Individual differences in English-medium education

Comparing multilingual identity, beliefs, motivations and perspectives in EME in Spanish and Chinese undergraduates

Jennifer Ament & Mengjia Zhang
Universitat Autònoma de Barcelona | Xi'an International Studies University

The rise of English as an international language has led to the widespread implementation of English-medium education (EME) programs in higher education institutions around the world. Due to the relationship between EME and access to opportunities, knowledge and valuable capital it is unclear if the practice enables or hinders diversity, inclusion and equity. This study examines the beliefs, motivations and perceptions of 107 Spanish and Chinese EME students with an aim to shed light on the relationship between these variables and multilingual identity and context. The participants completed four questionnaires, and the results show significant effects for context as well as for multilingual identity. Participants who self-identify as multilinguals felt more confident, were more open-minded and enjoyed their EME classes more than those who did not. Regarding context, findings revealed that the Chinese students felt less confident, suffered from higher anxiety and perceive less use for English in both the present and future than the Spanish students. These findings suggest that empowering EME students to feel like multilingual users of English rather than learners of the language could have a positive impact on their EME experiences and long-term outcomes, as well as foster diversity, inclusion and equity in this context.

Keywords: English-medium instruction, multilingual identity, perceptions, motivation, multilingual beliefs

https://doi.org/10.1075/aila.24047.ame
AILA Review 38:2 (2025), pp. 160–186. ISSN 1461-0213 | E-ISSN 1570-5595

1. Introduction

The hegemony of English as a medium of education (EME) around the world is undeniable. The practice has been increasing steadily even in countries that traditionally have had little to no English education, such as the contexts under investigation in the present study: China and Spain (Lasagabaster, 2020). EME, the denomination used in the present study, also referred to as English-medium instruction (EMI), is the practice of teaching academic subjects through English in contexts where English is not spoken as a first or official language (Macaro, 2022).

The creation of the European higher education area in 2010 (EHEA, 2024) led to the massification, marketization and employability of universities (Alves & Tomlinson, 2020). Specifically, the Bologna Process, which began in 1999, sparked the shift of higher education in Europe from institutions of knowledge to economic enterprises (Štech, 2011). In order to secure their place in the global higher education market, Spain, along with many other European countries, began implementing EME to foster the internationalization and collaboration between countries, which has, in turn, led to a body of research questioning the equity, diversity and inclusion of the marketization of universities and the widespread implementation of EME and its consequences (see, for example, Bowles and Murphy, 2020, Jaeger, 2023, and Wilkinson, 2013).

In China, the Chinese Ministry of Education is the entity responsible for the top-down EME policy implementation across the country which began around the year 2000. The main reason for its creation was the promotion of bilingual medium education to strengthen undergraduate teaching and to improve education quality (Ministry of Education, 2010). The practice of EME in China has been steadily increasing ever since, and it has been noted that "English proficiency has become the most coveted form of cultural capital in Chinese society" (Hu & Lei, 2014, p.564). While EME enables and contributes to the increased diversity, inclusion and equity of higher education in some respects it also has great potential to hinder them (DeCosta et al., 2021). More research is needed in this area to tease apart the affordances and drawbacks of this type of education and to uncover where diversity, inclusion and equity may be affected in EME. As Paulsrud et al., (2021) mention, there is a need to understand the unique needs of the educational context, a need to "understand the affordances available for learning, communicating and building identity" (p.15) in each context, and to a need to understand the opportunities and practices of each context. Thus, the present study reflects on two different variables in English-medium higher education: context and multilingual identity, and asks if perceptions, multilingual beliefs, and motivations toward EME differ depending on the context and/or on one's multilingual identity. After reporting the findings, a thorough discussion is pro-

vided shedding light on the specific ways in which diversity, inclusion and equity might be enabled or hindered in the two contexts under study, and finally actionable strategies are suggested to address the challenges with an aim to improve the EME experience for the different stakeholders.

2. Theoretical framework

Research on EME contexts has been steadily increasing to keep up with its ever-growing implementation around the world, and while tendencies and trends have been noted within specific contexts, it remains unknown how applicable the findings of each study are to new contexts. This is largely due to the multitude of factors involved in the practice. For instance, EME cannot be studied in isolation and is recognized as interacting with social behaviors, groupings, and beliefs that interact with language policy. In an effort to encompass the wide range of factors involved in EME education, the ROADMAPPING framework (Dafouz & Smit, 2020) was proposed as a common framework for interpretation and analysis. It takes a holistic approach, theoretically grounded in sociolinguistics, ecolinguistics, and language policy research. This is the perspective from which the present study is anchored. The ROADMAPPING model offers a template for analysis allowing for wider generalizations and applicability to diverse contexts. The framework includes six interconnected dimensions: roles of English (Ro), academic disciplines (AD), (language) management (M), agents (A), practices and purposes (PP), and internationalization and glocalization (ING).

The present study is particularly interested in the (1) roles, which refers to the "communicative functions that language fulfills in the higher education institution" (Dafouz & Smit, 2020, p. 60), (2) practices and purposes which refers to the classroom practices or professional development practices that involve EME, and (3) agents, which refers to the social players that are engaged with EME at socio-political, institutional, or hierarchical levels. Applied to the present study, agents are the roles or identities students adopt and project in EME. These three dimensions were chosen because they are thought to be closely intertwined. For example, agency refers to the institutional policies and individual perspectives of the stakeholders. This dimension influences the purposes and practices of English in the learning context which, in turn, influences the role of English in the context. The study targets these dimensions by collecting quantitative data through questionnaires on our participants' perspectives, multilingual beliefs, and motivations in the two EME settings. Being a relatively new framework for analysis, research applying the ROADMAPPING framework is still scarce. However, one study revealed that learners in different contexts view the role of English as

distinct, specifically, Thai students perceived English as a target to be learned whereas Austrian students perceived English as a tool to learn content and that language goals were not to be expected from EME (Baker & Hüttner, 2017). This demonstrates the different perspectives learners in different contexts can have towards EME and how it might affect their practices and purposes in the classroom. Studies on these dimensions in different Asian contexts reveal that English holds the role of lingua franca and can be understood as part of multilingual and translanguaging processes as there is a clear role for other language practices (Baker & Tsou, 2021). Regarding agents Baker and Tsou (2021) found that when EMI students are encouraged to use their full language repertoires, they can better develop their agency and multilingual self in the EME context. Beyond these studies little is known about these dimensions across EME contexts, which is one of the unique contributions of the present study.

