Research Square

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What Makes an Effective Tutoring Programme for Early-Career Medical Teachers? Perspectives of Tutors and Tutees

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Abstract

Introduction:

Globally, higher education institutions face a growing shortage of qualified academic teachers, particularly in medical and health-professions education. Many early-career faculty at medical universities enter academia with strong clinical or disciplinary expertise but limited pedagogical preparation, emphasizing the need for structured professional development and institutional support. Tutoring offers a promising, though still underexplored, approach to faculty development and professional integration, with a notable lack of evidence from medical universities. This study aimed to design, implement, and evaluate a pilot tutoring program for early-career academic teachers at a medical university, examining both its perceived benefits for tutors and tutees and their perspectives on essential tutor competencies.

Methods

A mixed-methods design included six stages encompassing focus group research, qualitative analysis, program development, implementation, and evaluation. Thirty-nine tutors completed a 20-hour training course, each subsequently supporting one early-career academic teacher through five individual tutorials. Post-program questionnaires assessed perceived benefits, essential tutor competencies, and the extent to which participating tutors demonstrated these competencies. Quantitative comparisons between tutors' and tutees' perspectives were supplemented by qualitative feedback.

Results

Focus groups highlighted the need for pedagogical training, institutional guidance, and individualized support for new academic staff. Tutors reported gains in teaching competencies, organization, and reflective awareness, while tutees emphasized professional growth, confidence, and better understanding of university procedures. Both groups emphasized interpersonal, pedagogical, and organizational competencies as essential tutor attributes. However, tutees more frequently identified extensive subject-matter knowledge as essential than tutors (80% vs. 46%).

Conclusions

The pilot tutoring program was well accepted and perceived as beneficial by both tutors and tutees. Findings highlight the importance of combining individualized professional support with clearly defined tutor competencies encompassing interpersonal, pedagogical, and organizational skills. Differences in expectations regarding subject-matter expertise underscore the need for explicit role definition and appropriate tutor–tutee matching.

Introduction

Across Europe and worldwide, higher education systems are facing a growing shortage of qualified academic teachers, particularly within medical and health-professions education. Multiple studies have reported increasing difficulties in recruiting and retaining academic staff, an ageing workforce, and declining interest among younger professionals in pursuing academic careers [1, 2]. These trends are driven by several converging factors: expanding student enrolments, rising teaching loads, and limited institutional incentives for professional advancement [3]. The problem is especially evident in the medical sector, where universities must educate more physicians, nurses, and allied-health professionals to meet the global healthcare workforce deficit projected by the World Health Organization to reach 10 million by 2030 [4].

At the same time, many early-career university teachers enter academia with strong disciplinary expertise but limited preparation for teaching [5]. Empirical studies have shown that university instructors often lack formal training in pedagogy, curriculum design, assessment, and student engagement strategies, particularly those recruited directly from clinical or research settings [6, 7]. The transition from clinician or researcher to academic teacher is rarely supported by structured induction programs, resulting in uncertainty, inconsistent teaching quality, and slower professional adaptation [8].

Professional development for academic teachers has thus become a strategic priority rather than a supplementary activity. Åkerlind identified several domains of teacher growth — expanding disciplinary knowledge, accumulating the practical experience, developing teaching strategies, identifying more and less effective approaches and deepening the understanding of how one's teaching influences students – and emphasized that these competencies evolve through guided, reflective support [9]. The early stages of an academic career are particularly critical for establishing effective teaching practices and professional identity, yet this formative period often coincides with limited mentoring and institutional support [10].

In response, many higher education institutions are exploring structured approaches to support novice educators. One such model is tutoring, in which an experienced academic (tutor) provides individualized guidance, feedback, and pedagogical support to a less-experienced colleague (tutee). Unlike traditional workshops or one-off faculty-development sessions, tutoring allows continuous, personalized growth grounded in the tutor's experience and the tutee's individual needs [11].

Although mentoring and tutoring frameworks for students have been extensively studied [12, 13], structured tutoring programs aimed at supporting early-career academic teachers remain under-researched, particularly in medical universities. Addressing this gap, we performed a study to design, implement, and evaluate a pilot tutoring program for early-career university teachers. The present study examines both the perceived benefits of the tutoring program for tutors and tutees and their perspectives on essential tutor competencies, including the extent to which these competencies were demonstrated in practice, to inform the development of structured faculty support initiatives in medical education.

Methods

The study received approval from the Ethics Committee at the Medical University of Lublin (reference number: KE-0254/51/02/2023). All procedures complied with the principles of the Declaration of Helsinki. All participants voluntarily agreed to participate in the study and provided informed consent prior to their participation.

