



Exploring Motivational Factors and Learning Barriers in English for Medical Purposes: Perspectives of Hungarian Medical Students and EMP Educators

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ABSTRACT

The growing importance of English in medical education has increased the need for effective English for Medical Purposes (EMP) instruction, particularly in countries where English is not the primary language of instruction. Student motivation plays a decisive role in the successful acquisition of medical communication skills, yet the factors that encourage or discourage engagement with EMP remain insufficiently understood. This study investigates the perceptions of Hungarian medical students and EMP instructors regarding the motivational conditions that influence learning and participation. A cross-sectional survey was conducted among 283 medical students and 20 EMP teachers representing the four Hungarian medical universities. Quantitative data were analyzed to compare learner and instructor perspectives on factors promoting and constraining motivation. The findings indicate that professional aspirations, international career opportunities, and the perceived relevance of English in clinical practice are the strongest sources of motivation. Conversely, intensive academic workloads, communication anxiety, limited self-confidence, and concerns about academic performance emerged as the most significant barriers to engagement. Although both participant groups demonstrated considerable agreement regarding the principal influences on motivation, instructors assigned greater importance to pedagogical practices, classroom interaction, and instructional support as determinants of learner engagement. The results emphasize the need for authentic medical communication tasks, learner-centered instructional strategies, continuous formative feedback, and supportive learning environments that reduce performance-related anxiety while strengthening confidence. Integrating EMP instruction with clinical education and providing institutional support for faculty development may further improve learner motivation and language proficiency. The study contributes to the growing body of research on motivation in specialized language education and provides evidence-based recommendations for designing effective EMP curricula in non-English-speaking medical education contexts.

KEYWORDS: Student Voice; Student Participation; Educational Leadership; Inclusive School Governance; Shared Decision-Making; Irish Post-Primary Education.

INTRODUCTION

Educational systems across the world have increasingly recognised that students should be regarded as active contributors to school improvement rather than passive recipients of educational services. Over the past two decades, research has consistently demonstrated that meaningful student participation enhances learning environments by encouraging collaboration, strengthening democratic values, and improving institutional responsiveness. Rather than limiting students' involvement in classroom activities, contemporary educational frameworks advocate for their participation in broader school governance, curriculum

development, policy formation, and strategic planning. This shift reflects an evolving understanding of schools as inclusive communities in which learners possess valuable perspectives that can shape educational quality and institutional effectiveness [1].

Student voice has emerged as a central concept within inclusive education because it acknowledges students as legitimate stakeholders whose experiences can inform educational decision-making. Earlier educational models primarily viewed students as beneficiaries of policies designed by adults, whereas current perspectives recognize that students possess unique knowledge of teaching

practices, school climate, wellbeing, and everyday learning experiences. When educational institutions actively seek and respond to these perspectives, they create environments characterized by trust, transparency, and shared responsibility. Such practices strengthen relationships among students, teachers, and school leaders while fostering a stronger sense of belonging and mutual respect throughout the school community [2].

Research conducted before 2025 has shown that authentic student participation extends beyond consultation or symbolic representation. Genuine engagement requires opportunities for students to influence decisions that affect their educational experiences and contribute to continuous school development. Schools that successfully embed participatory approaches frequently report improvements in student motivation, classroom engagement, collaborative problem-solving, and organizational culture. These outcomes are particularly significant in post-primary education, where adolescents seek greater autonomy, responsibility, and recognition as capable contributors to school life. Consequently, educational leadership has increasingly shifted toward collaborative governance models that value dialogue, partnership, and collective decision-making.

Inclusive school leadership plays a pivotal role in translating the principles of student participation into everyday practice. School leaders establish the organizational culture, allocate resources, develop participation structures, and influence staff attitudes toward student involvement [3,4]. Leadership approaches grounded in openness, mutual respect, and shared accountability encourage students to participate confidently in discussions regarding school policies, wellbeing initiatives, teaching and learning improvements, and extracurricular development. Conversely, leadership practices that rely solely on hierarchical decision-making often restrict opportunities for meaningful student engagement, resulting in participation that is limited to formal representation rather than genuine influence [5].

Although national and international education policies developed before 2025 have consistently promoted children's rights, democratic participation, and learner-centred education, implementation across schools has remained uneven. Many educational systems have introduced student councils, consultation mechanisms, and participatory initiatives; however, evidence suggests that these structures often operate with limited authority over institutional decisions. In numerous cases, students are invited to express opinions without receiving meaningful opportunities to influence outcomes, creating a disconnect between policy aspirations and everyday educational practice. This implementation gap continues to challenge efforts to establish genuinely inclusive school governance [6].

The Irish post-primary education sector reflects many of these international developments. Educational reforms introduced before 2025 have increasingly encouraged schools to strengthen student wellbeing, active citizenship, inclusive practice, and collaborative leadership. Schools have been encouraged to create environments where students contribute to school improvement, participate in evaluating learning experiences, and engage with issues affecting the wider school community. Nevertheless, variations remain in how these expectations are interpreted and implemented across different schools. While some institutions have embedded participatory practices within leadership and governance structures, others continue to rely on traditional administrative approaches that limit meaningful student involvement [7].

Previous studies conducted before 2025 have highlighted several factors that influence successful implementation of student voice initiatives. Organisational culture, leadership commitment, teacher attitudes, communication practices, student confidence, and the availability of structured participation opportunities all shape the effectiveness of student engagement. Schools characterised by mutual trust and collaborative relationships are generally more successful in sustaining authentic participation than institutions where communication remains predominantly one-directional. Furthermore, the development of students' leadership capabilities, confidence, and decision-making skills has been identified as an essential prerequisite for meaningful participation within complex school environments [8].