2.1 Perspectives in EME

Within the body of research on EME there is considerable interest in students' and professors' perspectives. This research tends to focus on how different stakeholders feel while participating in EME courses or interacting on campus with coworkers, classmates or administrators. Identifying with, and practicing, the language norms of a community or educational context is a way of aligning oneself with a specific group, and in the case of the present study, the community is one's academic discipline and English is the language that gives access to that community. If one perceives themselves positively in relation to English, it can lead to positive engagement with the EME course. If one perceives themselves poorly in relation to English, it could lead to withdrawal and increased stress levels which may affect the practices and purposes and agency dimensions of the ROADMAPPING framework. For these reasons, this study investigates how the learners perceive themselves in relation to English and their performance in English with respect to their studies.

The variable of perceived level relates to one's confidence in a language. Research on the effects of confidence in EME classes shows that it is an important predictor of achievement; if a student feels confident about their language use, they tend to perform better in that environment (Stankov et al., 2013). Furthermore, students tend to identify with contexts in which they feel confident, aligning themselves with that community, ideology and practice, and, on the other hand, when they do not feel confident, they disengage, and distance themselves from the ideologies and practices of the group (Hermann, et al., 2017). Confidence is also positively associated with attitudes towards EME (Bukve, 2018). Taken together, these findings highlight the important role that self-perceptions in lan-

guage competence play in the EME context and shed light on the negative consequences that having poor self-perceptions might have on an individual's educational or professional trajectory.

Studies into these individual difference variables from different contexts demonstrate that Norwegian EME students report being confident in their English language skills, especially their receptive skills (reading and listening) (Bukve, 2018). Similarly, Turkish students reported having average to good levels of English, especially in receptive skills and, when it comes to perceived improvements, the same pattern was found; most students felt EME had a positive effect on their English skills, most notably receptive skills compared to productive ones (Kir & Akyüz, 2020). A study carried out on more than 600 Taiwanese full- and semi-EME students investigating anxiety, perspectives and perceived difficulties in EME reported that full-EME students had significantly lower anxiety than semi-EME students and that semi-EME students also reported significantly more perceived language difficulties particularly with respect to vocabulary and fluency (Chou, 2018). In the Spanish context, on the other hand, Ament et al., (2020) compared second and third year full- and semi-EME students on L2 attitudes, anxiety, enjoyment, and future selves and did not find any significant differences between full- or semi-EME groups, indicating they were similarly motivated and had similar EME experiences. While these studies suggest there could be a relationship between self-perceptions and dimensions such as agency, roles, and practices and purposes in EME settings, there are no previous cross context studies that specifically apply the ROADMAPPING framework.

2.2 Motivations in EME

Exploring motivation is the study of why people make the choices they make. To understand the motivations behind one's behavior, psychologists observe choices, latency, intensity, persistence, and emotional reactions (Weiner, 1992). A few key models for its analysis in second language acquisition (SLA) have been proposed, for example, Gardner's socio-educational model (1985), Dörnyei's second language (L2) motivational systems model (2009), and Deci and Ryan's self-determination theory (1985). This study adopts Gardner's socio-educational framework to L2 learning, which is well known for incorporating the variables of intrinsic and extrinsic motivation (being motivated by either internal or external factors respectively) with the variables of integrativeness (an openness to the target culture [Gardner, 2007], in this case, the EME academic English community), instrumentality (practical reasons, related to achievement and usefulness) and anxiety (a trait that is negatively correlated with language learning [Gardner et al., 1992]). We have chosen this model due to the demonstrated relationship that

the socio-educational model has shown between attitudes and second language learning outcomes (Masgoret & Gardner, 2003). The socio-educational model assumes "that an individual's language is an important component of the individual. It serves to organize the individual's thoughts, perceptions of the word, etc. and consequently can be said to define one's self-identity" (Gardner, 2010, p. 207). It becomes increasingly important to study motivations in the EME setting due to their close relationship with identity and investment (Norton, 2015). As one study reported, one of the main motivations to enroll in EME courses can be to gain the capital that speaking English gives access to (Machin et al., 2023).

Research into the motivation behind enrolling in EME courses shows that, in the Nordic context, EME is perceived as a natural choice and the students report having constructed hybrid rather than bicultural identities (Henry & Goddard, 2015). In the Spanish context, Machin et al. (2023) carried out a study on 34 EME economics undergraduates and found that students could be categorized into three groups: (1) aligners, those who felt EME aligned with their ideology, (2) learners, those who felt EME was a place to engage with and speak English, and (3) valuers, those students who reported studying through EME to access the capital and symbolic power of English. Similar to the Nordic context, the researchers noted a shift in identity perceptions. Specifically that: "[t]here was a valuing of the linguistic capital and a sense of an emergent identity, a reframing of themselves, which empowered them to believe they could participate in communities, anywhere, at home or internationally, in person or online." (Machin et al., 2023, p. 95).

A study comparing the motivation of students from different disciplines in the Chinese context was carried out by Zhang and Pladevall-Ballester (2023). They studied three different disciplines at three different Chinese universities over one year and found that EME motivations were high for all groups, and that motivation tended to decrease over time on all variables. Integrative and instrumental motivation scored the highest on all tests with extrinsic motivation scoring the lowest for all groups. EME anxiety was reported to be notably high for all groups and tended to decrease over time. The authors suggested that implementing a minimum language level to access the program would help reduce negative experiences caused by the negative relationship between poor language level and anxiety and participation in EME courses.

Similarly, some studies have compared the intensities of EME studies to uncover the motivational differences between semi- or full-EME groups. For example, a study by Ament et al. (2020) measured the motivation of full and semi-EME students from their second to third year of study and found that while there were no differences between intensity there were differences between year 2 and year 3 students. This suggests that those who participate in one or many

EME courses have the same motivational drives. It also highlights the dynamic and ever-changing nature of motivations over time which is further corroborated in Gao's longitudinal study (2008). This study reported a change over time with students becoming more ideal L2 self oriented over a three-year period of EME study.

Given the close relationship between motivation and behavior, investigating the motivations of EME participants' may provide a window to understand the dimensions of *agents, practices and purposes* and *roles* of English in the EME context. The study aims to contribute to EME research by analyzing and discussing the findings through the ROADMAPPING framework to make the results and possible implications more easily transferrable to different EME contexts.

