International Journal of Instruction *October 2026 ● Vol.19, No.4*
e-ISSN: 1308-1470 ● www.e-iji.net *p-ISSN: 1694-609X*
pp. 119-144

Article submission code: 20251211080704
Received: 11/12/2025 Revision: 12/03/2026
Accepted: 19/03/2026 OnlineFirst: 01/07/2026

Students' Motivations for Multilingual Programmes with EMI or DMI vs. Unilingual Programmes in French

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English Medium Instruction (EMI) programmes have been rapidly expanding in higher education, and students' motivations for enrolling in such programmes have been described in various studies. However, programmes taught in Languages Other Than English (LOTE) in higher education also exist, and it remains unclear whether students' motivations for enrolling in these programmes differ from those observed in EMI contexts. This paper addresses this gap by analysing the motivations of students enrolled in three different study programmes in French-speaking Belgium: (1) multilingual programmes including Dutch Medium Instruction (DMI), (2) multilingual programmes with English (EMI), and (3) unilingual programmes (French only). 706 Bachelor's degree students took part in an online survey, in which motivation was assessed through a series of items based on the expectancy-value model of achievement (Eccles & Wigfield, 2002). Using a cluster analysis, the findings reveal distinct motivation profiles across study programmes, varying according to students' socio-economic status and linguistic background. Multilingual programmes have more students who see high value and interest in their study programme, while unilingual tracks have more students who report lower value and interest. This study offers new insights into the motivations that drive students to enrol in a multilingual programme with DMI, compared to a multilingual programme with EMI and a unilingual programme taught in French.

Keywords: motivation, Dutch medium instruction (DMI), English medium instruction (EMI), languages other than English (LOTE), multilingual higher education

INTRODUCTION

The last decades, English Medium Instruction (EMI) programmes have mushroomed all over the world with English becoming the lingua franca of higher education (Macaro,

Citation: Louis, L., Degrave, P., & Hiligsmann, P. (2026). Students' motivations for multilingual programmes with EMI or DMI vs. unilingual programmes in French. *International Journal of Instruction*, *19*(4), 119-144.

2018). Many students and teachers underline the benefits of EMI programmes (Gröblinger, 2017). As a result, more and more students are motivated to enrol in this type of study programme. Next to this global trend, there also exist programmes with courses in languages other than English (LOTE), such as Dutch Medium Instruction (DMI), in regions where Dutch is not the official language but is relevant in the context, such as in French-speaking Belgium, for example. Belgium has indeed several official languages, each associated with a specific language community: French in the French-speaking part, Dutch in the Dutch-speaking region, and German in the German-speaking area. Education is provided in the language of the respective community, yet knowledge of the other national languages remains highly valued and necessary (Degrave & Hiligsmann, 2021). Despite the success and benefits of EMI, there are various challenges associated with such a university course, from a linguistic point of view, for example. Thus, investigating why students choose a multilingual programme with and without DMI over a unilingual programme and vice versa despite these additional challenges is a continuing concern of teaching staff and university administrators (Macaro, 2018).

Previous research has established that EMI generally attracts students from higher socio-economic families (e.g., Hu & Lei, 2014) and with a good English proficiency level (e.g., Evans & Morrison, 2018). Louis et al. (2024) showed similar findings among students enrolled in a multilingual programme with EMI and/or DMI in French-speaking Belgium.

Concerning student motivation to enrol in multilingual programmes, most previous studies have been conducted within the framework of EMI programmes and little is known about students' motivations for programmes in foreign languages other than English (LOTE). To address this gap, our study analyses the motivations of students enrolled in three different study programmes in a French-speaking Belgian university: (1) multilingual programmes including Dutch (Dutch/French/English or Dutch/French), (2) multilingual programmes without Dutch (English/French), and (3) unilingual programmes (French only).

The results of this study may be useful to universities in making appropriate decisions about study programmes integrating DMI to meet the expectations of the students concerned. They also provide universities with a better understanding of the factors that influence students' choices for a particular language stream. Finally, they can enable secondary schools to address students' existing beliefs and help them to make an informed choice when enrolling for a university degree.

Theoretical Framework

Student Motivation for EMI vs. LOTE Programmes and Courses

Although more and more studies analyse the reasons why students choose EMI programmes, only few studies have been carried out on other languages, making it interesting to explore whether student motivation differs when enrolling in a fully or partial EMI programme versus a programme in another language. Lueg and Lueg (2015), for example, conducted a study in Denmark analysing students' reasons to choose a fully EMI programme rather than the same programme in Danish. Their results

suggest that social background has a direct influence on the students' programme choice. Students with a high social background opt more easily for EMI realizing the importance of English for their career prospects. Their choice is also primarily driven by personal motives related to cultural capital. On the contrary, students from lower strata will rather not opt for EMI because of their fear of academic failure. Moreover, these students will make their choice mainly driven by peer and family pressure. Furthermore, Arnó-Macià and Aguilar-Pérez (2020) conducted a similar study comparing students' motivations when enrolling in a fully EMI course compared to the same course in Spanish. The researchers indicate an important disparity regarding class sizes where the number of students in the course taught in the students' L1 was much higher compared to the EMI class. The main findings are that students opted for the EMI course because of the instructor's ability to teach as well as their desire to learn technical English. The students in the L1 class mentioned the linguistic challenge associated with the EMI course as main barrier. In their study, Belhiah and Elhami (2015) analysed if university students in the United Arab Emirates are more in favour of a fully EMI programme, a bilingual programme with EMI and Arabic courses or a unilingual programme in Arabic. According to the results, 62% of the students preferred the bilingual model, while 27% think an English only programme is preferable. Several students pointed the importance of English knowledge with regards to their future career. Moreover, students had the opinion that a bilingual programme would suit them better since some courses could be better taught in English and others in Arabic. Finally, Madrid (2021) conducted a comparative study in Spain between Bachelor's degree students enrolled in a bilingual programme with EMI courses or in a unilingual programme in Spanish. Overall EMI-students are more motivated than non-EMI students when it comes to English proficiency, to experience a language stay in an English-speaking country, and to exchange with native English speakers.

DMI as New Research Area

Besides EMI, there also exist programmes with LOTE but the literature on student motivation for LOTE programmes compared to EMI programmes is relatively scarce. As mentioned above, besides programmes with EMI courses, also programmes with DMI courses are organized in the French-speaking Community. In this context, Belgium is an interesting area of research for LOTE studies because of its multilingual nature.

Motivation Frameworks in Multilingual Higher Education Research

As aforementioned, most research about motivation in multilingual higher education focused on EMI programmes and were analysed through Gardner's & Lambert's (1972), Bourdieu's (1984), Gardner's (1985) and Dörnyei (2005, 2009) motivation models. Kırkgöz (2005), for example, analysed EMI students' motivation based on Gardner's & Lambert's (1972) integrative and instrumental motivation model. Lueg and Lueg (2015) and Pushpakumara et al. (2023) followed Bourdieus' theoretical framework. Al-Masheikhi et al. (2014) based their research on Gardner's (1985) motivation framework and Lasagabaster (2016) and Serna-Bermejo and Lasagabaster (2023) followed Dörnyei's (2005, 2009) motivation framework.

Most of these motivation models were designed primarily to assess language learning motivation. However, there is no explicit language instruction in EMI and DMI contexts (Dearden & Macaro, 2016). That is why in this study, the expectancy-value model of achievement of Eccles and Wigfield (2002) is placed centrally as it is more adaptable to domain-general higher education contexts beyond language learning. In that model, expectancies relate to ideas about one's performance on various tasks or activities, whereas values refer to incentives or motivations for engaging in an activity. In other words, and as presented in Figure 1, expectancy is the individual's ability (competence) to succeed in a certain impending task or in a particular domain. Furthermore, task-value is made-up of four parts: attainment value, intrinsic value, utility value, and cost. The personal significance of performing successfully on a task is known as attainment value. The enjoyment a person derives from engaging in an activity or their subjective interest in a subject are examples of intrinsic value. How well an activity relates to present and future objectives, such as professional aspirations, determines its utility value. Lastly, cost is defined as the drawbacks of doing the task, like the amount of work required to be successful. This model, by combining expectancy and value constructs, suits the motivation analysis of students in their enrolment choice for either language stream well.

Figure 1
Schematic presentation of the theoretical framework used based on the expectancy-value model of achievement of Eccles and Wigfield (2002)

This study offers a novel perspective in LOTE research by comparing the motivation profiles of law, economics & management, and political sciences students at a French-speaking Belgian university. Specifically, it examines students opting for a multilingual programme with or without DMI and those enrolled in a unilingual programme in French, based on Eccles and Wigfield's (2002) expectancy-value model of achievement.

