



Research article

Pre-eminence of determining factors in second language learning: An educator's perspective from Spain

Amaya Arigita-García^a, Roberto Sánchez-Cabrero^{a,*}, Amelia Barrientos-Fernández^b, Lidia Mañoso-Pacheco^c, F. Javier Pericacho-Gómez^d^a Department of Social Sciences and Applied Languages, Alfonso X El Sabio University, Madrid, Spain^b Department of Education, Catholic University of Ávila, Ávila, Spain^c Department of Philology and Its Didactics, Autonomous University of Madrid, Madrid, Spain^d Department of Education, International University of La Rioja (UNIR), Madrid, Spain

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ABSTRACT

Second language acquisition as a process is subject to factors related to the student, the teacher, the learning structure and learning organisation, and also to the learning environment. The research hereby presented aims to establish the relevance of the above-mentioned factors in the process of second language learning. The study addresses the point of view of teachers, as their perspective concerning the learning process is privileged. If it were not to be included in a scientific process, this detailed and contextual knowledge would not be able to contribute to the improvement of teaching. The data obtained will allow for the designing of teaching strategies focused on learners' needs and requirements. This is a descriptive, observational and cross-sectional study with the participation of 216 practicing teachers within the Community of Madrid in Spain. The information was collected through an online questionnaire using the *Google Drive* tool *Google Forms*. Then, it was analysed and validated with *IBM SPSS Statistics 25.0*. The outcomes of the study show that the factors linked to the teacher are the most dominant for those educators in the Community of Madrid. Regarding the teacher-student relationship, the use of teaching resources and materials adequate for learning, together with the communication, strategies used, the linguistic input received by the students and the planning of lessons, are factors showing the greatest capacity to determine the process of teaching and learning a second language.

1. Introduction

Throughout the past twenty years, second language learning and the effective use of a second language have been the subject of many studies by sociologists, linguists and educational psychologists (Atkinson et al., 2018; Citing and Wendong, 2020; Dewaele et al., 2019; Feng, 2019; LaScotte and Tarone, 2019). The conclusions of said studies have managed to convince authors, scientific societies and national and European institutions that three circumstances converge in second language acquisition, which are decisive in acquiring linguistic competence. Firstly, that there are differences in learning processes and strategies between learning a mother tongue and learning a second or foreign language, even if learning a second language is possible at any age. Secondly, that the communication process involves many elements related to the student's own characteristics, social context, conditions under which the learning progresses (learning of target language) and

teaching methods and strategies used in the teaching-learning process. Thirdly, that there is no ideal teaching methodology; but that it is the student's own characteristics, her/his immediate setting and the context of education the elements that ultimately determine the suitability of the method to be used (Larsen-Freeman, 2019; Ortega, 2019; Richards, 2015).

Although from such conclusions we may deduce the importance of knowing the impact of the aforementioned factors on the communication process, it would be logical to ponder on the reason for conducting a study on a topic so widely documented over said period of years. The answer rests on the increasingly accelerated rate of change we are experiencing in today's world, particularly in the education sector. By simply stopping for a moment and looking, reading or listening to any social media we realise the impact of geopolitical changes, amendments to legislation, welfare state crisis, economic globalisation, demographic changes, migrant flows, changes in social values, new lifestyles, mass

* Corresponding author.

E-mail address: rcabrero@uax.es (R. Sánchez-Cabrero).<https://doi.org/10.1016/j.heliyon.2021.e06282>

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access to online information on our social dealings, to name a few. Or even the impact that digital and communication technologies, which cannot happen over time without an economic, political and social impact capable of modifying the way in which the determining factors of teaching and learning linguistic competence in a second language intervene (Bárcena, 2020; Caliskan et al., 2017; Hartshorne et al., 2018; Thorne et al., 2015).

Subsequently, the reader may wonder why the study of such factors that affect second language learning through the opinion of teachers may be implemented. The answer lies with the role of the educator nowadays. Besides, being a transmitter of knowledge and values, the educator is an essential cog in the educational system (Cochran-Smith and Zeichner, 2005; Mañoso-Pacheco et al., 2020; McKinsey Report, 2017; OCDE, 2013). The long periods of mandatory schooling our children and young people must undergo turn the educator into a usually silent witness of the effects that social, economic, technological and legislative changes have on curricula design and on the teaching-learning process. The educators' close relationship with citizens, their commitment as educators and trainers of our schoolchildren and their vast knowledge of the educational system's structure and resources make them a valuable source of information that invites us (at the very least) to pay more attention to their opinion (Sánchez-Cabrero et al., 2019a).

