

Exploring Mentorship Through the Lens of Low-Achieving Medical Students: A Qualitative Inquiry

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Abstract

Mentorship is integral to academic and professional success in medical education. This study aimed to explore low-achieving medical students' perceptions of the mentorship program, examine the underlying reasons for their noncompliance with scheduled mentoring sessions, and identify ways to improve mentorship delivery for academically at-risk students. Students were randomly assigned to focus groups across four medical programs, each led by a trained moderator. Sessions were audio-recorded, transcribed, and analysed using content analysis, incorporating field notes to capture non-verbal insights. Purposive sampling ensured the inclusion of students most impacted by mentoring disengagement. Two main themes emerged: Mentorship Experience and Mentorship Program Structure. Subthemes highlighted barriers, including poor mentor accessibility, weak interpersonal connections, and rigid program logistics. Students emphasised the need for a flexible, empathetic, and student-centred mentorship model. A three-phase framework—ice-breaking, structured engagement, and self-directed development—was proposed to foster effective transitions from passive participation to autonomous growth.

Keywords: mentorship, low-achieving students, student engagement, framework, academic support

1. Introduction

Mentoring students is a key factor contributing to a successful career in academic medicine (Reynolds, 2008). Mentoring refers to the relationship between a less experienced individual (mentee) and a more experienced individual (mentor) who can offer guidance and trusted advice (Fallatah, 2018). It develops professional attributes (Markakis, Beckman, Suchman, & Frankel, 2000) and eases socialisation into the profession (Ramani, 2006). Having a mentor is essential for a medical student's academic progression. Therefore, structured mentoring programs for health professionals have been developed in medical universities worldwide during the past few decades (Buddeberg-Fischer & Herta, 2006).

Low achievers are students who underperform on formative or summative assessments throughout their academic journey. Factors such as lack of interest and motivation, absenteeism, peer influences, difficulty with time management, language, and food preferences appear to have a significant impact on students' academic performance (Wai-Packard, 2009). Most of these issues can be resolved through effective counselling and guided mentoring early in a student's academic journey (Saraf et al., 2017). The problem arises when underperforming students don't meet their mentors for guidance. They pass unnoticed and result in either failing, dropping out or becoming low-performing doctors (Todres, Tsimitsiou, Sidhu, Stephenson, & Jones, 2012). Therefore, it is very important to explore the factors that lead to the absenteeism of these low achievers in mentoring programs.

Existing literature indicates that mentorship is widely regarded as a valuable educational and developmental support strategy in medical and higher education. It can help students with academic guidance, career planning, professional development, research engagement, psychosocial support, and well-being (Frei et al., 2010; Sambunjak et al., 2006). Medical students have also described effective mentoring as a meaningful personal connection with a faculty member who supports their personal and professional growth (Hauer et al., 2005). However, mentorship is not always experienced positively. Negative perceptions may occur when mentoring is poorly structured, irregular, inaccessible, mismatched, or lacks genuine engagement. Previous studies have reported problems such as distancing behaviour, lack of mentor expertise, mismatch between mentor and mentee, manipulation, and dysfunctional mentoring relationships

(Eby et al., 2000; Long, 1997). Therefore, exploring mentees' perceptions is important to understand whether the existing mentorship programme is experienced as meaningful developmental support or as a limited, compliance-based process.

While examining the challenges faced by mentoring programs, the literature identifies several limitations that can lead to their ineffectiveness and, hence, low engagement among medical students (Nuel, Nwakoby, & Ifechi, 2021). Various researchers have reviewed the literature and highlighted the risks and concerns related to mentoring programs. Their primary focus was on various challenges in mentoring related to staff and organisations, such as the consumption of faculty time, increased workload, training of faculty for mentoring, poor mentor-mentee matching, etc. (Long, 1997; Lord, Atkinson & Mitchell, 2008; Wright CA, Wright SD, 1987; Fornari et al., 2014). In the academic mentoring model, mentors help students improve their grades, credits, and persistence. Also, the faculty provides students with psychological support to some extent (Law, Hales, & Busenbark, 2020).

