
SOCIAL REPRESENTATIONS OF ENGLISH AMONG MEXICAN MEDICAL STUDENTS

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Abstract

English competence is essential in medicine, as it facilitates access to cutting-edge research, global communication, and international collaboration in the field. In this context, a study was conducted to examine social representations of English among 463 newly registered medical students at a Mexican public university between 2021 and 2023. It was part of a long-term investigation project focused on exploring the development of university students' critical thinking in relation to various aspects of their academic activities. SRs refer to shared beliefs and interpretations held by members of a social group regarding a particular social object. Using an open-ended question "What comes to your mind when you think of English?", the participants expressed their past and current interests, challenges, and reflections on acquiring this language, along with their thoughts on its role in medicine. The findings reveal that English transcends its linguistic utility, emerging as a social phenomenon. Most of the participants viewed it as a universal language fundamental for professional success, while also acknowledging frustrations involved in mastering it, which were often attributed to teaching methods or individual barriers. These results highlight both the instrumental and integrative value of this language in the students' personal and academic lives. In this case, the function of medical and language teachers is critical in supporting their efforts to become proficient in English.

Keywords: English language, global communication, medical education, social representations, university students

Introduction

The prominence of English in worldwide healthcare is indisputable, serving as the principal medium for academic research, international collaboration, and professional development (Chan, Mamat, & Nadarajah, 2022). In medical education, mastery of this language constitutes a core competence for students seeking academic excellence, professional advancement, and high-quality clinical service delivery in increasingly globalised contexts (Ángel Rodríguez, Alpizar León, & García Hernández, 2020). Despite its

importance, medical trainees' attitudes toward English are diverse (Lin et al., 2025). These viewpoints are influenced by previous and continuing experiences, both in formal instruction and informal exposure through social or digital environments. Thus, students often recognize English's instrumental value for accessing specialized knowledge, expanding professional opportunities, and enhancing academic and geographic mobility. However, certain individuals view it as challenging, due to extensive technical vocabulary, idiomatic expressions, and syntactic complexities (Deng, Zhou, & Al-Shaibani, 2022). For Spanish-speaking learners, lexical overlap with medical terminology derived from Latin may facilitate comprehension, yet significant differences in grammar and discourse conventions remain obstacles (Ruiz Rosendo, 2008).

Non-native English speakers in non-English-speaking countries often perceive English's dominance in academia and medicine as a form of linguistic imperialism, privileging certain linguistic communities while marginalizing others (Phillipson, 1992; Spolsky, 2019). These perspectives highlight the importance of considering the sociocultural, ethical, and political dimensions of English acquisition, particularly where global knowledge hierarchies intersect with local educational contexts. Understanding them clarifies the interplay of discourse, identity, and power in contemporary medical education.

Perceptions of English can be analysed through multiple theoretical perspectives. Cognitive Theory emphasizes internal mental processes in language learning, Sociocultural Theory point to the facilitating role of social interaction and culturally situated practices, and Critical Discourse Analysis examines embedded power relations and ideologies in linguistic practices. The study presented in this article, nevertheless, adopts Social Representation Theory as its primary framework. Originating from Moscovici (1961), this approach conceptualizes knowledge as socially constructed, offering tools to examine how collective beliefs, shared values, and socially mediated experiences shape understanding. Applied to language acquisition, it stresses the influence of cultural, societal, and institutional forces on both communicative competence and the symbolic valuation of a language.

The study examines how newly matriculated medical students at a public university in Mexico construct, negotiate, and internalize social representations (SRs) of English and the process of learning it. By considering their educational trajectories, cultural backgrounds, and everyday interactions, the research reveals how collective identities and shared meanings around this language emerge and are sustained within the medical education context. In this way, it provides an integrative perspective that goes beyond strictly linguistic or cognitive approaches, emphasizing the sociocultural, ideological, and institutional processes that shape English instruction and learning within a globalised educational context.