The goal of this research is to establish the pre-eminence of the factors involved in the process of second language learning concerning the perspective of teachers from the Community of Madrid (Spain). Thus, we have developed a descriptive, observational and cross-sectional study with the participation of 216 practicing teachers from the Community of Madrid. Information was collected via an on-line questionnaire using the *Google Drive* tool *Google Forms*, and it was analysed and validated with the program "Statistical Package for the Social Sciences (IBM SPSS Statistics 25.0)". Once our reasons for undertaking this study have been explained and having justified the chosen fieldwork method, it only remains to introduce the structure of the study.

The study hereunder is divided into four main sections. The first section focuses on defining the key aspects of the research: factors impacting on second language learning and their link to the learning process and the current role of the teacher in the classroom. The second section explains the main aim of the study, introduces the methodology followed to formulate the study, and it explains the design and validation of the fieldwork tool. The third section shows the results obtained, where they are analysed and compared to current literature. Finally, the fourth section shows the reader the conclusions arising from our study, the potential impact thereof on the educational community and possible lines of research for the future.

1.1. Factors impacting on second language learning and their connection to the learning process

Scientific evidence clearly shows the heterogeneity of factors that condition the acquisition of a second language and its relationship with the learning and teaching process (Atkinson et al., 2018; Chen et al., 2020; Dewaele and Dewaele, 2018; Saville-Troike and Barto, 2016). For instance, after analysing the opinions of a group of teachers on the use of mobile devices to learn foreign languages, Üstün and Dimililer (2017) stress their usefulness and relevance. As for the native or non-native nature of the teacher, Hong and Mendoza (2020) showed by a combined method (qualitative and quantitative) that there was a distribution of functions and that students perceived both profiles as complementary; therefore, none of the two profiles seem to be clearly more efficient than the other. As for another key factor in second-language acquisition, the student's age, the work done by Caballero and Milla (2018) and their systematic review showed the existence of a key critical period for learning (between the age of 2 and 12) after which, the process is tougher. Alcaraz-Mármol (2018), for her part, interviewed several teachers to get their opinion on the CLIL (Content and Language Integrated Learning) approach, and the results highlight the importance of

the methodological training quality for teaching. The relevance of the teacher's training quality can also be seen in the study developed by Yolcu and Dimici (2020) in which, with the use of mixed methodology, the opinions of teachers, students and the administrators were analysed. Foreign language teachers also mention the teacher's training quality on a qualitative analysis of questionnaires made by Bayraktar (2018) and Fleta (2016). Those results are aligned with the documentary analysis made by Fandiño (2017).

If we consider the concept of the mother tongue as the language of first acquisition by the child, which the child uses for their first communication acts, we may be able to conceptualise the acquisition of a second language as the language used as a means of communication in the country where it is learned (Cook, 2016; Painter, 2015). Concerning the concept of acquisition (bearing in mind that current approaches use acquisition and learning interchangeably), the term 'acquisition' refers to the learner's capacity to express themselves as naturally as a native speaker of the language in any communication context (Larsen-Freeman, 2018). Further, the term 'learning' refers to a conscious and planned activity that allows the learner to acquire the vocabulary and the grammatical structures necessary to be fluent in a language other than their mother tongue (Arnon and Christiansen, 2017; Chandler, 2003). The term acquisition ought to be used when referring to natural or linguistic immersion contexts in the target language country. The term learning, for its part, ought to be used when referring to the context of formal education (Park, 2016; Vives, 2016).

Since the Council of Europe first advocated for the promotion of language learning (other than the first language) at an early stage and through a games approach (Official Journal of the European Communities, 1997), there have been many projects based on diversity seeking to promote knowledge of the languages spoken in the European Union.