Despite growing scholarly attention to student voice, comparatively fewer studies have examined how school leaders themselves understand and operationalise participatory leadership within Irish post-primary schools. Existing literature has predominantly focused on students' experiences, classroom engagement, or policy implementation, while less attention has been directed toward the perspectives of senior and middle leaders responsible for translating policy into everyday organisational practice. Understanding leadership perspectives is particularly important because these individuals influence institutional priorities, establish participation mechanisms, and determine the extent to which student contributions are incorporated into school governance.

This study addresses that gap by examining school leaders' perceptions of student voice and student participation in decision-making within Irish post-primary schools. It investigates how educational leaders understand the value of student participation, the organisational conditions that facilitate inclusive engagement, and the practical barriers that continue to limit authentic involvement. By exploring leadership experiences across different post-primary settings, the study contributes to a deeper understanding

of participatory educational leadership and inclusive school governance before 2025 [9].

The findings are intended to enrich ongoing discussions concerning democratic education, collaborative leadership, and inclusive school development. By identifying effective leadership practices that strengthen student participation while recognising the challenges encountered during implementation, the study provides evidence that may support future educational policy, leadership development, and school improvement initiatives aimed at creating more inclusive, responsive, and student-centred post-primary education systems [10-13].

LITERATURE REVIEW

Motivation is widely recognized as one of the most influential determinants of success in learning English for Medical Purposes (EMP). Within medical education, language learning extends beyond acquiring general communication skills because students are expected to interpret scientific literature, communicate accurately in clinical environments, and participate in international academic activities. These expectations make motivation a dynamic construct that is shaped by personal aspirations, educational experiences, institutional conditions, and professional goals. Although research has consistently acknowledged the importance of motivation in language learning, relatively few studies have examined the specific motivational factors affecting students enrolled in non-English-medium medical programs, where English functions primarily as an academic and professional resource rather than the language of instruction [14].

One of the strongest motivational influences identified in previous research is the recognition of English as the dominant language of global medicine and healthcare. Medical students increasingly understand that proficiency in English enables access to current scientific evidence, international clinical guidelines, and high-impact medical journals. Competence in English also facilitates participation in international conferences, collaborative research projects, postgraduate education, and professional mobility across countries. As healthcare becomes increasingly interconnected through digital communication and global research networks, students often associate English proficiency with improved employability, academic advancement, and long-term career success. The rapid dissemination of medical information during global public health emergencies has further reinforced the practical necessity of English for healthcare professionals, strengthening students' perception that language competence represents an essential professional skill rather than an optional academic requirement [15].

Alongside professional aspirations, educational practices significantly influence students' willingness to engage in EMP learning. Studies examining English for Specific Purposes have demonstrated that learning environments

emphasizing interaction, collaboration, and authentic communication encourage stronger learner engagement than traditional teacher-centered approaches. Instructional strategies such as case-based discussions, simulation activities, collaborative problem-solving, and peer-assisted learning allow students to connect language acquisition with realistic clinical situations, thereby increasing both confidence and motivation [16]. The integration of digital learning platforms, virtual clinical resources, and multimedia educational materials has also created opportunities for more individualized learning experiences that accommodate diverse learning preferences. When instructional activities closely resemble authentic medical practice, students are more likely to perceive immediate relevance, which strengthens intrinsic motivation and promotes sustained participation throughout the course.

The relevance of instructional content is equally important in maintaining learner engagement. Educational theories suggest that students demonstrate greater persistence when they recognize clear connections between classroom learning and future professional responsibilities. EMP courses that incorporate authentic patient scenarios, evidence-based medical literature, clinical documentation, and healthcare communication tasks encourage learners to view English as a practical clinical competency rather than an isolated language subject. Such contextualized learning experiences contribute to the development of professional identity while simultaneously improving communication skills required for modern healthcare practice. Despite these pedagogical advances, many non-English-medium medical institutions continue to face challenges in translating motivational research into curriculum design that reflects local educational realities and learner needs [17].

Despite numerous motivational influences, previous studies have also documented several factors that reduce students' enthusiasm for learning medical English. The specialized vocabulary, technical terminology, and complex grammatical structures characteristic of medical communication create substantial cognitive demands, particularly for learners whose previous English education emphasized general language skills rather than scientific discourse. Many students perceive EMP as considerably more challenging than general English because it requires simultaneous mastery of language, medical knowledge, and professional communication conventions. These academic demands often coincide with intensive medical curricula, leaving students with limited time and psychological resources for language learning. Heavy workloads, examination pressure, and prolonged academic stress have therefore emerged as consistent barriers that negatively influence motivation and learning persistence [18].

Psychological variables further influence students' engagement with EMP [19]. Foreign language anxiety

remains one of the most frequently reported obstacles, particularly in activities requiring oral communication, presentations, or interactions involving clinical terminology. Many learners fear making linguistic errors in front of peers or instructors, leading to reduced classroom participation and diminished confidence. Since effective communication is closely associated with professional competence in medicine, students often interpret language difficulties as indicators of inadequate academic ability, thereby intensifying performance-related stress. Low self-efficacy, fear of negative evaluation, and communication apprehension can therefore create a cycle in which anxiety limits participation, reducing opportunities for improvement and further weakening motivation [20,21].

Institutional conditions also shape students' motivational experiences. Access to appropriate instructional resources, well-designed teaching materials, and adequately trained EMP instructors contributes substantially to learning effectiveness. However, several studies have identified shortcomings in curriculum organization, insufficient availability of specialized learning resources, and limited professional development opportunities for language instructors. These institutional limitations may reduce instructional quality and create inconsistencies between learners' expectations and educational experiences, ultimately affecting their willingness to invest sustained effort in language learning.

Beyond academic and institutional influences, sociocultural factors contribute to students' motivational orientations. In multilingual societies, learners may experience tension between maintaining their native linguistic identity and adapting to the dominant role of English within global medicine. Some students perceive English primarily as a professional necessity rather than a component of their personal identity, while others may experience uncertainty regarding their ability to participate confidently in international academic communities. These broader cultural perceptions influence attitudes toward language learning and may either strengthen or weaken long-term motivation depending on individual experiences and educational contexts [22].