Research Questions

This study addresses the following research questions:

1. Based on Eccles and Wigfield's (2002) expectancy-value model of achievement, why do students opt for a multilingual programme including Dutch (combining French/Dutch/English or French/Dutch as the media of instruction) over a multilingual programme without Dutch (combining French/English as the media of instruction) or a unilingual programme (French only as medium of instruction)?
2. Can meaningful subgroups of students in either programme with specific combinations of motivation constructs be identified?
3. Do these subgroups differ in terms of socio-demographic factors?

METHOD

Research Context and Participants

The study was carried out at UCLouvain Saint-Louis, a French-speaking university situated in Brussels (Belgium). This institution was purposively chosen because multilingual Bachelor's degrees have been offered for more than 30 years in this university in the field of human sciences. The survey participants were Bachelor's degree students in law, economics & management, and political sciences.

Data Collection

To answer the research questions above, quantitative data have been collected through an online survey in French. Between November 2022 and January 2023, students pursuing a multilingual or unilingual degree were given the questionnaire consisting of four sections: (a) general profile, (b) university course: study period, (c) university course: choice of study programme, and (d) secondary school curriculum. Those who agreed to participate in the study completed a consent form at the beginning of the questionnaire. Of the 1,035 Bachelor's degree students that were reached, 706 completed the entire survey: a total of 140 students in a multilingual programme with DMI, 273 students in a multilingual programme without DMI, and 293 students in a French-only programme. The data analysed in this study relate mainly to the third part of the questionnaire (c). Variables related to parts (a), (b), and (d) of the survey were used to examine the relationship between students' motivations and their socio-economic and language profiles.

To assess students' motivation, the survey included a set of items adapted from Barrios & López-Gutiérrez (2021), Kırkgöz (2005), Al-Masheikhi et al. (2014), Lasagabaster (2016), and Madrid (2021). These items captured the reasons underlying students' enrolment in one of the language streams and were organised according to the expectancy-value model of achievement (Eccles & Wigfield, 2002), namely interest, cost, and utility values and competence beliefs.

Variables

From the different survey questions, we categorised the variables into two groups: (1) the students' sociodemographic and language profile and (2) the students' motivations. For the first group of variables, we used (a) mother's SES; (b) year of study; (c) gender; (d) number of hours of Dutch classes in the last year of secondary school; (e) number of hours of English classes in the last year of secondary school; (f) CLIL education at primary and/or secondary school level. The second group comprised all items related to students' motivation for their study programme.

Sociodemographic and language profile Building on the findings of Louis et al. (2024), which identified variables (a) to (f) in Table 1 as significant predictors of students' choice of language stream, the present study extends this line of inquiry by analysing students' motivation profiles in relation to their sociodemographic and language backgrounds. This approach is grounded by the assumption that learners' engagement in learning and motivation orientations are strongly tied to their social identities (Gao, 2008). The descriptive sociodemographic characteristics are presented in Table 1.

Table 1
Descriptive statistics on the participants ($N = 706$)

Variables	Unilingual French ($n = 293$)	Multilingual with Dutch (DMI) ($n = 140$)	Multilingual without Dutch (EMI) ($n = 273$)	N ($N = 706$)
a. SES mother	100% (291)	100% (140)	100% (273)	100% (704)
Do not know	5.5% (16)	0.7% (1)	2.9% (8)	3.6% (25)
Completed primary or secondary education (low)	43.0% (125)	8.6% (12)	25.3% (69)	29.3% (206)
Bachelor's degree (moderate)	27.5% (80)	25.0% (35)	28.6% (78)	27.4% (193)
Master's or doctoral degree (high)	24.1% (70)	65.7% (92)	43.2% (118)	39.8% (280)
b. Year of study	100% (293)	100% (140)	100% (273)	100% (706)
First year	54.9% (161)	32.9% (46)	57.5% (157)	51.6% (364)
In the middle	23.9% (70)	37.9% (53)	28.9% (79)	28.6% (202)
Last year	21.2% (62)	29.3% (41)	13.6% (37)	19.8% (140)
c. Gender	100% (293)	100% (140)	100% (273)	100% (706)
Female	66.2% (194)	67.1% (94)	78.4% (214)	71.1% (502)
Male	33.8% (99)	32.1% (45)	21.6% (59)	28.8% (203)
Other[1]	0% (0)	0.7% (1)	0% (0)	0.1% (1)
d. Number of class hours in Dutch	100% (243)	100% (103)	100% (209)	100% (555)
1 to 2 hours	16.0% (39)	1.9% (2)	17.7% (37)	14.1% (78)
3 to 4 hours	79.0% (192)	68.9% (71)	76.6% (160)	76.2% (423)
More than 5 hours	4.9% (12)	29.1% (30)	5.7% (12)	9.7% (54)
e. Number of class hours in English	100% (260)	100% (132)	100% (240)	100% (632)
1 to 2 hours	18.8% (49)	22.0% (29)	9.2% (22)	15.8% (100)
3 to 4 hours	78.1% (203)	68.2% (90)	76.7% (184)	75.5% (477)
More than 5 hours	3.1% (8)	9.8% (13)	14.2% (34)	8.7% (55)
f. CLIL education at primary and/or secondary school level	100% (293)	100% (140)	100% (271)	100% (706)
Yes	12.3% (36)	48.6% (68)	22.9% (62)	23.5% (166)
No	87.7% (257)	51.4% (72)	77.1% (209)	76.5% (540)

Motivation items Each motivation item had to be answered on a 7-point Likert-type scale with ratings from 'strongly disagree' to 'neutral' to 'strongly agree'. The participants could also select a 'does not apply to me' option. To identify the underlying motivation factors among students in the three language tracks, an initial exploratory factor analysis (EFA) was conducted. An oblique rotation method (Oblimin) was applied, as correlations between factors were expected (Tabachnick & Fidell, 2019).

For the students in the multilingual programme with DMI, all motivation items were included in the model except three specific (coded MULTI3, MULTI4, and MULTI9) because these items had a high proportion of missing values or did only concern a part of the students (e.g. items that were directed at students with a particular mother tongue). Kaiser's criterion indicated a solution with 6 factors and the Cattell criterion showed a solution around 3/4 factors. Several factor solutions were tested, and a three-factor solution was retained based on both statistical adequacy and interpretability[2]. According to the .40-.30-.20 rule (Howard, 2016), items coded MULTI21 and MULTI25 were excluded from the final solution because of low communalities and poor loadings. The EFA has been run each time an item was deleted as this might impact the results. Afterwards, rounding the values of Mc Donald's Omega and

[1] Since only one student selected 'other', we identified this response as missing variable.
[2] KMO = 0.802, communalities > 0.4

Cronbach's Alpha, three factors are remaining (see Table 2). Finally, we calculated a mean motivation score for each scale for each student.

For the students in the multilingual programme without DMI, all motivation items were included in the model except three specific (coded MULTI3, MULTI4 and MULTI8) because these items had lots of missing values or did only concern a part of the students. Kaiser's criterion indicated a solution with 7 factors and the Cattell criterion showed a solution around 4/5 factors. Several factor solutions were tested, and a four-factor solution was retained based on both statistical adequacy and interpretability[3]. Item MULTI6 was excluded from the final solution because of low communalities and poor loadings (Howard, 2016). Furthermore, MULTI34 was also excluded since the Mc Donald's Omega and the Cronbach's Alpha are higher when left out of the scale. The EFA has been run each time an item was deleted to compensate for changes in the results. Rounding the Mc Donald's Omega and Cronbach's Alpha values, four factors are remaining (see Table 2). Finally, we calculated a mean motivation score for each scale for each student.

For the students in the unilingual programme in French, all motivation items were included in the model. Kaiser's criterion indicated a solution with 7 factors and the Cattell criterion showed a solution around 3/4 factors. Several factor solutions were tested, and a five-factor solution was retained based on both statistical adequacy and interpretability[4]. Two items (coded UNI2 and UNI20) were excluded from the final solution because of low communalities and poor loadings (Howard, 2016). Furthermore, UNI14 and UNI26 were excluded because the McDonald's Omega and Cronbach's Alpha were better with these items omitted, which also coincides with the interpretability of the scales. The EFA has been run each time an item was deleted as the results might change. Rounding the values of McDonald's Omega and/or Cronbach's Alpha, there are five remaining factors (see Table 2). Finally, we calculated a mean motivation score for each scale for each student.