Overview of the research process

The study aimed to develop and pilot a structured tutoring program designed for academic teachers at the early stage of their university careers. The specific objectives were:

(1) to identify selected aspects of the professional environment of academic teachers employed at a medical university, and

(2) to assess the benefits experienced by participants during the pilot implementation of the tutoring program.

The research was conducted in six consecutive phases:

1. Preparation for conducting focus groups;
2. Pilot focus group study;
3. Focus group study;
4. Analysis of focus group findings;
5. Development of implementation guidelines for the tutoring program;
6. Implementation and pilot testing of the tutoring program (training sessions and tutorials).

Study design

An institutional working group was established to develop a structured tutoring program for early-career academic teachers. The study employed a mixed-methods approach, combining an initial needs assessment through focus group discussions with a subsequent evaluation of the implemented program. The evaluation addressed both the perceived benefits of tutoring and participants' expectations and assessments of tutor competencies.

Focus group study

Focus group discussions were moderated by a sociologist and a psychologist and involved academic teachers from all faculties, including experienced educators with high teaching evaluations and newly employed staff. A panel of educational psychologists and senior faculty members developed the discussion guide, which was initially piloted with six participants representing different academic ranks and levels of experience.

The finalized guide consisted of two sections. The introductory section included eight questions addressing working conditions, professional motivation, workplace challenges, and institutional support. The main discussion explored the needs of newly employed teachers and potential institutional measures to facilitate their adaptation, with particular emphasis on the definition of tutoring, essential tutor competencies, areas of support, and training requirements for prospective tutors. The findings informed the development of the tutoring program.

Implementation of the tutoring program

Thirty-nine academic teachers completed training and were certified to serve as tutors. Each tutor was subsequently assigned to support one tutee.

Inclusion criteria:

- Tutors: Academic teachers employed in a teaching or research-and-teaching position who met institutional performance requirements and demonstrated motivation to provide individualized support to other faculty members. Candidates were required to have a minimum of five years of academic experience and a positive evaluation in the university's assessment system. Two qualification pathways were defined:
- Option 1: ≥10 years of academic experience, fulfillment of the annual minimum requirements for the position in both teaching and organizational domains, and confirmed motivation to provide tutoring support.
- Option 2: ≥5 years of academic experience, performance exceeding the annual minimum requirements for the position in both teaching and organizational domains, and confirmed motivation to provide tutoring support.

Tutor recruitment was conducted through a university-wide call for applications. Candidates submitted online forms through a dedicated platform. A total of 66 teachers applied, representing all faculties of the medical university; 40 were accepted for training. Priority was given to award-winning and pedagogically distinguished faculty (e.g., recipients of the *Student's Friend* award, participants in the *Teaching Masters* program, holders of the Rector's Award for teaching excellence, and graduates of studies in medical education).

- Tutees: Newly appointed academic teachers or those with ≤ 2 years of teaching experience at the university.

Tutor training

Selected tutors participated in a 20-hour preparatory training course, delivered in eight small groups (average 5 participants per group) between February and April 2023. Training materials covered the

foundations of adult learning, tutoring methodology, effective feedback, motivation strategies, and reflective teaching. Thirty-nine participants completed the training successfully.

Tutorial phase

In the second phase, 39 tutees were enrolled. Most tutees were paired with tutors from the same faculty, although cross-faculty matches were also allowed. Each tutor–tutee pair conducted five one-hour individual meetings (tutorials) over at least one month. Meetings were held in person or online, with the first session always conducted face-to-face. All sessions were documented in structured meeting record forms. A total of 195 tutorials were conducted during the pilot phase. Meetings adhered to data-protection standards and confidentiality guidelines.

Program evaluation instruments

Following completion of the program, separate electronic questionnaires were administered to tutors and tutees. The tutor questionnaire contained nine items, while the tutee questionnaire included eight items. Most questions used a five-point Likert scale (1 = strongly disagree; 5 = strongly agree) to assess the program's organization, achievement of objectives, and perceived benefits for professional and teaching-related development. Optional open-ended questions collected additional feedback and suggestions for improvement.

A complementary assessment examined tutor competencies. Both groups identified attributes considered essential for academic tutors using structured questions with predefined response options and opportunities to provide additional responses. Tutees also evaluated whether their assigned tutors demonstrated these competencies. This enabled comparisons between tutors' and tutees' expectations and tutees' assessments of their tutors' competencies.