Recent developments in educational psychology have introduced additional perspectives for understanding learner motivation through the concept of emotioncy. This framework proposes that learners' emotional engagement with educational content depends upon the richness and diversity of their sensory and experiential interactions. Rather than viewing motivation as a static psychological characteristic, emotioncy suggests that meaningful experiences promote deeper cognitive engagement and more active participation in learning. Within language education, students who engage in authentic simulations,

clinical role-plays, practical demonstrations, and real-world communication activities are believed to develop stronger emotional connections with learning tasks. These experience-rich instructional approaches encourage learners to move from passive exposure toward active participation, thereby strengthening motivation, confidence, and willingness to communicate. Consequently, teachers play a central role in designing learning environments that transform theoretical language instruction into meaningful professional experiences [23].

Considerable attention has also been directed toward the professional responsibilities of EMP instructors themselves. Unlike general English teachers, EMP educators operate at the intersection of language education and medical knowledge, requiring them to integrate linguistic instruction with discipline-specific content. Many instructors acquire medical knowledge independently through self-directed learning, collaboration with healthcare professionals, and continuous updating of educational resources. This dual professional responsibility presents unique challenges, including increased preparation time, frequent curriculum revision, limited access to specialized professional development, and insufficient institutional recognition. These factors not only affect instructional effectiveness but may also influence teachers' capacity to maintain motivating classroom environments for medical students [24,25].

STUDY SETTING AND PARTICIPANTS

Medical Student Participants

The study was conducted across the four universities in Hungary that provide undergraduate medical education through Hungarian as the primary language of instruction. These institutions offer integrated six-year medical degree programs comprising twelve academic semesters. Undergraduate medical students enrolled from the first through sixth year of study constituted the target population. Approximately 5,800 students were eligible to participate during the study period. Recruitment followed a voluntary convenience sampling strategy, and invitations were distributed to all eligible students through official university communication channels [26].

At the time of data collection, institutional policies regarding English for Medical Purposes (EMP) differed across universities. Two universities required students to complete EMP courses before graduation, whereas the remaining institutions offered EMP only as elective coursework. Furthermore, no unified national curriculum existed for EMP instruction, resulting in institutional variation in course content and instructional approaches [27].

A total of 486 questionnaires were returned, representing an overall response rate of approximately 8.4%. After applying the inclusion criterion that respondents must have

completed or been enrolled in at least one EMP course, 283 valid questionnaires remained for statistical analysis, corresponding to an effective response rate of 4.9%. Participants represented all years of undergraduate medical education and possessed varying levels of English language proficiency based on the Common European Framework of Reference (CEFR). Female students constituted most respondents, while most participants reported intermediate (B2) or advanced (C1) English proficiency [28].

English for Medical Purposes (EMP) Teacher Participants

The instructor component of the study focused exclusively on university teachers responsible for English for Medical Purposes instruction. Participants were recruited through the Hungarian Association of Teachers and Researchers of Languages for Specific Purposes together with direct invitations sent to university language departments. Although responses were obtained from a wider population of Languages for Specific Purposes educators, only teachers actively involved in EMP instruction were included in the present investigation [29].

Twenty EMP instructors satisfied the eligibility criteria and formed the final teacher sample. Publicly available institutional information suggests that Hungary employs approximately 50–60 university-level EMP instructors, indicating that nearly one-third of the estimated national teaching population participated in the study. Most respondents were female and possessed extensive professional experience, averaging approximately twenty years of university teaching. Several participants held doctoral qualifications or were pursuing doctoral studies, while a small proportion also possessed academic backgrounds in health sciences or related biomedical disciplines. This combination of linguistic expertise and disciplinary knowledge provided valuable insights into factors influencing learner motivation [30].

Data Collection

Data collection was carried out between February and April 2024 during the spring semester of the 2023–2024 academic year. Surveys were administered during the regular teaching period rather than the examination period to minimize the potential influence of assessment-related stress on participant responses [31].

Institutional approval was obtained before commencing data collection. Following authorization from the participating medical faculties, electronic questionnaire links were distributed to undergraduate medical students through official university mailing systems. Students from all six years of study were invited to participate provided they had previously completed or were currently enrolled in at least one EMP course.

Recruitment of EMP instructors employed multiple dissemination strategies. The Hungarian Association of Teachers and Researchers of Languages for Specific Purposes circulated the survey among its membership, while additional invitations were sent directly to university language departments identified through institutional websites. Participation was restricted to university instructors teaching Languages for Specific Purposes, with only EMP teachers retained for the present analysis [32].

The investigation represented educational research involving questionnaire-based data collection and contained no clinical procedures or biomedical interventions. Ethical approval was granted by the Ethics Committee of the Doctoral School of Education at the University of Szeged (Reference No. 1/2023). Participation remained voluntary, anonymous, and confidential throughout the study. Electronic informed consent was obtained before respondents could access the questionnaire, and no personally identifiable or sensitive information was collected (Figure 1).

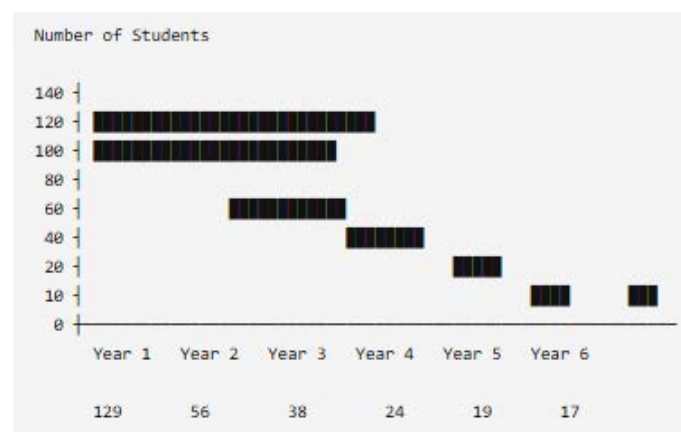


Figure 1: Distribution of Medical Student Participants by Academic Year

Data were collected using structured online questionnaires administered in Hungarian. Separate questionnaires were prepared for medical students and EMP instructors, although both instruments formed part of a broader research project investigating language learning in medical education. Only the questionnaire items directly related to motivational factors and learning barriers were analysed in the present study.