Table 2
McDonald's Omega and Cronbach's Alpha values for each factor

Factor	McDonald's Omega (ω)	Cronbach's Alpha (α)
1. Multilingual with DMI (French/Dutch/English and French/Dutch)		
a. Lack of competence in French	0.921	0.918
b. Utility	0.756	0.747
c. Interest	0.667	0.628
2. Multilingual without DMI (French/English)		
a. Lack of competence in French	0.802	0.796
b. Utility 1 (master's and career prospects)	0.714	0.715
c. Interest	0.664	0.657
d. Utility 2 (during Bachelor's degree)	0.697	0.691
3. Unilingual programme in French		
a. Utility	0.778	0.784
b. Lack of competence in English	/	0.822
c. Lack of competence in Dutch	/	0.794
d. Interest	0.672	0.440
e. Cost	0.686	0.634

[3] KMO = 0.749, communalities > 0.4
[4] KMO = 0.711, communalities > 0.4

Operationalisation of Variables and Data Analysis

The software package IBM SPSS (version 28.0.1.1) was used for descriptive statistics. Regarding the students' motivations for their study programme choice, frequency counts and percentages were used to examine the quantitative data. We decided to group the response options of the Likert-scales into three groups for the sake of visual clarity: (1) disagree ('strongly disagree', 'disagree', and 'slightly disagree' together), (2) neutral, and (3) agree ('slightly agree', 'agree', and 'strongly agree' together). The response option 'does not apply to me' as well as the missing values have not been considered in the percentages. Therefore, the total number of responses (*n*) varies for each motivation item. The results regarding students' motivation were classified according to the validated expectancy and value constructs and ranked according to the highest percentage of 'agree' responses among the students.

Afterwards, the mean score for the items in each motivation factor was calculated.[5] Then, we ran a cluster analysis for each student group to analyse the data according to meaningful students' subgroups. Each motivation scale was standardized through Z-transformations before being entered into the cluster analysis. Four k-means cluster analyses were run separately specifying two-, three-, four-, and five-cluster solutions. The final cluster approaches were ultimately chosen as the most meaningful difference based on a number of indicators, including the number of iterations, sample sizes in each cluster, and interpretability. The final cluster centroids are illustrated in Figures 2, 3 and 4 below. Centroids can be defined as students' means of each motivation factor. However, a word of caution is necessary when interpreting these results. Because every scale was normalized, a positive centroid indicates a higher score than the sample mean as a whole rather than a high score in and of itself. Therefore, it is important to view centroids as a normative evaluation rather than one that is based on criteria. For example, students who showed greater interest in their study programme than the average students in the sample were included in a cluster with a positive centroid on interest.

Finally, the different motivation profiles in each cluster were analysed by students' sociodemographic and language profile to analyse the students' subgroups further.

FINDINGS

Using the methodological approach described in the previous section, we first present the motivation profiles of students enrolled in a multilingual programme with DMI (French/Dutch/English or French/Dutch). We then examine the profiles of students in a multilingual programme without DMI (French/English), before turning to those enrolled in a unilingual programme (French).

Why Do Students Opt for the Multilingual Programme with DMI (*n* = 140)?

Table 3 presents the first set of descriptive statistics, highlighting the motivation items with which students most and least agree when registering for a multilingual programme with DMI, organised according to expectancy and value constructs.

[5] The initial motivation scales, without missing values and 'does not apply to me' responses, were used.

Overall, most students reject statements suggesting a lack of competence to succeed in a programme taught in French. In contrast, a clear majority agree with items reflecting the perceived utility value of the programme. However, between one fifth and one quarter of students disagree with items related to integrative social and cultural aspects (MULTI33 and MULTI35). With regard to interest-related items, most students express agreement. Nevertheless, nearly 30% do not agree that they are uninterested in the unilingual programme (MULTI26). Moreover, a considerable proportion of students (18.0% to 22.9%) select neutral responses for three of the four interest-related items.

Table 3
Descriptive statistics of students' answers – expectancy and value constructs results according to the students in the multilingual programme with DMI (n = 140)

a. Lack of competence in French (M = 1.68)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI14	I do not feel able to undertake my entire study programme in French	83.5%	3.3%	13.2%	121
MULTI17	the French courses require more work and study time	85.6%	3.4%	11.0%	126
MULTI13	I find it difficult to master key concepts related to my choice of study in French	81.9%	7.8%	10.3%	116
MULTI5	I think my command of French is insufficient	72.1%	2.9%	9.0%	118
MULTI12	I find it difficult to understand a content course in French	91.7%	0.8%	7.4%	121
MULTI16	The unilingual programme is too demanding	91.3%	3.1%	3.8%	130
b. Utility (M = 5.58)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI28	I would like to take on an additional challenge	4.3%	3.6%	92.1%	140
MULTI23	Dutch is important for my future job	2.9%	5.8%	91.3%	138
MULTI7	To master the content of my studies in Dutch	6.6%	2.2%	91.2%	136
MULTI2	I want to improve my command of Dutch	13.9%	0.0%	86.1%	137
MULTI33	To broaden my cultural knowledge of Dutch	19.7%	10.2%	70.1%	137
MULTI35	To get in touch with more people who speak Dutch	26.1%	17.4%	56.5%	138
c. Interest (M = 5.37)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI24	To have better career opportunities	0.0%	1.4%	98.6%	140
MULTI29	It is the best programme at the university	12.9%	18.0%	69.1%	139
MULTI18	The content of the multilingual programme is more interesting	9.3%	22.9%	67.9%	140
MULTI26	I am not interested in the unilingual programme	29.7%	21.0%	49.3%	138
Excluded items					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI21	To have more opportunities for international mobility (studying or working abroad)	4.3%	6.5%	89.1%	138
MULTI25	To feel ready to pursue multilingual studies at Master's level	6.4%	9.3%	84.3%	140
MULTI3	To extend my CLIL education from primary/secondary school to university	22.0%	2.8%	75.2%	109
MULTI4	It allows me to take some of my classes in one of the languages spoken at home	55.2%	5.7%	39.0%	105
MULTI 9	The programme in Dutch (my mother tongue) is difficult enough for me in terms of mastering the content	63.5%	11.1%	25.4%	63

For students enrolled in a multilingual programme with DMI, the statistical and theoretical criteria outlined above supported the selection of a three-cluster solution, which revealed distinct and meaningful motivation profiles. Figure 2 displays the final cluster centroids, which are interpreted in detail below.

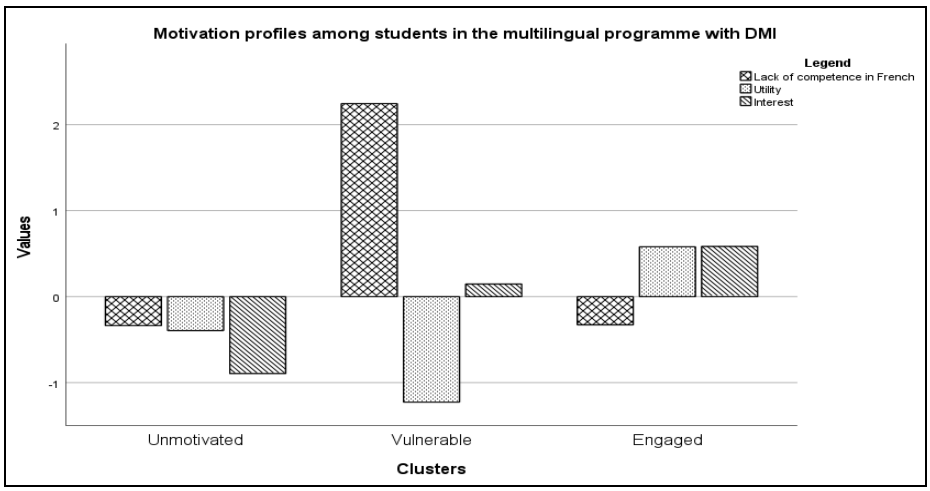

Figure 2
Final cluster analysis of motivation factors for each profile of students enrolled in the multilingual programme with DMI (n = 140)

1. *Unmotivated* (*n* = 50; 35.7%). The first cluster was labelled the *unmotivated profile*. These students score below the average for the three factors compared to the overall sample, reflecting a generally less motivated profile. They are particularly distinguished by a lack of interest for their study programme, which is not only the lowest dimension within the cluster, but also the lowest among all clusters. Their perception of the programme's usefulness is also lower than average, but less pronounced than in cluster 2.
2. *Vulnerable* (*n* = 18; 12.9%). Students in the second cluster, entitled the *vulnerable profile*, score below the overall average for utility and above for interest. They are particularly characterised by a lack of proficiency in French, which is not only the highest dimension within the cluster, but also the highest among all clusters. Their lack of perceived value may eventually reduce their persistence in the DMI programme.
3. *Engaged* (*n* = 72; 51.4%). The third cluster is characterised as the *engaged profile*. This group of students is particularly distinguished by a high programme's usefulness and interest compared to the other clusters.