As outlined above, mentoring programs at universities worldwide are facing challenges that have led to ineffectiveness and low mentee engagement. Most of this research consists of literature reviews and surveys (Foster, 2001; Ehrich, Hansford & Tennent, 2004; Queiruga-Dios, Perez-Araujo, de Ávila-Arias, & Queiruga-Dios, 2023; Findyartini et al., 2023) or of qualitative, in-depth studies with faculty and students (Scholz et al., 2023; Rehman, Ali, Khalid, & Ali, 2023). To our knowledge, no study has exclusively focused on the needs of low-achieving students and the factors behind their absenteeism from scheduled mentoring sessions. There is a need to explore these factors in detail and to propose a mentoring framework that focuses on students who are in real need of mentoring. Hence, we have explored in depth the true voice of low-achieving students regarding the mentorship program. The primary objective of this study was to explore medical students' perceptions of the mentorship program and to identify the underlying reasons for their low participation, with particular focus on low-achieving students.

The following research questions were framed:

1. What is the perception of low-achieving undergraduate medical students towards mentorship programs?
2. Why are low-achieving medical students non-compliant with scheduled mentoring sessions?
3. How can medical universities improve their mentorship program for low-achieving undergraduate medical students?

2. Methodology

This study was situated within the interpretivist paradigm, which assumes that reality is socially constructed and subjective, and that individuals make meaning of their experiences in context (Edwards & Skinners, 2009). The epistemological stance underpinning this study is constructivism, which emphasizes the co-construction of knowledge through interaction between the researcher and participants (Illing, 2010). This perspective is particularly relevant for exploring the lived experiences and nuanced perceptions of low-achieving students regarding mentoring programs. The study design was descriptive and qualitative.

2.1 Study Setting

This study was conducted from February 2024 to May 2024. It included students in the College of Medicine across four academic programs: MBBS (Bachelor of Medicine and Bachelor of Surgery), MD (Doctor of Medicine), BBMS (Bachelor of Biomedical Sciences), and HDPCS (Higher Diploma in Preclinical Sciences). Participants represented a range of academic levels, from first-year students to final-year students.

2.1.1 Inclusion and Exclusion criteria

The inclusion criteria comprised students with average summative scores below 70%. The exclusion criteria comprised students whose average summative score was greater than 70% over the last five years of exams. The threshold for an overall score below 70% was selected because, within our institution, this cut-off formally designates a student as low achieving and places them at risk of academic probation; hence, the student is expected to receive enhanced academic and mentoring support.

2.1.2 Sampling Strategy and Recruitment of Participants

All mentors were contacted to provide average summative scores of their mentees, and the collected data were carefully analysed to identify mentees who had consistently performed poorly. From this group of low-scoring mentees, students were then invited to participate in the study. Hence, the sampling strategy was purposive.

2.2 Data Collection

Participants from the same program were randomly assigned to focus groups, each comprising 6–8 individuals. A total of six focus group discussions were conducted, involving 42 participants. Data analysis was performed concurrently with data collection, enabling ongoing assessment of data saturation. After the fifth focus group, no new themes were identified; therefore, data collection was concluded following the sixth focus group.

Students were grouped within the same academic program to ensure homogeneity and increase participants' comfort during the discussions. Each program differs in curriculum structure, assessment practices, and academic expectations; therefore, grouping students by program enabled them to relate more easily to one another's experiences, facilitating open dialogue. These groups participated in focus group discussions led by the authors. Before initiating the focus group sessions, the moderators provided participants with a detailed explanation of the research objectives. Additionally, written informed consent was obtained from everyone before their involvement in the discussion.

The focus group discussions were guided by predetermined questions outlined in Table 1; however, the conversations remained flexible and participant driven. Throughout the sessions, all interviews were audio-recorded to ensure accurate data collection and later analysis. Additionally, field notes were written by one of the facilitators to ensure comprehensive documentation of non-verbal cues, group dynamics, and observations that may not have been captured in the audio recordings. All focus groups were conducted on the university premises, in a quieter area.

Table 1. Predetermined Questions for the Focus Group Discussion

Questions used for the Focus group discussion
<i>What are your thoughts about mentoring and mentorship programs?</i>
<i>How would you define a mentorship program?</i>
<i>How do you think that the mentoring or the lack of mentoring is affecting you as a graduate student?</i>
<i>Have you been in touch with your mentor from the beginning of the program?</i>
<i>Can you comment on any disadvantages or advantages you face in receiving mentoring?</i>

The predetermined guiding questions for the focus group discussions were developed through an extensive review of literature on mentoring programs in medical education and factors influencing student engagement. The research team drafted and refined these questions to ensure they aligned with the study objectives and captured the breadth of student experiences related to mentorship. Questions were pilot tested with two students not included in the study to ensure clarity and relevance.