The survey instrument was specifically developed following an extensive review of the literature concerning language learning motivation, English for Specific Purposes education, and English for Medical Purposes instruction. Previous validated educational instruments served as conceptual guidance, while individual questionnaire items were modified to reflect the characteristics of Hungarian medical education. To ensure content validity and contextual relevance, specialists in medical English education and educational research reviewed the questionnaire before implementation [33].

Participants evaluated predefined motivational factors and learning barriers using a forced-choice response format, allowing direct comparison between student and teacher perspectives. The instrument generated quantitative data suitable for descriptive and comparative statistical analyses, facilitating identification of the most influential motivational drivers and obstacles affecting EMP learning (Table 1).

Variable	Category	Students (n=283)	Teachers (n=20)
Gender	Male	89 (31.4%)	2 (10.0%)
	Female	194 (68.6%)	18 (90.0%)
English Proficiency (Students)	B2	137 (48.4%)	—
	C1	128 (45.2%)	—
Teaching Experience	Mean Years	—	20.0 years
Academic Qualification	PhD	—	7 (35.0%)
	PhD Candidate	—	5 (25.0%)
	No PhD	—	8 (40.0%)

Table 1: Demographic Characteristics of Study Participants (N = 303)

The frequency and ranking of motivational and demotivational factors reported by medical students and English for Medical Purposes (EMP) instructors. Both individual items and broader conceptual categories were examined to provide a comprehensive understanding of the factors influencing learner motivation. Only a small proportion of respondents selected the open-ended “Other” response option, indicating that the predefined questionnaire items captured the principal motivational experiences and perceived learning barriers reported by both participant groups. This finding supports the content validity of the survey instrument and suggests that the selected factors adequately represented

the motivational landscape of EMP learning within the participating institutions [34].

Motivational Drivers

The distribution of motivational factors identified by medical students and EMP teachers. Participants were asked to select the three factors they considered most influential in promoting engagement with English for Medical Purposes. The responses demonstrate that several motivational drivers were consistently recognized by both groups, although their relative importance varied between students and instructors.

A limited number of respondents provided additional comments using the open-response option. These responses primarily referred to institutional requirements, including the opportunity to obtain academic credits and compulsory course participation. Because both comments reflected external educational expectations, they were incorporated into the category representing institutional or community-related influences [35].

To facilitate interpretation of the findings, the reported motivational factors were further organized into three broader theoretical dimensions derived from the L2 Motivational Self System proposed by Dörnyei. The identified drivers were classified according to whether they reflected learners’ future professional aspirations (Ideal L2 Self), externally imposed responsibilities and expectations (Ought-to L2 Self) [36], or experiences associated with the immediate learning environment (L2 Learning Experience). This conceptual framework provides a clearer understanding of the psychological mechanisms underlying motivation while simultaneously distinguishing factors that are directly influenced by classroom instruction from those originating outside the educational environment. Such categorization also assists in identifying aspects of motivation that may be strengthened through curriculum design and instructional practice (Table 2).

Table 2: Ranking of Major Motivational Drivers and Learning Barriers Reported by Medical Students and EMP Teachers.

Rank	Medical Students	Frequency (%)	EMP Teachers	Frequency (%)
Motivational Drivers				
1	Future career opportunities	71.4	Professional relevance of English	85.0
2	Interest in medical English	65.7	Student career development	80.0
3	International communication	58.3	Effective classroom instruction	75.0
4	Academic achievement	44.9	Learner engagement	65.0
5	Institutional expectations	28.6	Curriculum requirements	50.0
Learning Barriers				
1	Heavy academic workload	74.2	Heavy academic workload	90.0
2	Fear of making mistakes	66.8	Language anxiety	80.0
3	Limited confidence	59.7	Low learner confidence	75.0
4	Time constraints	54.1	Limited instructional time	70.0
5	Difficult medical terminology	47.3	Complexity of medical vocabulary	65.0

Motivational Barriers

The analysis of motivational drivers, participants selected the three barriers they considered most influential. Compared with the motivation-related questions, respondents provided a greater number of additional comments under the open-response category. Wherever appropriate, these responses were incorporated into existing thematic categories. Comments that could not be meaningfully assigned to predefined groups were retained as independent responses to preserve the originality of participants' perspectives [37].

To provide a more practical interpretation of the findings, the identified barriers were grouped according to the extent to which they could be influenced by instructional practice. This classification distinguishes factors that primarily originate from institutional or structural conditions, such as scheduling difficulties, curriculum organization, and limited educational resources, from classroom-related factors that may be modified through pedagogical approaches. Attention was given to barriers associated with teaching practices, classroom interaction [38], and instructor support because these elements represent areas where educational interventions can be implemented directly (Figure 2).