Concept and foundations of SRs

SRs offer a framework for understanding how individuals and groups collectively construct, negotiate, and communicate shared

interpretations of socially relevant phenomena. They constitute organized systems of values, ideas, and practices that enable communities to make sense of social reality and assign meaning to experiences (Moscovici, 1961). Rather than being private mental models, these representations are socially mediated, dynamic constructs shaped through communication, interaction, and cultural exchange (Jodelet, 1991). Moreover, they fulfil both cognitive and social functions: simplifying complex phenomena into accessible categories while fostering cohesion by reinforcing shared norms, collective identities, and symbolic boundaries (Bauer & Gaskell, 1999). Importantly, SRs are dynamic, evolving through interaction, negotiation, and contestation within broader sociocultural, historical, and institutional contexts (Jodelet, 1991).

According to Moscovici (1961), SRs have a tripartite structure comprising three interrelated dimensions: information, field of representation, and attitude. The informational dimension includes the knowledge, beliefs, and perceptions that form the cognitive foundation of a representation. The field of representation organizes and hierarchizes this information, showing how meanings are interconnected within the collective understanding of the group. The attitudinal dimension captures the evaluative stance (emotional, ideological, or axiological) through which members orient themselves toward the represented object, thereby guiding motivation and behaviour. The formation and transformation of SRs depend on the processes of anchoring and objectification (Moscovici, 1961). Anchoring interprets new phenomena through pre-existing cognitive and cultural frameworks, rendering the unfamiliar intelligible and socially manageable. Objectification, in turn, transforms abstract concepts into concrete, tangible images or symbols, facilitating communication and collective understanding. Together, these processes convert the abstract into the familiar and the intangible into the concrete, ensuring that representations are both socially functional and culturally transmissible.

Central to the theory is the concept of the social object, defined as any phenomenon, issue, practice, or entity that attains social relevance and is discursively constructed within a community (Moscovici, 1961). The emergence of a social object requires three conditions: collective relevance (the phenomenon concerns the group), discursive circulation (it is discussed, represented, or symbolized through communication), and cognitive anchoring (it is integrated into pre-existing frameworks of meaning). For example, objects such as 'English,' 'academic success,' or 'professional identity' acquire representational status as they are continuously discussed, evaluated, and redefined within academic and institutional discourses.

SRs in education

In learning environments, SRs offer a comprehensive framework for understanding how individuals construct, interpret, and engage with their academic and professional domains. As Chaib (2015) observes, these representations uncover the collective meanings underlying pedagogical processes, illustrating

how learners' perceptions are shaped by social interaction, cultural traditions, and institutional discourse. From this perspective, education is not merely a cognitive endeavour but a social process through which individuals internalize and reproduce shared systems of knowledge, values, and beliefs. Empirical research demonstrates that SRs influence students' motivation, attitudes, and self-efficacy, which in turn affect academic behaviours, learning strategies, and professional aspirations (Cook & Artino, 2016). Acting as mediating systems between participants and their educational settings, SRs organize experiences and provide frameworks for interpreting success, failure, and identity within the learning process. In higher education, they are particularly relevant for understanding how disciplinary cultures, institutional hierarchies, and sociolinguistic ideologies shape engagement with specialized knowledge. They highlight the dialogical and dynamic nature of knowledge, positioning learning as participation in social practices that simultaneously reflect and transform collective representations.

SRs of languages

Languages clearly qualify as social objects: they are socially and culturally embedded, carry symbolic meanings, and reflect power relations, identity, and social hierarchies. Consequently, according to Castellotti & Moore (2018), learners' motivation, engagement, and behaviour are influenced by how languages are represented within their communities. These authors point out that SRs of languages encompass beliefs about utility, prestige, accessibility, appropriate use, and assumptions about "proper" speakers.

In globalised contexts, English has emerged as the dominant academic and professional language, particularly in medicine. Learners' representations of English integrate instrumental perception, such as access to scientific literature, academic achievement, and professional mobility, with symbolic dimensions like prestige, modernity, and international inclusion. At the same time, this language may also be viewed critically as a vehicle of linguistic imperialism that marginalizes local languages and cultures, reflecting the ambivalent nature of SRs (Lai, 2021).

