Language-related perceptions: How do they predict student satisfaction with a partial English Medium Instruction in Higher Education?

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ABSTRACT

This study investigated language-related predictors of satisfaction with a partial English Medium Instruction (EMI) programme in teacher education at a Spanish university. More specifically, it explored the impact on programme satisfaction of students' perceptions of language improvement, of opportunities to use English, of lecturers' English proficiency, and language improvement as a motivation for enrolling in the programme. Additionally, it examined how self-rated proficiency affects the association between these language-related variables and satisfaction. Results show that students were more satisfied than they were dissatisfied, that they acknowledged having made an improvement in their English skills, and that the lecturers' English proficiency was below their expectations. Most importantly, the language-related variables under study were found to be significant predictors of student satisfaction with EMI, and each of them explained a high percentage of the variance in programme satisfaction. It was also found that these variables impacted student satisfaction differently across different self-rated proficiency groups. The article discusses that, at a time when competition among universities is taking a global dimension and students' general English proficiency is getting progressively higher, most attention needs to be paid to the language when designing and resourcing EMI initiatives in order to make them competitive and sustainable.

1. Introduction

One of the most remarkable developments in higher education in the last decades has been the exponential increase in English Medium Instruction (EMI) in non-native English-speaking contexts. Against the backdrop of increasing globalisation, staff and student exchanges and labour mobility, global comparisons and university rankings, English-taught courses have proliferated across Higher Education (HE) worldwide and have become a standard strategy to meet internationalisation policies (Dearden, 2014; Fenton-Smith et al., 2017; Macaro et al., 2018).

The most commonly claimed advantage of EMI is the simultaneous acquisition of disciplinary knowledge and language competence (Coleman, 2006; Doiz & Lasagabaster, 2020; Rose et al., 2020). However, doubts have been raised about the validity of this claim by those who hold that conclusive evidence regarding the nature of the purported improved English competence of students in EMI

initiatives is still lacking (e.g., Macaro et al., 2018). Among students, the prospect of improving their English skills seems to be one of the most common reasons why they choose to opt for an EMI track (Chapple, 2015; Salaberri-Ramiro & Sánchez-Pérez, 2018; Yeh, 2014). Additionally, the positive impacts of English-medium instruction on the development of their English language skills is one of the student reported benefits from an EMI experience (Aguilar & Rodríguez, 2012; Barrios & López-Gutiérrez, 2021; Byun et al., 2011; Galloway & Ruegg, 2020; Hernandez-Nanclares & Jimenez-Munoz, 2017; Rogier, 2012; Rose et al., 2020; Tazl, 2011; Wu, 2006), even if they enrolled for reasons other than improving their English (Yeh, 2014). There is evidence, albeit to a lesser extent, that some students do not appreciate the expected improvement in their language proficiency (Aguilar & Rodríguez, 2012; Chapple, 2015; Kim et al., 2016; Lei & Hu, 2014; Sert, 2008).

In the early stages of EMI in European higher education (HE) language learning was not recognized as one of the reasons alleged by governments and institutions to adopt EMI. In fact, in his state-of-the-art article on this topic, Coleman (2006) even highlighted that "foreign language learning in itself is NOT the reason why institutions adopt English medium teaching" (p. 4; emphasis in the original). With the expansion of EMI in countries where their citizens' English proficiency has traditionally lagged behind that of those European pioneering countries in the implementation of EMI policies (The Netherlands and northern European countries), the reasons behind EMI may have accordingly changed and, as Pecorari (2020) contends, "There is […] reason to think that decisions to implement EMI are guided not only by the present value of English in permitting universities to internationalize, but also by the future value to students in having acquired this door-opening proficiency" (p. 22). This holds true in the case of Spanish universities, that place the promotion of language learning at universities at the heart of their internationalisation policies. The official nationwide strategy for the internationalisation of Spanish universities for the period 2015–2020 (Ministerio de Educación, Cultura y Deporte, 2014) recommends the reinforcement of language learning opportunities as the means to scale up the number of "bilingual" (i.e., partial EMI) bachelor's and master's courses, which are considered to "facilitate students' mobility and exchanges, together with providing them with opportunities to work and study at international and multicultural environments" (p. 41).