The sociodemographic characteristics associated with each cluster are presented in Table 4. Most students across all three clusters have a high SES, with the highest percentage in the engaged cluster. The vulnerable cluster counts the lowest percentage of students with a high SES and almost 90% of them did not benefit CLIL education at primary and/or secondary school level. Moreover, the majority of the students in this cluster are first-year students, whereas the majority of the students in the other two clusters are in their second or last year. Around half of the students in the unmotivated and engaged clusters have had CLIL education before entering university. Across all

clusters, the students are overall female and the majority have had 3 to 4 hours of Dutch classes per week in their last year of secondary.

Table 4
Descriptive statistics of the variables investigated (n = 140)

	Cluster 1 Unmotivated (n = 50)	Cluster 2 Vulnerable (n = 18)	Cluster 3 Engaged (n = 72)
	% (n)	% (n)	% (n)
SES mother	100% (49)	100% (18)	100% (72)
Completed primary or secondary education (low)	8.2% (4)	22.2% (4)	5.6% (4)
Bachelor's degree (moderate)	26.5% (13)	22.2% (4)	25.0% (18)
Master's or doctoral degree (high)	65.3% (32)	55.6% (10)	69.4% (50)
Year of study	100% (50)	100% (18)	100% (72)
In the first year	38.0% (19)	77.8% (14)	18.1% (13)
In the middle	42.0% (21)	22.2% (4)	38.9% (28)
In the last year	20.0% (10)	0.0% (0)	43.1% (31)
Gender	100% (49)	100% (18)	100% (72)
Female	63.3% (31)	72.2% (13)	69.4% (50)
Male	36.7% (18)	27.8% (5)	30.6% (22)
Number of class hours in Dutch	100% (40)	100% (3)	100% (60)
1 to 2 hours	2.5% (1)	0.0% (0)	1.7% (1)
3 to 4 hours	65.0% (26)	100% (3)	70.0% (42)
More than 5 hours	32.5% (13)	0.0% (0)	28.3% (17)
CLIL education	100% (50)	100% (18)	100% (72)
Yes	50.0% (25)	11.1% (2)	56.9% (41)
No	50.0% (25)	88.9% (16)	43.1% (31)

Why Do Students Opt for the Multilingual Programme without DMI (n = 273)?

Turning now to students enrolled in the multilingual programme without DMI, Table 5 presents the descriptive statistics of their motivations, organised according to the expectancy and value constructs.

Overall, these students strongly reject statements suggesting insufficient competence in French. On the contrary, they show the highest levels of agreement with items related to the programme's utility for their master's studies and career prospects (utility 1). Concerning the interest construct, most students agree that the multilingual programme is more interesting (MULTI18). However, fewer than half agree that they are not interested in the unilingual programme (MULTI26) or that the multilingual programme is the best programme at the university (MULTI29). Furthermore, between one and two fifths of the students selected neutral responses for the interest-related items. Finally, with respect to the utility construct during the Bachelor's degree (utility 2), students again report high levels of agreement.

Table 5
Descriptive statistics of students' answers – expectancy and value constructs results according to the students in the multilingual programme without DMI (n = 273)

a. Lack of competence in French (M = 1.63)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI14	I do not feel able to undertake my entire study programme in French	88.5%	3.5%	8.0%	226
MULTI5	I think my command of French is insufficient	90.0%	2.7%	7.3%	220
MULTI17	the French courses require more work and study time	88.9%	6.7%	4.4%	252
MULTI12	I find it difficult to understand a content course in French	94.8%	1.7%	3.4%	232
MULTI16	The unilingual programme is too demanding	85.3%	11.6%	3.1%	259
MULTI13	I find it difficult to master key concepts related to my choice of study in French	91.7%	5.7%	2.6%	228
b. Utility 1 (master's and career prospects) (M = 6.37)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI24	To have better career opportunities	0.7%	2.2%	97.0%	270
MULTI21	To have more opportunities for international mobility (studying or working abroad)	2.2%	1.1%	96.7%	270
MULTI22	English is important for my future job	1.5%	6.7%	91.9%	270
MULTI25	To feel ready to pursue multilingual studies at Master's level	3.7%	4.8%	91.4%	269
c. Interest (M = 4.53)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI18	The content of the multilingual programme is more interesting	13.0%	20.4%	66.5%	269
MULTI26	I am not interested in the unilingual programme	35.0%	20.0%	45.0%	260
MULTI29	It is the best programme at the university	16.7%	40.4%	43.0%	270
d. Utility 2 (during Bachelor's degree) (M = 5.91)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI1	I want to improve my command of English	4.8%	3.0%	92.2%	270
MULTI32	To broaden my cultural knowledge of English	6.7%	4.5%	88.8%	269
MULTI28	I would like to take on an additional challenge	9.8%	9.4%	80.8%	266
Excluded items					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
MULTI6	To master the content of my studies in English	2.2%	1.1%	96.6%	268
MULTI34	To get in touch with more people who speak English	11.9%	11.5%	76.6%	269
MULTI3	To extend my CLIL education from primary/secondary school to university	49.2%	8.7%	42.1%	183
MULTI4	It allows me to take some of my classes in one of the languages spoken at home	74.2%	6.5%	19.4%	186
MULTI 8	The programme in English (my mother tongue) is difficult enough for me in terms of mastering the content	75.4%	9.0%	15.7%	134

If we now compare the students' motivations across the two multilingual programmes, we can conclude that there are similar patterns with regard to the competence, utility, and interest constructs. In both groups, students most strongly reject items suggesting a lack of competence in French, while showing considerable agreement with items highlighting the utility of their study programme. Furthermore, interest-related items receive the highest proportion of neutral responses in both programmes.

For students enrolled in the multilingual programme without DMI, the statistical and theoretical criteria supported the selection of a three-cluster solution, which revealed distinct motivation profiles. The final cluster centroids are illustrated in Figure 3 and described below.

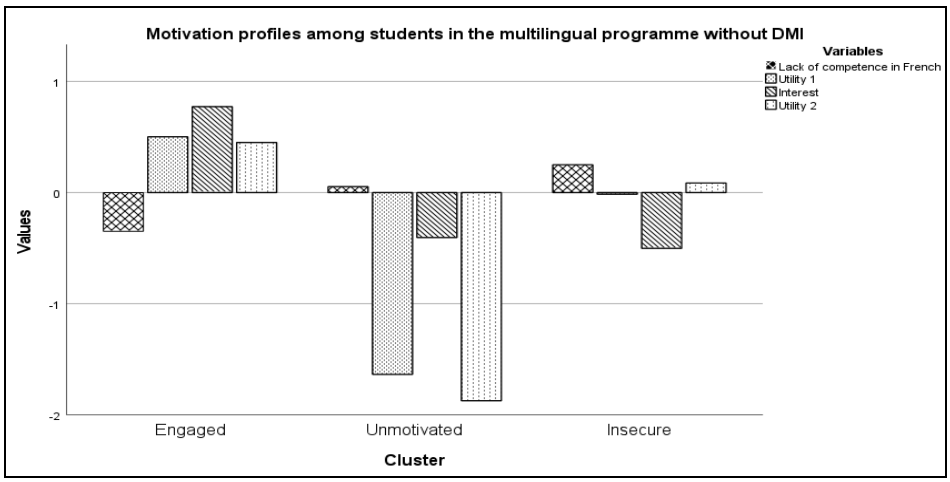

Figure 3
Final cluster analysis of motivation factors for each profile of students enrolled in the multilingual programme without DMI (n = 271)

1. *Engaged* (*n* = 104; 38.4%). Students in the first cluster, labelled the *engaged profile*, score above the overall average for utility 1 (Master's and career prospects), interest and utility 2 (during Bachelor's degree), reflecting a generally more motivated profile. These are not only the highest dimensions within the cluster, but also the highest among all clusters. These students are particularly characterised by a high interest in their study programme.
2. *Unmotivated* (*n* = 31; 11.4%). The second cluster is entitled the *unmotivated profile*. This group of students scores below the overall average for utility 1 (Master's and career prospects), interest and utility 2 (during Bachelor's degree), suggesting a generally less motivated profile. They are particularly distinguished by a shortfall of their programme's usefulness, which are not only the lowest dimensions within the cluster, but also the lowest among all clusters.
3. *Insecure* (*n* = 136; 50.2%). Students in the third cluster, characterised as the *insecure profile*, score above the overall average for lack of competence in French and utility 2 (during Bachelor's degree) of their study programme. Their lack of interest particularly distinguishes them as it is the lowest dimension in the cluster, but also among all clusters. Moreover, their lack of French competence is also the highest among all clusters.

