

Language Learning Motivation in Trilingual Hungarian Learners: A Partial Least Square Structural Equation Modeling Analysis of Dörnyei's Motivational Dimensions

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Abstract

This study investigates L2 and L3 motivation, through the application of Dörnyei's seven motivational constructs identified in a longitudinal study by Dörnyei et al. (2006). These motivational components fall within the framework of the L2 Motivational Self System that was developed to offer a more self-based understanding of language motivation. This research aims to unravel Hungarian secondary school students' L2 and L3 motivational disposition based on the Partial Least Squares Structural Equation Modelling (PLS-SEM). The study involves 134 Hungarian high school students, speakers of L2 English and L3 French, who are enrolled in a Hungarian-French bilingual program. Participants were administered the Language Experience and Proficiency Questionnaire, a language motivation questionnaire, an English proficiency test, and a French proficiency test. The findings reveal a complex motivational profile, where students, despite being enrolled in a French bilingual program, exhibited greater motivation towards learning English, due to its global dominance across various platforms, social media, and educational resources. The study yielded different results regarding the different motivational constructs originally defined by Dörnyei et al. (2006), as some discrepancies were observed in factor loadings which consequently created a difference in the motivational models subsequently developed.

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Introduction

Language Motivation as a Factor Affecting Language Learning

Work in L2 motivation has experienced a notable publication surge and a changing landscape. Research on L3 motivation has also begun to expand, given that L3 learning involves a greater degree of complexity and the motivational systems of a learner's various languages need to be viewed as cognitively interconnected (Henry, 2020). Currently, much significant work is being produced as researchers across the globe are investigating various motivational issues, including teacher motivation, group dynamics, motivational strategies, complexity theory, and demotivation (c.f. Mahmoodi & Yousefi, 2021). Nagle (2021) claims that motivation, broadly defined as the impetus behind goal-directed behavior, influences language learning effort, persistence, and achievement. Motivation can thus be viewed as a fundamental ingredient to successful language learning. Within the field of SLA, it is regarded as a strong predictor of language learning success and task achievement. As Dörnyei and Ushioda (2021) put it, it is a vital aspect of the language learning experience that works as a central driving force, shaping learners' choices, engagement, persistence, and overall success in acquiring a second or additional language. Motivation can be understood as the process through which people determine which objectives to seek or avoid and how much effort to exert in achieving these goals, underscoring its core role as a dynamic process and an inner force that drives action. The process of language learning entails sustaining effort and investment over time, particularly in the face of challenges and setbacks. Motivation might influence learning strategies, dedication to practice, and readiness to seize chances in using the target language. Dörnyei (2010) emphasizes that without sufficient motivation, even the most gifted learners are unlikely to persevere long enough to reach fluency in a language. Although a state of cognitive and emotional arousal is an eminent driving force in successful language learning, Csizér (2020) argues that an L2 motivation definition needs to consider the learning setting as teacher-student and student-student interactions play a pivotal role. She posits that motivation is an interactional process that includes effort and persistence to learn an additional language.

Literature Review

The L2 Motivational Self System

The current stage in language motivation theory is a socio-dynamic one that Dörnyei and Ryan (2015) referred to as the process-focused stage. Starting from the turn of the millennium, research has centered on "motivational change/dynamism, self-regulation, imagined (possible) selves and emergence of individual motivation in sociocultural contexts" (Oxford, 2020, p. 185). This paradigmatic shift was signaled by Dörnyei's L2 Motivational Self System (L2MSS), which offers a new conceptualization of language learning motivation that has its roots in psychological theories of the self and the ways in which aspects of the self-concept influence and guide behavior. Dörnyei (2005, 2009) expounds that a student's learning behavior, defined by the effort they are willing to exert and their persistence in language learning (Csizér et al., 2021), is influenced by three

distinct constructs: (i) the ideal L2 self; (ii) the ought-to L2 self, and (iii) the L2 learning experience. The ideal L2 self represents the learner's ability to envision themselves as competent users of the target language, acting as a powerful motivator deeply rooted in personal aspirations. The ought-to L2 self reflects the external pressure and expectations that learners think they need to comply with. The ideal and ought-to L2 selves are usually described as future self-guides. The third component of the model, the L2 learning experience, involves executive motives related to the learning environment and attitudes towards classroom processes. Although the model was subject to criticism (cf. Csizér, 2020; Henry & Liu, 2024), its relevance and viability have been proven in a vast body of empirical studies.

Huang and Mizumoto (2025) maintain that the L2MSS is particularly relevant in such contexts as English as a foreign language learning, where students often experience minimal to no interaction with native speakers. Yang and Liang-Itsara (2024) applied the model in a Thai context to explore students' motivation across different foreign languages. The study findings supported the robustness of the L2MSS as a measure assessing learners' motivation and proved that the ideal L2 self and L2 learning experience were key motivational drivers positively correlated with intended effort, while the ought-to L2 self played a smaller role. Against this backdrop, recent empirical investigation demonstrated the dynamic reconceptualization of L_n motivation. In this light, Fan and Wang (2025) evidenced that the two components of the L2MSS, namely ideal L2 self and ought-to L2 self, dynamically interact with affective and cognitive variables, including willingness to communicate in L2, communication anxiety, and growth mindset. This underscores the dynamic nature of the L2MSS which operates as a constantly evolving network rather than a static system with isolated constructs. Likewise, Irgatoğlu (2024) and Pan and Wang (2025) employed structural equation modeling to explore the relationships among components of the L2MSS, L2 anxiety, and intended effort. Both studies showed that the ideal L2 self and positive learning experience negatively predicted L2 anxiety, whereas ought-to L2 self and negative learning experience positively increased L2 anxiety. The L2MSS components were also found to positively predict intended effort. These findings highlight the interdependence of emotional and motivational dimensions and the importance of promoting positive motivational self-images and mitigating anxiety through constructive learning experiences (Pan & Wang, 2025). Ultimately, these recent empirical findings evidence the enduring relevance, robustness, and adaptability of the L2MSS framework.

The Language Disposition Questionnaire

The beginnings of Dörnyei's L2MSS can be traced back to his collaboration with Clément and Csizér at the turn of the millennium, in influential large-scale longitudinal research on L2 motivation and attitudes in Hungarian students, as outlined in Dörnyei, Csizér, and Németh (2006). A pivotal aspect of Dörnyei et al.'s (2006) research examining language attitudes and motivation among 13,391 Hungarian teenage language learners was the

development of a comprehensive Language Disposition Questionnaire designed to capture the complex factors influencing learners' motivation in a rapidly globalizing world. The Language Disposition Questionnaire conceptualizes seven main motivational/attitudinal components, as explained below (Dörnyei & Csizér, 2002), that were later used to explain the L2MSS:

- *Integrativeness* refers to the learner's desire to integrate in and connect with the L2 community as well as to become similar to the L2 speakers.
- *Instrumentality* reflects the perceived pragmatic benefits associated with L2 proficiency.
- *Attitudes towards L2 speakers/ community* concerns the learner's attitudes towards contact with L2 speakers and traveling to their country.
- *Vitality of L2 community* concerns the learner's perceived status and wealth of the L2 community.
- *Cultural interest* (i.e., indirect contact) refers to the learner's appreciation of the L2 cultural products conveyed by the media (e.g. movies, TV programs).
- *Milieu* relates to the perceived importance of foreign languages in the learner's immediate environment such as significant others (e.g., family and friends).
- *Linguistic self-confidence* refers to the learner's confidence level in the learning and mastery of L2.