Given the understandable expectations of linguistic gains generated by EMI in students attested to by research findings, it can be speculated that perceptions of language-related dimensions connected with the programme may be crucial factors in determining student satisfaction with EMI. However, the association of language-related student perceptions and satisfaction with EMI remains surprisingly underexplored (cf. Barrios & López-Gutiérrez, 2021; Lei & Hu, 2014). In a previous study (Barrios & López-Gutiérrez, 2021), findings indicated that the higher the students' self-rated proficiency in English, the lower the satisfaction with this partial EMI programme in teacher education. These findings prompted us to investigate further into language-related student perceptions. Additionally, the study investigated the relationship between being motivated to enrol by language learning and programme satisfaction, and how self-rated proficiency affects the association between language-related perceptions and satisfaction.

2. Literature review

Research findings to date indicate that, although they hold complex and ambivalent attitudes toward EMI, students across contexts seem to be more satisfied than unsatisfied with EMI (Aguilar & Rodríguez, 2012; Botha, 2013; Ekoç, 2020; Karakaş, 2017). One of the major sources of dissatisfaction with EMI among students is their non-native lecturers' English proficiency (Aguilar & Rodríguez, 2012; Bolton & Kuteeva, 2012; Byun et al., 2011; Chapple, 2015; Ekoç, 2020; Jensen et al., 2013; Klaassen, 2003) – with accent being a frequent issue of complaint (Karakaş, 2017). Evidence also exists that students establish a connection between the quality of their EMI experience and the lecturers' English proficiency (Ekoç, 2020; Jensen et al., 2013; Madrid & Julius, 2017).

When it comes to perceptions of language learning, the majority of the studies find that students experience an improvement in their language competence (Hernandez-Nanclares & Jimenez-Munoz, 2017; Rogier, 2012), particularly in terms of technical, specialized vocabulary (e.g., Aguilar & Rodríguez, 2012). However, there is also evidence that questions the effectiveness of EMI for language learning from the students' standpoint (Aguilar & Rodríguez, 2012; Lei & Hu, 2014; Sert; 2008). With regard to the affordances that EMI programmes or courses offer the students, studies repeatedly report that students perceive a remarkable reduction in lecturer/student interaction in EMI as opposed to L1-medium instruction (Aguilar & Rodríguez, 2012; Airey & Linder, 2006; Ekoç, 2020; Wu, 2006).

As noted above, the association between satisfaction with EMI and English learning is far from being thoroughly researched. Two studies have explored this relationship so far. In a study conducted in China, Lei and Hu (2014) investigated the impact of EMI on undergraduates' English proficiency and affect in English learning and use. In a first analysis, degree of satisfaction with EMI was found to be significantly related to proficiency. The students who perceived EMI to be satisfactory made significantly greater gains in their English proficiency than their Chinese medium (CM) counterparts who, like the EMI students, received instruction in English in their programme in Business Administration. However, when prior English proficiency scores were entered in the analyses to partial out the differences in English proficiency between the two groups, the EMI students did not outperform their CM peers on an English proficiency test after receiving EMI for one year. This indicates that previous English proficiency had the same magnitude of effect on students' subsequent English proficiency regardless of satisfaction with EMI. More recently, in a study carried out in the same programme as the present study (Barrios & López-Gutiérrez, 2021), it was found that the higher the students' proficiency in English, the less satisfied they were with it. A statistically significant difference in satisfaction with the programme was found between the lowest self-rated proficiency group (B1) and the highest (C1) groups, with an intermediate effect size. The fact that the advanced (C1) group was also the one that perceived the least improvement in their English skills led the researchers to suggest that there might be an association between their lowest satisfaction with the programme and their perception of modest language gains.

In conclusion, despite the fact that language improvement is one of the main reasons why the students claim to have enrolled in EMI and one of the most frequently reported benefits, the literature concerning research on the relationship between satisfaction with EMI

and perceptions of language-related factors in HE EMI settings is strikingly scarce. However, the existing evidence suggests that the perceptions that the students hold concerning the language dimension in EMI may be essential in how they appraise their EMI experience.

3. Materials and method

3.1. Objective and research questions

The present study had a two-fold aim. The first was to investigate the impact a) of perceptions of language improvement; b) of opportunities to use English; c) of lecturers' English proficiency; and d) of motivation to improve English as reasons to enrol in the programme on satisfaction with it. The second aim was to examine how self-rated proficiency affects the association between these language-related variables and satisfaction. More specifically, the study was guided by the following research questions:

RQ1. Which language-related factors are associated with satisfaction with a partial EMI programme in teacher education?