In higher education, SRs influence students' academic and professional development. Among first-year medical trainees, prior formal and informal exposure through schooling, media, travel, or social interaction shapes their expectations, learning strategies, and emotional engagement (Muthukumar et al., 2025). English is perceived either as a gateway to advanced medical knowledge and professional growth or as a demanding challenge. Cultural beliefs, past learning experiences, and prevailing social discourses further mediate these perceptions. Through anchoring and objectification, learners assimilate unfamiliar linguistic phenomena into existing cognitive frameworks and transform abstract concepts into culturally meaningful forms (Moscovici, 1961). For instance, medical terminology may be anchored to Spanish equivalents or objectified through metaphors that facilitate comprehension, retention, and motivation.

Medical education demonstrates how language serves both as a communication tool and as a conduit for accessing and producing scientific knowledge. Students' representations of English are shaped by expectations of professional competence, the perceived complexity of specialized terminology, prior exposure, and informal interactions. These opinions influence motivation, self-efficacy, and learning strategies, impacting both immediate performance and long-term career trajectories. Peers, instructors, media, and institutional discourses collectively construct and negotiate these beliefs. While students may valorize English as a marker of modernity and legitimacy, they also critique its hegemonic influence, reflecting its sociocultural and ideological significance.

Empirical research confirms these dynamics. Lasagabaster (2003) found that university students' attitudes toward English, Spanish, and Euskera were shaped by sociolinguistic factors, educational background, cognitive traits, socioeconomic status, and group affiliation, with attitudes toward English strongly correlating with proficiency. European studies emphasize the role of language images (perceptions of status, history, and utility), which often manifest as stereotypes reflecting social power and influencing learning (Candelier & Hermann-Brennecke, 1993; Zarate, 1993; Cain & De Pietro, 1997). These representations are conveyed through media, literature, professional materials, and classroom interactions, with teachers' attitudes and discourse shaping learners' perceptions (Moore & Py, 2011; Friedman, 2023).

SRs are closely tied to identity. Languages signal belonging, mobility, cultural capital, and heritage, affecting motivation, engagement, integration, and self-esteem (Cadavid-Múnera, 2022; Chen, Su, & Wang, 2024). Prestige and native-speaker ideals continue to influence pedagogy and learner confidence, normalized across institutional and digital contexts (Jovic, 2023; Guo, 2024). Curricula and materials both reflect and shape SRs: anglophone bias predominates in many textbooks, whereas local references enhance engagement and identity formation (Lopez & Martínez, 2023). From early childhood, learners develop representations through family, school, and media exposure, with metaphors such as "English is a key language" encoding hierarchy and utility (Cadavid-Múnera, 2022).

Classroom interactions play a key role in shaping and negotiating SRs. Teachers' beliefs about linguistic norms and utility influence pedagogy, feedback, assessment, and learner identity, while peers may reinforce or challenge these perceptions (Lőrincz, 2023). Beyond the classroom, language policies often reflect market-oriented representations, framing languages as tools for economic advancement or national prestige (Bourdieu, 1991). Alignment with community perceptions is particularly crucial in contexts such as minority-language revitalization (O'Rourke & Dayán-Fernández, 2024). Media and technology further encode SRs, sometimes perpetuating prestige biases, yet digital platforms also enable the inclusion of diverse speaker profiles and provide

opportunities to question established hierarchies (Panjaitan & Patria, 2024). Additionally, SRs encompass affective and embodied dimensions, where socio-emotional interventions can shape learners' attitudes and engagement (Chen, Su, & Wang, 2024; Pentón Herrera & Darragh, 2024).

Methodologically, research in this field often employs mixed and multimodal approaches such as drawings, interviews, and content analysis, situating SRs within specific sociolinguistic contexts and integrating cognitive or neuroscientific measures. Nevertheless, certain gaps remain, including a lack of longitudinal and intervention studies, limited cross-national comparisons, underdeveloped standardized measurement instruments, and insufficient exploration of local and minority languages.