2.3 Multilingual identity, beliefs about multilingualism, open-mindedness, and future multilingual self

2.3.1 *Multilingual identity*

An individual's identity is described as "the way a person understands his or her relationship to the world, how that relationship is structured across time and space, and how the person understands possibilities for the future" (Norton, 2000, p. 5). The current study focuses on multilingual identity and beliefs, because of the relationship between these variables and future possibilities and opportunities and, which, in turn, is a way to tap into the dimension of equity. Linguistic identity can be described as how one understands their relationship to each of the languages they may speak. Our study takes Fisher et al.'s (2020) proposal, which suggests that the awareness of one's linguistic repertoire and ability to self-identify as a multilingual is, in fact, the key component of being multilingual. Having self-awareness and self-identifying as a multilingual individual are, in turn, believed to have an impact on the learning and development of languages spoken as well as the effort and investment placed in learning new languages (Fisher et al., 2020). The concept of investment concerning language learning was proposed by Darvin and Norton (2015) and includes theories of capital, language, and symbolic power (Bourdieu, 1991). Norton (2013) argues that when learners invest in a language "they do so with the understanding that they will acquire a wider range of symbolic resources (language, education, friendship) and material resources (capital, goods, real estate, money) which will increase the value of their cultural capital and social power" (p. 6). Furthermore, investment refers to the choice to participate in language learning, i.e., the action that sustains participation in the learning context (Darvin & Norton, 2023). Given this relationship between multilingual identity, language investment and the potential impact this can have on EME students' perceptions of roles, practices and purposes and agency, and the lack of

studies considering the EME context, there is a clear need for more studies investigating these variables in the EME context.

2.3.2 *Beliefs*

Beliefs are psychological constructs that contribute to the construction of identity. For the purposes of the current study, multilingual beliefs were broken down into three factors: beliefs about multilingualism (BAM), open-mindedness (OMS), and future multilingual self (FMS) for a few reasons:

Firstly, BAM relates to the perceived benefits of multilingualism and is an essential factor to measure due to the relationship it has with identity and capital. For example, in Darvin and Norton's (2015) model of identity and investment, perceived benefits of multilingualism is one of the variables related to investment (in a language) along with ideology and positioning. Therefore, BAM can be said to form part of one's ideology and is central to language use. Research also shows that gaining insight into beliefs can reveal membership of individuals to certain ideological groups. For example, Chen et al. (2016) examined attitudes toward globalization through the study of affective, behavioral, and cognitive processes of individuals adapting to a new culture and identified two responses: multicultural acquisition and ethnic protection. What was interesting is that the multicultural acquisition response positively correlated with openness to experience, multicultural ideology, bicultural identity, and liberalism while the ethnic protection response correlated with anxiety, stress, and difficulty dealing with new situations. Thus, due to the relationship between BAM and identity, and the relationship between identity and access to social and material capital, we consider it valuable to research the BAM of Spanish and Chinese EME students and measure how this variable interacts with context, multilingual identity, perceptions and motivation.

Secondly, OMS, the trait of being open to new and different ideas (Piechurska-Kuciel, 2020) and unprejudiced towards different norms and values (Dewaele & Oudenhoven, 2009), is a key feature to consider in the EME context. The aim of some of the EU multilingual policies is to foster intercultural competence (open-mindedness, cultural empathy etc.). Internationalization relies on tolerance, respect for diversity and curiosity for others (European Union, 2022); all of which contribute to the character trait of OMS in an individual. For example, Dewaele and Oudenhaven (2009) investigated OMS and cultural empathy, among other personality variables, and found that multilingual children scored higher on both variables than bi- and monolinguals. This finding was confirmed in another study on OMS among Norwegian children (Tiurikova et al., 2021) which found that OMS was positively correlated to multilingualism (third language learning at school) as well as to self-identification as multilingual.

Finally, FMS plays a prominent role in SLA motivation theory (Dörnyei, 2009). FMS can be considered the ideal projection of oneself in the future, and we considered it particularly relevant to include in our study on EME students. This is because EME students have chosen an alternative method of education, one that supposes extra effort, and we believe this decision may be related to their future professional plans. FMS also forms part of the creation of imagined communities and imagined identities, and how a person understands the possibility of their participation in these communities (Darvin & Norton, 2021). This is especially relevant to EME learners precisely because upon graduation they enter the work force and may seek employment in multilingual contexts. For these reasons this study seeks to give insights into the development of these beliefs in EME settings in Spain and China. Due to the interaction of the individual difference variables mentioned in this literature review and their possible impact on the dimensions of role, agency, and practices and purposes in the EME context the present study poses two research questions: RQ1) Do perceptions, multilingual beliefs, and motivations toward EME differ depending on the EME context, Spain or China? And RQ2) Do perceptions, multilingual beliefs, and motivations toward EME differ depending on one's multilingual identity?

3. Methodology

3.1 Design

One-hundred and seven participants were recruited for the study. Participation was voluntary and participants were informed about the study, and its aims and purposes, and signed consent forms before collecting data. Data was collected via four questionnaires. In the Spanish context the questionnaires were completed online and in the Chinese context the questionnaires were completed in class. This difference in data collection modality is not ideal and may cause some bias in the results. However, this was our circumstance. In the Spanish context we were not permitted to enter the class or use class time while in the Chinese context we had a closer relationship with the department and teachers concerned, and were permitted to enter the EME classes. We feel that despite the data collection modality difference the study still makes an important contribution.

3.2 Instruments

The four questionnaires were:

1. A background information questionnaire comprised of 20 items.

2. A 37-item multilingual questionnaire based on Haukås et al.'s (2021) questionnaire, which was designed to explore teenagers' multilingual perspectives and identity in Norway. We found it adequate for our purposes and adapted it to the EME context. By choosing a valid and reliable questionnaire we could ensure the validity of our results. The questionnaire consists of four sections.

Section 1: Multilingual habits (9 items)

This section targeted the linguistic repertoire of the students and asked about the use and context of use of each language (6 items), the attitudes towards each language (4 items) and whether they identify this language as a first or native language (1 item).

Section 2: Beliefs about multilingualism, future multilingual self, and open-mindedness (25 items)

BAM (8 items)
This subsection targeted the participants' BAM. Participants were asked if they believe that being multilingual correlates with any of the following attributes: higher intelligence, creativity, language awareness, language learning ability, economic benefits, academic benefits, and empathy.
FMS (7 items)
This subsection targeted the participants' FMS and how many languages they envision themselves speaking and in which areas of life they envision themselves being multilingual speakers.
OMS (10 items)
This subsection targeted participants' OMS by asking about their willingness to interact with, and level of tolerance of, different cultures, opinions, and interests.

Section 3: Multilingual identity (3 items)

This section asked the participants to define multilingualism or what being multilingual means to them. They were then asked if they consider themselves multilingual and were asked to explain their answer.

3. 25-item EME motivation questionnaire, adapted from Somers and Llinares (2021), and Zhang and Pladevall-Ballester (2023) CLIL/EME-motivation questionnaires. This was chosen because it is a valid and reliable test, and we recognize that language learning motivation cannot be separated from content learning motivation in immersive contexts, so that the questions must consider both aspects. Each motivational factor (instrumental, integral, intrinsic, extrinsic, and anxiety) was targeted with five questions.

4. 16-item EME perceptions questionnaire. We focused on EME perceptions because we could not collect data on language level, and our main interest was to target perceived linguistic gains, to identify perceived challenges, and to detect perceived level and confidence in EME classes. We adapted a questionnaire used in Zhang and Pladevall-Ballester (2022) that was used to collect data on perceptions toward three different EMI programs.