This research question can be divided into four sub questions:

RQ1.a. Is perception of English improvement associated with satisfaction with a partial EMI programme in teacher education?
RQ1.b. Is perception of opportunities for English use associated with satisfaction with a partial EMI programme in teacher education?
RQ1.c. Is perception of lecturers' English proficiency associated with satisfaction with a partial EMI programme in teacher education?
RQ1.d. Is English improvement as a reason to enrol in the programme associated with satisfaction with a partial EMI programme in teacher education?
RQ2. Are there statistically significant differences in how language-related factors are associated with satisfaction with a partial EMI programme in teacher education across different self-rated proficiency groups?

3.2. Context

The study took place at the Faculty of Education at the University of Málaga (Spain), where a partially English-taught programme leading to a Bachelor Degree in Primary Education was offered. Before entering university, student learn a foreign language – in most cases English – for 12 school years and they typically reach an A2-B1 level. The programme did not include explicitly stated language learning goals or formal language provision. A minimum entry English level was not required for students or lecturers. Around 35% of the 240 ECTS credit points were delivered in English by non-native lecturers over the course of the four-year degree programme. Among the English-taught modules were the following: Music Education, Arts Education, Social Sciences Education, Physical Education and Science Education. Only students specialising in English as a Foreign Language Teaching received specific training in Content and Integrated Language Learning (CLIL). Instruction was mainly in English, although teachers' code-switching was sometimes used to support student understanding of unfamiliar concepts. The tuition fee for this programme was the same as for the equivalent Spanish language programme.

3.3. Participants

Two hundred and seven students enrolled in the partial EMI programme in teacher education took part in the study. All participants were L1 speakers of Spanish. Although some international students were enrolled in program modules at the time of data collection, they were excluded from the study. One hundred and sixty-seven participants (80.68%) were identified as female, 36 as male (17.39%), 1 (0.48%) as non-binary and 3 (1.45%) preferred not to say. Their ages ranged between 18 and 40 ($M = 20.64$, $SD = 3.014$; $Mo = 20$).

A total of 267 students were registered in this partly English-taught degree programme in the academic year in which data were collected (2019–2020). It represents 77.53% of the total number of students enrolled. The study included students from all four course years (see Table 1).

Thirty-eight (18.36%) students self-rated their English proficiency as B1 according to the Common European Framework of Reference (Council of Europe, 2001), 107 (51.69%) as B2, and 62 (29.95%) as C1. As many as 35 (16.90%) students declared not to

Table 1
Distribution of the sample by course year.

Course year	Frequency	Percentage
1st	57	27.54
2nd	50	24.15
3rd	49	23.67
4th	51	24.64

have an officially recognized English proficiency certification. Of the remaining 172 students, 2 (0.97%) held an A2, 57 (27.54%) a B1, 82 (39.61%) a B2, and 31 (14.98%) a C1 level.

English improvement was the second most frequently selected motivation for joining EMI, just behind the expectation of improved employment opportunities in local bilingual schools ($n = 166$ [62.17%]); a hundred and thirty-two (63.77%) participants indicated that improving their English competence was the only reason ($n = 13$ [6.28%]) why they enrolled in EMI, or one of the reasons why they opted for it.