The study of factors determining second language learning and the effective use of a second language, the subject of this paper, did have its heyday during the second half of the 20th century. At that time, disciplines (as interrelated as they are distinct from one another) such as linguistics, semiotics, psychology, sociology, anthropology or pedagogy were relied upon by authors and institutions to establish, relate and collate the factors that influence the learning process from a multidisciplinary perspective (Hong and Mendoza, 2020; Levesque et al., 2017; Saito et al., 2019).

The main challenge faced by those authors when carrying out research was, as it is today, the difficulty involved in the empirical evaluation of aspects as complex and as difficult to define, quantify or measure as those linked to the student's own characteristics, the social context where teaching takes place or the strategies and mental processes the learner elaborates during the learning process. Such challenge was avoided mostly by focusing the research on the results of the learning process; as well as those results were something regularly observable, measurable and directly linked to the student and the student's achievements (Herrera-Torres and Mohand, 2017; Sánchez-Cabrero et al., 2019b). However, this especially practical solution still leaves a considerable break in continuity. The study of the said gap could provide original conclusions concerning the factors that are accepted by the scientific community today as determining factors for second language learning.

In our opinion, we may think of Stern (1983) classification as one of the most complete amongst the many classifications formulated in order to catalogue and relate these factors. As it can be observed in Figure 1, such factors appear grouped sequentially and integrated into the five key aspects of the learning process currently accepted.

The first aspect would be social context (Stern, 1983), understood as the space where the student regularly interacts that is made up of cultural, social, political, geographical, historical, religious, linguistics and economic aspects and that is part of the learner's identity (Beltrán-Arias, 2015; Citing and Wendong, 2020) The combination of these aspects would determine the perception the learner has concerning the target

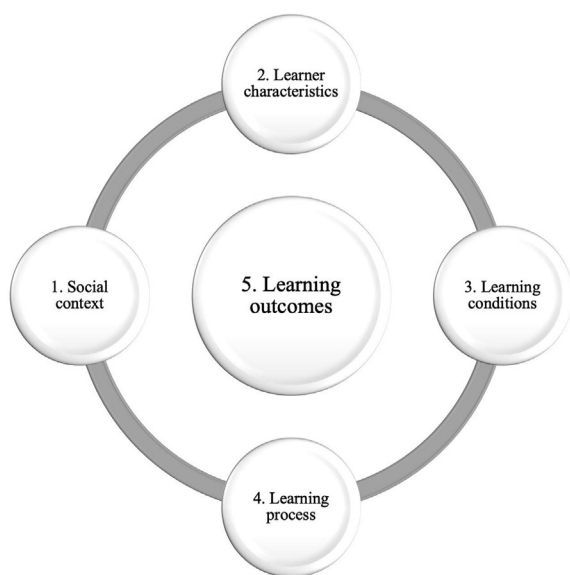


Figure 1. Framework for the examination of second language learning (Diagram inspired by Stern's second language learning model, 1983).

language and the learner's behaviours towards the learning of the target language to a great extent (Cronin, 2017; Good and Lavigne, 2017).

The second and third (directly related and determined by the social context) aspects would be the student's characteristics and learning conditions. Within the student's characteristics, we would include factors related to the learner's individuality, i.e., the sum of traits that distinguishes one person from another. Amongst these many factors, extensively studied in these recent years, the following would be worth citing as the most relevant:

- Age (Tomlinson and Masuhara, 2017).
- Cognitive characteristics, including linguistic proficiency (Good and Lavigne, 2017), communications skills (Romero-Martín et al., 2017) and cognitive style (Rao, 2016), understood as the constant and characteristic working way of a person demonstrated through the person's intellectual and perceptive activity.
- Affective qualities, comprising motivation and attitude towards learning and the community who speaks the target language (Hiver and Al-Hoorie, 2020), and learner's personality (Dewaele and Dea-waele, 2018).