Questionnaire participation was non-anonymous. Participants were informed that their identities would be recorded and provided informed consent.

Results

Focus group findings

Participants responded to a series of structured questions exploring their professional experiences, workplace challenges, and expectations regarding institutional support (Table 1). Across the focus groups, responses were largely consistent. Faculty members described their university as an institution for those *who wish to grow professionally*, emphasizing opportunities for personal development, knowledge sharing, and continuous learning. They valued teamwork based on *shared responsibility for common goals, collaboration, and exchange of information*. At the same time, participants identified

insufficient feedback from students, limited opportunities for individualized approaches to teaching, and the need for continuous professional development as recurring challenges.

Table 1
Questions within the focus group discussion.

Question	Answer
We are an ideal employer for those who...	*Wish to grow professionally*
The key aspect of my work for me is that...	*I can share my knowledge and that I am challenged to develop in various areas*
The key priority for the team I work in is…	*Shared responsibility for common goals and tasks, a focus on collaboration, complementing each other's strengths, and exchanging information*
What do I need to perform my job even better?	*Continuous professional development and improvement of internal relationships*
The thing I appreciate most in working with students is…	*Engaging with young people, learning from them, exploring new topics, being encouraged to investigate, and consequently, personal and professional growth*
What I find most lacking in working with students is…	*Positive feedback, including delayed feedback, as well as time for a more personalized approach to students*
What motivates me most in my professional work is…	*A sense of duty*
List the three most essential skills for an academic teacher.	*Being open-minded, patient, mastery of subject matter and the ability to teach effectively.*

A particular concern was the limited pedagogical preparation of newly appointed academic teachers. Participants emphasized that new faculty members often require support not only in developing teaching competencies but also in understanding institutional procedures and adapting to their professional responsibilities. They advocated introductory pedagogical training and individualized guidance from experienced colleagues.

Although participants described tutoring in different ways, including mentorship, supervision, professional guidance, and collaborative problem-solving, they consistently emphasized its developmental and supportive character. The discussions identified three main domains of competencies considered important for academic tutors: organizational and institutional knowledge, interpersonal and communication skills, and pedagogical competencies. Participants particularly valued openness, active listening, constructive feedback, patience, and the ability to motivate and support less-experienced colleagues. They also stressed that tutors should be familiar with university procedures and able to guide tutees through teaching-related and organizational challenges.

Suggested forms of support included assistance with lesson planning, preparation of teaching materials, observation of teaching sessions, feedback on instructional practices, and guidance on institutional responsibilities. Participants further emphasized the importance of dedicated tutor training covering communication, knowledge transfer, stress management, and contemporary teaching methods. These findings informed the development of the tutoring program and the preparation of participating tutors.

Evaluation of the tutoring program

All 39 trained tutors and 39 tutees completed their respective post-program evaluation questionnaires. Responses indicated generally positive perceptions of the program's organization, achievement of objectives, and usefulness for professional development (Table 2). Neither group selected “disagree” or “strongly disagree” for any of the evaluated statements.

Table 2
Summary of tutors’ and tutees’ responses to the tutoring programme evaluation survey (number of indications). The response categories “Disagree” and “Strongly disagree” were omitted from the table, as neither category was selected by any respondent.

	Survey question	Difficult to say	Agree	Strongly Agree
Results of the tutee survey.	1) Mutual setting of the meeting objectives	0	4	35
	2) Achievement of the meeting objectives	1	3	35
	3) Enhancement of the Tutee’s knowledge	1	4	34
	4) Enhancement of teaching competencies	1	5	33
	5) Usefulness of the skills acquired for future teaching activities	1	3	35
	6) Usefulness of the acquired knowledge and skills for generating new ideas	1	8	30
	7) Meeting the Tutees’ expectations	1	3	35
Results of the tutor survey.	1) Mutual setting of the meeting objectives	0	7	32
	2) Achievement of the meeting objectives	0	12	27
	3) Enhancement of the Tutor’s knowledge	0	11	28
	4) Enhancement of teaching competencies	1	10	28
	5) Usefulness of the skills acquired for future teaching activities	0	9	30
	6) Usefulness of the acquired knowledge and skills for generating new ideas	0	10	29

Among tutors, the proportion selecting “strongly agree” ranged from 69% to 82% across the six evaluation items. The highest number of strongly positive responses concerned the mutual setting of

meeting objectives (n = 32), followed by the usefulness of acquired skills for future teaching activities (n = 30). Most tutors also strongly agreed that participation enhanced their knowledge (n = 28) and teaching competencies (n = 28), while 29 indicated that the acquired knowledge and skills could contribute to generating new ideas.