3.4. Instrument

An anonymous online questionnaire was used to gather data on participants' perceptions of language-related issues and satisfaction with the partial EMI programme in teacher education (Appendix). The questionnaire consisted of a demographics section and four different scales. The 6-item 'Perception of language improvement scale' (Cronbach's $\alpha = 0.895$) was designed to gather students' perceptions on their English language development in the programme. This scale contained statements concerning overall English improvement, listening, speaking, oral interaction, reading and writing. The second scale (5 items), 'Perceptions of opportunities for English use scale' (Cronbach's $\alpha = 0.817$), aimed to obtain information on the students' views on affordances provided by the programme to use English in conversation, monologue, listening, reading and writing. The third scale, 'Perception of lecturers' English proficiency' (4 items) (Cronbach's $\alpha = 0.881$), included statements on the lecturers' ability to use English competently. The fourth scale, 'Satisfaction with the bilingual programme scale' (Cronbach's alpha = .897) was designed to be a measure of programme satisfaction. The following dimensions were represented: overall satisfaction, methodology and quality of lessons. The same procedure was used to construct all the scales. The research team, consisting of three language teaching specialists, generated a pool of items for each potential scale. A panel of five experts was involved in the determination of the content validity of the items in the scales. There were specialists in language teaching pedagogy from three different HE institutions in Spain, with between 11 and 21 years' experience as university professors. Each expert individually assessed each item for its relevance to the scale content domain. Each item was scored according to the following scoring system: 1 = not relevant; 2 = somewhat relevant; 3 = quite relevant; 4 = highly relevant. Scores 3 and 4 were considered acceptable (Lynn, 1986). In order to calculate the Item-level Content Validity Index (I-CVI) (Ayre & Scally, 2014; Lawshe, 1975; Wilson et al., 2012) the scale was collapsed into a dichotomy of relevant (points 3 & 4) and non-relevant (points 1 & 2). Only items with an I-CVI score of 1 were finally selected following recommendations by Polit and Beck (2006) and Polit et al. (2007). Both the 'Perception of language improvement scale' and the 'Satisfaction with the bilingual course scale' were used in a previous study (Barrios & López-Gutiérrez, 2021). However, they were also subject to the content validation process explained above for the present investigation. A draft questionnaire was piloted on 11 volunteers from the programme, who then participated in a group interview. The described procedure allowed us to identify wording problems, refine the measure accordingly, and estimate the questionnaire completion time.

4. Results

4.1. Language-related factors of satisfaction with the partial EMI programme in teacher education

Descriptive statistics for the continuous variables in the study are shown in Tables 2 and 3, and the results for the Ordinary Least Squares (OLS) estimator are reported in Table 4.

Table 2 shows that students were only moderately satisfied with the programme. Female students were less satisfied with it than their male counterparts. Additionally, those students who joined the partial EMI programme in teacher education seeking English improvement seemed to be considerably more satisfied with it than those who did not endorse that motivation. These descriptive results were checked by an OLS regression model. As Table 3 shows, students held the view that they had made above average progress in their English competence and that the programme had provided relatively high opportunities for language exposure and practice. As a group, they perceived that their lecturers' English level was not good enough.

As Table 4 shows, all factors under study are associated with satisfaction with the partial EMI programme in teacher education. Results indicate that female students were less satisfied than their male counterparts, as coefficients show their satisfaction was between 0.976 and 1.575 points lower than that of male students. Additionally, students who joined the programme because they wanted to improve their English valued their satisfaction with it more than two points higher than those who did not report this reason to register in it. All three language-related perception scales in the study are significantly associated with satisfaction; as R-squared values

Table 2
Descriptive statistics for the dependent variable 'Satisfaction with the bilingual programme'.

	Mean	Standard Deviation	Range	
			Potential	Actual
Whole sample	*15.62*	*4.06*	*6–24*	*6–23*
Female	15.30	4.24		6–23
Male	17.08	2.67		10–23
English improvement as a reason to enrol (yes)	16.44	3.81		10–23
English improvement as a reason to enrol (no)	14.11	4.09		6–21

Table 3

Descriptive statistics for the independent variables measured by scales.

	Mean	Standard Deviation	Range	
			Potential	Actual
Perception of English improvement	17.39	3.33	6–24	7–24
Perception of opportunities for English use	15.57	2.27	5–20	10–20
Perception of lecturers' English proficiency	7.02	2.14	3–12	3–12

Table 4

Relationship between overall satisfaction with the programme and perception variables.

Variables	Spec. I	Spec. II	Spec. III	Spec. IV
Gender: female (ref.: male)	−0.976	−1.183*	−0.987*	−1.575**
	(0.621)	(0.658)	(0.510)	(0.714)
Perception of English improvement	0.671***	–	–	–
	(0.071)			
Perception of opportunities for English use	–	0.831***	–	–
		(0.111)		
Perception of lecturers' English proficiency	–	–	1.365***	–
			(0.091)	
English improvement as a reason to enrol in the programme: yes (ref.: no)	–	–	–	2.238***
				(0.570)
Constant	4.737***	3.656*	6.847***	15.467***
	(1.427)	(1.889)	(0.824)	(0.766)
Observations	203	203	203	203
R-squared	0.326	0.241	0.542	0.098

Notes: Standard errors are in parentheses. "Spec." stands for "Specification".
Estimation method: Ordinary least squares.
Dependent variable: Overall satisfaction with the programme.
Coefficient: ***Significant at 1%, ** significant at 5%, * significant at 10%.

show, the overall models accounted for a considerable variation in programme satisfaction. Particularly striking is the result of the specification III, in which gender and perception of lecturers' English proficiency explained 54% of the variance in satisfaction with the partial EMI programme in teacher education, followed by the result of specification I, in which gender and perceptions of English improvement explained 32% of the variance in programme satisfaction.