2.3 Data Analysis

The audio recordings were first transcribed using NVivo software, and the transcriptions were manually verified against the recordings. The authors then conducted the analysis. While analysing, field notes written during focus group discussions were also incorporated and reviewed. Alphanumeric codes were used to anonymise participants' identities during transcription and analysis. Each participant received a unique identifier, like FG5C for participant C in Focus Group 5.

This study employed conventional qualitative analysis as described by Hsieh & Shannon (2005), in which codes were derived inductively from the data and progressively grouped into categories and themes. Content Analysis, a commonly used method for analysing text data, was conducted through a systematic process of coding and theme identification. Subcategories were also developed (DuBois & Karcher, 2013).

To ensure rigour and depth of interpretation, three members of the research team independently analysed the transcripts. Each researcher conducted an initial round of open coding, after which the team met iteratively to compare codes, refine the coding framework, and reconcile any differences. Through repeated cycles of discussion and re-coding, emerging categories and sub-themes were examined in greater depth. This iterative, team-based approach strengthened the credibility and trustworthiness of the final themes.

Reflexivity Statement: The research team consisted of faculty members with extensive experience in clinical teaching, mentoring, and educational research. Given that the authors also served as focus group facilitators, we acknowledge the potential influence of our roles on participants' responses. To mitigate this, we ensured that facilitators did not serve as mentors to any participating students and emphasised confidentiality and non-judgment during data collection. The team maintained a conscious effort to interpret the data through the participants' perspectives rather than their own assumptions or institutional roles.

2.4 Ethical Statement

Ethical approval for this study was obtained from Gulf Medical University's IRB [redacted]. Before data collection, eligible students were invited to participate through an initial in-person, one-on-one meeting conducted by a member of the research team. During this session, the purpose of the study, the anonymous and voluntary nature of participation and participants' rights, including the right to withdraw at any time, were clearly explained. Written informed consent was obtained from all participants.

3. Results

The content analysis of the data resulted in two themes: Mentorship Experience and Mentorship Program. These themes emerged from various related themes, which in turn resulted from categories and codes. These themes and subthemes are shown as a Thematic Map in Figure 1. Following is the detailed account of the results:

3.1 Mentorship Experience

This theme encompasses the comprehensive journey of mentees in the mentorship program. It includes two subthemes: Mentorship Engagement and Mentorship Impact. These subthemes primarily focus on how participants communicate and build relationships, as well as the subsequent personal and academic effects of these engagements. They are as follows:

3.1.1 Mentorship Engagement

This sub-subtheme comprises the following categories:

-Communication Challenges: Participants mentioned that, at times, they struggled to connect with the support provided by their mentors, possibly due to communication challenges arising from generational differences and evolving perceptions. One such student said:

"It's hard to understand the explanations provided by my mentor. I feel more lost after meeting her." (FG2C)

-Mentor Availability: This sub-theme was supported by most of the students during focus group discussions. They have raised their concerns about the unavailability of their mentors. One of the students said:

"I want to meet my mentor more often as she is very encouraging and welcoming, but at the same time, she is very busy, and it's hard to find a time to meet her." (FG6D)

-Relationship Building: Participants stated that their relationship with their mentor was not particularly close enough to foster strong mentorship.

"We just meet once a month, I don't feel comfortable sharing anything with my mentors despite them being encouraging." (FG6B)

3.1.2 Mentorship Impact

This sub-theme primarily focuses on the effects of mentorship on participants, including academic guidance and personal growth benefits. It comprises the following categories:

-Academic Guidance: Students mainly appreciated the academic guidance they received from their mentor. One of the students said:

"The second mentor meeting was about performance, so that helped me. It made me reflect more on what I should have done to improve my results." (FG4E)

-Personal Growth: In addition to academic performance, some students also highlighted the personal growth they experienced through their mentorship. One of the students said:

"My mentor has not only helped me improve in my results, but she has also instilled great ethical concepts in me" (FG5D)

3.2 Mentorship Program Structure

This theme comprises students' perceptions of the mentorship program structure. It has two sub-themes: Mentorship Implementation and Mentorship Accessibility. This theme addresses issues related to mentors' accessibility and the program's flexibility, highlighting barriers to accessing support when needed and challenges in the program's implementation and logistics.