The global dominance of English in medicine and its implications for healthcare

English has become the dominant language in medicine worldwide, reflecting both its practical utility and its role as a form of linguistic imperialism that shapes access, communication, and professional development in healthcare. Most leading medical research is published in English, making proficiency essential for keeping pace with scientific advances (Pascual-Leone et al., 2022). High-ranking journals, databases, and conferences predominantly operate in English, and most high-impact studies are disseminated through this language (Díaz-Rodríguez, Quintana-López, & de León-Riera, 2022). Proficiency allows medical professionals to critically evaluate research, participate in academic discourse, and apply evidence-based findings in clinical practice, whereas limited proficiency can hinder access to the latest methods and innovations (Remes-Troche, 2012; Goodfellow, 2012; Faraj, 2015; Wahyuni, 2021). Many medical technologies, devices, and protocols are introduced via English-language platforms, making the language a gateway to advanced care (Araujo Inastrilla & Solís Solís, 2023). Nevertheless, Spanish remains vital across Latin America and Spain, partially explaining why some Mexican students initially deprioritize English proficiency (Romero Arocha et al., 2024; Silva, 2019; Ulloa-Aguirre et al., 2020).

English also serves as the lingua franca of international medical collaboration. Proficiency enables healthcare professionals to engage in global health discussions, participate in joint research, and contribute to multinational clinical trials, fostering the development of new treatments, technologies, and policies (Schkinder, 2024). Fluency facilitates access to conferences, workshops, and professional networks, as well as collaborations with prestigious institutions, international funding, and advanced study abroad (Nguyen, 2024; Chan, Mamat, & Nadarajah, 2022). Thus, English enables cross-border scientific cooperation while reflecting structural inequities, as professionals lacking proficiency may face disadvantages in global medical participation.

In medical education, English proficiency is increasingly a prerequisite for academic success. It is central to licensing exams, certification programs, and comprehension of complex concepts, assignments, and professional discussions (Chan, Mamat, & Na-

darajah, 2022). Leading medical schools use English as the medium of instruction, and textbooks and online resources are often provided in English even in non-English-speaking countries (Alsuliman et al., 2019). Students pursuing international education or prestigious positions face stringent English requirements, illustrating its gatekeeping role and the global hierarchy of linguistic dominance in healthcare education (Wynter et al., 2019).

Beyond academia, English is crucial for patient communication, particularly in international medical missions, medical tourism, and global health initiatives (Wu et al., 2021; Caballero Martinez, Galvan De La Fuente, & Fong Flores, 2024). In Mexico, the expansion of medical tourism has made English essential for effective interaction with international patients (Fischer, 2022; Martínez Almanza, Morales, & Breceda Pérez, 2022). This illustrates how linguistic imperialism operates in practical healthcare, privileging English speakers while potentially marginalizing non-English-speaking professionals.

Although English is widely recognized as the *lingua franca* of medical education and practice, research examining this phenomenon from a social-psychological perspective in Spanish-speaking contexts is limited. Few studies explore the social and cognitive dynamics underlying English learning in health-related education. For instance, Jiménez Barraza (2022) found that students associate English with professional advancement, international mobility, and access to scientific knowledge, while also experiencing apprehension due to perceived difficulty or limited proficiency. Similarly, De Tagle Herrera (2013) reported that medical students view English as essential for accessing literature and participating in international conferences, yet weigh its benefits against the effort required to achieve proficiency. Camacho Imbachí et al. (2022) highlighted both symbolic and instrumental dimensions of English learning, including associations with modernity, scientific progress, and global communication.

Collectively, these studies underscore the practical and symbolic roles of English and the influence of SRs on learners' attitudes, perceptions, and behaviours. Research on newly matriculated Mexican medical students is scarce. Investigating their representations of English can illuminate how students navigate proficiency expectations, pressures from global linguistic hierarchies, and affective and motivational factors shaping engagement. This is particularly relevant in contexts of entrenched linguistic imperialism, where English dominates research dissemination, professional communication, and international collaboration, potentially marginalizing local languages and cultural knowledge (Phillipson, 1992; Crystal, 2003). Insights from such research can inform curriculum design, pedagogical strategies, and institutional policies to promote effective, contextually relevant language education and enhance access to global medical knowledge.