Structural equation modeling (SEM) of the language data collected during the three phases of the longitudinal study consistently revealed a strong relationship between key motivational variables: integrativeness, instrumentality, and attitudes toward L2 speakers/community, and two critical criterion measures: language choice and intended learning effort. Further analysis revealed that integrativeness was influenced by two antecedent variables: instrumentality and attitudes toward L2 speakers/community (Dörnyei, 2009). In his conceptualization of the L2 Motivational Self System, Dörnyei (2005, 2009) expanded on this realization by reinterpreting integrativeness as an L2-specific facet of the learner's ideal self. In this light, Taguchi, Magid, and Pap (2009, p. 88) reached a conclusion that "integrativeness can be relabelled as the ideal L2 self" in a study testing the L2MSS among Japanese, Chinese, and Iranian learners of English, with the aim of examining the findings from the Hungarian longitudinal study in different contexts and therefore verify the generalizability and potency of the system.

The language disposition questionnaire's flexibility and comprehensiveness have enabled researchers to investigate multiple aspects of motivation and their impact on language learning behavior, demonstrating its continued relevance in the field. The seven motivational/attitudinal dimensions were empirically tested in a number of follow-up studies, providing insight into their adaptability and applicability across various educational and cultural settings. Kormos and Csizér's (2008) findings revealed that a few components such as linguistic self-confidence, instrumentality, and ethnolinguistic vitality (vitality of L2 community) had to be excluded since very few items loaded onto

them. The researchers were surprised that instrumentality, a robust construct in motivational studies, did not load adequately as expected. Similarly, Ko-Yin Sung (2013), using the Language Disposition Questionnaire to measure L2 motivation, identified four main motivational constructs: instrumentality-dominant, attitudes towards the L2 speaker/ community-dominant, learners' perception of their parents' proficiency in Chinese, and milieu. None of the other factors identified in Dörnyei et al. (2006) were found in this study. These results, although different and intriguing, highlight the evolving nature of motivational dimensions and the way they manifest differently across varying contexts. The language disposition questionnaire, a valuable diagnostic tool as it is, appears to yield different motivation structures depending on the learning environment and learner population. Thus, investigating the adaptability and universality of the questionnaire's original constructs is imperative in assessing its continued relevance and uncovering how core motivational dimensions are reshaped by evolving learner identities across different sociocultural contexts. Using this questionnaire in contemporary educational contexts could lend invaluable insights into the dynamic nature of language motivation, particularly in light of globalization, technological advancements, and shifting sociocultural dynamics. The rise of digital learning environments and the emergence of English as a universal language may change how students perceive integrativeness, instrumentality, and attitudes toward the L_n speakers and communities. Adapting this instrument in contemporary research would not only support and maintain continuity with previous research but also enable comparative analyses that might reveal patterns and shifts in L_n learning motivation over time.

The study

This research, which is a part of large scale study in which we also investigate metalinguistic awareness (Ghanmi, 2024), explores the seven motivational constructs developed by Dörnyei et al. (2006) to assess language motivation in Hungarian learners. The existent body of research that used the language disposition questionnaire is scarce and has shown a limited understanding and inconsistent results about these attitudinal and motivational constructs across different contexts. Hence, this study revisits these dimensions within the L2MSS framework, applying them in a Hungarian-French bilingual context in an attempt to provide new data and analysis that may ultimately contribute to the understanding of L_n motivation. Comparing the original and current motivational models would shed light on the evolving nature of learners' motivational dispositions.

An environment such as that of Hungarian-French bilingual programs, where learners are constantly navigating three linguistic systems, namely Hungarian, French, and English as a foreign language, with a special focus on the development of French, can be a fertile ground for investigating L_n motivation. English is the most widely taught foreign language in these bilingual settings and in Hungarian mainstream curricula in general, given its perceived pragmatic value in today's globalized world. The structure of these Hungarian-French bilingual programs aims at developing a sustained interest in learning

French due to its instructional relevance and the cultural, academic, and career opportunities it may offer. This dichotomy raises questions about students' motivational dispositions towards learning both languages. The existing literature on motivation in the Hungarian context, which is dominated by Dörnyei and Csizér's framework, focuses on traditional language learning classrooms and does not address the motivational complexities emerging from the coexistence of English, as a global lingua franca, and a program-targeted language like French. Studying learners' motivational orientations towards both languages within Dörnyei's L2 Motivational Self System is particularly relevant, considering that the hegemony of the English language might overshadow French. In this light, applying the language disposition questionnaire provides a valuable opportunity to reassess its dimensions and examine how well they capture the complex, multilayered motivational disposition in learning multiple languages in a trilingual context.

In light of the rationale of this study, the current research aims to answer the following questions:

RQ1: How would the original factor structure of the motivation questionnaire (Dörnyei et al., 2006) change in light of the current study's circumstances?

RQ2: What would learners' motivations and attitudes be towards learning French (L3), the language of instruction in their bilingual program, and English (L2), the more globally dominant language? How would this relate to their intended effort?

RQ3: What is the connection between the various motivational/attitudinal dimensions and L2/L3 proficiency?

Methods

Setting

The study was conducted in three Hungarian public high schools in three different vibrant regions in Hungary. These schools are recognized for their emphasis on academic excellence and their French bilingual programs, which meet the quality of French bilingual education worldwide. The French bilingual program begins in grade 9 and continues until grade 12. Students receive intensive French language instruction where several subjects including history, geography, civilization, and mathematics are taught in French. This approach ensures that students not only develop high proficiency in French but also acquire subject-specific knowledge through the medium of the language. Other foreign language courses, including English, are also offered within the French bilingual program. The schools prioritize the teaching of other foreign languages with English usually being a core component of the curriculum due to its universality and utility. Hungarian students usually begin learning their first foreign language, often English, at the age of 8-9 (3rd-4th grade). When they reach grade 9, they start learning their second foreign language. If English is not their first foreign language, it is often chosen as their second. The participants who took part in this study have French and English at their disposal.

Participants

The sample included 10th, 11th, and 12th graders (N=134, ages: 16-19, M=17.67), 104 of whom were female. The participants predominantly learned French as L3 starting from grade 9 as part of the French bilingual program and English as L2 from primary school. During the first year of the program (grade 9), the participants received an intensive training in French aiming at preparing them for content learning in the foreign language from grade 10 onwards. From grade 10 to grade 12, students receive 5 to 6 hours of French instruction and 3 hours of English language classes per week.

Materials

Five instruments were used in this study: Language Experience and Proficiency Questionnaire (LEAP-Q), language motivation/ attitude questionnaire, French proficiency test, and English proficiency test.

Language experience and proficiency questionnaire (LEAP-Q)

LEAP-Q is widely recognized as a validated questionnaire tool that provides comprehensive data about a multitude of language-related aspects such as language dominance, language use, language exposure, and self-reported proficiency in the languages spoken by the participants. To tailor the LEAP-Q for the specific aims of this study, sundry modifications were made. Questions 7 and 8 in the original language experience section as well as questions 6 and 7 under each language profile were excluded from this study due to their irrelevance. The rationale behind adopting the LEAP-Q as an instrument to collect self-reported background information is its validity, reliability, and ability to provide a comprehensive description of bilingual and multilingual participants.

French proficiency test

A French proficiency test at B2 level, as defined by the Common European Framework of Reference for Languages (CEFR), was designed for this study. The test consists of two sections: a reading comprehension task and a lexical grammatical task containing 7 and 10 multiple-choice questions, respectively.