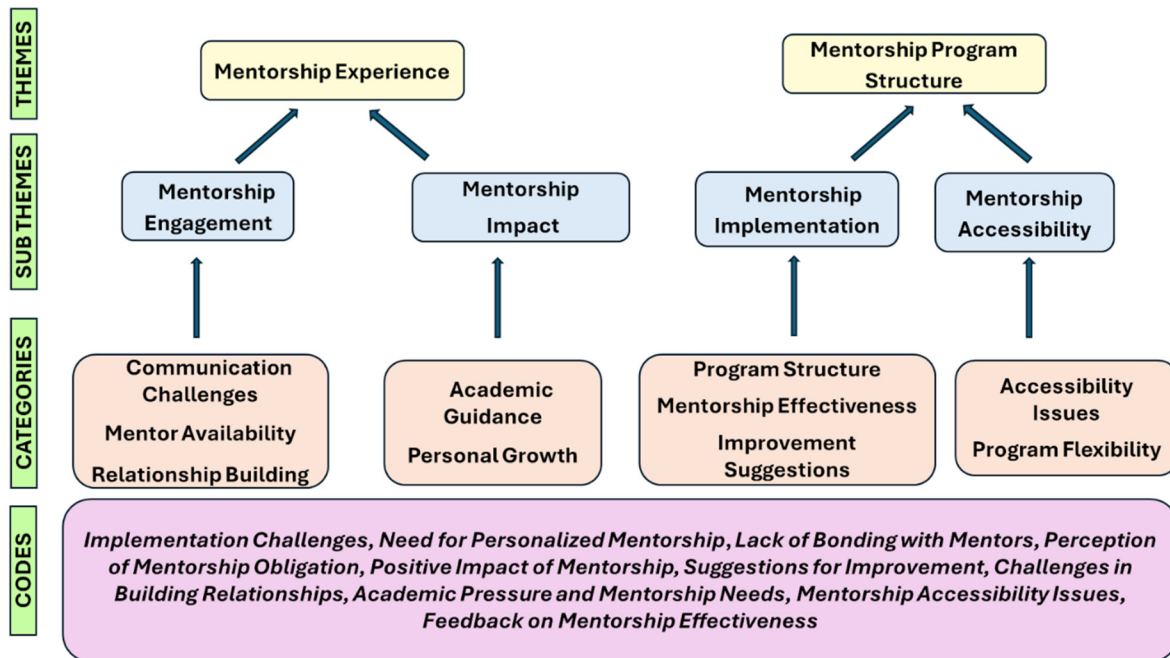


Figure 1. Thematic Map

3.2.1 Mentorship Implementation

-Program Structure: Students shared their experiences regarding the structure of the mentorship program. They expressed dissatisfaction with the program's rigidity. One of them said:

"It seems like it is an obligation that we need to fulfil. It's something that has to be done." (FG1A)

-Mentorship Effectiveness: Students voiced their concern about the effectiveness of the program. They said that: "Mentors only call us when there is a need to fulfil their documentation rather than providing real ongoing support. This undermines the real essence of a true mentorship program." (FG5C)

-Improvement Suggestions: Students suggest more flexible mentorship programs with more accessible mentors rather than a rigid methodological approach. One of the students said:

"Mentorship should not be limited to academic performance alone. Checking in only when students receive low marks can feel confrontational rather than supportive." (FG2D)

Students also suggested adopting a more holistic approach to mentorship. One of them said: "Effective mentorship should focus on the mentee as a whole, including their mental well-being, rather than just academic success." (FG3D)

3.2.2 Mentorship accessibility

-Accessibility Issues:

Students raised their concerns about their mentors not being easily accessible. One of them said:

"My mentor does not respond to emails and phone calls." (FG4E)

4. Discussion

Capturing students' voices and reflections yielded meaningful insights that can be utilised to enhance the design and delivery of the mentorship program and broader educational support services. Importantly, the findings have implications, offering valuable guidance for academic mentorship programs globally that face comparable challenges in engaging underperforming students.

The conceptualisation of mentoring does not follow a fixed definition. However, both our findings and existing literature suggest that there exist three main milestones in mentoring. These include mentors being more experienced than mentees, and mentors providing all the support required by the mentees. The third milestone develops during the mentorship process itself, which comprises building an interpersonal relationship, engagement, and commitment

between the mentor and the mentee (Abdullah et al., 2014; Cornelius, Wood, & Lai, 2016). Our students and the existing literature suggest that providing mentoring should promote their growth as whole people, and this can be achieved through guidance, reflection, and regulated learning. That is, mentoring never occurs in isolation (Ziegler, Gryc, Hopp, & Stoeger, 2021). Values, trust, and respect, along with a sense of belonging, are essential elements of the relationship between a mentor and their mentee (Mullen & Klimaitis, 2021).