Concerning learning outcomes conditions, these would be determined by the teaching context through two likely dichotomies. On the one hand, 'acquisition versus formal learning', whether we consider that nowadays we tend to separate the learning context into formal and non-formal. On the other hand, the dichotomy pertaining to the education model, 'a model centred on teaching versus a model centred on learning' (Dewey, 1986; Park, 2016; Stern, 1983; Unsworth and Mills, 2020). See below for definitions:

- *Natural acquisition vs. formal learning.* According to the European Commission (Colardyn and Bjornavold, 2004), *formal education* would be considered the learning usually provided by a centre of education or training centre (structured according to didactic goals, duration or medium), which concludes with a certification. Formal learning is intentional from the student's perspective. Contrary to that, *informal learning* must be learning from daily life activities related to work, family or leisure. This learning is not structured according to didactic goals, duration or medium and it does not usually lead to a certification. Informal learning may be intentional, but in most cases, it is not, as it is accidental and random. Lastly, *non-formal*

learning would be considered learning not provided by a centre of education or training centre and not usually leading to a certification. However, it is structured according to didactic goals, duration or medium. Non-formal learning is intentional from the student's perspective (Cole and Vanderplank, 2016).

- *A model centred on teaching vs. a model centred on learning.* A teaching-centred model understands knowledge as something externally constructed. There is a body of scientific knowledge ring-fenced by the discipline and formulated by great thinkers, which must be disseminated in the hands of the teacher. The teacher is responsible for organising and transforming knowledge. The learning-centred model understands knowledge not as something fixed and unmovable, which is out there in order to fill in the student's ignorant gap, but as a socially negotiated construct that ought to be formulated by the student, as something the student must personalise and own. *The responsibility for organising and transforming knowledge lies with the teacher and student* (Gargallo et al., 2010, p. 11). Within the context of formal education, the organisation of the educational space (JISC, 2006; Martire, 2017) and the student-teacher ratio (DiFino and Lombardino, 2008) will be two of the most relevant factors within this group.

The fourth aspect of this series would be the learning process. This process, modulated by the uniqueness of the learner and the conditions of learning, would encompass the strategies, techniques and mental operations that the student develops from the beginning of their instruction until they reach linguistic competence in the target language. Such as it happens during the acquisition of the mother tongue, as the learner internalises the new language system, the learner goes through successive learning stages that ultimately culminate with the achievement of sufficient linguistic competence to face real communicative situations by making proper use of the language (Oxford, 2016; Selinker, 1972). Selinker (1972) coined the term '*interlanguage*' to refer to the students' linguistic system of a second language or foreign language in each of the successive stages of acquisition during their learning process. The concept of interlanguage is defined as the learner's individual and own linguistic system. It is further defined as a mediator between the mother tongue's linguistic system and the target language's; for its independence and self-governing rules; for being systematic, since it possesses a coherent set of rules. It is also defined as variable, because those rules are not constant concerning certain phenomena; permeable to the adult and, therefore, able to undergo successive restructuring to give way to the next stage; and, finally, to be in constant evolution, since it is constituted by successive staged approaches to the target language (Oxford, 2016; Paquot, 2019; Sánchez-Cabrero and Costa-Román, 2018; Selinker, 1972).

Considering the aforementioned cognitive-intellectual, affective and social factors, Stern (1983) sets out four basic sets of strategies the student ought to prepare and develop in order to achieve an efficient learning process, and in relation to such strategies, he contends 'that students who show a less efficient learning process would have used them half-heartedly, would have not executed them simultaneously or would have not developed them fully' (p.411).

An active planning strategy would be the first of these strategies involving selecting short-term, medium-term and long-term goals; defining stages and developmental sequences and actively participating in the learning process.

- Formal learning or academic learning of the target language would be the second strategy. This would include the study of rules and regular relationships amongst forms of language and meanings. This would force the student to memorise and frequently practise such memorised contents; to constantly review learnings adapting meanings to new content and to gradually exclude the mother tongue as the student develops internal standards of grammatical correctness and adaptation.

- Practising the target language in real communication settings would be the third strategy. Communication contact with native speakers would allow the student to know the real use of the target language and to develop techniques to confront communication difficulties arising from a language not fully known.
- Finally, motivation and attitude towards learning would be a fourth and final strategy. The student must effectively overcome any emotional or motivational issues derived from learning a new language, developing a positive attitude towards the self, towards learning the target language and towards the originating culture and society.

The outcomes of the learning process would constitute the last aspect of the series here submitted. They would include, as proposed by Jenkins and Unwin in 2001 Unwin (2001, cited in Kennedy et al., 2006), what a student is expected to be able to do as a result of the learning activity. Moreover, they would constitute - being observable and measurable competencies and skills - important clarification tools of the fruits of learning for students, citizens, employers and educators (Keinänen et al., 2018). Prior awareness of the expected results would allow for some guidance as regards curricula design in the teaching-learning process, as well as the facilitation of coordinating tasks amongst faculty, the preparation of training activities, the development of assessment mechanisms fit for learning and the exchange of educational experiences with other teachers (Nguyen, 2017).