English proficiency test

An English proficiency test was developed to assess learners' English language competence at B1-B2 levels, as defined by the Common European Framework of Reference for Languages. The test consists of a reading comprehension section and a grammatical section with 7 and 10 multiple-choice questions, respectively. These tasks were developed to evaluate essential language skills aligned with the aims of the study, ensuring that the test was both effective and relevant for the targeted proficiency levels.

Language disposition questionnaire

The Language Disposition Questionnaire (Dörnyei and Csizér, 2002) was adapted to examine the participants' motivation in learning French and English. Although the original questionnaire includes background questions (demographic details and language choice), only the items related to the motivational constructs are used in this study. The twenty-nine items utilized fall into seven motivational dimensions as defined in Dörnyei and Csizér (2002) and Dörnyei et al. (2006).

Pilot Study: Reliability of the Tests

The pilot study was conducted on 10 participants with a similar linguistic background to the participants involved in the present study. Data analysis showed that the tests were comprehensible and reliable. The Cronbach's alpha values were as follows: French Proficiency Test, $\alpha=.82$; English Proficiency Test, $\alpha=.79$. Since the α measures were considerably high, all tests had therefore good reliability and were used in the subsequent data collection.

Data Collection Procedure

Initially, four Hungarian-French bilingual secondary schools were approached to obtain their consent to conduct the present study with their students, and three of them agreed to take part in this research. Data collection took place on five different days within a period of three months (2022-2023) during the French language classes and in the presence of the students' French teacher and the researcher. On every occasion, the researcher would start by giving a brief explanation, in French, of the study aims and the questionnaires and tests the participants would be completing. The students were also made aware of the voluntary nature of participation and were given the option of using pseudonyms instead of their real names, if they wished. They were informed that all data would be treated anonymously and were finally instructed to complete the tasks individually. Participants were first administered the LEAP-Q, followed by the French Proficiency Test and the English Proficiency Test. All tests were administered in written form. The whole procedure took about 60 minutes.

Results

LEAP-Q Results

Language exposure and dominance

Although being exposed more to French in their schools, 76.1% of the participants stated that they were dominant in English and only 18% of them reported more dominance in French. On a daily basis, participants are more exposed to Hungarian ($M=68.75$), followed by English ($M=18.18$) then French ($M=17.00$).

The participants reported using English more frequently than French in various contexts (e.g., family, friends, watching TV, listening to music) and identified with the English (26.8%) and French (24.6%) cultures to varying degrees. All of them expressed a degree

of identification with their L1 Hungarian culture, choosing values between 2 and 10 on a scale of 0-10. A few students reported identifying with other cultures including Japanese, Spanish, German, Croatian, Polish, and Korean (Table 1).

Table 1

Descriptive Statistics of Students' Cultural Identification

		Hungarian Culture	English Culture	French Culture	Another Culture
N	Valid	128	128	128	128
	Missing	6	6	6	6
Mean		9,3906	1,4141	1,2969	1,1406
Variance		2,130	6,780	5,848	6,201
Range		8,00	10,00	8,00	10,00
Minimum		2,00	,00	,00	,00
Maximum		10,00	10,00	8,00	10,00

Additionally, participants were asked to self-report their proficiency levels in their second and third languages (in order of acquisition), predominantly English and French respectively (Table 2). These data offer valuable context for analyzing the participants' language learning experiences and motivation.

Table 2

SELF-Reported Proficiency in Different Language Skills across Grades

Grade	Language	Skills	Mean	Minimum	Maximum	Std. Deviation
10	French	Reading	6.189	1	10	2.503
		Speaking	5.621	2	9	1.934
		Understanding spoken language	5.959	1	10	2.180
	English	Reading	8.377	4	10	1.554
		Speaking	7.459	4	10	1.608
		Understanding spoken language	8.527	5	10	1.130
11	French	Reading	7.281	2	10	1.835
		Speaking	6.343	1	10	2.041
		Understanding spoken language	7.062	3	10	1.899
	English	Reading	8.437	5	10	1.366
		Speaking	7.625	2	10	2.012
		Understanding spoken language	8.562	5	10	1.479
12	French	Reading	7.678	3	10	1.536
		Speaking	6.423	3	9	1.289
		Understanding spoken language	7.245	3	10	1.418
	English	Reading	8.830	3	10	1.301
		Speaking	8.135	3	10	1.332
		Understanding spoken language	9.033	3	10	1.245

Language preference

The LEAP-Q results show that most participants feel more comfortable speaking to someone, who speaks all three of their languages, in English compared to French. The

most preferred order of preference is Hungarian-English-French, selected by a majority of 59 participants. Hungarian-French-English ranks second, though with significantly fewer selections (15 participants). Preferences for individual languages or different language order, such as Hungarian (N=10), English (N=5), English-Hungarian-French (N=9), and Hungarian-English (N=7), are also reported, with each receiving modest representation in the responses. Interestingly, preferences for language orders including French-English, French-Hungarian-English, and Hungarian-French are significantly less frequent. Overall, the participants showed a clear preference for initiating communication in Hungarian with an individual speaking all three languages, since it's their mother tongue. However, English in particular seems to be a better choice, in such interactions, than French which typically ranks lower in the participants' order of language preference.

Regarding language preference when reading a text available in all three languages: Hungarian, English, and French, the most selected order of preference is Hungarian-English-French (N=62), reflecting a strong preference for English over French. Only 15 participants would prefer reading a text in French over English, but again Hungarian would be their first choice. Altogether, 31 participants reported a preference for reading a text in English first when it is available in all three of their languages. One participant, however, indicated exclusively picking English. Other orders of preference including Hungarian-English, French-English, and Hungarian are much less frequent, with only very few participants selecting these options. Overall, although Hungarian appears to be the dominant choice for reading, English is the preferred reading language for the majority of participants as compared to French.

Factors Contributing to Language Learning

Factors contributing to English language learning

The LEAP-Q results indicate that watching TV, video-based platforms such as Youtube, social media, and the increasingly popular video-streaming platforms such as Netflix as well as reading are perceived as the most significant contributing factors to English learning. English is seldom used in home environments as interacting with family received the lowest mean score for the factors contributing to learning English (Table 3).

Table 3

Factors Contributing to English Language Learning

		Interacting with Friends	Interacting with Family	Reading	Language Tapes/Self- Instruction	Watching TV	Listening to the Radio
N	Valid	128	128	128	128	128	128
	Missing	6	6	6	6	6	6
Mean		6.437	3.156	7.648	5.515	7.695	4.687
Minimum		0	0	0	0	0	0
Maximum		10	10	10	10	10	10
Std. Dev.		3.649	3.901	2.816	3.863	3.141	4.050

Factors contributing to French language learning

Reading, according to the participants, is the most contributing factor in acquiring French, followed by self-instruction. This implies that a key factor in participants' acquisition of the French language is structured learning through reading and autonomous study. Watching TV, video-based platforms, and social media and interacting with friends received moderate ratings, suggesting that audiovisual exposure and peer communication contribute to French learning and development, although they do not appear to be as influential and dominant as in English language learning (Table 4).

Table 4*Factors Contributing to French Language Learning*

		Interacting with Friends	Interacting with Family	Reading	Language Tapes/Self- Instruction	Watching TV	Listening to the Radio
N	Valid	128	128	128	128	128	128
	Missing	6	6	6	6	6	6
Mean		4.385	1.252	6.283	5.378	4.401	3.322
Minimum		0	0	0	0	0	0
Maximum		10	10	10	10	10	10
Std. Dev.		3.752	2.935	2.847	3.794	3.601	3.810

Language Attitudes and Motivation: Factor Analysis

Factor analysis of the motivational/attitudinal items concerning the target languages and their communities (items 1-21)

The factor matrix for French and English learning motivation revealed a five-factor structure as shown in Table 5.