Tutees similarly reported high levels of satisfaction, with 77–90% selecting “strongly agree” across the seven survey items. The highest number of strongly positive responses concerned the mutual setting of meeting objectives, achievement of meeting objectives, usefulness of acquired skills for future teaching activities, and fulfillment of expectations (n = 35 for each item). Most tutees also strongly agreed that participation enhanced their knowledge (n = 34) and teaching competencies (n = 33). The usefulness of acquired knowledge and skills for generating new ideas received 30 strongly positive responses.

Participants additionally identified specific areas in which tutees' competencies had improved during the program (Fig. 1). Both tutors' assessments and tutees' self-assessments most frequently indicated professional and personal development, familiarity with university procedures, organizational competencies, and the ability to fulfill employer expectations. Communication skills, metacognitive competencies, and relationship-building were also reported, although less frequently. The distribution of responses was broadly similar between the two groups, with tutees reporting improvements more frequently in several areas, particularly metacognitive competencies and community-oriented attitudes.

Tutor competency expectations and assessments

In addition to evaluating the tutoring program, tutors and tutees identified the competencies they considered essential for academic teachers serving as tutors (Fig. 2). Both groups endorsed a broad and largely overlapping range of attributes, particularly those related to interpersonal communication, pedagogical support, and the ability to respond to individual needs.

Among tutors, the most frequently indicated competencies were openness to the tutee's needs and the ability to motivate and support the tutee (n = 37 for each), followed by active listening and asking meaningful questions (n = 35), defining goals and assessing progress (n = 34), and providing constructive feedback (n = 33). Familiarity with diverse teaching techniques was also frequently selected (n = 31), whereas organizational skills (n = 22) and extensive subject-matter knowledge (n = 18) received fewer indications.

Tutees similarly emphasized openness to their needs (n = 34), familiarity with diverse teaching techniques (n = 33), the ability to motivate and support (n = 32), and active listening and asking meaningful questions (n = 32). However, extensive subject-matter knowledge was considered essential by 31 tutees, compared with 18 tutors. This was the only competency for which a statistically significant difference between tutors' and tutees' expectations was identified (79.5% vs. 46.1%, respectively; $p = 0.0023$).

Tutees additionally evaluated the competencies demonstrated by their assigned tutors (Fig. 3). Overall, the assessments were positive, with each of the nine evaluated competencies receiving at least 31 indications. The most frequently recognized attributes were openness to the tutee's needs and extensive subject-matter knowledge (n = 34 for each), followed by patience, active listening and asking meaningful questions, and the ability to motivate and support (n = 33 for each). Organizational skills were indicated by 32 tutees, while the remaining competencies, including goal setting, constructive feedback, and familiarity with diverse teaching techniques, each received 31 indications. No additional competencies were identified through the open-ended response option.

Further comparisons between tutors' expectations and tutees' assessments of their assigned tutors revealed differences in two areas. Extensive subject-matter knowledge was reported as a demonstrated tutor competency by 87.2% of tutees, compared with 46.1% of tutors who considered it essential ($p = 0.0001$). Similarly, organizational skills were reported as a demonstrated competency by 82.1% of tutees, whereas 56.4% of tutors identified them as essential ($p = 0.0142$). Across the remaining competencies, the distributions of responses were broadly comparable.

Qualitative feedback and suggestions

Open-ended responses provided additional insights into participants' experiences and suggested improvements for future editions of the program. Tutors emphasized the importance of continuous professional development and opportunities to exchange teaching experiences. As one participant noted, “Competency development is not limited to formal training — it also involves implementing new methods, exchanging experiences, and working together to find common solutions” (T03). Another highlighted the potential value of additional training: “Workshops led by experienced tutors, including those from other universities, would be highly valuable” (T02).

Several suggestions concerned the organization and duration of the tutoring program. Participants recommended extending the program to a full academic year or introducing a multi-year model lasting two to three years to facilitate more sustained professional relationships. Greater flexibility in the frequency and duration of meetings was also proposed, particularly to enable tutors to observe tutees' teaching sessions and provide individualized feedback.

Other recommendations included increasing the number of preparatory training hours, organizing periodic meetings for tutors to exchange experiences, and introducing small-group tutorials involving two or three tutees per tutor as an optional format. Together, these suggestions reflected participants' interest in developing a more flexible and sustained model of academic tutoring.

