Studying in an English-Medium Instruction Medical Degree Program in Italy: Students' Perspective - Ongoing Research

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Abstract

In the last two decades, the internationalization of education at tertiary level has led several academic institutions in non-English speaking countries to adopt English as a medium of instruction (EMI) (Costa and Coleman, 2013; Macaro, 2018). English has become the language of teaching and learning of several academic degree programs and a key factor for attracting a more diversified student population and increasing the institutional prestige. Through an online questionnaire sent to a group of first-year students of a degree in Medicine and Surgery in Italy, this study (1) verifies the students' English language level at the beginning of their academic studies; (2) identifies the factors and reasons to enroll in this degree program; (3) observes the students' initial experience in an English-only academic setting. The preliminary findings show that the participants have a good command of the English language at the beginning of the term, as required. The research also identifies the students' most common motivations and expectations, which include English language improvement during six years of medical studies in English, highly competent lecturers at teaching through English and more opportunities to study and work abroad. Although English development is not a primary goal in EMI programs (Pecorari and Malmström, 2018), this study suggests that, as far as this medical course is concerned, the English language plays a key role in its overall success and in the students' general satisfaction.

Keywords: English-medium instruction; EMI; English proficiency; medical school; higher education

Introduction and Study Background:

In the last twenty years, education has undergone significant changes in order to be more international and attractive to a more diversified student population. Driven by the trend of globalization and the call for the internationalization of higher education (HE), many institutions in the world have begun to plan new educational policies and strategies to become more competitive and appealing (Doiz et al., 2011; Smit and Dafouz, 2012; Hultgren et al., 2015). In Europe, the turning point towards a more internationalized

education came after the Bologna process in 1999, which had envisaged a standardization of the European educational system and an increase of prestige, international mobility, overseas students and academic staff (Wilkinson, 2005; Wächter and Maiworm, 2014; Pulcini and Campagna, 2015).

One of the most tangible results of the new educational strategies has been the introduction of English-medium instruction (EMI) degree programmes, entirely taught in English, in those countries where the language is not the mother tongue of the majority of the population (Macaro, 2018; Pecorari and Malmström, 2018). In such a context, English is used almost exclusively as a means to teach and learn academic content, whereas language development and improvement are not explicit learning outcomes (Pecorari and Malmström, 2018). Thus, the focus of EMI classes is on the content delivered, which is the priority (Aguilar, 2017).

Nonetheless, English language improvement is one of the key motivations to opt for English-medium education across the different countries where the EMI courses are offered (Lei and Hu, 2014; Ackerley, 2017; Drljača Margić and Vodopija-Krstanović, 2017). Indeed, the immersion in an English-only environment may be perceived by some as a convenient way to learn and practice the language (TAEC EMI Handbook, 2019; Kamaşak et al., 2020) and "some incidental language learning is expected due to the exposure […]" as argued by Aguilar (2017: 726). In the same vein, other EMI scholars suggest that a certain degree of language development and improvement may take place while studying through English (Coleman, 2006; Smit and Dafouz, 2012; Rose et al., 2020). In a study spanning across 55 countries, Dearden (2015) noticed that there is some evidence that students improve their receptive skills but not the productive ones.

Yet, there is little published data about the type of language skills that are likely to improve in EMI contexts. While many scholars highlight that students' English skills are expected to expand, there is an ongoing effort to establish whether English language improvement is achieved by EMI students and to what extent the success of EMI programmes and students' satisfaction are related to language learning outcomes.

In light of the above considerations, this paper focuses on a group of first-year students enrolled in an EMI degree programme in Medicine and Surgery at the University of Torino (Italy) and analyzes their motivations and initial experience in such a programme. Starting from the investigation of the students' English language level and skills at the beginning of their academic studies, this research will shed light on the students' experience in a medical programme and their relationship with the English language.