Summary of the factor analyses

Based on the exploratory factor analysis (EFA) run for both French and English, a unified four-factor structure was established to ensure cross-language comparability. Factor 1, Cultural Interest, includes variables related to learners' engagement with and appreciation of Ln media, entertainment, and exposure to cultural products, as evidenced by learners' enjoyment of films (Item 15), TV programs/video-based platforms (Item 16), frequency of watching Ln content (Item 18), and preference for L2 music (Item 21). Factor 2, which is labelled Instrumentality, reflects the pragmatic instrumental value of language learning. It encompasses variables related to career advancement and benefits (Item 7), knowledge development (Item 2), and Ln as important in the world (Item 3). Integrativeness and attitudes towards Ln speakers/communities merge to make Factor 3, Ideal Ln Self, which includes liking the language (Item 1), identifying with native speakers (Item 10), willingness to travel to the Ln country (Item 11), and overall emotional connection with the Ln community (Items 17, 14, 4). Factor 4, Parental Influence, includes learners' perceptions of their parents' Ln proficiency (Items 8 and 9), reflecting the perceived influence of parental language ability on motivation.

Table 5*Results of the Factor Analyses of the Attitudinal Items (Items 1-21)*

	French	English
Factor 1	18 Frequency of watching films/ TV programs in Ln 15 Like films 16 Like TV programs/video-based platforms 14 Meet Ln speakers	18 Frequency of watching films/ TV programs in Ln 15 Like films 16 Like TV programs/video-based platforms 21 Like pop music
Factor 2	3 Ln important in world 2 Become knowledgeable 6 Useful for travel 4 Get to know culture 7 Useful for career	14 Meet Ln speakers 1 Like Ln 17 Like Ln speakers 11 Travel to country 10 Similar to Ln speakers
Factor 3	1 Like Ln 21 Like pop music 11 Travel to country 10 Similar to Ln speakers	7 Useful for career 2 Become knowledgeable
Factor 4	12 Country: developed 13 Country: important 17 Like Ln speakers	8 Perception of mother's Ln proficiency 9 Perception of father's Ln proficiency
Factor 5	20 Frequency of meeting Ln speakers 9 Perception of father's Ln proficiency 8 Perception of mother's Ln proficiency	3 Ln important in world 4 Get to know culture

Note: variable clusters determining each factor (variables in the table are referred to by short labels as used in the original study)

Factor analysis of the motivational/attitudinal items concerning the target languages and their communities (items 22-29)

To investigate the underlying structure of learners' generic perceptions of their learning environment and linguistic self-confidence, regardless of any particular L2 context, a factor analysis was carried out, similar to the analyses conducted on the L2-specific items. Table 6 presents the factor matrices revealing a three-factor solution from which a two-factor structure is adopted to explain the data, as only one item loaded onto Factor 3.

Factor 1, which is labelled Milieu, received salient loadings from items 25, 27, and 24. These items reflect the general appreciation of foreign languages in the learners' immediate environment including the school setting and parents' and friends' views. Factor 2 received loadings from items 29, 22, and 23 which are connected to learners' linguistic self-confidence. Factor 3, however, only included one item related to learners' fear of assimilation. Hence, it will be disregarded as well as item 26, related to fear of assimilation, which did not load on either of the factors, thus differing from the pattern observed in the original study.

Table 6*Factor Analysis of the Non-L2-Specific Items*

Variables	Factor 1	Factor 2	Factor 3
I don't think that foreign languages are important school subjects	0.698		
My parents do not consider foreign languages important school subjects.	0.536		
People around me tend to think that it is a good thing to know foreign languages.	0.372		
Learning a foreign language is a difficult task.		0.492	
I am sure I will be able to learn a foreign language well.		0.492	
I think I am the type who would feel anxious and ill at ease if I had to speak to someone in a foreign language.		0.488	
Learning foreign languages makes me fear that I will feel less Hungarian because of it.			0.797
I often watch satellite programmes on TV.			

Note: Principal axis extraction, oblique rotation, only loadings above 0.3 are considered.

Composition of the multi-item scales

The factor analyses previously described lead to slightly different results from the original study by Dörnyei's et al. (2006). However, as explained above, the current study findings are in line with the existing research on motivation. The factor analytical results have been used to form the basis of computing six multi-item scales. These motivational dimensions are detailed in Table 7 containing the complete list of constructs, the constituent motivational/attitudinal items of each scale, and the Cronbach's Alpha internal consistency reliability coefficients for both L2 and L3.

Most of the scales across French and English demonstrate acceptable to good reliability coefficients, given the small number of items loading onto each scale. Additionally, the robustness and reliability of these variables have already been established in Dörnyei's et al.'s (2006) large-scale longitudinal investigation. The consistency of these measures across contexts further strengthens the reliability of the current findings.

Learners' motivation and attitudes towards learning French and English

Figure 1 displays the mean scores of the different motivational/attitudinal factors across French (L3 in order of acquisition and the language of instruction in the bilingual program) and English (L2 in order of acquisition and the more globalized language), highlighting major differences in learners' perception of and interaction with each language.

Table 7

The Composition of the Motivational/Attitudinal Constructs and the Cronbach Alpha Coefficient for each Construct