Discussion

This study provides insights into the development and evaluation of a structured tutoring program for early-career academic teachers at a medical university, addressing both its perceived benefits and the competencies considered essential for effective tutoring. The findings indicate that the program was

positively received by tutors and tutees, who reported benefits related to professional development, teaching competencies, and institutional adaptation. At the same time, the assessment of tutor competencies revealed substantial agreement between both groups regarding the importance of interpersonal and pedagogical skills, alongside a notable difference in their expectations concerning subject-matter expertise. These findings highlight the complementary importance of program organization, individualized support, and appropriate tutor preparation in faculty development.

The need for structured support during the early stages of an academic teaching career is well documented. Academic teachers entering medical education frequently encounter challenges associated with developing their teaching identity, balancing professional responsibilities, and adapting to institutional expectations. Sethi et al. [14] described tensions experienced by medical educators in negotiating their academic and professional roles, illustrating the complexity of developing an identity as an educator alongside other responsibilities. In our study, focus group participants similarly identified insufficient pedagogical preparation and difficulties navigating institutional procedures as important challenges for newly appointed faculty members. These findings support the relevance of structured induction programs that address both educational and organizational aspects of academic work. Systematic reviews of faculty development initiatives have highlighted the importance of purposeful educational design, feedback, reflection, and institutional support in promoting professional learning [15, 16].

The high level of satisfaction reported by both tutors and tutees suggests that the program was well accepted and perceived as relevant to participants' professional needs. Most respondents positively evaluated the achievement of tutorial objectives, the usefulness of acquired knowledge, and the perceived development of teaching-related competencies. These findings are consistent with the systematic review by Steinert et al. [15], which reported high participant satisfaction and improvements in confidence, educational knowledge, and self-reported teaching practices following faculty development interventions. Importantly, the benefits reported in our study extended to tutors themselves, who perceived improvements in their knowledge and teaching competencies and recognized opportunities to generate new ideas for educational practice. Similar observations have been described in workplace-based faculty development approaches, where peer coaching, feedback, and reflective learning may support the professional development of participating educators [17, 18]. Nevertheless, these parallels should be interpreted cautiously, as our evaluation measured perceived benefits rather than objectively demonstrated changes in teaching performance.

Beyond overall satisfaction, participants identified professional and personal development, familiarity with university procedures, and organizational competencies as prominent areas of perceived improvement. The convergence between tutors' assessments and tutees' self-assessments suggests that both groups recognized broadly similar areas of potential benefit. Particularly noteworthy is the importance attributed to understanding institutional procedures, indicating that tutoring may serve not only as a means of pedagogical support but also as a form of professional orientation. This aspect is relevant to medical universities, where newly employed academic teachers may be required to navigate

teaching, research, clinical, and administrative responsibilities simultaneously. The workplace-based faculty development model proposed by Yasmeen and Yusoff [17] similarly emphasizes institutional support, peer coaching, and reflective practice as interconnected components of professional learning. Our findings suggest that providing individualized guidance on institutional functioning may therefore represent a valuable component of structured faculty support.

An important contribution of the present study is the identification of competencies considered essential for academic tutors. Both tutors and tutees particularly emphasized openness to individual needs, the ability to motivate and support others, active listening, meaningful questioning, and constructive feedback. These findings correspond with research on mentoring relationships in academic medicine. Straus et al. [19] identified reciprocity, mutual respect, clear expectations, and effective communication as characteristics of successful mentoring relationships, while Hill et al. [20] highlighted the developmental and relational dimensions of mentoring in academic health centers. Similarly, the AMEE Guide No. 167 emphasizes the importance of relationship-building, communication, and shared expectations in establishing effective mentorship in health professions education [21]. Although mentoring and the more structured, task-oriented tutoring implemented in our program are not identical, these approaches share an emphasis on individualized professional support. The prominence of interpersonal competencies in our findings suggests that effective tutor preparation should extend beyond subject knowledge and familiarity with institutional procedures to include the development of communication and feedback skills.

The focus group findings further demonstrated that participants did not share a uniform understanding of tutoring, describing it variously as professional guidance, collaborative problem-solving, mentorship, or supervision. Despite these differences, they consistently emphasized its developmental rather than purely administrative character. This observation reflects the conceptual diversity identified by Nuis et al. [22], whose systematic review demonstrated considerable variation in definitions and approaches to mentoring in higher education. Such ambiguity may have practical consequences for program implementation, particularly when tutors and tutees enter the relationship with different expectations. Clearly defining the objectives, responsibilities, and boundaries of tutoring may therefore be important for establishing a shared understanding of the relationship and ensuring that the support provided corresponds to participants' needs [21, 22].