Methodology:

This paper presents the initial findings of a forthcoming doctoral thesis on the role played by the English language in the EMI environment, specifically in a medical degree programme in an Italian university, taught through the medium of English. The main aims of this article are (1) to verify the students' English level proficiency at the beginning of their academic studies in Medicine and Surgery, (2) to identify the students' motivations to enroll and study in this programme and (3) to evaluate the students' feedback towards EMI in the initial phases of their university experience. This study seeks to answer the following research questions:

RQ1: Does the students' English language competence comply with the required standards?
RQ2: What are the students' motivations to study medicine in English?
RQ3: What is the students' feedback in the initial phases of their university experience?

Data collection instrument

The instrument chosen to gather the data was an online questionnaire in English created through the Google form tool and consisting of 21 open and close-ended questions and Likert scale items. The Likert scale questions were made up of 5 response anchors measuring the level of difficulty of specific tasks in EMI classes, ranging from very difficult (1) to very easy (5).

The questionnaire was divided into three sections:
(1) the first focused on the students' demographic characteristics and personal background through the first five items of the questionnaire (age, gender, nationality, mother tongue, type of secondary school attended).
(2) The second section dealt with the students' self-evaluation of their language skills according to the Common European Framework of Reference (CEFR) descriptors, on a scale from A1-A2 (basic user) to B1-B2 (independent user) and C1-C2 (proficient user). They were asked to reflect on their abilities in certain language activities according to the CEFR descriptor scale[1] in which the tasks are classified as follows: reception (listening and reading), production (speaking and writing), interaction (spoken and written) and mediation. For the purpose of the study, the latter was not considered.

In this part, they also provided additional information about their previous contacts with the English language by choosing from a range of different options and alternatives (e.g. preparation for internationally

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[1] CEFR Descriptor Scale 2018: https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989
Last access: 15/12/2020

recognized language examinations, prior experience studying through English, use of the language outside the academic context).

(3) The third and last section focused on the students' motivations to enroll in an EMI degree programme in Medicine and Surgery in Italy and the first impressions they had of the course.

Before administering the questionnaire to the participants, it was piloted with three colleagues of the university where the study took place. Small changes were done to make the questionnaire clearer and less time-consuming. It was sent to 100 students at the beginning of the term via email, after having obtained their contacts and the permission to involve them in the survey.

Context of the study

The data were gathered in November 2019 at the University of Torino where the EMI degree programme in Medicine and Surgery has been activated since the academic year 2017-18. This is a single-cycle course offered by the Department of Clinical and Biological Sciences lasting six years. In the academic year 2019-20, when this study began, it was in its third year of experimentation; thus, the first six-year cycle has not been completed yet. This degree course has restricted admission procedures with a fixed number of candidates and specific entry requirements decided at national level by the Italian Ministry of University and Research (MUR). To be admitted in the EMI programme, prospective applicants firstly have to pass the International Medical Admission Test (IMAT)[2] which usually takes place simultaneously in all the Italian universities where this degree programme is offered. If students pass the entrance test, the next step takes place locally at the university/ies chosen by the candidates, who are placed on a ranking of eligible applicants. Indeed, throughout Europe, admission policies and specific language entry requirements are individually set by the universities that offer EMI degree programmes (TAEC EMI Handbook, 2019; Dimova, 2020) in the forms of either internal tests (such as placement tests and oral interviews conducted by the academic staff) or external tests (e.g. international certifications) (Cicillini, forthcoming). Although candidates have already passed a first national selection, weaknesses may arise in some disciplinary

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[2] IMAT: *International Medical Admissions Test* is offered by the Cambridge Assessment Admissions Testing and is aimed at measuring the prospective candidates' skills, specifically the students enrolling in EMI degree programmes in Medicine and Surgery and Dentistry in Italy. It evaluates the students' logical reasoning, general and scientific knowledge that they are expected to have for the admission to this degree programme. It is a 100 minute test composed of 60 multiple-choice questions.
https://www.admissionstesting.org/for-test-takers/imat/about-imat/
Last access: 16/12/20

areas or language competence; in these cases, students are expected to attend specific remedial courses during their first year.