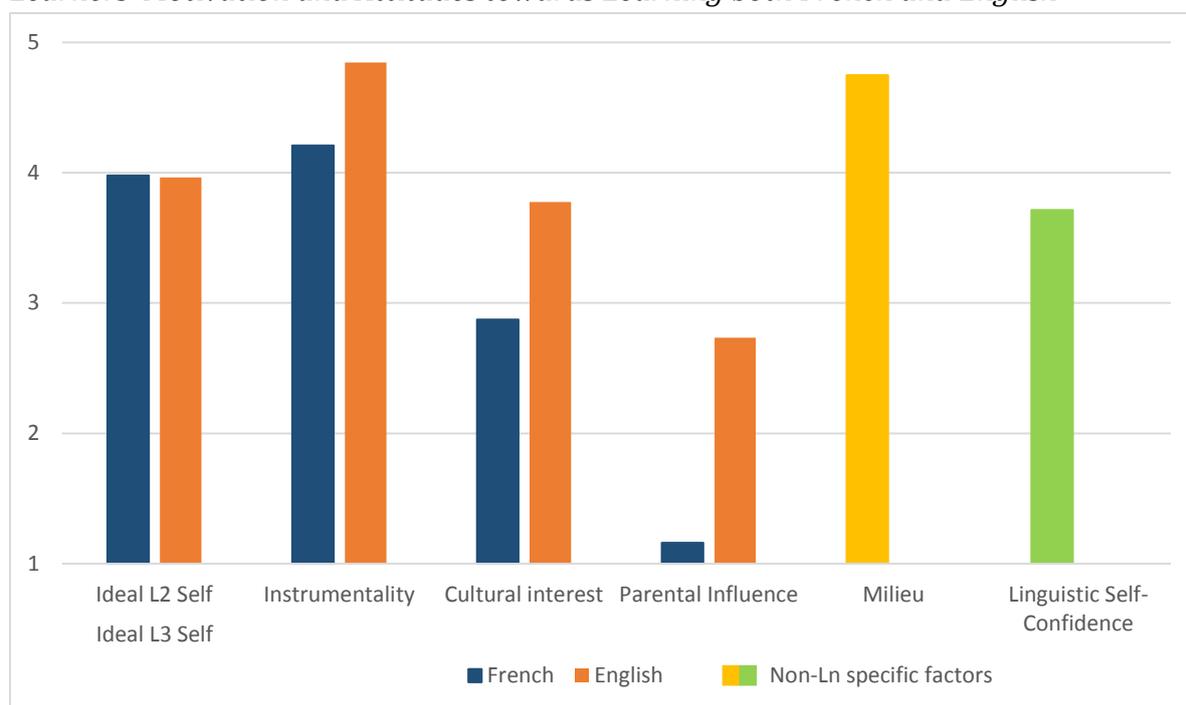
	Cronbach Alpha	
	French	English
Ideal Ln self	0.67	0.68
<ul style="list-style-type: none"> • How much do you like these languages? • How much would you like to become similar to the people who speak these languages? • How much would you like to travel to these countries? • How important do you think learning these languages is in order to learn more about the culture and art of its speakers? • How much do you like meeting foreigners from these countries? • How much do you like the people who live in these countries? 		
Instrumentality	0.65	0.40
<ul style="list-style-type: none"> • How much do you think knowing these languages would help you to become a more knowledgeable person? • How important do you think these languages are in the world these days? • How much do you think knowing these languages would help your future career? 		
Cultural Interest	0.62	0.70
<ul style="list-style-type: none"> • How much do you like the films made in these countries? • How much do you like the TV programmes made in these countries? • How often do you see films/TV programmes made in these countries? • How much do you like the pop music of these countries? 		
Parental Influence	0.33	0.49
<ul style="list-style-type: none"> • How well does your mother speak these languages? • How well does your father speak these languages? 		
Overall Cronbach Alpha	0.76	0.70
Milieu	0.43	
<ul style="list-style-type: none"> • People around me tend to think that it is a good thing to know foreign languages. • I don't think that foreign languages are important school subjects. • My parents do not consider foreign languages important school subjects. 		
Linguistic Self-Confidence	0.44	
<ul style="list-style-type: none"> • I am sure I will be able to learn a foreign language well. • I think I am the type who would feel anxious and ill at ease if I had to speak to someone in a foreign language. • Learning a foreign language is a difficult task. 		

Ideal Ln Self was equally influential and significant for both languages (French: $M=3.97$, English: $M=3.96$), indicating that learners have positive attitudes towards both languages and their communities and a strong sense of identification with Ln speakers. Additionally, instrumentality was higher for English ($M=4.84$) than for French ($M=4.20$), suggesting

that learners perceive English as more useful for career and academic advancement. Similarly, cultural interest was higher for English ($M=3.77$) compared to French ($M=2.87$), suggesting a higher level of exposure and engagement with English-language media and cultural products. Regarding parental influence, the figure shows that parents have higher proficiency in English ($M=2.73$) than French ($M=1.16$) as perceived by the participants. The findings indicate that learners have a moderate degree of confidence in their ability to learn and use a foreign language without feeling anxious ($M=3.71$), which might have been likely influenced by their multilingual experiences, while Milieu seems to be highly influential and supportive of foreign language learning ($M=4.74$).

Figure 1

Learners' Motivation and Attitudes towards Learning both French and English



Intended effort as the criterion measure

Effort invested in learning L2 and L3

The motivation questionnaire adopted in this study included one targeted criterion measure concerning the level of effort learners are willing to invest in learning both French and English (item 5). A strong score for intended effort would imply a strong dedication and motivation towards L2/L3 learning (Kwok & Carson, 2018). Table 8 illustrates the descriptive statistics of effort intended to be put into learning French and English.

Table 8*Descriptive Statistics for Intended Effort across French and English*

	N	Minimum	Maximum	Mean	Std. Deviation
Effort/ French	134	2.00	5.00	3.95	.92
Effort/ English	134	.00	5.00	3.39	1.16

Table 8 shows that students, on average, are eager to expend more effort in learning French ($M = 3.99$, $SD = 0.93$) than English ($M = 3.40$, $SD = 1.17$). The scores for effort invested in learning French range from 2.00 to 5.00, indicating greater consistency in students' dedication to learning the language, while the wider range for English (0.00 to 5.00) and higher standard deviation suggest greater variability in learners' commitment to learning English.

The connection between intended effort and the six motivational dimensions

Studying the correlation between the six motivational constructs and participants' intended effort for learning French and English aims to identify the motivational factors that most strongly predict learners' readiness to exert effort in L2/ L3 learning and the extent to which these influences vary between French and English. Table 9 illustrates a non-parametric Spearman's rho correlation conducted between the motivational scales and intended effort across both languages.

Table 9*Correlation between Intended Effort and the Six Motivational Dimensions*

		Effort/ French	Effort/ English
Ideal Ln Self	Correlation coefficient	.351**	.499**
	Sig. (1-tailed)	.000	.000
Instrumentality	Correlation coefficient	.285**	.110
	Sig. (1-tailed)	.000	.103
Cultural Interest	Correlation coefficient	.359**	.332**
	Sig. (1-tailed)	.000	.000
Parental Influence	Correlation coefficient	-.022	-.065
	Sig. (1-tailed)	.399	.228
Milieu	Correlation coefficient	-.006	.067
	Sig. (1-tailed)	.944	.228
Linguistic self-confidence	Correlation coefficient	.039	-.003
	Sig. (1-tailed)	.328	.485
	N	134	134

** Correlation is significant at the 0.01 level (1-tailed).

A close look at the correlation shows that the Ideal Ln Self is significantly correlated with intended effort for both French ($r = .351$, $p = .000$) and English ($r = .499$, $p = .000$). This connection is stronger for English, indicating that motivation to study the language is more significantly influenced by a desire to become fluent like the native L2 speakers and by a favorable attitude towards the L2 community. Additionally, Cultural Interest, for both languages, shows a significant positive correlation with effort (French: $r = .359$, $p = .000$; English: $r = .332$, $p = .000$), underscoring the role of engagement with cultural products in motivating learners to expend effort in language learning. Instrumentality is

also positively correlated with effort but only for French ($r = .285, p = .000$), although the relationship is not so robust, and not for English. This might suggest that learners perceive French as instrumentally useful within their academic setting, whereas English may already be viewed as globally necessary, reducing the direct impact of instrumental motivation. Conversely, Parental Influence, Milieu, and Linguistic Self-Confidence show no connection with effort, suggesting that learners' motivation is mostly self-driven rather than influenced by external factors.

The inter-relationship of the multiple variables within the motivational dimensions of the language motivation questionnaire: Partial least squares structural equation modelling (PLS-SEM)

The choice to conduct the PLS-SEM analysis is based on the small sample size of this study (Hair et al., 2019a; Hair et al., 2019b). Additionally, given the considerably large number of items in the motivation questionnaire vis a vis the small population size, a PLS-SEM algorithm is the most appropriate to make an overarching examination of the connections between latent constructs, offering insights into how different motivational factors interact and contribute to shaping learners' motivation. The analysis is set to model the interactions existent among all motivational dimensions so as to determine whether certain constructs have a greater impact on motivation and how they collectively contribute to learners' willingness and preparedness to exert effort and engage in L2 and L3 learning. The PLS-SEM analysis for the motivational constructs in both languages showed an interconnection between all dimensions with few constructs directly influencing intended effort.