The most pronounced difference between tutors' and tutees' expectations concerned extensive subject-matter knowledge, which was considered essential by 31 tutees (79.5%) but only 18 tutors (46.2%). This finding suggests that early-career academic teachers may attach greater importance to disciplinary expertise than their more experienced colleagues anticipate. One possible explanation is that tutees regard extensive subject knowledge as a source of professional credibility and reassurance when adapting to teaching responsibilities. Tutors, in contrast, may place greater emphasis on their developmental role, prioritizing guidance, feedback, and support over specialized disciplinary instruction. However, these explanations remain hypothetical, as the study did not directly investigate participants' reasons for prioritizing particular competencies. Nevertheless, the observed difference highlights the

importance of explicitly discussing expectations at the beginning of a tutoring relationship. It also suggests that matching tutors and tutees within related disciplines, where feasible, may help address expectations concerning subject-matter expertise while maintaining the broader developmental objectives of the program.

Tutees' assessments of their assigned tutors were consistently positive, with all evaluated competencies receiving at least 31 indications. Openness to individual needs and extensive subject-matter knowledge were the most frequently recognized attributes, followed by patience, active listening, and the ability to motivate and support. These findings suggest that the participating tutors were generally perceived as possessing the competencies expected of them. Notably, extensive subject-matter knowledge and organizational skills were reported more frequently in tutees' assessments of their tutors than in tutors' own indications of which competencies were essential.

The findings also provide practical directions for refining future tutoring programs. Participants recommended extending the duration of the program, introducing greater flexibility in meeting arrangements, increasing opportunities for teaching observation, and organizing additional training and meetings for tutors. These suggestions are consistent with evidence highlighting the value of workplace-based learning and direct observation in faculty development. For example, Tsai et al. [23] reported improvements in novice problem-based learning tutors' self-rated confidence following a faculty development intervention incorporating tutor shadowing. Although the educational context and evaluation methods differed from those of our study, their findings support further investigation of observational and feedback-based approaches to tutor preparation. Incorporating opportunities to observe teaching sessions and discuss authentic educational challenges could complement the individualized guidance already provided within the program. However, the proposed extensions and organizational modifications were recommendations from participants rather than interventions evaluated in the present study.

Another consideration concerns the balance between developmental support and institutional responsibilities. Focus group participants emphasized the importance of trust, openness, and individualized assistance, suggesting that the tutor–tutee relationship should not be reduced to an administrative induction process. Research by Loosveld et al. [24] demonstrated that combining mentoring support with assessment responsibilities may create tensions within the mentoring relationship. Although the context of their study differed from ours, the findings underscore the importance of clearly defining the tutor's role and establishing appropriate boundaries. Maintaining confidentiality, encouraging open communication, and distinguishing developmental guidance from formal performance assessment may help preserve the supportive character of tutoring.

Strengths and limitations

An important strength of this study is its integration of an initial needs assessment with the subsequent implementation and evaluation of a structured tutoring program. The inclusion of both tutors' and tutees'

perspectives allowed the identification of perceived benefits and areas of agreement or divergence in competency expectations. Furthermore, all 39 tutors and 39 tutees completed the post-program evaluation, providing responses from the entire participating cohort.

Several limitations should nevertheless be acknowledged. First, the study was conducted at a single medical university with a relatively small sample, limiting the generalizability of its findings to other institutional settings. Tutors were selected based on academic experience, motivation, and favorable performance evaluations, potentially contributing to the high competency ratings reported by tutees. Second, the evaluation relied predominantly on self-reported perceptions collected after program completion. The absence of baseline measurements, a comparison group, and objective assessments of teaching performance prevents conclusions regarding the causal effectiveness of the tutoring intervention. Additionally, the relatively short duration of the pilot program and the absence of longer-term follow-up prevented evaluation of sustained changes in teaching practices, professional adaptation, or institutional outcomes.

Future research should involve larger, multi-institutional samples and longitudinal study designs incorporating objective indicators of teaching competence. Direct classroom observation, structured teaching evaluations, student feedback, and measures of professional adaptation could provide a more comprehensive assessment of program effectiveness. Further investigation of tutor–tutee matching, particularly the influence of disciplinary alignment and differences in competency expectations, would also be valuable.

Conclusion

Taken together, the findings indicate that structured tutoring was perceived as a valuable form of support for early-career academic teachers and that interpersonal, pedagogical, and organizational competencies constitute important elements of the tutor role. The divergence regarding subject-matter expertise highlights the need to align expectations and define tutoring responsibilities clearly. While further research is required to establish the effectiveness and long-term outcomes of such programs, the present study offers preliminary evidence to inform the design and refinement of individualized faculty development initiatives in medical education.