The sociodemographic characteristics of each cluster are presented in Table 6. The three clusters show similar trends regarding sociodemographic characteristics: the majority of them are female first-year students having had 3 to 4 hours of Dutch classes in their last year of secondary school, and having not benefitted of CLIL education previously. They differ only in terms of SES, with the unmotivated cluster including a higher percentage of students with low SES.

Table 6
Cluster means and standard deviations on the variables investigated (n = 271)

	Cluster 1 Engaged (n = 104)	Cluster 2 Unmotivated (n = 31)	Cluster 3 Insecure (n = 136)
	% (n)	% (n)	% (n)
SES mother	100% (102)	100% (29)	100% (132)
Completed primary or secondary education (low)	23.5% (24)	41.4% (12)	25.0% (33)
Bachelor's degree (moderate)	36.3% (37)	20.7% (6)	25.0% (33)
Master's or doctoral degree (high)	40.2% (41)	37.9% (11)	50.0% (66)
Year of study	100% (104)	100% (31)	100% (136)
In the first year	46.2% (48)	54.8% (17)	66.9% (91)
In the middle	40.4% (42)	29.0% (9)	19.9% (27)
In the last year	13.5% (14)	16.1% (5)	13.2% (18)
Gender	100% (104)	100% (31)	100% (136)
Female	85.6% (89)	61.3% (19)	76.5% (104)
Male	14.4% (15)	38.7% (12)	23.5% (32)
Number of class hours in English	100% (91)	100% (27)	100% (120)
1 to 2 hours	7.7% (7)	11.1% (3)	9.2% (11)
3 to 4 hours	80.2% (73)	70.4% (19)	75.8% (91)
More than 5 hours	12.1% (11)	18.5% (5)	15.0% (18)
CLIL education	100% (104)	100% (31)	100% (136)
Yes	26.0% (27)	16.1% (5)	22.1% (30)
No	74.0% (77)	83.9% (26)	77.9% (106)

Why Do Students Opt for the Unilingual Programme in French (n = 293)?

Finally, we turn to the students enrolled in the unilingual programme. Table 7 presents the descriptive statistics of their motivations, structured around the expectancy and value constructs.

With regard to the utility value, responses are relatively varied. Most students agree that French is important for their future job (UNI17), although this item also received the highest proportion of neutral responses. The lowest levels of agreement concern obtaining better professional prospects (UNI18) and opportunities to interact with more French speakers (UNI29). Concerning perceived language competence, slightly more than half of the students report enrolling in the unilingual programme because they lack sufficient English proficiency (UNI8 and UNI4). Similarly, a majority indicates insufficient competence in Dutch (UNI9 and UNI5). Regarding interest, students most strongly disagree with statements expressing disinterest in English (UNI25) and in the multilingual programme (UNI21). Students feel quite neutral when asked whether the unilingual programme is the best programme at the university (UNI24). In terms of perceived cost, most students agree that courses taught in English (UNI12) and Dutch (UNI13) require greater effort and study time. More than half of the students also consider the multilingual programme too demanding (UNI11), although 21.2% provide a neutral response to this item. Among the items not associated with a specific motivation factor, the highest level of agreement concerns the importance of mastering key disciplinary concepts in French (UNI2).

Table 7
Descriptive statistics of students' answers – expectancy and value constructs results according to the students in the unilingual programme (n = 293)

a. Utility (M = 3.41)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
UNI17	French is important for my future job	26.2%	28.7%	45.0%	282
UNI3	To have knowledge in French of the concepts covered in CLIL (in primary and/or secondary school)	45.1%	19.5%	35.3%	215
UNI28	To broaden my cultural knowledge in French	47.6%	19.6%	32.7%	275
UNI1	I want to improve my level of French first	53.6%	16.0%	30.4%	263
UNI19	To have more opportunities for international mobility (studying or working abroad)	53.8%	25.1%	21.1%	251
UNI29	To get in touch with more French speakers	58.7%	23.4%	17.8%	269
UNI18	To have better career opportunities	55.6%	28.4%	16.0%	275
b. Lack of competence in English (M = 4.48)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
UNI8	I find it difficult to understand certain nuances in English	29.7%	10.8%	59.4%	286
UNI4	I think my command of English is insufficient	33.7%	10.8%	55.6%	288
c. Lack of competence in Dutch (M = 5.67)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
UNI9	I find it difficult to understand some nuances in Dutch	11.4%	5.7%	82.9%	280
UNI5	I think my command of Dutch is insufficient	16.5%	5.4%	78.1%	279
d. Interest (M = 2.84)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
UNI21	I am not interested in the multilingual programme	59.5%	14.9%	25.6%	289
UNI24	It is the best programme at the university	46.5%	39.4%	14.2%	282
UNI25	I have little or no interest in English	86.7%	6.3%	7.0%	285
e. Cost (M = 5.07)					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
UNI13	Dutch courses require more work and study time	10.3%	6.3%	83.4%	271
UNI12	English courses require more work and study time	17.4%	8.9%	73.8%	282
UNI11	The multilingual programme is too demanding	23.3%	21.2%	55.5%	283
Excluded items					
Item no.	Survey item	Disagree	Neutral	Agree	*n*
UNI2	I find it important to master the key concepts of my field of study in French	13.0%	14.0%	73.0%	285
UNI20	I prefer a multilingual degree at Master's level	33.5%	18.2%	48.4%	275
UNI26	I have little or no interest in Dutch	43.1%	11.4%	45.6%	281
UNI14	The content of the unilingual programme is more interesting	39.8%	32.9%	27.3%	288

For students enrolled in the unilingual programme in French, the statistical and theoretical criteria supported the selection of a four-cluster solution, revealing distinct motivation profiles. Figure 4 displays the final cluster centroids.

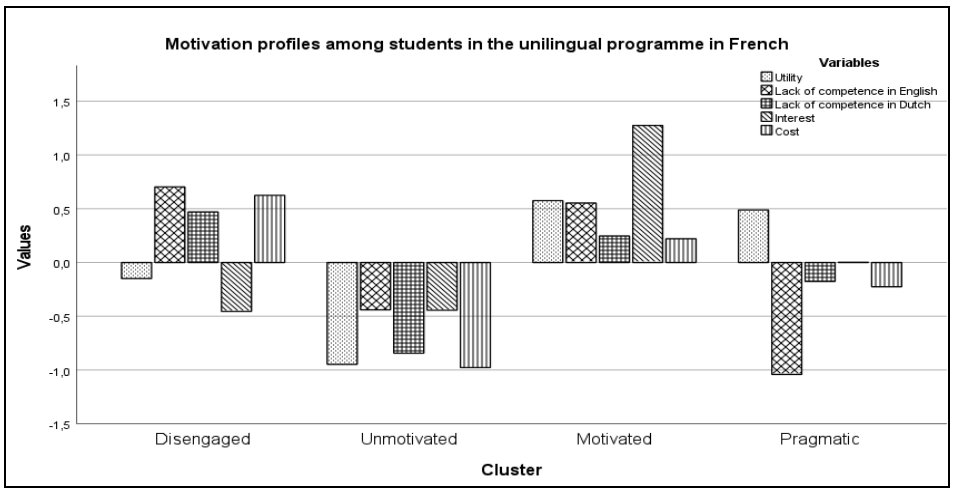

Figure 4
Final cluster analysis of motivation factors for each profile of students enrolled in the unilingual programme in French (n = 280)

1. *Disengaged* (*n* = 99; 35.4%). The students in the first cluster, labelled the *disengaged profile*, score above the overall average for lack of competence in English and Dutch, and cost, reflecting a generally low proficiency in English and Dutch and emphasising a high workload linked with the DMI and EMI courses. Moreover, of all clusters, these students show the lowest interest in their study programme, just ahead of the second cluster.
2. *Unmotivated* (*n* = 57; 20.4%). The second cluster is entitled the *unmotivated profile*. This group of students scores below the overall average for usefulness, lack of competence in English and Dutch, interest, and cost. Utility, lack of competence in Dutch, and cost are the lowest dimensions within the cluster, but also the lowest among all clusters, reflecting a generally low perceived usefulness of their programme, a high perceived Dutch proficiency, and a low perceived workload regarding DMI and EMI courses.
3. *Motivated* (*n* = 54; 19.3%). The third cluster is characterised as the *motivated profile* and scores above the overall average for the five factors. The dimensions of utility, lack of competence in English, and interest are the highest within the cluster, distinguishing these students by a high perception of the programme's usefulness, a lower English proficiency and a very high interest for their study programme.
4. *Pragmatic* (*n* = 70; 25.0%). The last cluster is characterised as the *pragmatic profile*. The perception of this group of students' study programme's usefulness is the highest dimension within the cluster, but is a bit less pronounced than in the third cluster. Moreover, they are characterised by a high English proficiency as the most distinctive dimension within the cluster but also among all clusters.