Measurement model assessment

The measurement model assessment is based on the guidelines of Hair et al. (2019a) to affirm the reliability and validity of the motivational constructs and their dimensions across both French and English models (Table 10).

CR values above 0.60, in exploratory designs, generally indicate acceptable reliability. Ideally, almost all constructs in the French and English datasets demonstrate strong internal consistency. AVE values, on the other hand, should ideally be greater than 0.50, but since AVE is considered a stringent criterion, a value of 0.4 is acceptable if the CR value is adequate (Fornell & Larcker, 1981; Maruf et al., 2021). In this light, the convergent validity of all constructs is confirmed across both models. Similarly, discriminant validity is also established, as exhibited by the Heterotrait-monotrait ratio (HTMT) values in Table 11.

Table 10
Reliability and Convergent Validity

	French		English	
	CR	AVE	CR	AVE
Ideal Ln Self	0.728	0.406	0.804	0.423
Instrumentality	0.670	0.599	0.818	0.692
Cultural Interest	0.671	0.500	0.833	0.561
Parental Influence	0.948	0.554	0.769	0.650
Milieu	0.928	0.417	0.739	0.405
Linguistic Self-Confidence	0.643	0.466	0.646	0.403

The computed SRMR values for the French and English motivation models were 0.072 and 0.076 respectively, which is below the recommended threshold of <0.08 (Hair et al., 2019a). The VIF values were also below the critical threshold of 3. This means that both models demonstrate a good fit to the data.

Table 11
Discriminant Validity

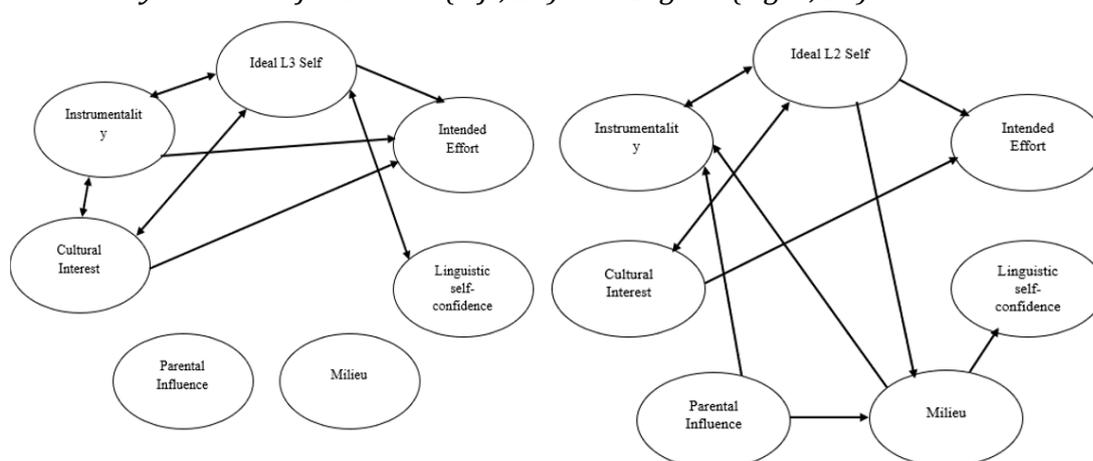
	CI	Instr.	ILnS	M	PI	LSC
French						
Cultural Interest (CI)						
Instrumentality (Instr.)	0.417					
Ideal Ln Self (ILnS)	0.793	0.710				
Milieu (M)	0.341	0.519	0.636			
Parental Influence (PI)	0.197	0.320	0.374	0.483		
Linguistic self-confidence (LSC)	0.310	0.219	0.460	1.296	0.343	
English						
Cultural Interest						
Instrumentality	0.193					
Ideal Ln Self	0.611	0.354				
Milieu	0.236	0.451	0.571			
Parental Influence	0.218	0.348	0.199	0.343		
Linguistic self-confidence	0.238	0.109	0.279	1.582	0.311	

Path analysis models for both languages

While the PLS-SEM analyses presented earlier capture all links between the motivational constructs, Figures 2a and 2b highlight only the strongest and most significant paths observed in the analyses, based on significance levels and standardized path coefficients. Both path models highlight the most robust relationships between dimensions, therefore visualizing the key motivational links that influence learners' intended effort.

Figure 2

Path Analysis Models for French (left, 2a) and English (right, 2b) Motivation



Compared to the path model for French learning motivation (Fig. 2a), The English path model (Fig. 2b) demonstrates a more interconnected structure, where Parental Influence and Milieu play active roles in influencing motivational constructs. The ideal L2 self appears to be a key factor that is strongly associated with intended effort, cultural interest, milieu, and instrumentality. Additionally, instrumentality is linked to milieu, which in turn contributes to linguistic self-confidence. Ideal L2 self and cultural interest seem to be strong predictors of intended effort, indicating that learners show preparedness to invest effort in learning English based on intrinsic reasons. The presence of milieu in the English path model implies that external factors, such as the surrounding people's attitudes towards English learning, influence students' overall motivation. Similarly, parental influence is strongly present in the model, suggesting that students' perceptions of their parents' English proficiency and potential support for language learning play a significant role in shaping motivation. The pathways in the French path model shows a slightly different structure. Remarkably, Milieu and Parental Influence do not appear to have a very significant role in shaping motivation, although the PLS-SEM analysis shows the interrelations of these variables with the rest of the constructs. This suggests that milieu and parental influence may have a weaker influence on the other motivational dimensions. The model highlights that the Ideal L3 Self, cultural interest, and instrumentality are key predictors of intended effort. Ideal L3 self is also closely related to linguistic self-confidence, cultural interest, and instrumentality. Additionally, instrumentality and cultural interest show a more pronounced and direct connectedness compared to the English path model.

The relationship between L2/L3 proficiency and the motivational dimensions

A correlation analysis, as shown in Table 12, was conducted to study the connection between Ln proficiency and motivation.

Table 12

Correlation between L2/L3 Proficiency and the Different Motivational Dimensions and Criterion Measure

		French Proficiency	English Proficiency
Ideal Ln Self	Correlation coefficient	.275**	.176*
	Sig. (2-tailed)	.003	.042
Instrumentality	Correlation coefficient	.145	-.040
	Sig. (2-tailed)	.094	.648
Cultural Interest	Correlation coefficient	0.14	.016
	Sig. (2-tailed)	.876	.854
Parental Influence	Correlation coefficient	-.103	.053
	Sig. (2-tailed)	.238	.543
Milieu	Correlation coefficient	.047	-.107
	Sig. (2-tailed)	.592	.219
Linguistic self-confidence	Correlation coefficient	.221*	.171
	Sig. (2-tailed)	.010	.048
Intended Effort	Correlation coefficient	.286**	.059
	Sig. (2-tailed)	.001	.5
N		134	134

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Ideal Ln Self shows a moderate positive correlation with French proficiency and a weaker but still significant correlation with English proficiency. Linguistic self-confidence has a moderately positive correlation with French proficiency and marginally with English, highlighting the role of self-belief and confidence in language learning and achievement. Intended effort also correlates significantly with French proficiency. However, no significant relationship is found between effort and English proficiency. Instrumentality, Cultural Interest, Parental Influence, and Milieu show no significant correlations with proficiency in either language. The correlation analysis highlights that the ideal Ln self, self-confidence, and effort can be important factors related to language proficiency and key drivers of a successful learning experience.