Having introduced the close link between the results of the learning process and the determining factors for its development, it would seem logical to update ourselves concerning such connection, ascertaining (if we wished to know why some students easily reach linguistic competency in a second language or foreign language and others, on the contrary, obtain very limited results and with great effort) the degree of pre-eminence that the teaching community confers upon these factors in the 21st century.

1.2. Study aim

The overall goal of this study is to establish the pre-eminence of the factors involved in the process of second language learning from the point of view of teachers from the Community of Madrid in Spain. To achieve this, the following specific objectives are set:

- To assess the degree of importance of factors related to the student.
- To assess the degree of importance of factors related to the teacher.
- To assess the degree of importance of factors related to the learning structure and organisation.
- To assess the degree of importance of factors related to the learning environment.

2. Materials and methods

2.1. Type of study

This study addresses the matter introduced from a quantitative, correlational perspective. It is a descriptive, observational and cross-sectional study, which analyses *ex post facto*, that is, it is aimed at verifying an existing reality assumed as stable. The variables are identified, measured and analysed without exerting direct control over them and, although they may allow for the formulation of causal theories, they do not allow for demonstrating the existence of a cause-effect association.

For data collection, we have used an online questionnaire, which is individualised, multi-variable, structured, with nominal-polychotomous questions and closed answers.

2.2. Participants

The group of educators who participated in this study was made up of a total cohort of 216 practicing teachers ranging from infant, primary to mandatory secondary education. The period of time assessed was November 2016 to November 2017, with teachers employed in the academic years 2016–17 and 2017–18, and conducted in some state-owned, private or privately-owned but state-funded schools in the area of the Community of Madrid. The sample of 216 teachers was taken randomly from the total population of teachers holding English language qualification during that period according to the data collected by the Ministry of Education of Spain in the Community of Madrid. In total, there were 5,792 teachers, 3,628 coming from infant and primary education, and 2,164 teachers from secondary and advanced secondary level ([Consejería de Educación e Investigación de la Comunidad de Madrid, 2017](#)). Although data collection was done during the period mentioned, the analysis and statistical interpretation of the data was carried out during 2018 and 2019 due to the complexity of the behaviour analysis of all the variables included in the research work. The table below ([Table 1](#)) shows the distribution of subject participation by the attribute variables under consideration.

As can be observed, the participant profile is mainly defined as women, aged between 30 and 39 years, with more than 10 years of teaching experience, who works in a state-owned school in the capital and teaches in primary education, and who practises her/his profession within a bilingual programme and teaches in the students' mother tongue. This profile, far from constituting a sample bias, is identified as the non-university teacher profile mostly represented in the classrooms of the Community of Madrid.

2.3. Analysis instrument and variables measured

This study was conducted considering quantitative variables (discrete and continuous) and qualitative variables (nominal and ordinal). An explanation of the variables used and measured in this study can be found below:

1. Teacher's age: discreet quantitative variable describing the age of those teachers who participated in the study. For a better analysis, it was grouped into 4 categories (Under 30, 30 to 39, 40 to 49 and Over 50), using this variable in ordinal sequence from lower to higher age, as suggested by the evidence shown by [Tamir and Finfer \(2016\)](#). These authors found that deep emotional changes have psychological and labour influence on teachers and that their impact varies depending on the decade.
2. Gender: dichotomous nominal qualitative variable determining gender identification of the study participants.
3. Years of teaching experience: discreet quantitative variable determining the number of academic years of experience of the study participants. For a better analysis, it was grouped into 3 categories (Up to 5 years, 6–10 years and More than 10 years).
4. Regional educational Authorities (DAT): nominal qualitative variable consisting of 5 school catchment areas that the Community of Madrid is divided into (East, West, North, South or Capital).
5. School ownership: nominal qualitative variable consisting of the main source of funding for the school. Three modes are considered: State-owned (managed and funded by public administration), privately-owned but state-funded (privately managed but mainly publicly funded) and private (managed and funded privately).
6. Highest level of education taught: nominal qualitative variable with 3 levels of education. Infant education (up to 6 years),

Table 1. Distribution of the sample according to different attribute variables.