These questionnaires and variables were chosen for analysis based on the aim to shed light on the dimensions of role, practices and purposes and agents within the ROADMAPPING framework. The perceptions questionnaire aims to inform on the practices and purposes dimension, the multilingual beliefs questionnaire aims to inform on the roles dimension, and the motivations questionnaire aims to inform the agents dimension in the two EME settings.

3.3 Participants

All participants were university students enrolled in an education related degree. Forty-eight students were enrolled in a primary education degree at a public Spanish university and 59 were enrolled in an English teacher education degree at a public university in China. Table 1 shows descriptive data from the background questionnaire.

3.4 Analysis

Jamovi was used for statistical analysis (The Jamovi Project, 2020). Firstly, a confirmatory factor analysis was carried out on the questionnaires to test the validity of the instruments. The multilingual questionnaire resulted in a RMSEA of .095, CFI of .84, and a TLI of .73, the EME motivation questionnaire resulted in a RMSEA of .098, CFI of .81, and a TLI of .73, indicating acceptable fits for both questionnaires. One possible reason for acceptable rather than excellent fits could be the sample size of less than 200 participants. For this reason, a reliability analysis was carried out on the questionnaire items and the results showed good to excellent reliability for all variables as reflected in the Cronbach's α values reported in Table 2.

Then, independent samples *t*-tests to detect the differences between the two participant groups by contexts (Spain or China) to answer research question one. Then a one-way ANOVA test was carried out to detect the differences between the three groups according to their multilingual identity (yes, no, and unsure), to answer research question two.

Table 1. Participant background data

Variable	Spain	China
Number of participants	48	59
Average Age	19	21
Gender	39 female, 9 male	54 female, 4 male
Year of studies	1st ($N=18$)	3rd ($N=59$)
	2nd ($N=15$)	
	3rd ($N=13$)	
	4th ($N=2$)	
How many classes in English per semester	3	1–3
Reported English level	C1 ($N=35$)	Test for English major (B2)
	B2 ($N=13$)	($N=59$)
Have studied abroad	9	2
Plan to study abroad	23	0
Average number of languages	4.2 (languages)	2.4 (languages)
or dialects* spoken		+ 1.4 (dialects)

* China has many local dialects that the speakers do not consider different languages from standard Mandarin. In the questionnaire we asked participants to report any languages or dialects that they spoke and the data is what was self-reported and self-categorized as a 'language' or 'dialect'.

Table 2. Reliability analysis results: Cronbach's α for each variable

Variable	BAM	FMS	OMS	Intrinsic	Extrinsic	Integrative	Integrative	Anxiety	PD	PL	PI
Cronbach's α	.728	.701	.758	.875	.664	.851	.754	.908	.861	.90	.90

4. Results

The data was first analyzed to target RQ1, for which it was split into two groups: Spain or China. The descriptive data for each variable is presented in Table 3. For this data a high mean (closer to 5) shows agreement or alignment with the variable in question and a low mean (closer to 1) shows disagreement or disalignment with the variable in question.

Table 3. Descriptive statistics: Group — China and Spain

Variable	Group	N	M	SD
Perceived difficulty	China	59	4.64	0.886
	Spain	48	3.33	1.33
Perceived level	China	59	3.42	.875
	Spain	48	4.85	.875
Perceived improvement	China	59	4.45	.835
	Spain	48	4.93	1.04
BAM	China	59	3.43	.722
	Spain	48	3.29	.540
OMS	China	59	3.00	.260
	Spain	48	3.14	.354
FMS	China	59	3.22	.524
	Spain	48	3.43	.540
Intrinsic	China	59	3.56	1.04
	Spain	48	4.78	.798
Extrinsic	China	59	3.56	.971
	Spain	48	3.49	1.04
Integrative	China	59	4.24	.953
	Spain	48	4.33	1.09
Instrumental	China	59	4.12	.811
	Spain	48	4.51	1.04
Anxiety	China	59	3.85	1.22
	Spain	48	3.02	1.44

Then, to detect any differences in any of the variables between the two EME contexts, an independent sample *t*-test was carried out. Firstly, the data was checked for normality and homogeneity, and both were found to be normal for all variables except for perceived difficulty and multilingual identity. Thus, for these two variables the Mann-Whitney *U* value is reported in place of the student's *t* value. The results are summarized in Table 4.

Significant differences were found within each construct investigated. Specifically, regarding perceptions, perceived level and perceived difficulty were significant, showing that the Chinese students felt they had a lower level of English and found EME more difficult than the Spanish students did. Two of the three multilingual belief variables were significant: OMS and FMS. The mean scores

Table 4. Comparisons across contexts: T-test results

Variable	Student's *t*	df	*p*-value	Cohen's d
Perceived difficulty	622**	106	<.001*	1.15
Perceived level	9.6	106	<.001*	1.87
Perceived	2.6	106	.012*	.50
Improvement BAM	1.87	106	.064	.36
OMS	2.97	106	.004*	.57
FMS	2.17	106	.032*	.42
Intrinsic	6.6	106	<.001*	1.23
Extrinsic	.388	106	.699	.07
Integrative	.51	106	.614	.09
Instrumental	2.22	106	.028*	.43
Anxiety	3.43	106	<.001*	.66
Multilingual identity	430**	106	<.001*	1.6

* Significant value ** Mann-Whitney *U*

show that the Spanish EME students were more open-minded and had a stronger future multilingual self than the Chinese EME students. Then, with respect to motivations, results show that the Spanish students were more intrinsically and instrumentally motivated than their Chinese counterparts and that the Chinese students felt more anxious in their EME classes than the Spanish ones. Finally, significantly more Spanish participants self-identified as being multilingual, whereas most Chinese participants did not feel multilingual or were unsure if they were multilingual. No other significant differences between the groups were detected.

Turning to the differences between groups depending on multilingual identity, the target of RQ2, we found that of the 48 Spanish participants, 41 self-identified as multilingual speakers, mentioning that they felt this because they "can speak three or four languages fluently', that they 'can express themselves in three languages", and that they "can switch between 3 languages with ease". Four of the Spanish participants said they were not multilingual stating that they "only speak three languages", that they "do not practice the languages they know", or that they "are not completely fluent in the languages they know". The remaining three participants said that they were unsure because they were "not sure how fluent in each domain they must be to be considered multilingual" or that while they "speak different languages the only one they feel comfortable in is their native language". As for the Chinese participants, nine of them self-identified as being multilingual speakers mainly because they "know and use three languages". Twenty-eight of

them felt they were not multilingual because they "do not speak more than two languages", they "never use the second or third language in daily life", and they "do not have any opportunities to use the foreign languages that they know", or that they "have not mastered the language yet". Finally, 22 of them reported not knowing if they were multilingual or not because even though they "have studied and know other languages they have not mastered them", or they felt they "do not use the foreign languages enough". The descriptive statistics of the data when grouped by multilingual identity are presented in Table 5.