Discussion

Differences and Similarities in Motivational Dimensions across the Original and Current Motivation Model: English vs French

The present study explored Dörnyei and Csizér's (2006) motivation model, revealing a number of significant differences in the dimensional structure of language learning motivation for both French and English. While the original model identified seven key dimensions, the factor structure that emerged from the current investigation unravels a somewhat different motivation model shaped by educational, contextual, and sociolinguistic circumstances. The final suggested model consists of Cultural Interest, Instrumentality, Ideal Ln Self, Parental Influence, Milieu, and Linguistic Self-Confidence.

Cultural Interest includes variables consistent with earlier research (Dörnyei, 2005, 2009) that emphasizes indirect exposure to a language through cultural content as a key motivational component. Learners' engagement with and appreciation of Ln media,

entertainment, and cultural products might mediate L_n learning success through providing contextualized input and “familiarizing learners with the L2 community and thus shaping their L2 attitudes” (Csizér & Dörnyei, 2005, p. 21). Learners’ appreciation of the L_n cultural products and artifacts may cultivate favorable attitudes towards the L_n community, strengthening integrative tendencies and promoting L_n learning success (Csizér & Kormos, 2009). Given its omnipresence across streaming platforms, social media, and educational resources, English seems to have become the default medium for accessing cultural and informative content, which explains the participants’ increased interest in and exposure to English cultural products.

Instrumentality is another construct that remains stable in both the original and current model, reflecting the pragmatic value of language learning. Although the scope of this factor appears slightly narrowed in the present study compared to the original model, it still encompasses fundamental elements related to career advancement, academic achievement, and perceived importance and utility of the target language in the world. In the present study, instrumentality emerged as the strongest motivating factor behind learning both languages, with the participants showing more instrumental motivation towards learning English compared to French. The participants’ perspectives on English are in line with studies that have demonstrated the utility of the language with regard to economic mobility, global connectivity, academic advancement, and personal development (Cho, 2017; Hashemi & Hadavi, 2014; Ruane, 2021). This increasing instrumental orientation towards English (cf. Csizér & Albert, 2024) can be explained by the prevalence of English as the language of science, technology, global media, and digital platforms, as already reinforced by a number of participants who highlighted its omnipresence across various fields, as well as its dominant position as an international *lingua franca*.

The Ideal L_n Self, merging items previously related to integrativeness and attitudes towards L_n speakers/communities, taps into learners’ emotional and aspirational connection to the language and its speakers. The Ideal L_n Self includes items that, combined, reflect a vision of the self as a competent, involved, and culturally integrated user of the target language, which is an ideal students strive to attain. Taguchi et al. (2009) points out the interrelationship between the ideal L2 self, which is the reinterpretation of integrativeness in Dörnyei’s L2MSS, and attitudes to L2 culture and community. The influence of attitudes to L2 culture and community on the ideal L2 self was very pronounced in their research. Martinović (2018) also posited that positive attitudes towards the L2 community are connected to one’s idealized L2 speaking self. Learners with high integrativeness often envision themselves as competent L2 speakers, embodying the traits of L2 native speakers, while developing positive feelings and attitudes towards L2 community and culture. This might suggest that integrativeness and attitudes merging as one factor can be different facets of the ideal L_n self. This construct becomes even more salient in multilingual contexts, where learners often align their

idealized L_n self-image with the language deemed more dominant, culturally accessible, and personally valuable. The Ideal L_n Self emerged, in this study, as a strong motivating force behind learning both French and English, with participants developing similarly strong emotional connection to both languages. While their ideal L₂ self might be driven by the language's global status, perceived importance, and omnipresence in digital and media spaces, the ideal L₃ self might be more reinforced by formal educational goals.

Parental Influence emerged as a new factor in this study, including learners' perceptions of their parents' L_n proficiency. Prior research suggests that parental influence including education level (Iwaniec, 2018), encouragement (Daniel et al., 2018), and beliefs (Van Mensel & Deconinck, 2019) about language learning can impact learners' motivation in learning second or foreign languages. The participants' perceptions of their parents' language proficiency might have influenced their instrumental motivation and the development of their ideal L_n selves. Proficient parents often demonstrate positive attitudes towards the target language and serve as role models themselves, establishing a supportive environment where language learning is valued (Chavez et al., 2023; Gardner, 1985). Moreover, if parents are competent users of the target language, learners may internalize the belief that mastery is attainable, which can promote a sense of self-efficacy and therefore language learning behavior (Csizér et al., 2021; Piniel & Csizér, 2013). The emergence of Parental Influence as a distinct motivational factor reflects a generational linguistic shift where English has increasingly been viewed as the language of opportunities and success, replacing other languages as the dominant foreign language taught in schools.

Milieu, as another factor in the current motivation model, aligns closely with the original model advanced by Dörnyei et al. (2006). The attitudes of the participants' significant others towards languages appear to be of utmost importance in establishing and maintaining learning motivation as evidenced in previous research (Dörnyei et al., 2006; Kormos et al., 2011; Taguchi et al., 2009). The persistence of this construct across both studies stresses the enduring influence of the social environment in language learning motivation (Csizér & Kormos, 2009; Wang et al., 2021). However, one remarkable discrepancy between the original and current factor is the absence of item 28, related to whether learning foreign languages threatens learners' Hungarian selves, in the current model. This suggests an attitudinal shift in the way foreign languages are perceived and might indicate that younger generations in Hungary do not view language learning as a threat to their national identity but as a means to global connectivity, social mobility, and economic and personal growth. Compared to Dörnyei et al.'s (2006) original study, the participants' milieu, in this context, appears to be more supportive and appreciative of further language learning, highlighting a more positive shift in attitudes towards multilingualism. Linguistic self-confidence is another dimension that remains the same across the original and current study's model structure. This construct covers learners' beliefs in their own language learning abilities, including self-perceptions of linguistic

competence and low level of anxiety in using the L2 and L3. These findings corroborate research highlighting the importance of self-confidence in establishing motivation in L_n learning (Choi et al., 2020, Jee, 2017) and its centrality in influencing the affective and cognitive dimensions of second/foreign language learning (Wu et al., 2024).

The Relationship between the Criterion Measure (Intended Effort) and the Motivational Dimensions: Comparing Path Models

The effort expended in learning French suggests greater consistency in students' dedication to learning the language, whereas the wider range for English indicates greater variability in learners' commitment to learning English. This difference in the amount of effort exerted in learning both L2 and L3 may be attributed to the academic and institutional requirements for French, given its role as the language of instruction within the bilingual program. Since students showed more proficiency in English than in French, investing more effort in learning French seems to be necessary in order to achieve higher competence. In fact, Schunk, Meece, and Pintrich (2014, p. 12) note that "the usefulness of effort as an index of motivation is limited by skill level, because as skill increases one can perform better with less effort". Hence, it is possible that the participants' higher proficiency and positive perceived L2 ability in English have affected the amount of effort they have invested in learning both languages. This is in accordance with Martinović and Burić (2021) who suggest that a positive perception of L2 ability resulting from successful past experiences in learning English might lead students to believe that future language learning would not necessitate a significant amount of effort.

Intended effort can be considered a dependent or endogenous variable since it only has incoming arrows in both L2 and L3 path motivation models. The path analysis of the French learning motivation model shows the Ideal L3 Self as a central construct that not only influences intended effort but also has apparent associations with other motivational dimensions. The ideal L3 self, instrumentality, and cultural interest appear to have a direct positive impact on intended effort. This suggests that learners who envision themselves as proficient French speakers, have positive attitudes towards the language, its community, and culture, and consider the role of French especially in their bilingual program are more likely to invest effort in learning. The positive direct influence of these motivational dimensions on intended effort partially corroborates findings from Martinović and Burić (2021), Rocher Hahlin (2014), and Taguchi et al. (2009) who highlight the cardinal role of the ideal self in exerting effort in language learning. However, instrumentality in prior research (Martinović & Burić, 2021; Taguchi et al., 2009) had an indirect effect on intended effort via ideal and ought-to L2 selves, while L2 cultural interest influenced intended effect via the ideal self (Taguchi et al., 2009).