	Frequency	Percentage
Gender		
Female	162	75
Male	54	25
Age		
Under 30	50	23.1
30 to 39	89	41.2
40 to 49	49	22.7
Over 50	28	13.0
Years of teaching experience		
Up to 5 years	70	32.4
6–10 years	43	19.9
More than 10 years	103	47.7
Regional Educational Authorities (DAT, Spanish acronym)		
Capital	61	28.2
North	53	24.5
South	31	14.4
East	31	14.4
West	40	18.5
School ownership		
State-owned	137	63.4
Privately-owned but state-funded	46	21.3
Private	33	15.3
Highest level of education taught		
Infant education	60	27.8
Primary education	96	44.4
Secondary education	60	27.8
Teaching according to a bilingual educational programme		
No	72	33.3
Yes	144	66.7
Language of instruction		
Mother tongue	130	60.2
Second language	55	25.5
Both	31	14.4
TOTAL	216	100

Primary education (approximately from 6 to 11 years) and Secondary education (approximately from 12 to 18 years). Each one of those levels refers to a stage of education within which the study participant teachers.

7. Teaching according to a bilingual educational programme: dichotomous nominal qualitative variable describing if the school of the teacher-participant follows a bilingual education programme or a monolingual education programme.
8. Language of instruction: nominal qualitative variable with 3 levels establishing if the educator teaches in the student's mother tongue or the second language subject of study (English), or in both.
9. Teacher's evaluation of factors related to the student: continuous quantitative variable consisting of the arithmetic mean arising from the participants' response to 16 aspects that may be linked to second language learning, which have their direct relation to the learner's internal characteristics in common. Each one of the aspects evaluated is measured by the Likert scale (from 1 unlikely to 5 highly likely) as ordinal qualitative variables. A description of each one of the items measured is provided below.
 - Strategies developed for target language learning: the teacher assesses the relevance of the complexity and adequacy of the method chosen by the student to acquire new language skills for the learning of a second language.

- Motivation for learning the target language: the teacher assesses the relevance of the student's motivation in mastering the second language.
- Fear of communicating in another language: the teacher assesses the relevance of the student's fear of communicating in the second language as a handicap for their learning.
- Level of confidence in achieving goals: the teacher assesses the relevance of the student's self-confidence in the command of the second language as an achievement within their reach.
- Age: the teacher assesses whether the student's age determines the acquisition and learning of the second language.
- Level of empathy with the target language: the teacher assesses whether the student sympathising with the second language influences their learning.
- Level of linguistic competence in the mother tongue: the teacher assesses whether the student's competence in their mother tongue conditions the learning of the second language.
- Level of self-esteem: this item assesses if the teacher perceives that the student's self-esteem influences the learning and command of the second language.
- Previous language learning experience: this item assesses if, according to the teacher, having had learning experiences of other languages influences the learning of the second language.