Sample

The sample identified for this study is made up of 100 first-year students enrolled in the EMI degree programme in Medicine and Surgery at the University of Torino in 2019-20. 91% participated in the survey and among these 57% were female while 43% were male students (See Table 1). Roughly half of them were between 17 and 19 years of age, reflecting the fact that in Italy students usually enter university soon after the end of secondary school. This also reflects the different school systems in the countries where the international students studied. Instead, the other half of the participants were between 20 and 25 years of age.

In terms of nationality and first language (L1), 67% of the participants were Italian while 33% were international students, whose mother tongues included Persian, Bangla, Hindi, Turkish, English, Hebrew, Arabic, French, Greek, Hungarian and Vietnamese. Among the Italian-speaking students, 70% were mother tongue while the remaining self-evaluated themselves as basic (23%) and independent (7%) Italian language users. As regards international students, 66% came from the Middle East and the Asian countries while 33% were European.

In response to the question about their previous school studies, most of the students attended the "Liceo" (83%), a type of secondary school which offers a more academic-oriented education (Costa and Coleman, 2013); 15% studied in technical and professional schools, which are more vocationally-oriented (Costa and Coleman, 2013; Campagna and Pulcini, 2014), while just 2% attended international schools in their home countries.

Summary of demographics			
Characteristics	**Category**	**Answers given**	**%**
Age range		n=88	
	17-19 years	46	52%
	20-25 years	42	48%
Gender		n=89	
	Female	51	57%
	Male	38	43%
Nationality		n=88	
	Italian	58	66%
	Other (international)	30	34%
Mother tongue		n=84	
	Italian	58	69%
	Persian	8	10%
	Bangla	3	4%
	Hindi	3	4%

	Turkish	3	4%
	English	2	2%
	Hebrew	2	2%
	Arabic	1	1%
	French	1	1%
	Greek	1	1%
	Hungarian	1	1%
	Vietnamese	1	1%
Secondary school	N=86		
	"Liceo"	71	83%
	Technical/Professional	13	15%
	International	2	2%

Table 1 - Summary of demographics

Findings and Discussion:

One of the main aims of the questionnaire used for this study was to verify the students' English language competence at the beginning of their first academic year in the EMI degree programme in Medicine and Surgery. For this reason, the survey considered their English language skills according to the CEFR descriptors, their self-evaluation and comments about their previous contacts with the English language. Their Italian language competence was also considered.

	English (89)	Italian (83)
A1	0	20% (16)
A2	0	3% (3)
B1	4% (3)	5% (4)
B2	33% (29)	2% (2)
C1	**50% (45)**	0
C2	13% (12)	**70% (58)**

Table 2 - Self-evaluation of English and Italian language competence (CEFR levels)

The results showed that 58 out of 83 participants (70%) self-evaluated themselves as Italian mother-tongue speakers (C2 level), while the remaining 30% were basic or independent Italian users. This may be explained by the fact that no Italian language entry requirement is explicitly requested to prospective international students, as can be seen in the annual report (Scheda SUA)[3] available online. Indeed, in an English-only medical school, the knowledge of Italian is not a requisite, although it may be of help in the students' daily life and relationships with non-English speaking people. This

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[3] Scheda SUA: *Scheda Unica Annuale*. The university annual reports provide information about the degree programme objectives, the entry requirements and admission procedures (if any) and the assessment methods.
https://www.universitaly.it/index.php/scheda/sua/49045
Last access: 18/12/2020

may be even truer in a country like Italy where the English proficiency levels are very low compared to other European countries, as reported by the EF English Proficiency Index (2019).