The sociodemographic characteristics of each cluster are presented in Table 8. Comparing the sociodemographic characteristics of the students in a unilingual track

with the previous student groups, we can conclude that they overall have a lower SES, with the motivated cluster having the highest percentage of low SES. Apart from this, all clusters demonstrate similar sociodemographic characteristics: the majority of them are female first-year students having had 3 to 4 hours per week of Dutch and English classes in their last year of secondary school and having not benefitted of CLIL education previously.

Table 8
Cluster means and standard deviations on the variables investigated (n = 280)

	Cluster 1 Disengaged (n = 99)	Cluster 2 Unmotivated (n = 57)	Cluster 3 Motivated (n = 54)	Cluster 4 Pragmatic (n = 70)
	% (n)	% (n)	% (n)	% (n)
SES mother	100% (93)	100% (56)	100% (50)	100% (64)
Completed primary or secondary education (low)	41.9% (39)	48.2% (27)	54.0% (27)	37.5%% (24)
Bachelor's degree (moderate)	30.1% (28)	26.8% (15)	24.0% (12)	35.9% (23)
Master's or doctoral degree (high)	28.0% (26)	25.0% (14)	22.0% (11)	26.6% (17)
Year of study	100% (99)	100% (57)	100% (54)	100% (70)
In the first year	49.5% (49)	54.4% (31)	66.7% (36)	57.1% (40)
In the middle	30.3% (30)	19.3% (11)	18.5% (10)	21.4% (15)
In the last year	20.2% (20)	26.3% (15)	14.8% (8)	21.4% (15)
Gender	100% (99)	100% (57)	100% (54)	100% (70)
Female	73.7% (73)	64.9% (37)	59.3% (32)	58.6% (41)
Male	26.3% (26)	35.1% (20)	40.7% (22)	41.4% (29)
Number of class hours in Dutch	100% (81)	100% (46)	100% (46)	100% (62)
1 to 2 hours	11.1% (9)	13.0% (6)	28.3% (13)	12.9% (8)
3 to 4 hours	86.4% (70)	78.3% (36)	67.4% (31)	82.3% (51)
More than 5 hours	2.5% (2)	8.7% (4)	4.3% (2)	4.8% (3)
Number of class hours in English	100% (90)	100% (47)	100% (50)	100% (63)
1 to 2 hours	23.3% (21)	12.8% (6)	26.0% (13)	12.7% (8)
3 to 4 hours	74.4% (67)	83.0% (39)	74.0% (37)	82.5% (52)
More than 5 hours	2.2% (2)	4.3% (2)	0.0% (0)	4.8% (3)
CLIL education	100% (99)	100% (57)	100% (54)	100% (70)
Yes	10.1% (10)	19.3% (11)	13.0% (7)	10.0% (7)
No	89.9% (89)	80.7% (46)	87.0% (47)	90.0% (63)

RESULTS AND DISCUSSION

Prior studies have examined students' motivation when opting for EMI programmes (e.g., Gardner & Lambert, 1972; Bourdieu, 1984; Gardner, 1985; Dörnyei, 2005, 2009). As mentioned in the literature review, however, only limited evidence is available regarding students' motivations for choosing a university degree with EMI rather than an alternative programme (Belhiah & Elhami, 2015; Lueg & Lueg, 2015; Arnó-Macià & Aguilar-Pérez, 2020; Madrid, 2021). Even less attention has been paid to programmes taught in LOTE in comparison with EMI programmes. Moreover, to our knowledge, no previous study has examined students' motivations for enrolling in a multilingual programme with LOTE as opposed to a multilingual programme with EMI or a unilingual programme. Therefore, the present study seeks to address this gap by investigating why students choose for either study programme.

For this purpose the expectancy-value model of achievement of Eccles and Wigfield (2002) allowed us to compare the motivations of the students in the three language tracks according to different motivation factors. Therefore, cluster analyses were

conducted to identify subgroups according to language tracks and to analyse these student groups in function of sociodemographic factors.

Regarding the levels of agreement with the questionnaire items, this study found that the students in the multilingual programme with DMI whether clearly agree or disagree that they opted for the study programme to improve their command of Dutch. A possible explanation for this might be that the students in this programme have a strong opinion on that motivation item.

Moreover, all students agree or were neutral with the fact that they registered for the multilingual programme with DMI to have better career opportunities. This result is likely to be related to the students' belief that one of the main purposes of the programme is to enhance career opportunities.

When comparing the results of the students in the study programme with DMI with those of the students in the multilingual programme without DMI, it is interesting to note that both groups of students place career prospects as main motivation factor. This finding was also reported by Lueg and Lueg (2015) in their study comparing students' motivation in a fully EMI programme versus the same programme in Danish.

Furthermore, students in a multilingual programme with DMI see their programme more as a continuation of their CLIL education they received in school than students in the multilingual programme without DMI do. A possible explanation for this might be that more students in the DMI programme had CLIL education at primary and/or secondary school level compared to the number of students in the programme without DMI. Also, the offer of CLIL education in Dutch in Belgium is higher compared to CLIL in English.

In addition, students in both groups disagree a lot that a unilingual programme might be too demanding. On the contrary, lots of these students explicitly chose for a multilingual programme to take on an additional challenge. The findings may suggest that these participants perceive the multilingual programme as a great challenge to undertake, particularly those enrolled in the stream with DMI. At the same time, they may view the unilingual programme as insufficiently challenging, despite being aware of the difficulties associated with multilingual tracks.

Finally, the high level of agreement with items referring to international mobility (for study or career purposes) and preparedness for multilingual Master's studies suggests that students enrol in multilingual Bachelor's programmes as a strategic preparation for their future academic and professional trajectories. These results support the idea that multilingual university programmes attract students who wish to hold a multilingual Master's degree or wish to have interesting (international) professional opportunities.

Moreover, in this study, students in both multilingual programmes stated that they had chosen that programme to improve their Dutch or English language skills. This is a common motivation for students enrolled in programmes with EMI (Chapple, 2015), but studies have also shown that the linguistic gains are sometimes very limited (Aguilar & Muñoz, 2014; Rogier, 2012). These outcomes clearly run counter students' recurring motivation to opt for a multilingual programme.

Compared to the two groups of students in a multilingual track, it is interesting to note that the EFA results of the students in the unilingual track indicated another factor, namely the 'cost' construct. This finding may support the hypothesis that students in the unilingual track associate the multilingual programmes with negative aspects related to additional workload.

Moreover, it is interesting to note that the students in the unilingual track agree much more with the motivation factor 'competence in Dutch' compared to 'competence in English'. This observation suggests that students consider understanding nuances in and mastering Dutch to be more difficult compared to English.

Another related issue emerging from the findings concerns the perceived difficulty and workload associated with Dutch, as reported by students enrolled in the unilingual programme. This is particularly noteworthy given that Dutch is one of Belgium's official languages.

Furthermore, the students indicated having a much lower interest in Dutch compared to English. This result raises an intriguing question regarding the place of other languages alongside English. This difference can be explained in part by the low attractiveness for as well as the perception of Dutch in French-speaking Belgium. This result is similar to the findings of De Smet et al. (2019) concerning the attitudes and motivations of primary and secondary school pupils in relation to Dutch and English CLIL education in Belgium. Taken together, pupils and students from primary to higher education have a greater interest and more positive attitudes for courses in English compared to Dutch.

Finally, the students in the unilingual track did not agree much on opting for their programme to have better professional opportunities compared to the two other groups of students.

In addition, the item with which they disagree the most was their disinterest in English. This finding suggests that students do not opt for the unilingual track due to a lack of interest in English. Rather, their decision appears to be driven by a perceived lack of proficiency to engage in a multilingual programme.