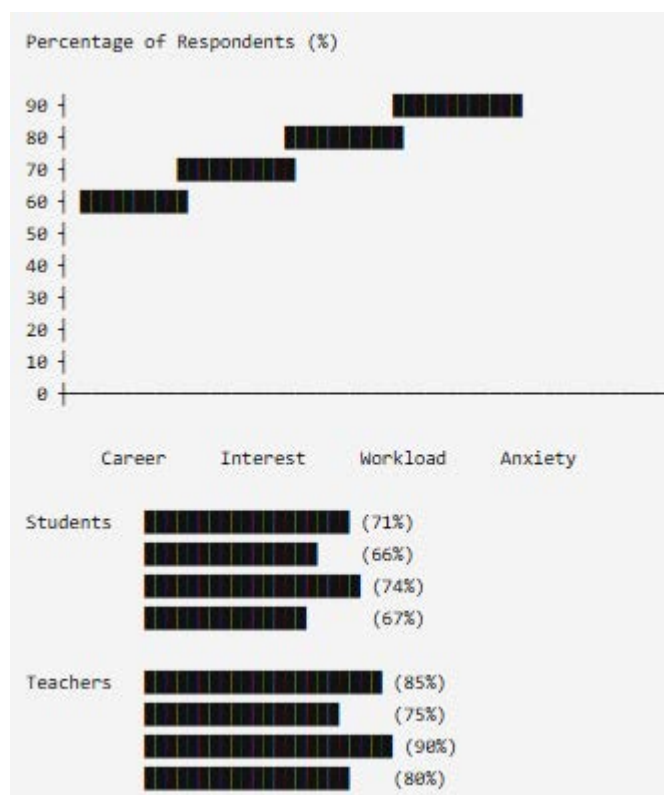


Figure 2: Distribution of Major Motivational Drivers and Learning Barriers.

A separate category was also established for psychological and emotional influences, including communication anxiety, fear of failure, and reduced self-confidence. Although these affective factors are shaped by multiple personal and contextual influences, they may be substantially moderated

through supportive teaching practices, constructive feedback, and psychologically safe learning environments. Organizing the findings in this manner provides a more comprehensive understanding of the origins of motivational barriers while identifying areas where targeted educational strategies may contribute to improving learner engagement and overall effectiveness of English for Medical Purposes instruction [39].

DISCUSSION

The present investigation addressed three interconnected objectives. First, it examined the principal factors that encourage and discourage Hungarian medical students in learning English for Medical Purposes (EMP) within non-English-medium medical programs. Second, it compared the perceptions of medical students and EMP instructors to determine areas of agreement and divergence regarding learner motivation. Third, it translated these findings into practical recommendations for curriculum development and instructional practice. Collectively, the results demonstrate that motivation in EMP learning is influenced by a combination of personal aspirations, educational experiences, and institutional conditions, highlighting the importance of adopting a learner-centered and professionally relevant approach to language education [40].

Motivational Drivers

The findings indicate substantial agreement between medical students and EMP instructors regarding the primary factors that encourage engagement in EMP learning. Although minor differences emerged in the relative importance assigned to individual items, both groups consistently recognized future professional development and personal interest as the strongest motivational influences. This shared perspective suggests that motivation in EMP is primarily shaped by learners' long-term professional goals rather than by external academic obligations. Students appear to perceive English as an essential competency for accessing international medical knowledge, participating in scientific communication, and advancing future careers, while instructors recognize these aspirations as fundamental drivers of sustained engagement [41].

Professional ambition emerged as the most influential motivational factor across both participant groups. Students associated English proficiency with opportunities for postgraduate education, international collaboration, clinical communication, and scientific publication. These findings reinforce established motivational theories, particularly the concept of the Ideal L2 Self, which proposes that learners become more motivated when they possess a vivid image of themselves successfully using a second language in future professional contexts. Personal interest represented another highly influential source of motivation, indicating that many learners viewed EMP as intellectually meaningful

rather than merely a compulsory academic subject. This combination of intrinsic interest and professional ambition encourages sustained learning behavior and promotes greater persistence when students encounter linguistic challenges [42].

The classroom learning experience also emerged as an important contributor to learner motivation. Students emphasized the satisfaction derived from mastering medical terminology and successfully completing language-related tasks, suggesting that experiences of achievement reinforce confidence and encourage continued participation. In contrast, instructors placed greater importance on instructional quality, teacher enthusiasm, and innovative teaching strategies. This difference reflects the distinct perspectives occupied by learners and educators. While students focus primarily on personal learning outcomes, instructors recognize their responsibility for creating classroom environments that facilitate those outcomes. Through supportive feedback, carefully designed learning activities, and effective classroom management, teachers influence learners' confidence and strengthen their willingness to participate actively in language learning [43].

The findings further emphasize the importance of instructional relationships in sustaining motivation. Positive teacher attitudes, meaningful interaction, and professionally relevant teaching methods contribute to classroom environments where learners feel supported in developing both language competence and professional identity. These observations align with learner-centered educational approaches that emphasize collaboration, autonomy, and meaningful engagement rather than passive knowledge transmission. Consequently, effective EMP instruction extends beyond language teaching to include the creation of learning environments that encourage confidence, participation, and continuous improvement [44].

External expectations, including institutional requirements and peer influence, played a comparatively smaller role in motivating learners. Although some students acknowledged that academic requirements and university expectations contributed to their engagement, these influences were consistently ranked below internally driven motivational factors. This pattern suggests that Hungarian medical students are primarily motivated by personal and professional aspirations rather than by external pressure. The relatively limited influence of family expectations further distinguishes this educational context from studies conducted in more collectivist societies, where parental encouragement and social obligations frequently exert stronger motivational effects. These findings indicate that learner autonomy and self-directed professional development represent central characteristics of motivation within Hungarian medical education [45].

Another noteworthy observation concerns the perceived role of disciplinary expertise. Both students and instructors assigned relatively low importance to teachers' medical specialization as a direct motivational influence. Instead, instructional effectiveness appeared to depend more heavily on teachers' ability to create engaging, authentic, and professionally meaningful learning experiences. This finding supports contemporary perspectives that define EMP instructors primarily as facilitators who integrate language learning with authentic professional communication rather than as providers of specialized medical knowledge.

Motivational Barriers

While participants demonstrated considerable agreement regarding motivational drivers, an equally strong consensus emerged concerning the principal obstacles to learning EMP. The results indicate that barriers originate from multiple sources, including institutional conditions, psychological factors [46], and classroom experiences. Organizing these barriers according to their degree of instructional influence provides valuable insights into where educational interventions may be most effective.