In Mexican higher medical education, English proficiency is essential for engaging with scientific literature, participating in international conferences, and integrating advances in clinical practice (Sierra-Galan, 2016; Pascual-Leone et al., 2022; Díaz-

Rodríguez, Quintana-López, & de León-Riera, 2022). Yet, many newly matriculated students demonstrate limited proficiency (Romero Arocha et al., 2024) and may hold ambivalent or negative perceptions of English. These perceptions, shaped by prior academic and social experiences and by the global dominance of English, reflect dynamics of linguistic imperialism. Such conditions can hinder motivation and engagement, as students confront both the instrumental necessity of this language for professional advancement and the socio-affective challenges of its learning. Understanding their social and cognitive representations of English is therefore essential to identify factors influencing motivation, guide pedagogical interventions, and support curriculum development in Spanish-speaking higher education contexts.

Study: SRs of English among Mexican medical students

Objective

The study aimed to identify and analyse the SRs of recently matriculated Mexican medical students regarding English. It examined students' attitudes, beliefs, and perceptions of this language as both an academic and professional tool, as well as a symbolically significant language in global and cultural contexts.

Contextual and institutional background

The research was conducted at a public university in Mexico City, which enrolls medical students through a trimester system, admitting new entrants twice annually. This structure allowed inclusion of multiple groups from six consecutive cohorts (2021–2023), ensuring diverse representation. The university provided a setting to explore how English influences students' academic and professional trajectories, particularly at the onset of their medical education, when exposure is primarily pre-university and not yet formalized in the curriculum.

Focusing on newly registered undergraduates enabled the assessment of English competence and attitudes before formal instruction – a critical stage, since students are expected to engage with English-language academic materials, including specialized medical texts and scientific publications. Examining initial perceptions provides insights into the formation of professional identities, motivation for learning, and this language anticipatory attitudes toward international academic engagement.

Although English is not mandatory at this university, it facilitates access to scientific literature, academic resources, and international professional networks. This context offers a strategic framework for examining how students socially represent this language during the early stages of their professional socialization in medicine.

Participants

The study included 463 students: 113 males (24.4%) and 350 females (73.6%), aged 17–34 years. All participants were Mexican nationals with prior English exposure through secondary and high school education, typically at A1–A2 level (CEFR). Eleven students (2.4%) had lived in English-speaking countries (USA,

UK, Canada), and 101 (21.8%) had pursued extracurricular English courses. Self-assessed proficiency varied: 9.3% “very good,” 39.5% “good,” 22% “fair,” 20.9% “poor,” and 8.3% “very poor.” This diversity in prior exposure and perceived competence enabled a nuanced analysis of SRs across different levels of familiarity and skill.

Methodology

The study employed a mixed-method design to explore both quantitative and qualitative dimensions of SRs. Data were collected using a structured demographic survey, covering age, gender, prior English instruction, international experience, and self-assessed proficiency, and an open-ended prompt: “What comes to mind when you think of English?” This elicited associative words, phrases, and narratives capturing symbolic, instrumental, and attitudinal dimensions.

Analysis combined quantitative coding and statistical examination in SPSS with qualitative thematic analysis. Themes were identified, guided by SR processes: anchoring, linking English to familiar contexts or prior experiences, and objectification, transforming abstract concepts into concrete categories such as academic success, career opportunities, or media engagement. Responses were organized into three dimensions: attitudes, field of representation, and information, by identifying representative phrases and testimonies and interpreting the meanings they conveyed.

This integrated approach supported methodological rigour, theoretical coherence, and careful operationalisation of SR constructs, helping to address previous concerns about epistemological clarity in representation research.”