Table 5. Descriptive statistics multilingual identity

Variable	Group	N	M	SD
Perceived difficulty	Yes	50	3.68	1.38
	No	32	4.86	.994
	Unsure	25	4.54	.815
Perceived level	Yes	50	5.08	.788
	No	32	3.78	.943
	Unsure	25	4.04	.703
Perceived improvement	Yes	50	4.81	1.07
	No	32	4.43	.932
	Unsure	25	4.77	.668
BAM	Yes	50	3.76	.557
	No	32	3.86	.616
	Unsure	25	3.64	.565
OMS	Yes	50	3.65	.272
	No	32	3.47	.347
	Unsure	25	3.53	.205
FMS	Yes	50	3.81	.437
	No	32	3.61	.494
	Unsure	25	3.70	.314
Intrinsic	Yes	50	4.96	.860
	No	32	3.82	1.05
	Unsure	25	4.38	.976
Extrinsic	Yes	50	3.96	.983
	No	32	3.71	.966
	Unsure	25	4.09	.895
Integrative	Yes	50	4.73	1.05

Table 5. *(continued)*

Variable	Group	N	M	SD
	No	32	4.65	.875
	Unsure	25	4.68	1.01
Instrumental	Yes	50	4.83	.858
	No	32	4.38	.888
	Unsure	25	4.64	.768
Anxiety	Yes	50	3.28	1.40
	No	32	4.25	1.13
	Unsure	25	4.38	1.01

To determine if there were any significant differences between the three groups, those who did identify as multilingual (Yes), those who did not (No) and those who were not sure (Unsure), a one-way ANOVA was carried out. When the data was tested for normality and homogeneity all variables were considered normal except integrative motivation and perceived improvement. For this reason, we report the Welch's F for these two variables and the Fisher's F for the other variables. Also, for the normally distributed data the Tukey post-hoc test is reported and for the abnormally distributed data the Games-Howell test is reported. A summary of the findings is reported in Table 6.

Table 6. One-way ANOVA results: Multilingual identity

Variable	Fisher's F	df	*p*-value
Perceived difficulty	11.34	106	<.001*
Perceived level	28.50	106	<.001*
Perceived improvement	1.74**	106	.184
BAM	.997	106	.373
OMS	4.04	106	.02*
FMS	2.11	106	.126
Intrinsic	14.65	106	<.001*
Extrinsic	1.22	106	.298
Integrative	.078**	106	.925
Instrumental	2.83	106	.064
Anxiety	9.41	106	<.001*

* Significant value, ** Welch's F

The ANOVA results show significant main effects for the variables of perceived difficulty, perceived level, OMS, intrinsic motivation, and anxiety. The post-hoc tests reveal that regarding perceived difficulty, those who perceived themselves as multilingual felt that EME was less difficult than both those who did not feel multilingual ($p = < .001$) and those who were unsure of their multilingual status ($p = < .009$). Regarding perceived level, the Yes group was again significantly different from the other two groups, No and Unsure, ($p = < .001$) and ($p = < .001$) respectively, revealing that those who felt multilingual also felt they had a higher level of English than those who did not feel multilingual or who were unsure. With respect to the OMS variable, we found that there was a significant difference only between the Yes and No group ($p = .018$) showing that those who identified as being multilingual were more open-minded than those who did not feel multilingual, but not more so than those who were unsure of their multilingual abilities. As for motivations, results show that the self-identifying multilingual group was more intrinsically motivated than the group who did not feel multilingual ($p = < .001$) and the group who was unsure ($p = .037$). Finally, regarding anxiety we found a significant difference between both the Yes group and the No group ($p = .002$) and the Yes group and the Unsure group ($p = .001$) revealing that those who identified as being multilingual were less anxious in their EME classes than those who did not or who were unsure. No significant differences were detected between the No and Unsure groups for any variables.

5. Discussion

This study has undertaken an analysis of the effects of context and multilingual identity on perceptions, motivations, and multilingual beliefs. Two EME contexts were examined, an education degree program in China and Spain, with an aim to offer some insights to the dimensions of roles, practices and purposes, and agents in each of these contexts with respect to English under the ROADMAPPING framework.

We first consider the results related to the RQ1 which examined how context affects multilingual identity, perceptions, multilingual beliefs and, motivations. Findings showed that there were significant group differences for all three perception variables: perceived difficulty, perceived level, and perceived improvement. This demonstrates how closely connected these variables are to each other and to language proficiency level. It also demonstrates that the Chinese participants felt they had a lower or insufficient English level for the EME courses and therefore also found the experience of taking EME courses more challenging.

A second finding in relation to RQ1 is that the Spanish group perceived significantly greater improvements than the Chinese group, which had less EME exposure and lower English levels. This contradicts previous research, for example, Ament and Pérez-Vidal (2015), who found that when comparing language outcomes in full- and semi-EME programs only the semi-EME students experienced significant gains. In addition to this, lower-level groups are usually reported to make the most significant gains with respect to language, which is usually attributed to having a wider margin for improvement while more advanced levels plateau (Coyle et al., 2010; Wilkinson, 2004). One possible explanation for the finding could be that, as some participants mentioned in the open-ended questions, the Chinese participants had fewer opportunities to practice English both in and out of the EME classes and that, perhaps, more effective strategies to encourage interaction and language use in the EME class is needed to enhance language skills (Aizawa et al., 2023). This finding, could also be particular to the Chinese context, as it is in line with another Chinese EME study which detected that students' self-perceived language gains became worse after a one-semester of EME courses. The authors noted, through classroom observation, that the EME teachers had a teacher-centered approach which allowed little time for students to interact and they did little to scaffold the students' language learning (Zhang & Pladevall-Ballester, 2022).

These findings interpreted under the ROADMAPPING framework reveal that the role of English for the Chinese participants on a local level is more of a target than a tool. They also suggest that the Chinese participants have poorer agency in the language and hesitate to interact with it in the EME context. Finally, regarding practices and purposes, EME is difficult to engage with, it is something to be learned and it causes anxiety in the majority of Chinese participants. The opposite is true of the Spanish participants: they seem to use English as a tool to communicate, have agency and participate in the EME classroom. They also seem to have more use for English both in and out of the classroom.