Institutional and structural challenges constituted the most frequently reported obstacles. Heavy academic workloads and limited available study time consistently ranked as the strongest barriers identified by both students and instructors. Medical education is characterized by intensive coursework, extensive clinical responsibilities, and demanding assessment schedules, leaving many students with insufficient opportunities to devote sustained attention to language learning. These findings suggest that motivational difficulties often arise from competing academic priorities rather than from a lack of interest in English itself. Consequently, improving motivation requires not only effective teaching but also careful consideration of curriculum organization and workload distribution [47].

Psychological barriers represented another major source of demotivation. Language anxiety, fear of making mistakes, and reduced confidence emerged as prominent concerns among both participant groups [48]. The specialized vocabulary and professional communication demands associated with EMP may intensify students' apprehension, particularly when classroom participation involves public speaking or clinical simulations. Learners frequently associate language performance with professional competence, increasing the emotional pressure surrounding classroom activities. These findings highlight the importance of supportive educational environments that encourage risk-taking, normalize mistakes as part of learning, and provide constructive feedback that strengthens confidence rather than emphasizing deficiencies.

Differences between students and instructors became more apparent when examining barriers of moderate

importance. Students assigned greater significance to feelings of failure and the influence of disengaged classmates, whereas instructors focused more strongly on class size and instructional limitations. These contrasting perspectives illustrate how learners and teachers interpret the educational environment differently. Students are particularly sensitive to classroom dynamics and peer participation because collaborative interaction forms an essential component of language learning. Reduced engagement among classmates may therefore decrease opportunities for meaningful communication and negatively influence overall classroom motivation [49]. Instructors, however, are more likely to attribute motivational challenges to structural constraints affecting teaching effectiveness, including limited instructional time, available resources, and classroom organization.

One of the most notable findings concerns instructors' strong sense of professional responsibility. Compared with students, teachers assigned greater importance to factors under their own influence, including the quality of feedback, classroom atmosphere, and instructional practices [50-54]. This tendency suggests a high level of pedagogical self-awareness, with instructors recognizing that their teaching behaviors directly affect learner motivation. Interestingly, students generally perceived these teacher-related factors as less problematic than instructors themselves anticipated. Nevertheless, this pattern demonstrates a constructive orientation among EMP educators, who appear willing to reflect critically upon their own practices and continuously improve the learning environment.

Encouragingly, both participant groups assigned relatively low importance to negative teacher-student relationships as a source of demotivation. This finding indicates that interpersonal interactions between learners and instructors are generally positive within the participating institutions. Strong teacher-student relationships provide an important foundation for effective language learning because they promote trust, reduce anxiety, and encourage active classroom participation. Maintaining these supportive relationships therefore represents an important strength upon which future curriculum development can build.

Pedagogical Implications

The findings of this study provide several practical implications for improving English for Medical Purposes education within non-English-medium medical programs. The substantial agreement between students and instructors regarding motivational influences suggests that curriculum development should be guided by learners' professional aspirations while simultaneously addressing the principal barriers that reduce engagement. Because students are primarily motivated by future career goals and meaningful learning experiences, EMP curricula should explicitly

demonstrate how language competence contributes to clinical practice, research participation, and international professional communication [55].

Curriculum design should therefore adopt an outcome-based approach that aligns learning objectives, instructional activities, and assessment with the professional competencies expected of future healthcare practitioners [56]. Learning experiences become more motivating when students understand how individual classroom activities contribute to their long-term professional development. Authentic learning tasks, including clinical case discussions, patient communication scenarios, medical presentations, and scientific literature analysis, enable students to connect language learning with realistic professional responsibilities. Such contextualized instruction strengthens both intrinsic motivation and professional identity while encouraging deeper engagement with language learning [57].

Greater integration between EMP instruction and medical education would further enhance the relevance of language learning. Rather than teaching English independently of medical content, universities may consider developing supplementary modules that parallel students' disciplinary coursework. Exposure to authentic clinical documents, research articles, and evidence-based medical literature enables learners to develop language competence alongside professional knowledge. Scenario-based learning, simulated patient interactions, and problem-solving activities provide additional opportunities for meaningful communication while preparing students for future clinical practice. Emerging educational technologies, including virtual simulation and extended reality environments, also offer promising avenues for creating immersive learning experiences that integrate language development with professional skill acquisition [58].

The findings additionally highlight the necessity of creating psychologically supportive learning environments. Because language anxiety and fear of failure constitute major motivational barriers, classroom practices should prioritize confidence building and active participation. Cooperative learning, collaborative projects, peer teaching, and problem-based instructional approaches encourage interaction while reducing communication apprehension. Teachers should provide scaffolded learning opportunities that allow students to experience gradual success through achievable challenges. Formative assessment emphasizing progress, constructive feedback, and individual improvement may further strengthen learners' self-confidence while reducing performance-related stress. Assessment should therefore function as a developmental process that supports learning rather than merely evaluating achievement [59].

Institutional support for EMP instructors represents another critical requirement identified by this study. Contemporary

EMP teaching demands considerably more than linguistic expertise, requiring instructors to integrate language education with professional medical communication and authentic disciplinary contexts. This expanded role necessitates continuous professional development, interdisciplinary collaboration, and systematic institutional recognition. Universities should therefore invest in specialized training programs, collaborative curriculum development, mentoring initiatives, and partnerships between language instructors and medical faculty. Such support will enable EMP educators to design increasingly authentic, motivating, and professionally relevant learning experiences.