Results

English competence from a multidimensional perspective

Thirteen percent of students emphasized English as essential for accessing scientific literature, textbooks, and international publications. Anchoring is evident in linking the language to familiar academic structures, while objectification appears in statements such as, “The majority of information is in English, so it is essential for my education.” Students perceived English not only instrumentally, as a resource for academic achievement, but also as integral to their emerging professional identity in medicine.

Thirty-two percent associated English proficiency with career advancement and employability. Anchoring occurs as students connect the language to tangible opportunities, including international internships, research, and global conferences. Objectification is reflected in metaphors like “opens doors to employment,” translating abstract career benefits into concrete cognitive representations. These SRs underscore the influence of worldwide labor market expectations on language-learning motivation.

Twenty-six percent conceptualized English as a universal lingua franca. Anchoring is seen in linking English to global communication and cross-cultural exchange, while objectification emerges in expressions such as “a universal language,” transforming abstract ideas into vivid metaphors. This category illustrates

integrative motivations, with English valued both instrumentally and as a medium for cultural connectivity and international participation.

Seventeen percent highlighted English in media and entertainment. Anchoring occurs through associations with familiar cultural content – films, music, and literature, while objectification is evident in statements like, “My favourite movies and series are in English.” This category reflects intrinsic motivation and identity formation, showing that engagement with English extends beyond academic and professional functions (Castro & Shelton-Strong, 2024).

Fifteen percent linked English to personal growth, mobility, and international experiences. Anchoring relates English to travel and concrete experiences, while objectification appears in expressions such as, “It helps with traveling.” These representations align with integrative motivations, emphasizing cultural engagement, worldview expansion, and intercultural competence (Chung & Long, 2024), positioning English as both a practical and symbolic tool for self-development.

Despite recognizing its importance, only ten percent reported difficulties, primarily in grammar, pronunciation, and listening comprehension. Anchoring is evident in mapping these challenges onto prior educational experiences, and objectification appears in statements like, “It’s difficult to speak fluently.” Notably, resilience emerged as a theme: many students highlighted persistence, reflecting the negotiation between perceived difficulty and long-term benefits.

Overall, these categories illustrate the interplay of anchoring and objectification, key processes in constructing SRs (Moscovici, 1961). English is anchored in concrete domains – academic, professional, and cultural, allowing students to interpret a socially salient phenomenon. Objectification materializes these representations through metaphors and tangible descriptors, trans-

Category	Frequency (number of students)	Percentage
Academic success	60	13
Professional success	146	32
Universal language	124	26.8
Popular culture and media	80	17.3
Personal development and travel	72	15.5
Challenges in learning English	46	10

Table 1
SRs: categories, frequencies and percentage.

lating abstract concepts into shared symbolic knowledge. Table 1 maps these processes, showing how academic and professional benefits (instrumental motivations) link to practical outcomes, while metaphoric representations of English as a universal language and cultural bridge reflect integrative motivations. Challenges and resilience highlight the dynamic negotiation inherent in SRs, where abstract ideals are continuously reconciled with practical realities.

Dimensions of SRs of English

To explore the multidimensional SRs of English among medical students, the data were interpreted through three interrelated dimensions: attitudes, field of representation, and informational perceptions. Participants’ testimonies were analysed and organized to highlight recurring patterns and illustrate the variety of experiences and perspectives. Table 2 presents a selection of these insights, providing a clear overview of the ways in which students

Table 2
Dimensions of students’ SRs.