A similar interpretation can be applied to the findings on the effect of context on motivations. Specifically, the Chinese participants, possibly due to the increased perceived difficulty and lower English level, were less intrinsically motivated and experienced higher anxiety in the EME class compared to their Spanish counterparts. This finding is consistent with other studies that have demonstrated a negative correlation between intrinsic motivation and anxiety (Ament et al., 2020). This finding gives more insight to the agency dimension when it comes to English use; the Spanish students tend to have more personal agency reflected through their inner motivation to engage with EME. Another difference noted is that the Spanish students were significantly more instrumentally motivated that the Chinese ones. This finding seems to suggest that the Chinese students do not

see an immediate or real need for English in their immediate or near future lives compared to the Spanish students. This reflects that at the local level the role and practices and purposes dimensions are significantly different in the two contexts. For example, the Spanish students have more contact with international students due to being part of the European Union's Erasmus exchange program. In addition, the Spanish study takes place in Barcelona, not only a popular tourist destination but also a city where a high percentage of foreigners choose to live, making English a common language at some levels of society and daily life. The Chinese participants, however, have little contact with foreigners in daily life and few opportunities to use English outside classrooms.

Motivation results regarding RQ1 also showed that there were important similarities between the two groups regarding extrinsic motivation. This could be because, as Lasagabaster (2016) found, EME students tend to have strong family and other societal pressures that drive motivation. Another similarity between the groups worth noting is integrative motivation levels, which suggests that both groups are similarly interested in English language and culture. These two findings demonstrate the similarities of the role and practices and purposes dimensions at the international level i.e., the status of English as a global language widely recognized for its usefulness in business, academia and leisure. As well as the access to valuable cultural capital that speaking English grants (Hu & Lei 2014; Machin et al., 2023).

Results from the multilingual beliefs variables showed that the groups were different according to FMS, which seems to parallel the motivation variables findings. It seems that the Chinese students have difficulty visualizing the usefulness (role and practices and purposes) of their EME studies for their future (integral motivation) and that they also have a less-well developed FMS (agency) compared to the Spanish students. No significant differences were found for the BAM variable, indicating that, at the individual level, the inner beliefs of the EME students in Spain and China do not differ when it comes to the positive views they hold towards multilingualism. What may be surprising is that, despite this similarity in multilingual beliefs, there is a significant difference in OMS. Culturally, the Chinese students may have a stronger sense of ethnic protection as was found in Chen et al.'s study (2016), which was found to correlate with less open-mindedness. It may also be the case that the lower proficiency levels and lack of experience abroad and with foreigners cause the Chinese students to be less open to different or conflicting ideas, opinions or experiences. Finally, less Chinese students identified themselves as multilingual speakers compared to the Spanish ones. This finding is in line with the trends noted regarding perspectives, motivations and multilingual beliefs of the Chinese group. It may also be that the Spanish students have more fully developed multilingual selves and therefore also feel

a stronger agency when interacting in EME courses. An intriguing finding is that most of the Chinese participants were unsure of their multilingual status, which could indicate that their multilingual identity is being constructed but that they had not fully claimed their agency in English at the time of data collection.

RQ2 asked if multilingual identity had any effect on the perspectives towards EME, motivations or multilingual beliefs. The findings showed that participants who identified as being multilingual had a higher perceived level of English; they felt they had a sufficient English level for the course. While those who did not identify as multilingual felt the opposite and, in turn, felt that the EME courses were more difficult. The findings with respect to motivations show a similar pattern, namely that those who feel they are multilingual feel less anxious in the EME classes and have higher intrinsic motivation than those who do not or are unsure. This suggests that those who identify as multilingual may feel they are users of the language and thus no longer feel the "social relations of power [...] that constrain opportunities for language learners to speak" (Darvin & Norton, 2021, p. 91). Finally, those who feel multilingual were found to be more open-minded than those who are not. This parallels Sung's (2016) and Chen et al.'s (2016) findings, who found that those who had strong global identities were more tolerant and open to new experiences. In sum, when learners' identify as multilingual speakers they perceive having a higher language level and experience less difficulty and anxiety in their EME classes. They also experience higher intrinsic motivation towards EME (enjoyment and fulfillment) and open-mindedness is supported. This suggests that the multilingual context created by EME might encourage speaker agency and open-mindedness.

Finally, applying the ROADMAPPING framework to the findings we can see that the perceptions, motivations and multilingual beliefs of the EME students significantly impact the roles, practices and purposes, and agency in the EME context. Specifically, the study demonstrates that when students perceive themselves to have lower levels of English they tend to identify more as learners of the language rather than users of the language. This is evident through the findings on motivations. As learners, rather than users of the language, the students have higher levels of anxiety and low intrinsic motivation which affects the practices and purposes of the students in the classrooms. For example, research shows that anxious students participate less in the classroom which can influence learning outcomes as Yuksel et al., (2023) reported. Regarding purpose, when students feel they have a low level they tend to use English as a target to be learned rather than as a tool to communicate as was reported in Baker and Hüttner (2017). Finally, this study has also brought to light that if students do not feel capable and confident in their educational setting it can affect their agency. The students do not feel empowered to participate and fully take on a multilingual identity, something

that our findings suggest may negatively affect their educational outcomes, their future opportunities (FMS) as well as their open-mindedness.

6. Conclusion

The present study has measured how either context or multilingual identity impacts three complex individual difference variables in two EME contexts. There are two main findings to be noted from the study, one in relation to context (RQ1), and the other in relation to multilingual identity (RQ2). Firstly, concerning RQ1, we did find significant context effects. Specifically, at the individual level EME students in the Chinese context seem to suffer from poor self-perceptions and in turn have little agency when they speak English. They tend to perceive themselves as learners of the language rather than users of it. The Spanish students have an increased tendency to perceive themselves as capable in the EME context and, as such, seem to have claimed their right as speakers of the language. At the local level the context plays an important role with respect to the practices and purposes dimension. This was evident through the attitudes, motivations, and FMS variables. Finally, at the international level there were no significant differences regarding the perspectives towards English and extrinsic and integrative motivation of the two contexts.

Concerning RQ2, we did find significant effects for self reported multilingualism. Specifically, those who identify as multilinguals also have increased agency in the EME context which, in turn, fosters OMS, FMS, enjoyment and engagement in the EME context. What is clear from the findings is that the individual difference variables are independent of the contextual ones. This suggests that perceptions, attitudes, motivation and identity have the potential to affect students regardless of their context.

A limitation of this study may be related to the differences in the two groups with regards to culture which may explain some of the results but is also difficult to control for. In addition to culture, other factors that we were unable to control for were educational system of the country and pedagogical style of the individual teachers. However, the bringing together and comparison of the two cultures, pedagogical styles, and academic systems under the ROADMAPPING framework is also one of the strengths of the study. Another limitation is that the Chinese students began the study with an intermediate English level while most of the Spanish students had an advanced English level, which may be a confounding variable. In fact, the findings suggest that perceived proficiency level is a key factor in perspectives and experiences in EME. We encourage more studies in this area to help tease apart the relationship between language level and perspectives.