An interesting finding of the English language proficiency is that 45 out of 89 of the students (50%) stated to be proficient English speakers and claim to have a C1 level (See Figure 1). Instead, 33% of them had a B2 level of English which meets the English language entry requirement set at B2 to enter the EMI degree programme analyzed. Moreover, B2 seems to be the most frequently requested and suitable level of the CEFR (Tatzl and Messnarz, 2013; Harsch et al., 2017; Harsch, 2018; TAEC EMI Handbook, 2019) for admission and successful career in EMI courses (Saarinen and Nikula, 2013). In the case of the Italian students, the B2 level should be achieved by the end of their secondary school education (Campagna and Pulcini, 2014) even though it is not always reached at that school stage (Cicillini, forthcoming). Instead, 13% of the students had a C2 level which corresponds to the highest level of English in the CEFR global scale[4].
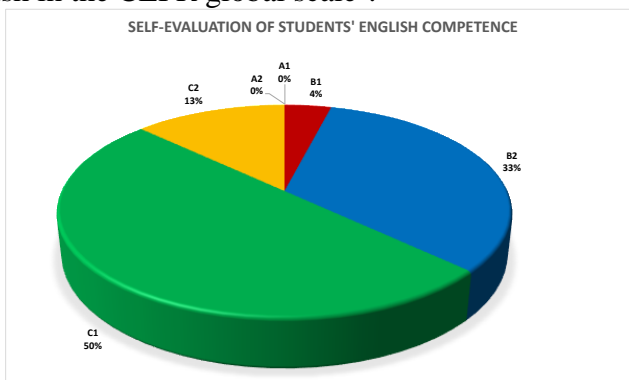

Figure 1 - Self-evaluation of students' English competence, according to the CEFR levels

Figure 2 presents a breakdown of the students' English skills according to the CEFR descriptor scale (2018), in which the language activities and strategies have been classified into receptive, productive and interaction skills. What stands out in Figure 2 is that the strongest skills are the *receptive* ones, with roughly half of the students reporting a C1 level in listening (47%) and reading (46%). As regards the *productive* skills, there seems to be a balance between the students who reported a C1 (38%) level and those who were B2 (36%) in spoken production. By contrast, 39% of the respondents had a B2 in the written production compared to 26% who were at a C1 level. When students were asked to reflect on their *interaction* abilities, over half of them

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[4] CEFR Global Scale: https://www.coe.int/en/web/common-european-framework-reference-languages/table-1-cefr-3.3-common-reference-levels-global-scale

(48%) reported a B2 level and 25% a C1 level in written interaction whereas in the spoken interaction 42% reported a C1 level and 36% a B2.

This data show a positive self-evaluation of the students' English skills and confirms their overall English proficiency which mostly (83%) ranged from B2 to C1 (See Table 2). The data also revealed differences in the students' self-evaluation of their language skills. Whereas the receptive skills are the strongest, productive and interaction are slightly lower, especially the written skills.
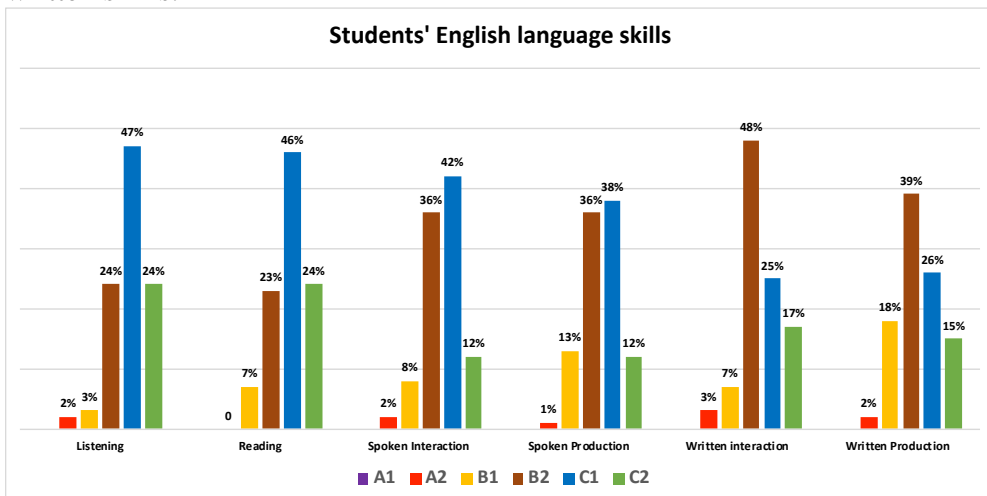

Figure 2 - Breakdown of the students' self-evaluation of their English skills according to the CEFR