4.2. Language-related factors of satisfaction with the partial EMI programme in teacher education across self-rated proficiency groups

Descriptive statistics for the continuous variables in the study by self-reported proficiency group are shown in Table 5 and the results for the OLS estimator by self-reported proficiency group are reported in Table 6.

According to results in Table 5, it seems that the lower the students' self-rated English level, the higher the overall satisfaction with

Table 5

Descriptive statistics for the continuous variables in the study by self-reported English proficiency group.

Variables	Mean	Standard Deviation	Actual range	
			Min.	Max.
Satisfaction with the programme scale				
B1	18.45	3.091	11	23
B2	15.73	4.107	6	23
C1	13.59	3.364	10	22
Perception of language improvement scale				
B1	18.22	2.016	13	23
B2	17.59	3.705	7	24
C1	16.52	3.148	7	24
Perception of opportunities for English use scale				
B1	16.05	2.525	12	20
B2	15.51	2.248	10	20
C1	15.37	2.132	11	20
Perception of lecturers' English proficiency				
B1	8.58	1.605	6	11
B2	7.18	2.092	3	12
C1	5.73	1.760	3	10

the programme, with quite a substantial difference in the average value for satisfaction between the highest and the lowest self-rated proficiency groups. Except for the perceptions on the opportunities afforded by the programme to use English, which seem to be rather similar across the three self-rated proficiency levels, groups differ in terms of how they viewed their English improvement – lower level students perceive they had made greater language gains – and their lectures' English competence, with higher self-rated proficiency students assessing this competence lower than those students in lower self-rated level groups.

Table 6 adds interactions to the regression model presented in Table 3; specifically, the interactions between the perception variables and that regarding English improvement as motivation to join the programme, with the self-rated English level, using the C1 level as reference. These interactions show that, with the exception of the perception of lecturers' proficiency (which seems to affect satisfaction across self-rated proficiency groups more uniformly), both the perceptions of language improvement and language use in the programme, and the enrolment in it for language improvement reasons, impact significantly differently on programme satisfaction according to self-rated proficiency groups.

These interactions show that, for the perceptions of language improvement and of opportunities for English use, the lower the students' self-perceived English level, the higher the impact of these language related perceptions on their programme satisfaction. The difference in the association between perceptions of language improvement and programme satisfaction is 0.217 and 0.094 points more for the self-rated B1 and the B2 group, respectively, as compared to the C1 group. In the case of the association between perceptions on opportunities for language use and satisfaction, this difference amounts to 0.281 and 0.135 points more for the self-rated B1 and the B2 group, respectively.

This also happens with the variable related to English improvement as a reason to choose partial EMI programme for teacher education, as B1 students with this motivation present a programme satisfaction which is almost 5 points higher than C1 students with the same motivation, whereas B2 students present 2.4 points higher programme satisfaction than C1 students.

Finally, the OLS regression analysis confirms that students with lower English level give higher value to the programme, as can be seen from the previous descriptive table.

Table 6
Relationship between overall satisfaction with the programme and perception variables, by self-reported English proficiency group.