Interestingly enough, for seven motivation items, more than a fifth of the students in the unilingual programme answered feeling neutral compared to two items for the students in the other two language streams. This recurring response suggests that students in unilingual programmes are less affected or concerned by the one or other strength of their study programme. In contrast, it seems possible that the students in the multilingual programmes made their choice more convincingly. Also this result is related to the findings of De Smet et al. (2019) since pupils in CLIL or students in multilingual language streams show more positive and higher motivation compared to non-CLIL pupils or students in a unilingual track.

Furthermore, a vast majority of students in the multilingual track with DMI consider their programme to be the best at the university. Students in the multilingual programme without DMI adopt a more neutral position, whereas most students in the unilingual track disagree with this statement. It can therefore be assumed that the students consider the quality of their programmes differently depending on their language track.

Regarding the analyses of the clusters, it is notable that these are slightly different between both groups of students enrolled in a multilingual programme. First of all, the results indicated three motivation factors for the students in a multilingual programme with DMI compared to four factors for the students in a multilingual programme without DMI where the utility scale was split in two. This interesting finding is likely to be related to the fact that these students make a difference between their motivation during their Bachelor's degree (utility 2) and their motivation regarding what comes next at Master's and career level (utility 1).

Furthermore, on the one hand, the item referring to interacting with members of the language community and mastering disciplinary content in the target language loaded on the utility factor for students in the programme with DMI. In contrast, similar items were not included in any motivation factor for students in the programme without DMI. This leads us to the conclusion that the students relate to these motivation items differently depending on their language track.

On the other hand, items related to international mobility and multilingual Master's studies loaded on the utility factor for students in the programme without DMI. However, the EFA results did not assign these items to any motivation factor for students in the other multilingual track. A possible explanation for this might be that these are not their main motivations related to their present and future objectives.

Another important finding is that the motivation item related to better career opportunities is part of the interest factor for the students in the language track with DMI, while that same item was included in the utility 1 (Master's and career prospects) factor of the students in the track without DMI. One possible interpretation is that students in the first group derive greater intrinsic enjoyment from their programme or are more subjectively interested in it. By contrast, students in the second group may approach their programme more as a means to achieve professional aspirations. The higher enjoyment may also be interpreted by the higher rates for the items within the interest factor of the groups of students in a multilingual programme with DMI compared to the group without DMI.

Regarding sociodemographic characteristics, the subgroups of students in the multilingual programme with DMI differ in terms of year of study. The vulnerable cluster counts a higher percentage of first-year students. They are typically still adjusting to academic studies. Their lower perceived utility may reflect uncertainty about the programme's value early in their studies, while their higher interest could stem from initial enthusiasm. With regards to the students in the multilingual programme without DMI, the subgroups differ in terms of SES. The majority of students in the unmotivated cluster have a lower SES. This could shape the students' perceptions of value. Finally, the recurring socio-demographic trends observed among students in the unilingual programme across all four clusters suggest that motivation differences are not strongly associated with socio-demographic background within this type of programme.

Moreover, overall the students in the multilingual programmes have a higher SES than the students in the unilingual programme.

In contrast to previous research reporting higher motivation among female students (e.g., Harmanto et al., 2023; Tasgin & Coskun, 2018), our study did not identify gender differences, which may be attributable to the overrepresentation of women in the sample.

When comparing students' language background, the overall majority of the students in the unilingual track have had no CLIL education previously and only a very small amount of them have had more than 5 hours of Dutch or English classes per week in their last year of secondary. Whereas a bigger amount of the students in the multilingual programmes have had more than 5 hours of Dutch or English classes per week in their last year of secondary school.

Taken together, these findings suggest two complementary patterns. First, students enrolled in multilingual programmes appear to come from more privileged backgrounds and to have had greater prior exposure to the target languages before entering university. At the same time, the results indicate that limited proficiency in Dutch or English may constitute a barrier for students considering enrolment in multilingual university degrees. Consequently, the results suggest that linguistic preparation and support before starting and during the Bachelor's cycle may help attracting more students to multilingual degrees. This outcome confirms and supports the results of Louis et al. (2024).

LIMITATIONS

The main limitation of the study was the length of the questionnaire, which meant that several students dropped out along the way, and we were therefore unable to collect data on some of them who had started the questionnaire. Furthermore, as every participant attended the same university, the results cannot be generalized to provide an overview of the overall situation in French-speaking Belgium, but at the same time there are no other universities in Belgium that offer such study programmes at Bachelor's level. Also, the methodological choices were constrained by the study orientation of the students. Including students of other study fields could reveal other motivation insights for multilingual programmes with and without DMI. Additionally, comparing these results with the situation in the Dutch-speaking region of Belgium and other multilingual countries could also reveal interesting insights about multilingual degrees. A greater focus on LOTE could produce interesting findings that account more for the attractiveness of a degree with EMI alongside university degrees with LOTE. A further study could also assess the long-term effects of language support regarding the accessibility to multilingual programmes as well as support for students within programmes with and without DMI.

CONCLUSION

In this study, the aims were threefold. First, we assessed students' motivations for choosing either a multilingual university degree with or without DMI or a unilingual degree in French in line with the expectancy-value model of Eccles and Wigfield (2002). Second, we identified relevant subgroups of students based on their motivation

profiles within each of the three language streams. Thirdly, these subgroups were analysed in combination with socio-economic and language profile data.

First of all, the data contribute to a clearer understanding of students' motivations to register for the one or the other programme thanks to the large sample. Moreover, it is the first study comparing the motivations of three student groups registered in different language tracks. In addition, the study provides a new insight into multilingual degrees that include courses with DMI as underexplored topic.

Second, the analysis of motivation constructs reveals that meaningful subgroups of students can be identified across the different programmes. Overall, students in the multilingual programmes display similar motivation profiles when opting for their multilingual degree. However, students in the programme with DMI have a higher proportion of engaged profiles, indicating a stronger perceived usefulness of and interest in the study programme within this group. At the same time, this programme also includes a higher proportion of unmotivated students compared to the multilingual programme without DMI. In contrast, half of the students in the multilingual programme without DMI fall into the insecure profile, while only a small proportion of students in the programme with DMI belong to the vulnerable cluster. Students in the unilingual track are distributed more evenly across the four clusters. The largest proportion falls within the disengaged profile, reflecting relatively low perceived interest in and usefulness of the study programme among these students.

With regard to the third research question, the findings reveal slight socio-demographic differences between the subgroups in either study programme. Moreover, there are socio-demographic differences across the students enrolled in multilingual and unilingual programmes. Students enrolled in multilingual programmes tend to come from more privileged socio-economic backgrounds and report greater prior exposure to the target languages. In contrast, lower socio-economic status and limited language proficiency appear to act as barriers to enrolment in multilingual degrees.

Another major finding of this study was that Dutch does not attract the local students as much as English which raises an important question about the place of other languages alongside English.

Taken together, the findings suggest that language support alongside courses in DMI or EMI is very important for students and could contribute to make multilingual programmes accessible to more students. Moreover, this language support is already needed before the start of the degree to give all students a chance to start such a study programme regardless their previous educational background. The insights gained from this research may be of assistance for university staff and administrators to improve and set up access to their multilingual programmes, but also when implementing multilingual Bachelor's degrees with or without DMI. Finally, the findings may by useful for secondary schools when advising their pupils for their university degree choice.

Continued efforts are needed to make multilingual programmes with and without DMI more accessible to all students regardless their language skills at university entrance

without impacting the programme's quality. Ensuring appropriate language support for students registered in a multilingual programme should therefore be a priority for all universities offering such degrees.

ACKNOWLEDGMENTS

The authors thank the participants for taking part in the survey, the lecturers who helped collecting the data as well as Mariane Frenay (UCLouvain) and Jérémie Séror (uOttawa) for their guidance and insightful feedback throughout the course of the study. This research benefited from the statistical support of Statistical Methodology and Computing Service at UCLouvain. The research project was approved by the ILC Ethics Committee under reference CE-ILC/2024/03.

STATEMENTS AND DECLARATIONS

No potential conflict of interest was reported by the authors.

This study was presented in part at the 22nd Colloquium Neerlandicum (25-29 August 2025, VUB, Brussels).

DATA AVAILABILITY STATEMENT

The data supporting the findings of this study are available on request from the corresponding author.

REFERENCES

Aguilar, M., & Muñoz, C. (2014). The effect of proficiency on CLIL benefits in Engineering students in Spain. *International Journal of Applied Linguistics*, *24*(1), 1–18. https://doi.org/10.1111/ijal.12006

Al-Masheikhi, F., Al-Mahrooqi, R., & Denman, C. J. (2014). *Investigating college of science student attitudes towards using English as a Medium of Instruction*. (http://www.westeastinstitute.com/wp-content/uploads/2014/11/Eiman-Rahma-Christopher.pdf). The 2014 WEI International Academic Conference Proceedings New Orleans.