The second part of the survey investigated the students' prior experience and contacts with the English language through a range of open-ended questions. The majority of the participants had studied English for more than seven years (88%) whereas 10% of them between five and seven years and just 2% for less than two years. At school level, over half of the students (49%) studied through the Content and Language Integrated Learning (CLIL) approach, which has a dual focus and aims at teaching both the content and the language used as the means to teach and learn (Coyle et al., 2010; Doiz et al., 2014; San Isidro and Lasagabaster, 2019). Among the respondents, just a few students (10%) followed a curriculum entirely taught in English. Instead, the majority (90%) studied single subjects through English. The hard sciences (58%) were the mostly taught and learned through English compared to the soft sciences (32%). This is also confirmed in the Eurydice report (2006) in which it is argued that science and social science are the most frequent subjects offered in English at school level. Among the hard sciences, physics (16%), mathematics (14%), biology (10%) and science (10%) are the disciplines mostly studied in English while history (9%), art (6%) and literature (4%) are the most popular among the soft sciences.

Most of the students (68%) stated to use English almost exclusively on the university campus with lecturers, classmates and patients, and only sometimes (32%) in their daily life, e.g. reading and watching films and TV series. Private tutoring was also mentioned by the respondents for improving their English skills and getting prepared for international certifications. Indeed, the respondents stated to have at least one internationally recognized language certification, among which Cambridge (66%), IELTS (27%) or TOEFL (7%). This may be due to the fact that many universities verify prospective students' language skills through international certifications (Cicillini, forthcoming). Although they are considered reliable to assess English proficiency (Charge and Taylor, 1997), there is a lack of evidence about their utility for admission procedures across EMI degree courses (Dimova, 2020; Galloway et al., 2020).

The second research question aimed at gaining insight into the students' motivations to enroll in a medical EMI programme in Italy. Table 3 shows the main reasons and factors that encouraged the respondents to choose an English-medium medical programme in a non-English speaking country. Among the most popular motivations, there is the awareness of the status of English as the international language (79%), which has become the language of business, science, technology, scientific publications and more recently of many academic programmes which are often offered in English only (Wilkinson, 2004; Wächter and Maiworm, 2008). Besides, more future opportunities in the job market (75%) locally and abroad, both for working (70%) or studying (67%), are perceived as major advantages and factors to opt for English-medium education. Moreover, according to students' answers, studying in the EMI context may give them the possibility *to meet international students* (65%) and *lecturers* (49%), *to have easier access to international publications* (64%) and, last but not least, *to improve their English skills* (60%). These results are in agreement with previous studies which underlined the most frequent reasons to choose an English-mediated education (Kırkgöz, 2005; Costa and Coleman, 2013; Lei and Hu, 2014; Ackerley, 2017; Costa and Mariotti, 2017; Drljača Margić and Vodopija-Krstanović, 2017; Dearden, 2018).

Motivations for studying Medicine and Surgery in English	%
Because English is the international language	79%
Have more job opportunities	75%
Work abroad in the future	70%
Continue my studies abroad	67%
Meet international students	65%
Have easier access to international publications	64%
Improve my English skills	60%
Have international lecturers	49%
Studying medicine in English is easier	1%
Entering Medicine programmes in English is easier	1%
I was accepted in the English programme only	1%

Table 3 - Motivations for studying Medicine and Surgery in English

The third research question focused on the students' feedback on the initial phases of their academic experience in English. In peer-to-peer communication, 60% of the students stated to alternate between English and Italian and that the code-switching largely depends on the context and the situation; instead, 28% use English regularly to talk to their classmates. 75% stated to speak English when they talk to their lecturers and to expect their professors to be proficient users of English (79%), ranging from a C1 to a C2 level of the CEFR; just a few (21%) chose the B1-B2 option as regards their lecturers' English proficiency. Despite these expectations, it seems to be unclear which benchmark of lecturers' proficiency may be the most appropriate to teach in an EMI context (Macaro et al., 2017). While B2 seems to be the minimum level to adequately cope with academic teaching, there is still a lack of consensus about the most meaningful threshold to teach content in English, ranging from the B2 to the C2 of the CEFR (O'Dowd, 2018).