Variables	Spec. I	Spec. II	Spec. III	Spec. IV
Sex: female (ref.: male)	−0.951	−1.089*	−1.119**	−1.373**
	(0.584)	(0.608)	(0.516)	(0.683)
Perception of language improvement	0.527***	–	–	–
	(0.073)			
Perception of opportunities for English use	–	0.634***	–	–
		(0.105)		
Perception of lecturers' English proficiency	–	–	1.267***	–
			(0.130)	
Attending the programme to improve English: yes (ref.: no)	–	–	–	−0.100
				(0.760)
Interactions (ref.: C1)				
Perception of language improvement*B2	0.094***	–	–	–
	(0.030)			
Perception of language improvement*B1	0.217***	–	–	–
	(0.037)			
Perception of opportunities for English use*B2	–	0.135***	–	–
		(0.034)		
Perception of opportunities for English use*B1	–	0.281***	–	–
		(0.042)		
Perception of lecturers' English proficiency*B2	–	–	0.007	–
			(0.074)	
Perception of lecturers' English proficiency*B1	–	–	0.141	–
			(0.085)	
Attending the programme to improve English*B2: yes (ref.: no)	–	–	–	2.415***
				(0.783)
Attending the programme to improve English*B1: yes (ref.: no)	–	–	–	4.715***
				(0.900)
Constant	5.625***	4.698***	7.394***	15.293***
	(1.331)	(1.734)	(0.868)	(0.728)
Observations	203	203	203	203
R-squared	0.427	0.380	0.553	0.208

Notes: Standard errors are in parentheses.
Estimation method: Ordinary least squares.
Dependent variable: Overall satisfaction with the programme.
Coefficient: ***Significant at 1%, ** significant at 5%, * significant at 10%.

5. Discussion

Our study confirms previous research in other contexts that found that students in EMI were more satisfied than they were dissatisfied (Aguilar & Rodríguez, 2012; Botha, 2013; Ekoç, 2020; Karakaş, 2017), that they acknowledge language progress as a benefit of the programme (Aguilar & Rodríguez, 2012; Hernandez-Nanclares & Jimenez-Munoz, 2017; Rogier, 2012), and that the lecturers' English proficiency was below their expectations (Aguilar & Rodríguez, 2012; Bolton & Kuteeva, 2012; Byun et al., 2011; Chapple, 2015; Ekoç, 2020; Jensen et al., 2013; Karakaş, 2017; Klaassen, 2003). Most significantly, our study provided substantial evidence that language-related factors impact student satisfaction with EMI and that these factors impact student satisfaction differently across different self-rated proficiency groups (Aguilar & Muñoz, 2014; Barrios & López-Gutiérrez, 2021). Firstly, students who were driven to enter the programme by their expectations of language improvement (as the sole motivation or, more commonly, as one of the reasons alongside others) rate their satisfaction with the partial EMI programme for teacher education significantly higher than those who did not share this motive. Secondly, whether the students joined the programme hoping to improve their English also significantly affects programme satisfaction depending on self-rated proficiency group, as the lower the proficiency of the students who shared this motive, the higher their programme satisfaction is. Thirdly, all language-related factors under study significantly predict programme satisfaction, and each one of them explains a high percentage of the variance in programme satisfaction. Fourthly, students from different self-rated proficiency groups assess programme satisfaction significantly differently, with satisfaction decreasing with increasing self-rated proficiency. And, finally, the effect of the perceptions of language improvement and of opportunities for language use on satisfaction significantly differ by self-rated proficiency group, the trend being that the effect of perceptions of language improvement and of opportunities for English use on programme satisfaction increases as students' self-rated proficiency decreases.

Our results have interesting implications for EMI programme design and evaluation. With increasing numbers of universities offering partial or full EMI courses, competition among universities inevitably grows. This, in turn, compels universities to fight for new national and international recruits and try to ensure student satisfaction. With an ever increasingly proficient student population, the prospect of English language progress could become less of an incentive to enrol in EMI than is at present. This reinforces the need for EMI initiatives to incorporate well-defined explicit language learning goals (Rogier, 2012), including academic and discipline-specific ones (Airey et al., 2017; Galloway & Ruegg, 2020; Kuteeva & Airey, 2014). This would entail the provision of not only general but also discipline-specific language support (Kling, 2017; Kuteeva & Airey, 2014; Rose et al., 2020), thus addressing Cummins' (e.g., 2008) seminal distinction between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). Even students who are highly proficient in general English would profit from the development of academic and discipline-specific discourse competence and would, consequently, experience the language gains that, according to our findings, significantly impinge on programme satisfaction. Being stakeholder participation mandatory in quality assurance, student satisfaction related to perceptions of language improvement could also have an impact on the evaluation and sustainability of EMI programmes. In fact, the quality assurance frameworks developed by national and international agencies and through projects (see Curle at al., 2020, for a review) to evaluate EMI acknowledge the relevance of language teaching policies and practices as one of the focus areas. Although it is beyond the scope of this article to discuss language provision in EMI in detail, student support with English for Academic Purposes (EAP) and English for Special Purposes (ESP), and collaboration between language specialists and content teachers, with the former providing language-related knowledge and pedagogical skills, have been proposed as strategies to enable students to improve English language skills while learning through EMI (Dearden, 2018; Lasagabaster, 2018).