The English path model, on the other hand, shows a more interconnected relationship between all motivational dimensions. Like in the French learning motivation model, the ideal L2 self appears to be a cardinal dimension connected to multiple constructs. Both

the ideal L2 self and cultural interest have a direct positive impact on intended effort, suggesting that the students' motivation to expend effort in learning the language is primarily internal: their envisioned selves as competent English speakers and cultural engagement are salient drivers of intended effort. These results emphasize the importance of internal motivational factors in English language learning, which is analogous to other studies including Yang and Chanyoo (2022). Additionally, instrumentality seems to exert an indirect influence via the Ideal L2 Self on the amount of effort participants tend to invest in learning English, which is in line with Martinović and Burić (2021). This pattern implies that students can integrate the pragmatic value of the English language into their future self-concept, which in turn influences the amount of effort they put in language learning.

The Connection between the Different Motivational, Attitudinal Dimensions and L_n Proficiency

The present study's findings indicate that only the ideal L_n self and linguistic self-confidence are connected to French and English proficiency. Participants who envision themselves as competent users of the target language, hold positive attitudes towards the target community and language, and show self-belief in their language abilities are more likely to have higher proficiency. Their future self-image as proficient speakers of the target language encourages them to engage in language activities that enhance their skills, thereby reaching higher proficiency levels as reported in Ghasemi (2018). The desire to achieve a native-like level can result in a heightened sense of purpose and perseverance in language learning. These results further support Dörnyei's (2009) assertion that the ideal possible L2 self, which might lead to a visionary image that learners would aspire to make real, results in sustained learning behavior and commitment to learning which eventually lead to higher proficiency. Conversely, Wong (2020) explores the influence of language proficiency on L2 motivational selves in ethnic minority young learners of Chinese and reports that learners' self-perceived proficiency mediates the effect of performed proficiency on the Ideal L2 self, highlighting the potential bidirectional connection between both constructs. Indeed, higher proficiency can enhance learners' ideal selves as observable, tangible L_n development offers concrete evidence of the progress made to reach the desired competency level. This reciprocal, mutually reinforcing relationship might be crucial in sustaining language motivation and learning behavior.

The positive correlation between linguistic self-confidence and L_n proficiency highlights the importance of participants' belief in their language abilities in successful language learning. This is in line with Ghafar (2023) who highlights that a lack of self-confidence and self-assurance might impede the process of acquiring proficiency in a foreign language. Increased levels of self-confidence are shown to be correlated with enhanced English language achievement. Self-confident learners, according to Ghafar (2023), exhibit greater command of various language skills including grammar, vocabulary, and

pronunciation. Similarly, Narzillayevna's (2024) systematic review of the literature also demonstrate that learners with elevated levels of self-confidence tend to successfully navigate and overcome learning challenges with minimal worry or anxiety. Besides, witnessing their gradual improvement in the target language, learners might experience a sense of accomplishment which further boosts their confidence in their language abilities (Ghasemi, 2018). Hence, the connection between both constructs appears to be reciprocal as linguistic self-confidence encourages learners to engage in communicative activities, thus improving language proficiency, while in turn gains reinforcement through successful language practice.

The study findings contribute to the evolving nature of multilingualism research and L_n motivation theory, especially within the Hungarian educational context which remains deeply rooted in monolingual traditions. The presence of the Ideal L2 and L3 selves as key motivational constructs related to intended effort, the disappearance of Vitality of L_n Community, and the emergence of Parental Influence as a new factor emphasize the model's relevance in investigating learners' affective and identity-related orientations regarding various languages. These results highlight a need for a revamped pedagogical approach to optimize learners' motivational trajectories, particularly in the context of less frequently taught languages and bilingual programs using languages other than English (LOTEs). Instruction that mainly relies on traditional classroom methods will not generate the same level of engagement and interest learners show towards English. Besides, promoting learners' ideal aspirational visions of themselves as competent speakers of their languages through vision-building tasks, communicative activities, and project-based learning rooted in real-world language may promote their engagement with the language, increase their motivation towards learning it, and build their linguistic self-confidence. Furthermore, promoting students' future self-image as competent users of the target language and boosting their self-confidence in their linguistic abilities can lead to higher proficiency levels and willingness to engage in L_n communication.

Conclusion

The present study's exploration of language learning motivation within the L2MSS framework yields remarkable differences and consistencies with the original model. Notable structural changes appeared, with Parental Influence emerging as a distinct factor and what used to constitute Integrativeness and Attitudes towards L2 speakers merging to form the Ideal L_n self. These divergences from the original model reflect generational linguistic shifts especially with the mounting dominance of English as a foreign language in Hungary, which is predominantly a monolingual country. The Ideal L_n Self and cultural interest remain strong predictors of intended effort in both languages. The results also highlight the gradual shift in Hungarians' attitudes and mindset regarding learning foreign languages, suggesting an openness towards bi- and multilingual education considering its pragmatic and cultural value. Comparing motivational dispositions across both French and English show that students exhibit higher motivation towards learning English, particularly across instrumentality, cultural

interest, and parental influence. Due to the pragmatic value and prevalence of English across multiple platforms and in various digital, academic, and professional domains, motivation for learning French appears to be more context-related, implying a need for a revamped pedagogical approach to optimize learners' motivational trajectories, particularly in the context of less frequently taught languages and bilingual programs using languages other than English.

Regarding the relationship between language learning motivation and proficiency, the study demonstrated the connection of French and English proficiency with the ideal self and linguistic self-confidence. Although the relationships between all constructs are not robust, learners' envisioned self-image and belief in their language abilities tend to be connected to language proficiency, since this ideal self motivates sustained effort and goal-oriented learning while self-confidence reduces anxiety and promotes self-efficacy. Higher proficiency can also reinforce learners' ideal L_n self, as noticeable proficiency gains offer tangible evidence of the progress made to approximate one's desired competence level. Intended effort, on the other hand, correlated mainly with French proficiency which can be attributed to the academic demands of the bilingual program. In contrast, English required less effort as students had already been receiving extensive input in the language through various means.

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CRedit Authorship Contribution Statement

Rabeb Ghanmi: Conceptualization, Data Curation, Formal Analysis, Funding Acquisition, Investigation, Methodology, Project Administration, Resources, Software, Validation, Visualization, Writing – Original Draft, Writing – Review & Editing

Judit Navracscics: Funding Acquisition, Investigation, Project Administration, Resources, Supervision, Validation, Writing – Review & Editing

Generative AI Use Disclosure Statement

No generative AI tools were used in the preparation of this manuscript.

Ethics Declarations

World Medical Association (WMA) Declaration of Helsinki–Ethical Principles for Medical Research Involving Human Participants

The current study did not involve any medical research or clinical interventions with human participants. The design and execution of this research, however, were conducted with strict adherence to ethical standards applicable to research in linguistics. Informed consent was obtained from all schools and participants prior to their involvement in the study.

Competing Interests

The authors report no competing interests.

Data Availability

The data supporting the findings of this study are available on request from the corresponding author, Ghanmi, R. The data are not publicly available due to the privacy of research participants.

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