In this survey, the participants were also invited to reflect on certain activities done during the first months of their university life and to express the level of difficulty experienced (1 very difficult – 5 very easy). What stands out in Table 4 is that most of the tasks proposed in the survey were considered very easy or easy to do. Surprisingly, half of the students (50%) considered the spoken interaction with classmates the easiest task to do in class followed by asking questions (35%) and interacting with lecturers (34%). This data is in contrast with previous studies about the EMI students' challenges, which underlined that productive and interactive activities are usually more challenging, as in the case of speaking in front of other people (Tatzl, 2011; Doiz et al., 2019) and giving oral presentations (Kırkgöz, 2005). This is also the case of note-taking, which was considered as a very easy (40%) or easy task (25%) by the respondents but not by other scholars who found out that taking notes (Airey, 2009) and writing academic essays (Evans and Morrison, 2011) are very challenging activities for EMI students.

As regards the receptive activities proposed, these were mostly considered very easy (28%) or easy (33%) as in the case of *following an EMI class* and *understanding specialized vocabulary* (very easy 38%; easy 18%). This corroborates the findings of a study conducted by Doiz et al., 2019, in which understanding technical terms was not regarded as the most difficult task, compared to other activities. Overall, no activities seem to be impaired by the use of English according to the students' feedback in the initial phases of their university careers.

How difficult (1) or easy (5) are the following tasks:							
	Follow an EMI class	Take notes in English	Interact with lecturers in English	Interact with classmates in English	Ask questions in English	Answer questions in English	Understand specialized vocabulary in English
Likert scale values	%						
5= very easy	28%	40%	34%	50%	35%	27%	38%
4= easy	33%	25%	34%	34%	33%	37%	18%
3= neutral	30%	26%	18%	9%	25%	26%	30%
2= difficult	8%	3%	11%	4%	4%	8%	12%
1= very difficult	1%	6%	3%	3%	3%	2%	2%

Table 4 - Students' view about the difficulty of certain tasks

Conclusion

This research has reported on a class of first-year students enrolled in a degree programme in Medicine and Surgery entirely taught in English at the University of Torino. Through an online questionnaire, this study has focused on the students' language background and English proficiency level at the beginning of the first term, their motivations to study in a medical school in English and their initial feedback on their experience.

Overall, it is a mixed group of domestic and international students with high English competence, ranging from B2 to C2. Thus, the English language requirements set for achieving successful academic outcomes seem to be met by this group of students. The students who speak Italian were almost exclusively Italian ones who have decided to remain in their home country and study in English.

The primary motivation for choosing an EMI programme is that English is considered to be the global language of communication and studying in that language may provide them with more and better opportunities, both in terms of future studies and work. According to the respondents, another major reason to choose a medical school in EMI mode is to improve their English proficiency level. Indeed, more than half of them hope to improve their skills through the immersion in an English-only environment and the practice with classmates, lecturers and patients. On the whole, the feedback provided by these first-year students during the first term of their programme is that most of the activities are considered easy or very

easy. In addition, what emerged from the answers to the questionnaires is that the receptive skills (listening and reading) are the strongest ones, followed by spoken interaction and production while writing (both in interaction and production activities) is weaker and probably needs more attention and emphasis in the academic curricula through specific support, activities and assignments.

Although improving English has also been reported in other previous studies (Lei and Hu, 2014; Ackerley, 2017; Drljača Margić and Vodopija-Krstanović, 2017) as one of the major motivations to study in EMI degree programmes, it is still uncertain whether language development takes place. Starting from the assumption that EMI lecturers are not English specialists and do not consider themselves as language instructors (Airey 2012; Costa 2012; Lasagabaster 2018), it has been suggested that the introduction of the CLIL approach at school level (Costa and Coleman, 2013; Costa, 2016) and of the Integrating Content and Language in Higher Education (ICLHE) approach at university level (Pulcini and Campagna, 2015; Dimova, 2020) would lead to a dual gain of both content and language. Undoubtedly, the English language plays a key role in the EMI context and for this reason the language factor in EMI is still under scrutiny by many scholars, especially as regards how language improvement may be promoted and achieved by the stakeholders involved.

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