Two main themes were deduced: mentorship experience & mentorship program structure. The mentorship experience was discussed in two subthemes: engagement, which involves communication challenges such as the mentor's availability, and impact, which focuses on academic progress and personal growth. Our second theme focused on the program with two subthemes: implementation and accessibility. The participants thought that the program needs to be evaluated and restructured with respect to its goals & policies. They added that it is also essential to assess whether participants feel compelled to join the program or see it as a beneficial opportunity for growth and success. Feedback is also essential to ensure the program's effectiveness and to better understand students' needs.

We developed a conceptual framework (Figure 2) to establish an effective mentorship program. An essential component of this framework is greater program flexibility, including adaptable meeting schedules, individualised mentoring frequency, and responsiveness to students' evolving academic and personal needs. This design targets explicitly low-achieving students. This framework is based on Self-Determination Theory (SDT), which provides a useful foundation for an academic mentorship model by emphasising three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2017). In mentoring, autonomy can be supported through collaborative goal setting, competence through structured feedback and academic guidance, and relatedness through a trusting, supportive mentor-mentee relationship. When these needs are addressed, mentoring becomes more than a remedial or advisory process; it becomes a meaningful developmental experience that strengthens students' motivation, self-regulated learning, confidence, and sense of belonging (Niemic & Ryan, 2009).

We propose that the program strategy should be implemented in three phases that allow the smooth transition from Mentor-driven to Mentee-driven Engagement:

- Ice-breaking phase
- Structured engagement phase
- Self-directed engagement phase

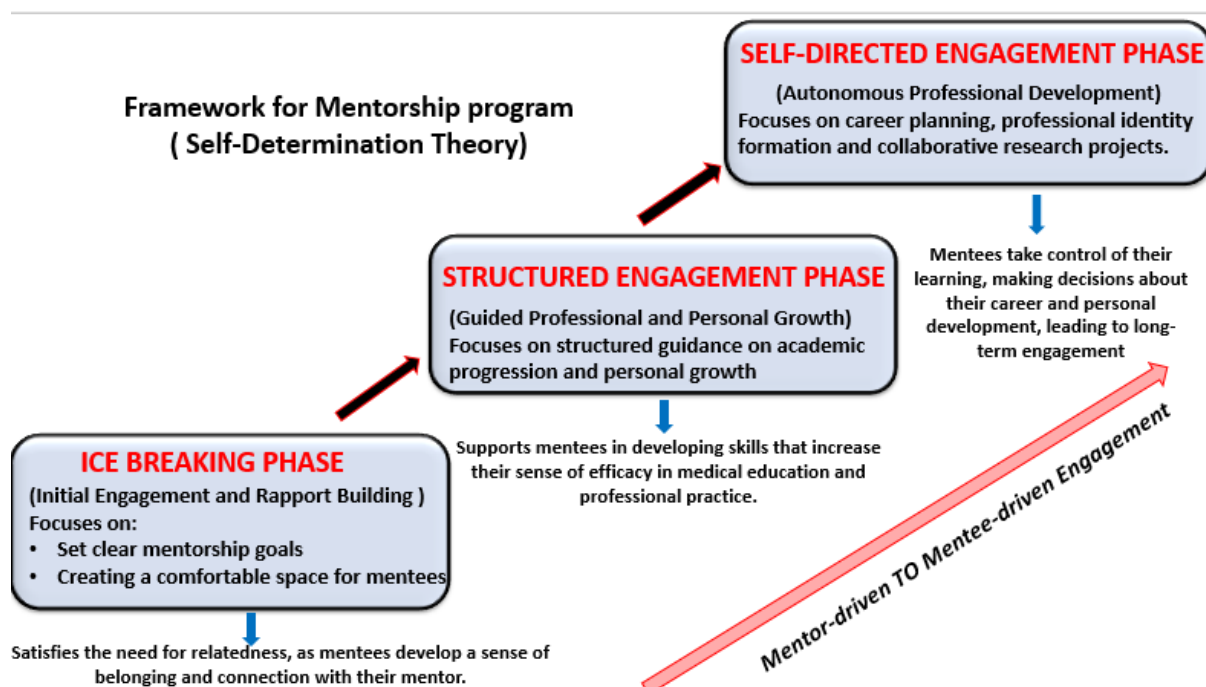


Figure 2. Conceptual Framework for Improving the Mentorship Program

In the ice-breaking phase, we should set our mentorship goals and create a comfortable space for the mentees, which we believe will guide them on their journey toward personal growth and development.