Arnó-Macià, E., & Aguilar-Pérez, M. (2020). Language issues in EMI: When lecturers and students can choose the language of instruction. In D. Block & S. Khan, *The Secret Life of English-Medium Instruction in Higher Education: Examining Microphenomena in Context*.

Barrios, E., & López-Gutiérrez, A. (2021). Language learning in a partially English-taught teacher education programme: Language gains and student perceptions. *International Journal of Multilingualism*, *20*(2), 1–18. https://doi.org/10.1080/14790718.2021.1888956

Belhiah, H., & Elhami, M. (2015). English as a medium of instruction in the Gulf: When students and teachers speak. *Language Policy*, *14*(1), 3–23. https://doi.org/10.1007/s10993-014-9336-9

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard University Press.

Chapple, J. (2015). Teaching in English Is Not Necessarily the Teaching of English. *International Education Studies*, *8*(3), 1–13. https://doi.org/10.5539/ies.v8n3p1

Costa, F., & Coleman, J. A. (2013). A survey of English-medium instruction in Italian higher education. *International Journal of Bilingual Education and Bilingualism*, *16*(1), 3–19. https://doi.org/10.1080/13670050.2012.676621

De Smet, A., Mettewie, L., Hiligsmann, P., Galand, B., & Van Mensel, L. (2019). Does CLIL shape language attitudes and motivation? Interactions with target languages and instruction levels. *International Journal of Bilingual Education and Bilingualism*, *26*(5), 534–553. https://doi.org/10.1080/13670050.2019.1671308

Dearden, J., & Macaro, E. (2016). Higher education teachers' attitudes towards English medium instruction: A three-country comparison. *Studies in Second Language Learning and Teaching*, *6*(3), 455–486. https://doi.org/10.14746/sllt.2016.6.3.5

Degrave, P., & Hiligsmann, P. (2021). *De behoefte aan vreemde talen van jonge universitair opgeleiden op de werkvloer in Franstalig België*. *Verslagen & Mededelingen van de Koninklijke Academie Voor Nederlandse Taal En Letteren*, *131*(2), 97–126.

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Routledge.

Dörnyei, Z. (2009). Individual Differences: Interplay of Learner Characteristics and Learning Environment. *Language Learning*, *59*(1), 230–248. https://doi.org/10.1111/j.1467-9922.2009.00542.x

Eccles, J. S., & Wigfield, A. (2002). Motivational Beliefs, Values, and Goals. *Annual Review of Psychology*, *53*(1), 109–132. https://doi.org/10.1146/annurev.psych.53.100901.135153

Evans, S., & Morrison, B. (2018). Adjusting to higher education in Hong Kong: The influence of school medium of instruction. *International Journal of Bilingual Education and Bilingualism*, *21*(8), 1016–1029. https://doi.org/10.1080/13670050.2016.1228600

Gao, X. (2008). Shifting motivational discourses among mainland Chinese students in an English medium tertiary institution in Hong Kong: A longitudinal inquiry. *Studies in Higher Education*, *33*(5), 599–614. https://doi.org/10.1080/03075070802373107

Gardner, R. C. (1985). *Social Psychology and Second Language Learning. The Role of Attitudes and Learning.* Edward Arnold.

Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and Motivation in Second-Language Learning*. Newbury House.

Gröblinger, K. (2017). What are the benefits and challenges of EMI in (international) study programs at UAS in Austria? *Forschungsforum Der Osterreichischen Fachhochschulen.*

Hamaide, B. (2018). *Multilingual education and language learning in Canada and Belgium at a crossroad*. Séminaire académique.

Harmanto, B., Anwar, K., Arifani, Y., Basri, H., & Nuruddin, M. (2023). The Relationship Between Attitudes, Motivations and Gender in Learners of English for Academic Purposes. *International Journal of Instruction*, *16*(3), 971–990. https://doi.org/10.29333/iji.2023.16352a

Howard, M. C. (2016). A Review of Exploratory Factor Analysis Decisions and Overview of Current Practices: What We Are Doing and How Can We Improve? *International Journal of Human-Computer Interaction*, *32*(1), 51–62. https://doi.org/10.1080/10447318.2015.1087664

Hu, G., & Lei, J. (2014). English-medium instruction in Chinese higher education: A case study. *Higher Education*, *67*(5), 551–567. https://doi.org/10.1007/s10734-013-9661-5

Kırkgöz, Y. (2005). Motivation and Student Perception of Studying in an English-medium University. *Journal of Language and Linguistic Studies*, *1*(1), 101–123.

Lasagabaster, D. (2016). The relationship between motivation, gender, L1 and possible selves in English-medium instruction. *International Journal of Multilingualism*, *13*(3), 315–332. https://doi.org/10.1080/14790718.2015.1105806

Louis, L., Degrave, P., & Hiligsmann, P. (2024). EMI and DMI, an elitist language learning approach? An investigation of students' socio-economic and language profiles. *Journal of Multilingual and Multicultural Development, 1*–21. https://doi.org/10.1080/01434632.2024.2406353

Lueg, K., & Lueg, R. (2015). Why Do Students Choose English as a Medium of Instruction? A Bourdieusian Perspective on the Study Strategies of Non-Native English Speakers. *Academy of Management Learning & Education*, *14*(1), 5–30.

Macaro, E. (2018). *English Medium Instruction*. Oxford University Press.

Macaro, E., & Akincioglu, M. (2018). Turkish university students' perceptions about English Medium Instruction: Exploring year group, gender and university type as variables. *Journal of Multilingual and Multicultural Development*, *39*(3), 256–270. https://doi.org/10.1080/01434632.2017.1367398

Madrid, D. (2021). Motivational Potential of Bilingual and Nonbilingual Programmes in Secondary and Tertiary Education. *Porta Linguarum. An International Journal of Foreign Language Teaching and Learning*, (36), 193–212. https://doi.org/10.37514/ATD-J.2011.8.3.18

Muttaqin, S., Chuang, H.-H., Lin, C.-H., & Cheng, M.-M. (2022). When Proficiency and Education Matter: The Mediating Role of English Proficiency and Moderating Effect of Parents' Education in the SES–Academic Achievement Relationship During EMI. *SAGE Open*, *12*(2), 1–13. https://doi.org/10.1177/21582440221103542

Pushpakumara, P. B. S. L., Madhusanka, M. P., & Maduwansha, N. A. N. J. (2023). Why Do Students Opt for English Medium Instruction in Humanities and Social Sciences in Sri Lanka? *Vidyodaya Journal of Humanities and Social Sciences*, *8*(2), 38–49. https://doi.org/10.31357/fhss/vjhss.v08i02.04

Rogier, D. (2012). *The effects of English-medium instruction on language proficiency of students enrolled in higher education in the UAE*. The University of Exeter.

Rose, H., Curle, S., Aizawa, I., & Thompson, G. (2019). What drives success in English medium taught courses? The interplay between language proficiency, academic skills, and motivation. *Studies in Higher Education*, *45*(11), 2149–2161. https://doi.org/10.1080/03075079.2019.1590690

Serna-Bermejo, I., & Lasagabaster, D. (2023). Why do students choose EMI courses? An analysis of their motivational drives. *Porta Linguarum. Revista Interuniversitaria de Didáctica de Las Lenguas Extranjeras*, (40), 235–252. https://doi.org/10.30827/portalin.vi40.27025

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics*. Pearson Education.

Tasgin, A., & Coskun, G. (2018). The Relationship between Academic Motivations and University Students' Attitudes towards Learning. *International Journal of Instruction*, *11*(4), 935–950. https://doi.org/10.12973/iji.2018.11459a

Thompson, G., Aizawa, I., Curle, S., & Rose, H. (2022). Exploring the role of self-efficacy beliefs and learner success in English medium instruction. *International Journal of Bilingual Education and Bilingualism*, *25*(1), 196–209. https://doi.org/10.1080/13670050.2019.1651819

Wilkinson, R. (2013). English-Medium Instruction at a Dutch University: Challenges and Pitfalls. In A. Doiz, D. Lasagabaster, & J. M. Sierra (Eds), *English-Medium Instruction at Universities* (pp. 3–24). Multilingual Matters. https://doi.org/10.21832/9781847698162-005

Xie, W., & Curle, S. (2022). Success in English Medium Instruction in China: Significant indicators and implications. *International Journal of Bilingual Education and Bilingualism*, *25*(2), 585–597. https://doi.org/10.1080/13670050.2019.1703898