Another weakness could be that, even though exposure to EME was similar, it was not exactly the same between the groups, and in the future controlling for this variable would help strengthen the results. A contribution of the present study is that it examines three complex individual difference variables and by applying the ROADMAPPING framework it describes how the variables impact roles, practices and purposes as well as agency in two EME contexts. Despite any possible shortcomings, we believe that the study offers valuable insights into the interactions between the sets of variables investigated and how they play out in two different contexts.

Thus, interpreting the findings together, a number of actionable strategies for educators, students and EME program design can be suggested in order to improve experiences and outcomes of EME. Firstly, for EME classrooms to become more diverse, inclusive and equitable, both learners and teachers should be more aware of the specific challenges they face in these contexts (e.g. level, exposure, need, motivation) and strive to find methods of overcoming them. Some ways to achieve this would be to give students surveys or questionnaires to identify how they feel, have group or class discussions identifying challenges and what the possible solutions might be at the local level. It is through becoming aware that the students can then empower themselves with respect to their English language use.

Secondly, a strategy that could benefit lower proficiency EME students would be the integration of translanguaging and multilingual practices. Research shows that when learners are able to translanguage, (use their full-multilingual repertoire) they are empowered and engage more deeply with their studies (Baker & Tsou, 2021). EME instructors and students may benefit from specific training on the incorporation of targeted translanguaging educational practices.

Thirdly, we recommend that, rather than implementing entry level tests or minimum proficiency levels in English — which can act as gatekeepers to EME and hinder inclusion and equity — EME courses or programs be taught through a combination of instruction from language and content specialists (Doiz, et al., 2019; Kletzenbauer, et al. 2022). Adopting this pedagogical approach can scaffold lower-level students and serve to boost inclusivity and diversity in the classroom. The findings from our study point out that if students feel confident and capable in their EME courses it could help shift perspectives and improve outcomes.

Finally, due to the demonstrated contextual differences of the dimensions of role, practices and purposes and agency in the present study it is essential that a needs analysis be carried out before implementing EME to decide how best to address both the individual, local and international needs of the context. EME cannot be a one-size-fits all application and must be implemented taking into consideration the unique context of each university. Perhaps through the adop-

tion of these measures, EME could foster more diversity, equity and inclusion. We encourage more studies that bring together multiple contexts or multiple individual difference variables to gain more insights into the complexity of EME and to corroborate the trends noted in this study.

Funding

Open Access publication of this article was funded through a Transformative Agreement with Universitat Autònoma de Barcelona.

Acknowledgements

This research is part of the Shaanxi Provincial Department of Education Youth Innovation Team Research Program Project: Comparative research on innovation of EMI teaching models in colleges and universities along the 'one belt and one road' countries. Project number: 23JP140.

References

doi Aizawa, I., Rose, H., Thompson, G., & Curle, S. (2023). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research*, *27*(4), 837–861.

doi Alves, M.G., & Tomlinson, M. (2020). The changing value of higher education in England and Portugal: Massification, marketization and public good. *European educational research journal*, *20*(2), 176–192.

doi Ament, J., Barón-Parés, J., & Pérez-Vidal, C. (2020). Exploring the relationship between motivations, emotions and pragmatic marker use in English-medium instruction learners. *Journal of Language Learning in Higher Education*, *10*(2), 469–489.

doi Ament, J. & Pérez-Vidal, C. (2015). Linguistic outcomes of English medium instruction programmes in higher education: A study on economics undergraduates at a Catalan University. *Higher Learning Research Communications*, *5*(1), 47–68.

doi Baker, W., & Hüttner, J. (2017). English and more: a multisite study of roles and conceptualizations of language in English medium multilingual universities from Europe to Asia. *Journal of Multilingual and Multicultural Development*, *30*(6), 501–516.

doi Baker, W., & Tsou, W. (2021). EMI and translanguaging in Asia through the ROAD-MAPPING lens. In W. Baker, & W. Tsou, (Eds.), *English-medium instruction translanguaging practices in Asia: Theories, frameworks and implementation in higher education*. (pp. 183–195). Springer.

Bourdieu, P. (1991). *Language and symbolic power*. Harvard University Press.

doi Bowles, H., & Murphy, A.C. (Eds.). (2020). *English-Medium Instruction and the Internationalization of Universities*. London: Palgrave Macmillan.

Bukve, T. (2018). Students' perspectives on English medium instruction: A survey-based study at a Norwegian university. *Nordic Journal of English Studies 17*(2), 215–242.

Chen, S.X., Lam, B.C.P., Hui, B.P.H., Ng, J.C.K., Mak, W.W.S., Guan, Y., Buchtel, E.E., Tang, W.C.S., & Lau, V.C.Y. (2016). Conceptualizing psychological processes in response to globalization: Components, antecedents, and consequences of global orientations. *Journal of Personality and Social Psychology*, *110*(2), 302–331.

Chou, M.H. (2018). Speaking anxiety and strategy use for learning English as a foreign language in full and partial English-medium instruction contexts. *Tesol Quarterly*, *52*(3), 611–633.

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.

Dafouz, E., & Smit, U. (2020). *ROAD-MAPPING English medium education in the internationalised university*. London: Palgrave Macmillan.

Darvin, R., & Norton, B. (2015). Identity and a model of investment in applied linguistics. *Annual review of applied linguistics*, *35*, 36–56.

Darvin, R. & Norton, B. (2021). Identity. In T. Gregerson & S. Mercer (Eds.), *Handbook of the Psychology of Language Learning and Teaching*. Routledge.

Darvin, R., & Norton, B. (2023). Investment and motivation in language learning: What's the difference? *Language teaching*, *56*(1), 29–40.

De Costa, P.I., Green-Eneix, C., & Li, W. (2021). Embracing diversity, inclusion, equity and access in EMI-TNHE: Towards a social justice-centered reframing of English language teaching. *RELC Journal*, *52*(2), 227–235.

Deci, E.L., & Ryan, R.M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, *19*(2), 109–134.

Dewaele, J.M., & Van Oudenhoven, J.P. (2009). The effect of multilingualism/multiculturalism on personality: No gain without pain for third culture kids? *International Journal of Multilingualism*, *6*(4), 443–459.

Doiz, A., Lasagabaster, D., & Pavón, V. (2019). The integration of language and content in English-medium instruction courses: Lecturers' beliefs and practices. *Ibérica*, *38*(38), 151–176.

Dörnyei, Z. (2009). Individual differences: Interplay of learner characteristics and learning environment. *Language learning*, *59*, 230–248.

European Higher Education Area, (2010, March). *Ministerial declarations and communiqués: Budapest-Vienna declaration on the European higher education area*. Retrieved September 9, 2024 from https://ehea.info/page-ministerial-declarations-and-communiques

European Union, (2022). *Multilingualism: The language of the European Union*. Briefing. European Parliament.