The interaction between faculty and their students is a special kind of relationship, and it can be approached from various perspectives. It finally improves the quality of teaching and learning (Tiberius, Sinai & Flak, 2002). The mentor-mentee meetings must provide a confidential space in which the student can share their opinions with comfort and confidence and understand what can help them grow personally (Queiruga-Dios, Perez-Araujo, de Ávila-Arias, & Queiruga-Dios, 2023).

Then, the transition will follow the structured engagement phase, which is the actual guided professional development station. Here, we provide structured guidance for academic progression and personal growth. The mentees find the support and develop skills that increase their sense of efficacy in medical education and professional practice. We propose to enrol the low-achieving students in scientific activities targeting their weak areas (tailored to each student) that can eventually upgrade their academic performance.

In a 2017 study conducted at an Indian medical school (Saraf et al., 2017), low-achieving students were enrolled in a special mentorship program comprising faculty counselling for emotional support and motivation, interactive discussions, and guided assignments. The post-intervention exam results revealed that students achieved better grades when they participated in mentoring-based courses and sessions.

The mentorship program conducted at Universidad Francisco de Vitoriain is part of a course called Personal Skills and Competencies, in which students engage in educational activities that develop their personal skills in critical thinking, proactivity, and personal knowledge. The program's effectiveness was measured by the scores they obtained on exams conducted after the course, which proved effective (Queiruga-Dios, Perez-Araujo, de Ávila-Arias & Queiruga-Dios, 2023).

In the self-directed engagement phase, the student can take the lead and make decisions. It is called the autonomous professional development phase, during which the student can plan their career and collaborate on research projects; that is, they develop their professional identity.

A previous study analysed fourth-year medical students' perceptions of the mentorship program conducted at their medical school in Athens. The students revealed that their mentorship experiences had a substantial impact on their decisions regarding rotation choices, residency programs, field of practice, and career trajectory (Bhatnagar, Diaz & Bucur, 2020). Poor mentorship can undermine medical students' eagerness, motivation and interest in their medical careers (Farkas, Allenbaugh, Bonifacino, Turner & Corbelli, 2019).

It is worth noting that most educational institutions are struggling with their mentorship programs, which require continuous evaluation and development. Thus, we assume that our developed framework could provide simple, practical guidelines for an improved mentorship service.

5. Conclusion & Future Recommendations

This study provides an in-depth exploration of low-achieving medical students' perceptions of institutional mentorship programs, revealing critical insights into the barriers that hinder effective engagement. Despite the presence of a structured mentoring system, issues such as mentor availability, communication challenges, limited accessibility, and the program's perceived rigidity significantly contribute to students' disengagement. The findings underscore the importance of building authentic, student-centred mentoring relationships grounded in trust, empathy, and ongoing academic and personal support.

Students clearly articulated a need for mentorship programs that are more flexible, holistic, and responsive to individual needs, especially for those who are underperforming academically. Importantly, these findings resonate with the global challenges faced by mentorship initiatives in medical schools, offering valuable guidance for program refinement for institutions worldwide seeking to enhance student engagement and success through mentorship. To address the identified gaps, a three-phase framework was developed comprising ice-breaking, structured engagement, and self-directed engagement to transition mentees from passive recipients to active participants in their personal and professional development.

Our study had limitations due to data collection from a single institution. Additionally, as the authors were faculty members at a single university, and served as facilitators for the focus group discussions, there is a potential for social desirability bias, in which participants may have altered their responses to align with perceived expectations. Measures such as ensuring facilitator-participant separation (i.e., avoiding direct mentor-mentee pairing) and emphasising

confidentiality were implemented to mitigate this bias.

Future research should assess the long-term outcomes of mentorship on academic resilience, career decision-making, professional identity formation, and learner well-being. Studies may also examine how mentorship influences students' transition into clinical practice, their ability to cope with academic challenges, and their engagement with reflective and self-directed learning. Comparative studies across diverse cultural and institutional contexts can further inform best practices. Additionally, evaluating the effectiveness of group vs one-on-one mentoring, peer mentoring models, and structured vs informal mentoring approaches will help refine mentorship strategies. There is also a need for research into the mentor's perspective, exploring the challenges, motivations, and training needs of faculty mentors to ensure the sustainability and impact of mentoring programs.

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Authors contributions

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