STRENGTHS AND LIMITATIONS

A notable strength of this study is its methodological approach, which explicitly adopts a dual perspective by collecting and analyzing data from both medical students and EMP teachers. The dual perspective is not only a methodological strength but also a conceptual one: by juxtaposing student and teacher perceptions, our study provides a more comprehensive picture of the motivational dynamics underlying EMP learning. The complementary viewpoints enrich the interpretation of the findings, as the convergence and divergence between students and teachers shed light on aspects of motivation that would have remained hidden if only one perspective had been examined [60]. To our knowledge, no previous research has applied such a design to investigate motivational dynamics in EMP learning in either the Hungarian context or the wider international literature. This dual-perspective approach not only identifies key drivers and barriers of motivation but also reveals the degree of alignment or divergence between student and teacher views.

Another important strength lies in the study's context-specific contribution: it offers rare empirical insight into EMP motivation within a non-Anglophone medical education environment, where English is not the medium of instruction but nevertheless essential for students' future professional trajectories. By situating the findings in the Hungarian context, the study also provides transferable insights that may be relevant to comparable non-EMI settings internationally [61].

The findings carry direct practical relevance not only for teachers and policymakers but also for curriculum developers, who may draw on these insights when designing more coherent and motivating EMP programs. The study highlights specific factors, such as career orientation, personal interest, and psychological barriers, that appear to play a central role in shaping learner engagement. These factors can serve as starting points or focal areas for further research in other educational or cultural contexts. In this sense, the results contribute to a broader understanding

of EMP motivation by identifying core elements that are likely relevant across diverse settings, even if their relative importance may vary [62].

At the same time, several limitations must be acknowledged. The use of a forced-choice item format, while effective for prioritizing key factors, may have constrained participants' ability to express more nuanced or context-specific concerns. The study is confined to a relatively small and context-specific sample drawn from Hungarian medical schools, which may limit the generalizability of the findings beyond this national setting. Additionally, since all participating institutions operate within a single national education system, the findings may reflect local curricular structures, institutional cultures, or language education policies that differ substantially from those in other countries. Moreover, because participation was voluntary, potential self-selection bias cannot be ruled out; the respondents may differ systematically from the wider population in their interest in or attitudes toward EMP. As with all self-reported data, the findings may also be influenced by social desirability bias or other limitations inherent to self-report measures. Finally, the study design was cross-sectional, without longitudinal tracking; as a result, it cannot capture how students' motivational dispositions may shift over time in response to curricular changes, evolving professional identities, or external circumstances. These constraints limit the transferability of the results but do not diminish their relevance, they offer empirically grounded starting points for future larger-scale, cross-contextual, and longitudinal studies.

CONCLUSION

In response to the three objectives of this study, several conclusions can be drawn. First, regarding the most salient motivational drivers and barriers (Objective 1), the findings show that Hungarian medical students' motivation to learn EMP is largely facilitated by their career goals and personal interest, whereas demanding schedules and language learning anxiety act as the most significant barriers. This highlights the central role of both intrinsic and career-oriented motivation, while also pointing to the structural and psychological constraints that hinder sustained engagement. Second, in relation to the degree of alignment between students' and EMP teachers' perceptions (Objective 2), it can be concluded that there is a notable alignment regarding both factors that support and hinder motivation in EMP learning. The data also reveal that EMP teachers perceive their own role as more influential than students do, both in terms of supporting and hindering motivation. This suggests a strong sense of professional responsibility among EMP teachers, who may attribute students' engagement or lack thereof to pedagogical approaches and instructional effectiveness. Third, addressing practice-oriented implications for EMP

curriculum development (Objective 3), we recommend that pedagogical improvements in EMP instruction should be grounded in student-centered design, authentic learning tasks, a psychologically safe learning environment, and teacher empowerment. Future research should investigate the long-term impact of such pedagogical interventions on sustaining motivation and improving EMP learning outcomes.

The study contributes to the broader EMP and L2 motivation literature by providing rare empirical evidence from a non-EMI context. Importantly, this study provides evidence-based insights that are transferable to comparable educational systems internationally, where English is essential but not the medium of instruction. By drawing on research-based findings rather than relying solely on everyday experiences or assumptions, stakeholders can make more informed choices when refining curricula and pedagogical practices to better meet students' motivational needs.

REFERENCES

1. Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centred approach*. Cambridge: Cambridge University Press.
2. Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge: Cambridge University Press.
3. Basturkmen, H. (2010). *Developing courses in English for specific purposes*. Basingstoke: Palgrave Macmillan.
4. Anthony, L. (2018). *Introducing English for specific purposes*. London: Routledge.
5. Woodrow, L. (2018). *Introducing course design in English for specific purposes*. London: Routledge.
6. Hyland, K. (2006). *English for academic purposes: An advanced resource book*. London: Routledge.
7. Hyland, K. (2009). *Academic discourse: English in a global context*. London: Continuum.
8. Hyland, K., & Tse, P. (2007). Is there an "academic vocabulary"? *TESOL Quarterly*, 41(2), 235–253.
9. Ferguson, G. (2013). English for medical purposes. In B. Paltridge & S. Starfield (Eds.), *The handbook of English for specific purposes* (pp. 243–261). Chichester: Wiley-Blackwell.
10. Ferguson, G. (2014). Using English as a lingua franca in medical communication. *English for Specific Purposes*, 34, 50–61.
11. Maher, J. (1986). English for medical purposes. *Language Teaching*, 19(2), 112–145.
12. Master, P. (2005). English for specific purposes. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 99–115). Mahwah, NJ: Lawrence Erlbaum Associates.
13. Boshier, S., & Smalkoski, K. (2002). From needs analysis to curriculum development: Designing a course in health-care communication for immigrant students in the USA. *English for Specific Purposes*, 21(1), 59–79.
14. Chia, H. U., Johnson, R., Chia, H. L., & Olive, F. (1999). English for college students in Taiwan: A study of perceptions of English needs in a medical context. *English for Specific Purposes*, 18(2), 107–119.
15. Javid, C. Z. (2011). English for specific purposes: Role of learners, teachers and teaching methodologies. *English for Specific Purposes World*, 10(31), 1–18.
16. Cowling, J. D. (2007). Needs analysis: Planning a syllabus for a series of intensive workplace courses at a leading Japanese company. *English for Specific Purposes*, 26(4), 426–442.
17. Long, M. H. (Ed.). (2005). *Second language needs analysis*. Cambridge: Cambridge University Press.
18. Nation, I. S. P., & Macalister, J. (2010). *Language curriculum design*. New York: Routledge.
19. Dörnyei, Z. (2001). *Teaching and researching motivation*. Harlow: Pearson Education.
20. Dörnyei, Z. (2005). The psychology of the language learner: Individual differences in second language acquisition. Mahwah, NJ: Lawrence Erlbaum Associates.
21. Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9–42). Bristol: Multilingual Matters.
22. Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Harlow: Pearson Education.
23. Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. New York: Routledge.
24. Ushioda, E. (2008). Motivation and good language learners. In C. Griffiths (Ed.), *Lessons from good language learners* (pp. 19–34). Cambridge: Cambridge University Press.
25. Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
26. Gardner, R. C. (2010). *Motivation and second language acquisition: The socio-educational model*. New York: Peter Lang.
27. Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
28. Ryan, R. M., & Deci, E. L. (2000). *Self-determination*

- theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
29. Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: Guilford Press.
30. Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109–132.
31. Wigfield, A., & Eccles, J. S. (2000). Expectancy–value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68–81.
32. Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132.
33. MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44(2), 283–305.
34. MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere* (pp. 24–45). Boston: McGraw-Hill.
35. Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest? *The Modern Language Journal*, 75(4), 426–439.
36. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
37. Clément, R., Dörnyei, Z., & Noels, K. A. (1994). Motivation, self-confidence, and group cohesion in the foreign language classroom. *Language Learning*, 44(3), 417–448.
38. Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50(1), 57–85.
39. MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545–562.
40. Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.
41. Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). San Diego: Academic Press.
42. Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Rowley, MA: Newbury House.
43. Ellis, R. (2003). *Task-based language learning and teaching*. Oxford: Oxford University Press.
44. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge: Cambridge University Press.
45. Littlewood, W. (2004). The task-based approach: Some questions and suggestions. *ELT Journal*, 58(4), 319–326.
46. Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223–231.
47. Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415.
48. Zhang, X. (2021). The impact of EFL students' emotioncy level on their motivation and academic achievement: A theoretical conceptual analysis. *Frontiers in Psychology*, 12, 798564. doi:10.3389/fpsyg.2021.798564.
49. Pishghadam, R. (2015). Emotioncy: A post-linguistic approach toward language education. In *Proceedings of the 9th International Conference on Language, Education and Innovation*. London: International Conference on Language, Education and Innovation.
50. Azuma, M., Nomura, O., Sakuma, T., & Soma, Y. (2022). Complex motivations of Japanese medical students to an online medical English course during the COVID-19 pandemic. *MedEdPublish*, 11, 47. doi:10.12688/mep.19042.1.
51. Deng, J., Zhou, K., & Al-Shaibani, G. K. S. (2022). Medical English anxiety patterns among medical students in Sichuan, China. *Frontiers in Psychology*, 13, 895117. doi:10.3389/fpsyg.2022.895117.
52. Rabadi, R. I., & Rabadi, A. D. (2020). Do medical students experience writing anxiety while learning English as a foreign language? *Psychology Research and Behavior Management*, 13, 883–893. doi:10.2147/PRBM.S276448.
53. Rinawati, R., Trisnadi, S., & Murwantono, D. (2022). Needs analysis of English for Medical Purposes: A student perspective. *Language Circle: Journal of Language and Literature*, 16(2). doi:10.15294/lc.v16i2.35445.
54. Pavel, E. (2020). *Language learner motivation and strategies in English for Medical Purposes*. Philobiblon: Transylvanian Journal of Multidisciplinary Research in Humanities, 25(1). doi:10.26424/philobib.2020.25.1.08.

55. Nazarieh, M., Delzendeh, M., & Beigzadeh, A. (2023). Motivation as an integral factor in English language learning for medical students. *Research and Development in Medical Education*, 12, 7. doi:10.34172/rdme.2023.33133.
56. Huang, Y. P., Lin, L. C., & Tsou, W. (2024). Leveraging ESP teachers' roles: EMI university teachers' professional development in medical and healthcare fields. *English for Specific Purposes*, 74, 103–116. doi:10.1016/j.esp.2024.01.005.
57. Ji, X., & Zhang, A. J. (2024). Demotivation in English learning of Chinese medical students: Insights from situated expectancy-value theory. *Acta Psychologica*, 253, 104716. doi:10.1016/j.actpsy.2025.104716.
58. Stötzer, A., Bagyura, M., & Farkas, É. (2024). Running a diagnostic on motivation: Exploring motivational dynamics underlying non-Anglophone medical students' efforts to learn English for Medical Purposes. *Educational Process: International Journal*, 20, e2026001. doi:10.22521/edupij.2026.20.1.
59. Stötzer, A., Farkas, É., & Bagyura, M. (2024). From theory to instrument: Developing an L2 Motivational Self System-inspired questionnaire. *Educational studies and language education research*.
60. Huang, Y. P., & Lin, L. C. (2024). Professional development and the changing roles of English for Specific Purposes teachers in medical and healthcare education. *English for Specific Purposes*, 74, 103–116.
61. Pinner, R. S. (2019). Authenticity and teacher motivation in language education. *English Language Teaching*, 12(5), 1–12.
62. Stötzer, A., Bagyura, M., & Farkas, É. (2024). Motivational drivers and barriers in learning English for Medical Purposes: Perceptions of Hungarian medical students and EMP teachers. *Social Sciences & Humanities Open*, 12, 102024. doi:10.1016/j.ssaho.2024.102024.

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