Dimension	Phrases and selected testimonies	Interpretation
Attitudes	I enjoy learning new things; I like how it sounds; It is fun; I enjoy learning another language; It seems elegant and pleasant to the ear; I like speaking differently and its accent; I love listening to music in English; I would like to master it perfectly; It is difficult to learn; It sometimes feels monotonous; It is fascinating to understand another language; It attracts my attention; I enjoy communicating with people from other countries.	Testimonies reflect intrinsic motivation, aesthetic appreciation, and awareness of learning challenges, indicating generally positive attitudes alongside recognition of cognitive demands.
Field of representation	Professional and career opportunities (working in the U.S., career development, educational and professional mobility); access to academic and scientific information (books, articles, conferences, research); international communication and interaction (people from other countries, cultures, social and cultural exchange); travel and global mobility; practical application in daily life and education; learning languages as a cultural and social tool.	Testimonies reflect intrinsic motivation, aesthetic appreciation, and awareness of learning challenges, indicating generally positive attitudes alongside recognition of cognitive demands. English is perceived as a strategic instrument that facilitates academic, professional, and cultural opportunities, demonstrating both instrumental and social value.
Information	Most widely spoken language/lingua franca; present in books, music, films, and media; essential for accessing scientific and technical research; facilitates international communication; fundamental for academic studies and training; contributes to personal and professional development; essential in medicine and science; enhances vocabulary and understanding of other languages; tool for cultural and professional exchange; strategic language for education, research, and culture; global language and medium for social interaction.	English is regarded as a global cognitive and social resource, crucial for learning, research, and intercultural communication.

perceive and engage with English, encompassing personal, academic, and cultural dimensions while maintaining the richness of the original responses.

Thus, medical students perceive English as a multidimensional social object, reflecting a convergence of attitudes, professional aspirations, and informational awareness. They express enjoyment and fascination with the language, highlighting aesthetic appreciation, intrinsic motivation, and a keen interest in intercultural communication, while simultaneously recognizing the challenges posed by complex grammar, vocabulary, and practical application (Gardner, 1985). English is also viewed as a crucial instrument for professional growth and academic advancement, facilitating careers abroad, access to scientific literature, participation in international conferences, and cross-cultural engagement. In this sense, it functions as a mediator of social and professional opportunities, consistent with Moscovici's theoretical framework. Beyond its instrumental role, students recognize English as a dominant global language present across media, literature, and scientific resources, enabling research access, vocabulary expansion, and meaningful participation in international networks. Its strategic importance in medicine, science, education, and global communication underscores both its practical utility and symbolic significance (Crystal, 2003). Together, these dimensions reveal that students' engagement with English encompasses cognitive, affective, and social elements, suggesting that language education should simultaneously cultivate motivation, aesthetic appreciation, and intercultural competence while reinforcing academic and professional skills, promoting a holistic approach to English learning.

Discussion

The findings of this study illuminate the multidimensional SRs of English among medical students, revealing its significance across academic, professional, and personal domains. Analysis of six principal categories highlights the interplay of affective, instrumental, and cognitive perceptions, reflecting Moscovici's (1961) processes of anchoring and objectification.

Students generally exhibit positive attitudes toward English, demonstrating intrinsic motivation, curiosity, and aesthetic appreciation. Expressions such as "I enjoy learning new things," "It is fascinating to understand another language," and "I enjoy communicating with people from other countries" indicate engagement beyond utilitarian purposes, encompassing both affective and integrative motivations (Gardner, 1985). At the same time, students recognize challenges in grammar, pronunciation, and listening comprehension, reflecting awareness of the cognitive demands of language learning (Karimnia & Khodashenas, 2018; Alrashed & Abdel Latif, 2025). Anchoring connects English learning to prior educational experiences and familiar contexts, while objectification appears in metaphors such as "It helps with traveling" or "opens doors to employment," translating abstract motivations into tangible, shared representations.

English is also perceived as a strategic instrument for professional growth, academic advancement, and international engagement. Categories such as professional and academic success underscore its role in shaping career aspirations, accessing scientific literature, participating in conferences, and pursuing international mobility. These perceptions align with global trends in medical education, where English functions as the *lingua franca* of scientific knowledge and professional communication (Hamel, 2007). The dominance of English in journals and conferences exemplifies linguistic imperialism, privileging access and legitimizing global professional standards (Phillipson, 1992). Students' beliefs reflect both instrumental motivations, viewing English as a practical means to career advancement, and integrative motivations, recognizing the cultural and symbolic capital inherent in mastery of the language.