Additionally, EMI programmes should offer plenty of opportunities for students to use English both receptively and productively, which reinforces the need to set up formal language provision to equip the students with the necessary skills to operate in general, academic and discipline-specific contexts in English. Finally, it is imperative that EMI university teachers have a high command of English to participate in EMI (Drljača Margić & Vodopija-Krstanović, 2018; Kling, 2017). The relatively low use of English in the field of education (Kuteeva & Airey, 2014) may probably be – at least partly – responsible for this language deficit. Teachers' weak proficiency may contribute to their adherence to a teacher-fronted, monologic teaching style, which limits student-teacher interaction and discussion (Costa & Coleman, 2013). Besides, the potential effect of some lecturers' poor English proficiency on the image of the academic institution and on the individual lecturer's reputation and credibility, and on the perception of their lecturing competence should not be underestimated (Bolton & Kuteeva, 2012; Jensen et al., 2013; Klaassen, 2003). To illustrate, the study conducted by Jensen et al. (2013) in Denmark found an impact of perceived English skills on perceived general lecturing competence and vice versa. Drawing on previous studies on the effect of accent variation on perceptions of competence and social attractiveness, the researchers concluded that students' evaluations were most probably highly influenced by stereotyping concerning perceptions of English ability. As student evaluations are currently used to assess individual lecturers' teaching competence, negative assessments influenced by weak English ability may have serious consequences for tenure-seeking faculty. Additionally, as previously mentioned, student evaluations are used as a measure of the success (or failure) of university programmes and courses, which is a further powerful reason to focus on the accreditation and upgrade of lecturers' English proficiency if EMI programmes are to be sustainable and competitive in the future.

However, a high competence does not guarantee that lecturers have the skills to produce academic and discipline-specific texts (Dafouz & Núñez, 2009), which makes the case for the need to train and support EMI teachers' disciplinary language development (Dafouz & Smit, 2020). Additionally, it must also be noted that advanced general English proficiency and familiarity with discipline-specific discourse conventions, in itself, does not assure effective communication or effective lecturing (Hellekjær, 2010; Pecorari, 2020) and that pragmatic and interactive strategies, together with scaffolding strategies – such as providing supportive material such visuals and slides – have been found to offset the lecturer's potentially problematic linguistic features and facilitate students' content understanding and intelligibility (Björkman, 2008; Griffith, 2021; Hellekjær, 2010). To illustrate, preliminary

findings from error and discourse analysis in EMI Computer Science lessons leads Griffith (2021) to conclude that the communicative context of the classroom makes normative accuracy "an imperfect measure of the communicative value of the classroom. Aspects such as clarification strategies, summarisation and negotiation of meaning proved to impact intelligibility much more than the errors detracted from it" (p. 315). EMI lecturers need, therefore, to be sensitive to the methodological and linguistic implications in EMI (Dafouz et al., 2018; Hellekjær, 2010; Macaro, 2020; Schmidt-Unterberger, 2018) and to be trained in the explicit use of effective language-sensitive pedagogical and methodological approaches (Kling, 2017; Pecorari, 2020) to facilitate content understanding and develop their students' disciplinary literacy (Airey, 2016). This conception of professional development for EMI contrasts, however, with current practices in the training and accreditation of university teachers in EMI reflecting "a belief in university education that language proficiency in itself is sufficient to teach subjects through another language" (Dafouz, 2018, p. 542).

6. Conclusions

The study behind this article aimed at investigating what language-related factors predicted satisfaction with a partial EMI programme in teacher education and how self-rated proficiency affected the association between these language-related variables and satisfaction. It has corroborated previous research findings concerning students' reasonable satisfaction with the partial EMI programme in teacher education, reports of language gains and relatively poor assessment of their lecturers' English proficiency. Additionally, it has been proven that satisfaction with EMI was strongly influenced by language-related factors and that these factors impact student satisfaction as a function of self-rated proficiency. The results are a clear indication of the high value attached by EMI students to English gains and other language-associated issues when assessing it in terms of satisfaction, and of the effect of English proficiency on perceptions concerning EMI, with higher proficiency students reporting less satisfaction with EMI, weaker language gains, and the perception of fewer opportunities to use English in the partial EMI programme in teacher education, and of a lower English proficiency in their lecturers.