Declarations

Ethics approval and consent to participate

The study was approved by the Bioethics Committee of the Medical University of Lublin, approval no. KE-0254/51/02/2023. The principles outlined in the Declaration of Helsinki were respected. All participants provided explicit informed consent to participate in the study.

Clinical trial number

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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Author Contribution

SP, ESK, MS and KT designed the study. SP obtained ethical approval, recruited the participants and collected the data. MB and MB wrote the manuscript, with SP and KT as their supervisors. All authors were involved in data analysis, editing and commenting on various iterations of the manuscript.

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Data Availability

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

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Figures

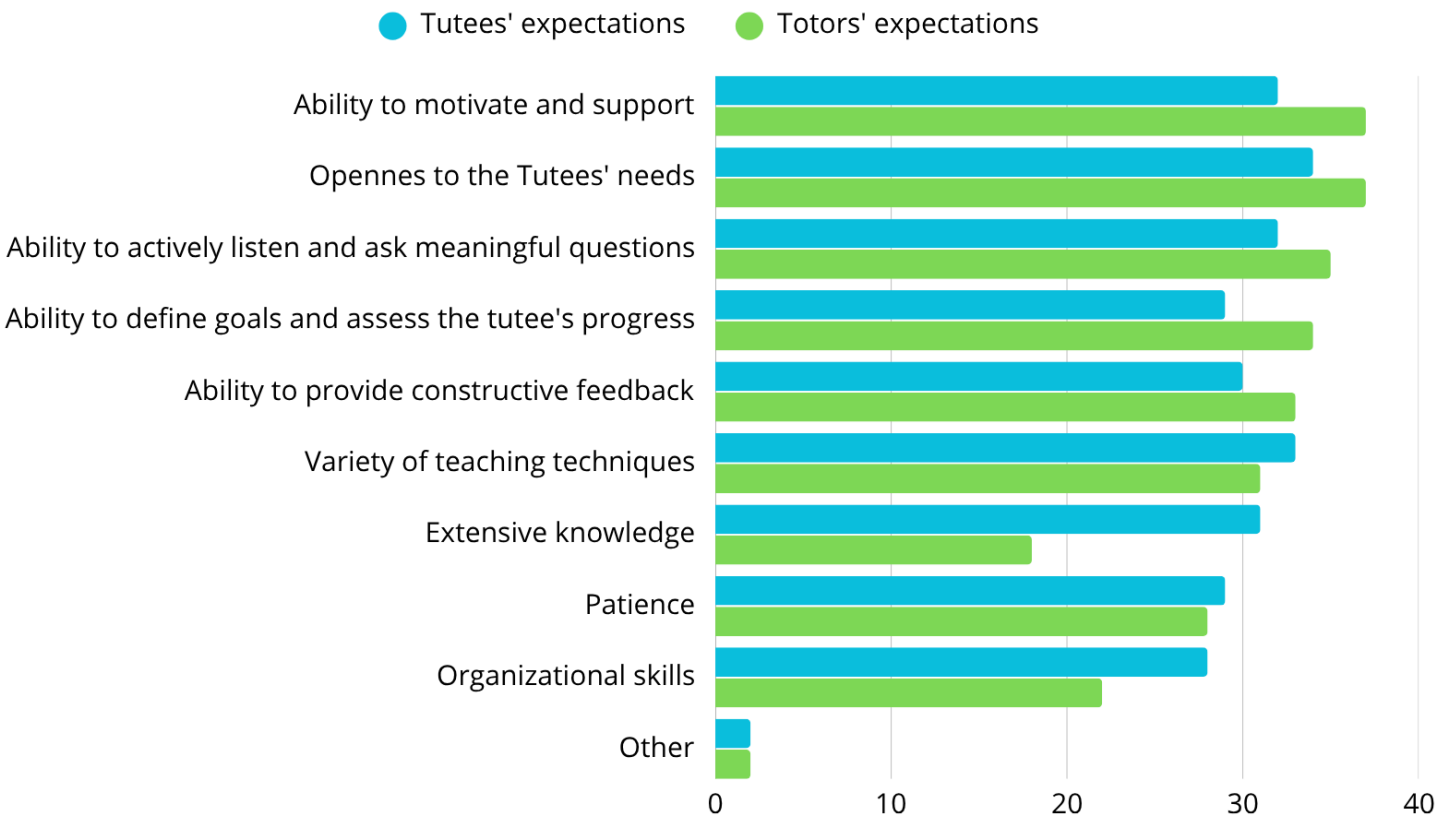


Figure 1

Expected competencies of an academic tutor: tutors’ vs tutees’ responses.