Moreover, the participants perceive English as a global cognitive and social resource, essential for accessing research, technical knowledge, and cross-cultural communication. Anchoring connects the language to concrete domains, such as scientific literature, media, and international exchange, while objectification transforms these domains into metaphors, including “a universal language” or “essential for my education.” These processes demonstrate how English simultaneously serves practical needs and cultural-symbolic functions, reinforcing its role as a *lingua franca* in global health and higher education.

The convergence of attitudinal, representational, and informational dimensions positions English as a multidimensional social object for medical students. Instrumentally, it facilitates access to cutting-edge research, international collaboration, and career mobility. Affectively and integratively, it supports personal development, cultural engagement, and professional identity formation. At the same time, the prominence of English in medical education reflects elements of linguistic imperialism, influencing pedagogical practices and shaping perceptions of competence (Hamel, 2007). While proficiency provides opportunities, non-native speakers may experience marginalization, illustrating the tensions between global standards and local educational realities.

Across all dimensions, anchoring and objectification structure students' perceptions. Academic and professional goals are anchored in familiar objectives, such as mastering textbooks or securing internships abroad, while objectification materializes these aspirations through metaphors such as “opens doors” conveys tangible career benefits, and “universal language” evokes cultural connectivity. Even challenges are socially constructed through these processes, with resilience emerging as students negotiate the balance between difficulty and potential gain.

Conclusions

The study illustrates the multifaceted role of English at the very beginning of medical education. By applying Moscovici's Social Representation Theory, it explores how medical students con-

struct shared beliefs and attitudes about English, emphasizing its cognitive, instrumental, and affective significance. Uniquely, the study examines this phenomenon at the onset of students' university studies, grounding the analysis in their prior experiences and exposure to the language. English emerges not merely as a tool for accessing information, but as a socially and professionally valued resource that shapes students' identity, motivation, and aspirations within the medical field.

Students perceive English as essential for academic success, professional mobility, and participation in global scientific and medical communities. Beyond its practical utility, the language functions as a cultural and symbolic bridge, enabling engagement in international networks, access to scientific knowledge, and integration into broader professional landscapes. Processes of anchoring and objectification translate abstract notions of opportunity and competence into concrete, shared representations, allowing students to navigate both the advantages and challenges of learning English.

The study also highlights the dual nature of English in medical education. While proficiency supports research, clinical collaboration, and professional recognition, it simultaneously reflects dynamics of linguistic imperialism. The dominance of English in publications, conferences, and global discourse privileges native speakers and may limit equitable access for others. Students' awareness of these dynamics underscores the importance of critically engaging with language as both a functional and sociocultural instrument.

The findings underscore the importance of a pedagogical approach that integrates affective and instrumental dimensions of language learning, thereby fostering motivation, resilience, and proficiency essential for academic and professional advancement. Educators should encourage critical engagement with English as a globalised language and promote inclusivity for non-native speakers. By integrating cultural, social, and professional dimensions into English learning, medical education can enhance students' global competencies and intercultural skills, preparing them for active participation in international medical and scientific communities.

Overall, the research results emphasize the need for educational strategies that address affective, cognitive, and instrumental dimensions of language learning. Curricular interventions should foster motivation, intercultural competence, and resilience while providing structured opportunities to develop proficiency aligned with professional demands. Encouraging critical awareness of linguistic hierarchies can help mitigate the unintended consequences of English dominance, preparing students as competent, culturally literate, and globally engaged medical professionals.

Limitations of the present study include reliance on self-reported data, which may be influenced by personal biases, and sampling from a single institution, limiting generalizability. So-

cio-economic and cultural factors were not examined, and the cross-sectional design precludes assessment of longitudinal changes in attitudes.

Future research should consider longitudinal designs to track evolving SRs of English, comparative studies across cohorts or institutions to examine generational or contextual differences, and qualitative methods such as interviews and focus groups to capture nuanced perspectives. Investigating the interplay between language policies, curriculum design, and students' attitudes could inform interventions to enhance linguistic and cultural competence, while examining how SRs influence teaching strategies may optimize educational practices and alignment with learners' needs.

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