Fisher, L., Evans, M., Forbes, K., Gayton, A., & Liu, Y. (2020). Participative multilingual identity construction in the language classroom: a multi-theoretical conceptualisation. *International Journal of Multilingualism 17*(4), 448–466.

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.

Gardner, R. (2007). Motivation and second language acquisition. *Porta Linguarium 8*, 9–20.

Gardner, R.C. (2010). *Motivation and second language acquisition: The socio-educational model*. Peter Lang.

Gardner, R.C., Day, J.B., & Maclntyre, P.D. (1992). Integrative motivation, induced anxiety, and language learning in a controlled environment. *Studies in second language acquisition*, *14*(2), 197–214.

Haukås, Å., Storto, A., & Tiurikova, I. (2021). Developing and validating a questionnaire on young learners' multilingualism and multilingual identity. *The Language Learning Journal*, *49*(4), 404–419.

Henry, A., & Goddard, A. (2015). Bicultural or hybrid? The second language identities of students on an English-mediated university program in Sweden. *Journal of Language, Identity & Education*, *14*(4), 255–274.

Herrmann, K.J., Bager-Elsborg, A., & McCune, V. (2017). Investigating the relationships between approaches to learning, learner identities and academic achievement in higher education. *Higher Education*, *74*(3), 385–400.

Hu, G., & Lei, J. (2014). English-medium instruction in Chinese higher education: A case study. *Higher Education*, *67*(5), 551–567.

Jæger, K. (2023). Elusive politics: De-internationalizing higher education in the context of international recognition conventions. *Higher Education Policy*, *36*, 411–429.

Jamovi project. (2020). *Jamovi*. (Version 1.2) [Computer Software]. Retrieved from https://www.jamovi.org

Kir, E., & Akyüz, A. (2020). An Exploration of perceptions of faculty members and students: The effects of English-medium instruction on language ability. In Carrió-Pastor, M.L., (Ed.), *Internationalising Learning in Higher Education*. Palgrave MacMillian.

Kletzenbauer, P., Fürstenberg, U., & Reitbauer, M. (2022). Becoming "language-aware" in ICLHE: Creating a space of trust for teachers, teachers trainers and language specialists. *CLIL Journal of Innovation and Research in Plurilingual and Pluricultural Education*, *5*(2), 53–63.

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

Lasagabaster, D. (2022). *English-Medium instruction in higher education*. Cambridge: Cambridge University Press.

Macaro, E. (2022). English Medium Instruction: What do we know so far, and what do we still need to find out? *Language Teaching*, *55*(4), 533–546.

Machin, E., Ament, J., & Pérez-Vidal, C. (2023). Motivation and investment: Exploring the choice of English-medium instruction for mid-degree undergraduates in Catalonia. *Journal of English-Medium Instruction*, *2*(1), 79–100.

Masgoret, A.-M., & Gardner, R.C. (2003). Attitudes, Motivation, and Second Language Learning: A Meta-Analysis of Studies Conducted by Gardner and Associates. *Language Learning*, *53*(S1), 167–210.

Ministry of Education. (2010). Guojia Zhongchangqi Jiaoyu Gaige He Fazhan Guihua Gangyao (2010–2020). [*The Outline of Medium and Long-Term Education Reform and Development Planning (2010–2020)*]. Beijing: Ministry of Education

Norton, B. (2000). *Identity and language learning: Gender, ethnicity, and educational change*. Longman.

Norton, B. (2013). *Identity and language learning: Extending the conversation* (2nd ed.) Multilingual Matters.

Norton, B. (2015). Identity, investment and faces of English internationally. *Chinese Journal of Applied Linguistics*, *38*(4), 375–391.

Paulsrud, B., Tian, Z., & Toth, J. (2021). Introduction. In B. Paulsrud, Z. Tian, & J. Toth (Eds.), *English-medium instruction and translanguaging*. Bristol: Multilingual Matters.

Piechurska-Kuciel, E. (2020). *The big five in SLA*. Cham, Switzerland: Springer.

Somers, T., & Llinares, A. (2021). Students' motivation for content and language integrated learning and the role of programme intensity. *International Journal of Bilingual Education and Bilingualism*, *24*(6), 839–854.

Stankov, L., Morony, S., & Lee, Y. P. (2013). Confidence: the best non-cognitive predictor of academic achievement? *Educational Psychology*, *34*(1), 9–28.

Štech, S. (2011). The Bologna process as a new public management tool in higher education. *Journal of Pedagogy*, *2*(2), 263–282.

Sung, C. C. M. (2016). ESL university students' perceptions of their global identities in English as a lingua franca communication: A case study at an international university in Hong Kong. *The Asia-Pacific Education Researcher*, *25*, 305–314.

Tiurikova, I., Haukås, Å., & Storto, A. (2021). The link between multilingualism, language learning and open-mindedness in secondary school students in Norway. *Nordic Journal of Language Teaching and Learning*, *9*(2), 1–24.

Weiner, B. (1992). *Human motivation: Metaphors, theories, and research*. Sage publications.

Wilkinson, R. (2013). English-Medium Instruction at a Dutch University: Challenges and Pitfalls. In A. Doiz, D. Lasagabaster, and J. M. Sierra, J. M. (Eds.), *English-medium instruction at universities: Global challenges*. Multilingual Matters.

Wilkinson, R. (Ed.). (2004). *Integrating content and language: meeting the challenge of a multilingual higher education; proceedings of the ICL conference, October 23–25 2003*. Universitaire Pers Maastricht.

Yuksel, D., Soruç, A., Horzum, B., & McKinley, J. (2023). Examining the role of English language proficiency, language learning anxiety, and self-regulation skills in EMI students' academic success. *Studies in Second Language Learning and Teaching*, *13*(2), 399–426.

Zhang, M., & Pladevall-Ballester, E. (2022). Students' attitudes and perceptions towards three EMI courses in mainland China. *Language, Culture and Curriculum*, *35*(2), 200–216.

Zhang, M. & Pladevall-Ballester, E. (2023). Students' English-medium instruction motivation in three English-medium instruction courses in China. *Frontiers in Psychology*, *13*.

Address for correspondence

Jennifer Ament
Universitat Autònoma de Barcelona
Edifici B. Despatx B11/126
Campus de la UAB Carrer de la Fortuna 08193
Bellaterra, Barcelona
Spain
Jenniferrose.ament@uab.cat
https://orcid.org/0000-0001-8273-171X

Co-author information

Mengjia Zhang
School of Education
Xi'an International Studies University
China
zhangmengjia2021@xisu.edu.cn
https://orcid.org/0000-0001-9823-0768

Publication history

Date received: 23 October 2024
Date accepted: 25 January 2025