- Level of cognitive maturity: this item assesses if the teacher perceives that the degree of cognitive maturity of the student influences the learning of the second language.
 - Classroom behaviour: the teacher assesses whether the student's competence in their mother tongue conditions enhances the learning of the second language.
 - Personality: The teacher measures the relevance of the personality traits of the student on the learning of the second language.
 - Socio-economic and cultural level of the family background: The teacher assesses whether the socioeconomic and cultural origin of the student can influence the acquisition of the second language.
 - Level of empathy with the monolingual community: The teacher assesses whether the student sympathising with the community that speaks the second language influences their learning.
 - Birth order: This item assesses if, according to the teacher, facts such as the student being an only child or from a large family, or considering the birth order of siblings could be relevant to the learning and acquisition of the second language.
 - Gender: The teacher assesses whether there are differences in learning a second language if the student is male or female.
10. Teacher's evaluation of factors related to the work of the teacher: Continuous quantitative variable consisting of the arithmetic mean arising from the participants' response to 9 aspects that may be linked to second language learning, and which have in common their direct relation to the teacher's internal characteristics. Each one of the aspects evaluated is measured by the Likert scale (from 1 unlikely to 5 highly likely) as ordinal qualitative variables. A description of each one of the items measured can be seen below.
- Teacher-student relationship: The teacher assesses the relevance of the quality and the positive emotional involvement between student and teacher for the learning of a second language.
 - Use of appropriate teaching resources and materials: This item assesses if the teacher considers that the selection of resources and teaching materials has an impact on the student's learning of a second language.
 - Communication strategies used: This item assesses if, according to the teacher, there are differences in the student's learning when trying to learn a second language according to the strategy followed when communicating with the student.
 - Linguistic input received by the student: Relevance that the teacher assigns to the number of terms, concepts and meanings that the student receives in the teaching process.
 - Lesson planning: This item assesses whether it is relevant for the teacher to plan adequately prior to the teaching situation in order to improve the learning outcomes of a second language student.
 - Level of linguistic competence in the target language: This item assesses whether establishing a higher level of linguistic competence as a learning objective influences student learning.
 - Academic background: If the teacher considers that their level of academic training has an impact on the student's learning of a second language.
 - Periodic evaluation of programmed objectives: This item assesses whether, according to the teacher, the establishing of specific methods of periodic evaluation with regard to the set learning objectives directly affects the learning of a second language.
 - Use of new Information and Communication Technologies (ICTs): The teacher assesses the increased student learning that the use of new technologies in the teaching-learning process could have.
11. Teacher's evaluation of factors related to the learning structure and organisation: Continuous quantitative variable consisting of the arithmetic mean arising from the participants' response to 11 aspects that may be linked to second language learning, and which have in common their direct relation to the learning structure and organisation. Each one of the aspects evaluated is measured by the Likert scale (from 1 unlikely to 5 highly likely) as ordinal qualitative variables. A description of each one of the items measured can be found below.
- Intensity of exposure to the target language: This item assesses if, according to the teacher, a more intensive or invasive educational methodology may result in greater, faster or deeper learning of a second language.
 - Methodological approach used in teaching: The teacher assesses if there are differences in learning a second language depending on the teaching approach promoted by the school.
 - Number of hours of daily instruction: This item assesses if, according to the teacher, there is a connection between the weekly number of hours of exposure to the second language and the command of said second language.
 - Context within which learning takes place: This item measures if the context in which the teaching-learning situation develops is relevant to the quality or quantity of student learning.
 - Current level of teacher coordination: This item assesses if there is an influence concerning the existence of good coordination amongst education professionals in order to improve second language learning.
 - Organization of curricular content: The impact that a consistent and logical content organisation could have on learning is assessed.
 - Existence of pedagogical advice: The teacher evaluates the impact of the involvement of appropriate pedagogical advice on the student's learning process.
 - Organisation of educational spaces: The implication that the physical space where the teaching-learning takes place may have on second language learning is measured.
 - School's location: Whether the ecological or urban environment influences the learning of a second language or not.
 - School ownership: The teacher measures if the fact that the school is private, state-owned or privately-owned but state-funded is a relevant factor in second language learning.
 - Size of the school: The teacher assesses whether the number of students in the school could influence the learning of a second language.
12. Teacher's evaluation of factors related to the learning environment: Continuous quantitative variable consisting of the arithmetic mean arising from the participants' response to 8 aspects that may be linked to second language learning, and which have in common their direct relation to the teaching-learning environment. Each one of the aspects evaluated is measured by the Likert scale (from 1 unlikely to 5 highly likely) as ordinal qualitative variables. A description of each one of the items measured is included below.
- Family's attitude towards the target language: this item assesses, according to the teacher, the impact of the family's attitude towards the learning of a second language by the student.
 - Society's attitude towards the target language: this item assesses whether the fact that society as a whole positively values knowledge and skill in the second language chosen can influence its learning.
 - Institutional attitude towards the target language: this item assesses if the teacher perceives that respect for educational institutions has a direct impact on the learning of a second language.
 - Phylogenetic proximity between the mother tongue and target language: this item assesses whether the existence of phylogenetic roots between the mother tongue and the second language to be acquired facilitates and improves student learning.

- Coexistence of similar cultural elements: this item measures the impact on learning should the mother tongue and the second language learned share any cultural significance for the learner.
- Presence of cultural stereotypes: this item assesses whether the existence of cultural stereotypes related to the second language, both positive and negative, could influence student learning.
- Historical relationship between the mother tongue and target language: the teacher assesses whether the historical interaction between both linguistic communities can influence student learning.
- Social distance between countries: this item assesses whether the social proximity between both linguistic communities could have an impact on the learning of the second language.

