salovey P. What is emotional intelligence? In: Salovey P, Sluyter DJ, eds. Emotional Development and Emotional Intelligence: Educational Implications. 1st ed. New York: Harper Collins, 1997:3-31.
22. El Tarhouny S, Hassouna A, Mansour T. Emotional intelligence in medical education: Its role in professional identity formation: AMEE Guide No. 186. Med Teach 2025;48(1):1-15. https://doi.org/10.1080/0142159x.2025.2501257
23. Mikolajczak M. Going beyond the ability-trait debate: The three-level model of emotional intelligence. Electronic J Applied Psychol 2009;5(2):25-31.
24. Harris VW, Anderson J, Visconti B. Social emotional ability development (SEAD): An integrated model of practical emotion-based competencies. Motiv Emot 2022;46(2):226-253. https://doi.org/10.1007/s11031-021-09922-1
25. Gandía-Carbonell N, Losilla J-M, Viguer P. Strategies to assess and promote the socio-emotional competencies of university students in the socio-educational and health fields: A scoping review protocol. Int J Educ Res 2022;20(5):112. https://doi.org/10.37766/inplasy2021.2.0076
26. Pagatpatan CP, Jr, Valdezco JAT, Lauron JDC. Teaching the affective domain in community-based medical education: A scoping review. Med Teach 2020;42(5):507-514. https://doi.org/10.1080/0142159x.2019.1707175
27. Gross JJ. Conceptual foundations of emotion regulation. In: Gross JJ, Ford BQ, eds. Handbook of Emotion Regulation. 3rd ed. New York: The Guilford Press, 2024:3-12.
28. Stanoi AS, Ochsner KN. Research methods in emotion regulation evolving questions and new approaches. In: Gross JJ, Ford BQ, eds. Handbook of Emotion Regulation. 3rd ed. New York: Guilford Press, 2024:13-21.
29. Jackson-Koku G, Grime P. Emotional regulation and burnout in doctors: A systematic review. Occup Med 2019;69(1):9-21. https://doi.org/10.1093/occmed/kqz004
30. Kadović M, Mikšić Š, Lovrić R. Ability of emotional regulation and control as a stress predictor in healthcare professionals. Int J Environ Res Public Health 2022;20(1):541. https://doi.org/10.3390/ijerph20010541
31. Chen Q, Mao C, Qi L, et al. Music-based therapeutic interventions for medical school students with emotional regulation and mental health: A pre-post cohort study. Front Psychol 2024;15:1401129. https://doi.org/10.3389/fpsyg.2024.1401129
32. Colonnello V, Fino E, Russo PM. Attachment anxiety and depressive symptoms in undergraduate medical students: The mediating role of emotion regulation strategies. Perspect Med Educ 2022;11(4):207-212. https://doi.org/10.1007/s40037-022-00713-z
33. Harley JM, Jarrell A, Lajoie SP. Emotion regulation tendencies, achievement emotions, and physiological arousal in a medical diagnostic reasoning simulation. Instr Sci 2019;47(2):151-180. https://doi.org/10.1007/s11251-018-09480-z
34. Brasseur S, Gregoire J, Bourdu R, Mikolajczak M. The Profile of Emotional Competence (PEC): Development and validation of a self-reported measure that fits dimensions of emotional competence theory. PLoS One 2013;8(5):e62635. https://doi.org/10.1371/journal.pone.0062635
35. Patton M. Qualitative Research & Evaluation Methods. Integrating Theory and Practice. 4th ed. Thousand Oaks, CA: SAGE Publications, 2015:246-254.
36. Bearman M. Focus on methodology: Eliciting rich data: A practical approach to writing semi-structured interview schedules. Focus Health Prof Educ 2019;20(3). https://doi.org/10.11157/fohpe.v20i3.387
37. Varpio L, Ajjawi R, Monrouxe LV, O'Brien BC, Rees CE. Shedding the cobra effect: Problematising thematic emergence, triangulation, saturation and member checking. Med Educ 2017;51(1):40-50. https://doi.org/10.1111/medu.13124
38. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: Guided by information power. Qual Health Res 2016;26(13):1753-1760. https://doi.org/10.1177/1049732315617444
39. Ramani S, Mann K. Introducing medical educators to qualitative study design: Twelve tips from inception to completion. Med Teach 2016;38(5):456-463. https://doi.org/10.3109/0142159x.2015.1035244
40. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res in Psychol 2006;3(2):77-101. https://doi.org/10.1191/1478088706qp063oa
41. Guba G, Lincoln Y. Epistemological and methodological bases of naturalistic inquiry. Educ Commun and Tech 1982;30(4):233-252. https://doi.org/10.1007/978-94-009-6669-7_18
42. Toufan N, Omid A, Haghani F. The double-edged sword of emotions in medical education: A scoping review. J Educ Health Promot 2023;12(1):52. https://doi.org/10.4103/jehp.jehp_644_21
43. Sharp G, Bourke L, Rickard M. Review of emotional intelligence in health care: An introduction to emotional intelligence for surgeons. ANZ J Surg 2020;90(4):433-440. https://doi.org/10.1111/ans.15671
44. Laws E, Samuriwo R, Webb K, Bullock A. Emotional socialisation and burnout in medicine and the role of medical educators. Med Educ 2019;53(4):320-322. https://doi.org/10.1111/medu.13787
45. Joubert PM, Kruger C, Bergh AM, et al. Medical students on the value of role models for developing 'soft skills' - "That's the way you do it". S Afr Psychiatry Rev 2006;9(1):28-32. https://doi.org/10.4314/ajpsy.v9i1.30204
46. Seeberger A, Lonn A, Hult H, Weurlander M, Wernerson A. Can empathy be preserved in medical education? Int J Med Educ 2020;11:83-89. https://doi.org/10.5116/ijme.5e83.31cf
47. Imperato A, Strano-Paul L. Impact of reflection on empathy and emotional intelligence in third-year medical students. Acad Psychiatry 2021;45(3):350-353. https://doi.org/10.1007/s40596-020-01371-1
48. Miller C, Satterfield C, Patel P, Dacso M. Reflection and debriefing: Tools for fostering student emotional learning during and after international health electives. Ann Glob Health 2015;81(1):162-163. https://doi.org/10.1016/j.aogh.2015.02.871
49. Crowe S, Clarke N, Brugha R. 'You do not cross them': Hierarchy and emotion in doctors' narratives of power relations in specialist training. Soc Sci Med 2017;186:70-77. https://doi.org/10.1016/j.socscimed.2017.05.048
50. Olasoji HO. Broadening conceptions of medical student mistreatment during clinical teaching: message from a study of "toxic" phenomenon during bedside teaching. Adv Med Educ Pract 2018;9:483-494. https://doi.org/10.2147/amep.s154642
51. Stoller JK, Taylor CA, Farver CF. Emotional intelligence competencies provide a developmental curriculum for medical training. Med Teach 2013;35(3):243-247. https://doi.org/10.3109/0142159x.2012.737964

Received 25 July 2025. Accepted 27 January 2026.