Our results have implications for EMI curriculum design, resourcing and lecturer selection if EMI initiatives are to be sustainable and competitive. In order to ensure teaching quality and student satisfaction, the language dimension must be purposely integrated into the programme, with explicit general, academic and disciplinary language learning goals. Also, lecturers who have advanced English proficiency need to be selected, and language support should be provided to both students and lecturers in general, academic and discipline-oriented English. Finally, EMI teacher professional development should include language-sensitive methodological education to facilitate both content learning and disciplinary literacy.

While the present research provides new insights into the scarcely researched area of associations between language-related factors and EMI programme satisfaction, some limitations need to be acknowledged. Firstly, the study was conducted at a particular HE educational context and our results cannot be directly extrapolated to other contexts. Secondly, as participation in the study was voluntary, a self-selection bias may be present. Thirdly, a questionnaire was the only data-gathering instrument and only quantitative data was collected. Qualitative and mixed methods studies are necessary to provide further insights into the association between language-factors and student satisfaction with EMI. Fourthly, students' English proficiency was self-reported, so it could be subject to report bias. Notwithstanding these limitations, our study contributes to the existing EMI literature by exploring the so far under-researched association between language-related factors and satisfaction with an EMI programme.

CRediT author statement

Elvira Barrios: Conceptualisation, Methodology, Supervision. Aurora López-Gutiérrez: Conceptualisation, Writing - Original Draft, Writing - Review & Editing. Luis-Alejandro Lopez-Agudo: Methodology, Data curation.

Declaration of competing interest

None.

Appendix. Questionnaire of Perceptions on EMI

1. Gender: ☐ Female ☐ Male ☐ Non-binary ☐ I prefer not to say
2. Age: __
3. Course year: ☐ First ☐ Second ☐ Third ☐ Fourth
4. What are the main reasons why you enrolled in the bilingual programme?
   ☐ To have better professional opportunities.
   ☐ To improve your level of English.
   ☐ To have more opportunities regarding international mobility (study or work abroad)
   ☐ Other (Please, specify):
5. Have you got a certified English level? If "yes", please indicate what level:
   ☐ No ☐ Yes ☐ A1 ☐ A2 ☐ B1 ☐ B2 ☐ C1 ☐ C2
6. How would you rate your current level of English?
   ☐ A1 ☐ A2 ☐ B1 ☐ B2 ☐ C1 ☐ C2

Please indicate your personal agreement with the following statements according to the following scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Agree) and 4 (Strongly Agree.

Perceptions of Language Improvement

– Taking part in this programme has improved my level of English.
– Taking part in this programme has improved my listening skills in English.
– Taking part in the bilingual programme has improved my speaking skills in English (oral presentations and similar activities).
– Taking part in the bilingual programme has improved my oral interaction skills in English (in dialogues, debates and similar activities).
– Taking part in the bilingual programme has improved my reading skills in English (academic documents, online information and similar activities).
– Taking part in the bilingual programme has improved my writing skills in English (essays, exam questions, written portfolios and similar activities).

Perceptions of opportunities for language use

In the English-taught modules I had enough opportunities to …

– speak (in oral presentations and similar activities) in English.
– interact with the teachers and my classmates (in dialogues, debates …) in English.
– listen to academic English (lectures, videos, etc.).
– read academic texts and documents in English.
– write in English (presentations, essays, portfolios …).

Perceptions of lecturers' English proficiency

In the English-taught modules …

– I am overall satisfied with the lecturers' level of English.
– lecturers use English correctly and appropriately.
– lecturers use English with good pronunciation and understandable accents.
– lecturers have adequate linguistic competence to teach in English.

Satisfaction with the EMI programme in teacher education

– Being part of the bilingual group has been a satisfactory experience.
– I am generally satisfied with the delivery of the contents of the subjects taught in English.
– I am generally satisfied with the methodology used in the English-taught subjects.
– Learning through the medium of English has been a positive experience.
– I would recommend other students to join the bilingual programme.
– In general, the quality of lessons is, at least, as good as the quality of the ones taught in Spanish.

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