Figure 2

Tutees’ assessment of tutors’ competencies (number of indications).

Overall, tutees evaluated their tutors’ competencies positively, with all assessed competencies receiving more than 30 indications. The most frequently recognized strengths were openness to tutees’ needs and extensive knowledge (n = 34).

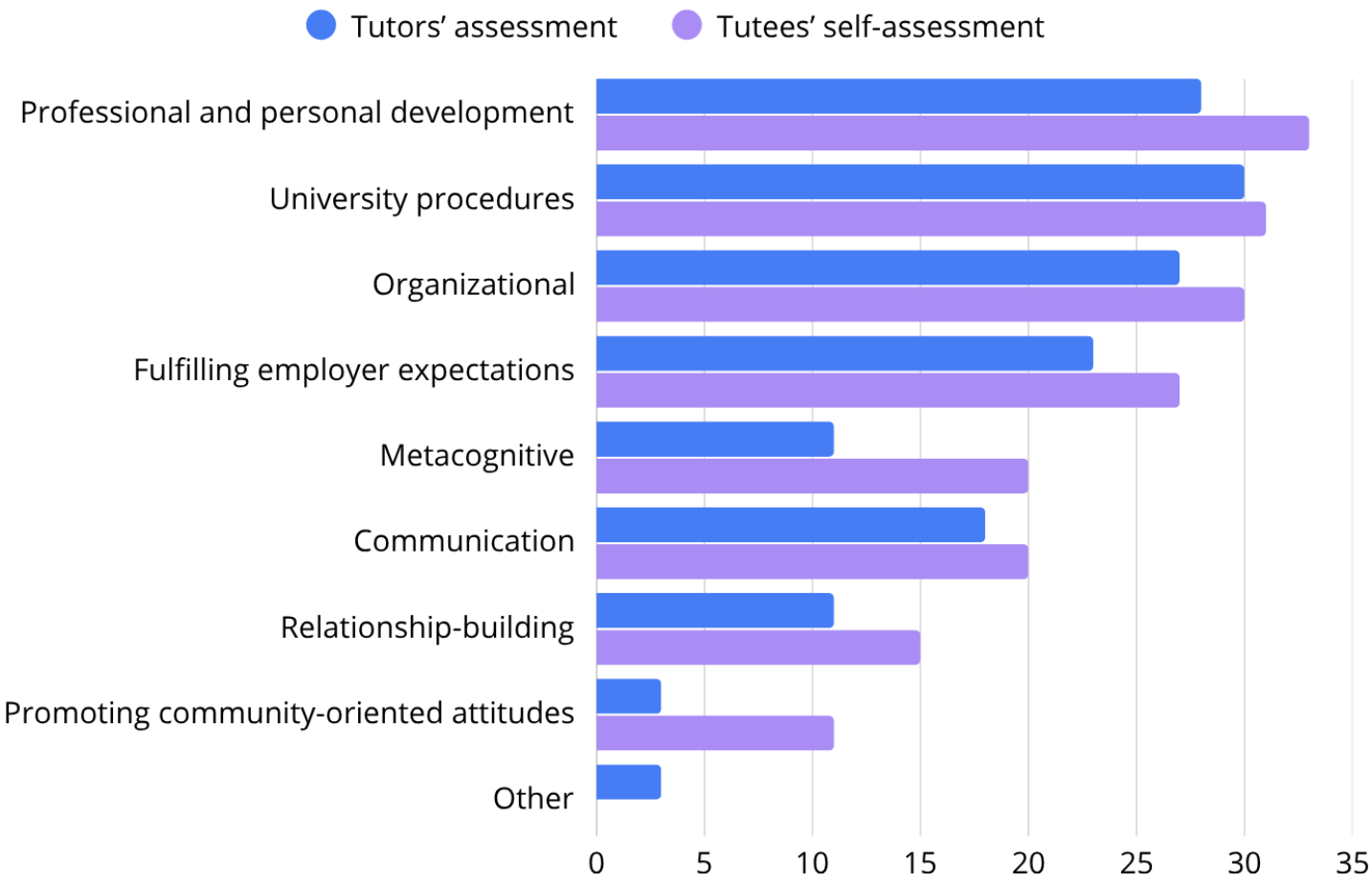


Figure 3

Perceived improvements in tutees' competencies: comparison of tutors' and tutees' assessments.