The information gathering tool is our own questionnaire designed ad hoc and previously validated by experts' opinion with the approval of the Scientific and Ethical Committee of the Alfonso X el Sabio University (*Comité Científico y Ético de la Universidad Alfonso X el Sabio*). All participants accessed the questionnaire after their written informed consent had been accepted, and after having their anonymity assured and all their rights protected, pursuant to the Declaration of Helsinki in 2013 (on ethical principles and good research practices).

In order to design the questionnaire, a review of available literature was conducted; those factors believed to be influential in second language learning or foreign language learning by studies on this field were collated. We assumed that the characteristics of the student body may vary depending on the Regional Educational Authority (DAT) under study, ownership model chosen by parents or tutors and schooling stage. In order to ensure that the questionnaire was analysed from the broadest possible perspective, we enlisted the help of a group of 45 teachers (29 women and 16 men). Each teacher represented one of the five DAT in the Community of Madrid (East, West, North, South or Capital), one of the three ownership models currently in place in the same area (state-owned, private or privately-owned but state-funded), and one of the three stages of mandatory schooling (Infant, Primary or Secondary). Finally, in order to ensure that the knowledge of the topic being analysed was as uniform as possible, we decided that the teachers consulted would have an experience equal to or over five years of teaching practise.

The questionnaire was divided into three sections collating interviewees' personal data, factors linked to the agents in the process (student and teacher), and factors linked to the learning structure, organisation and environment. In order to rate the degree of agreement of the interviewees with the items under sections two and three, we used a Likert-type scale, and each statement was assigned a range of values from 1 unlikely to 5 highly likely. We also checked the internal consistency and reliability of the questionnaire by using Cronbach's alfa with excellent results ($\alpha: .886$), which confirmed the existing high correlation between the factors (items) under study. Lastly, we checked the normality of the sample distribution according to the variables measured in order to determine whether there was a need for a parametric approach to confirm the validity and reliability of the data obtained or not. [Table 2](#) shows the scores as the minimum (Min.) and the maximum (Max.), asymmetry (Asym.), kurtosis (Kurt.) and the results of the Kolmogorov-Smirnov (K-S) test and their significance concerning the potential normality of our variables.

Table 2. Normality tests for assessed variables.

	Min.	Max.	Asym.	Kurt.	K-S
Teacher's evaluation of factors related to the student	2.07	4.87	-.193	.168	.046
Teacher's evaluation of factors related to the work of the teacher	2.88	5.00	-.324	-.688	.096**
Teacher's evaluation of factors related to the learning structure and organisation	2.56	5.00	-.059	-.182	.058
Teacher's evaluation of factors related to the learning environment	1.67	4.83	-.124	-.018	.055

*The correlation is significant at the level of 0.05/** The correlation is significant at the level of 0.01.

As can be observed in the results above ([Table 2](#)), concerning the K-S test, only the distribution of the variable *factors linked to the teacher* shows a distribution different to normal. Considering that the other variables show normal distributions and that the number of participants ($N: 216$) is considerable, we must assume normality concerning the study results and, thus, analyse the findings through statistical parametric contrasts.

2.4. Procedure

The initial questionnaire design was completed in March 2016, based on the scientific literature analysed for this study. From April to June 2016, the questionnaire was analysed by a group of five expert educators and investigators. From July to September 2016, the questionnaire was amended to include the suggestions fed back by those educators and investigators. In November 2016, once the changes had been made and the questionnaire had been validated, we initiated its online distribution through *Google Drive's Google Forms*. Finally, in November 2017, we reached the deadline for answers and we started analysing the results obtained. The statistical analysis was performed with *SPSS version 25.0*.

For descriptive statistical analysis we used frequency distribution, arithmetic mean, mode and standard deviation. For statistical inference, we used *Snedecor-Fisher's distribution* and *Student's t-distribution*. Both SF's and Student-t's can be used to establish significant relationships amongst the study's quantitative variables and their categorical and attributive variables through contrasts in mean differences and *One-way ANOVA*.

3. Results

As an initial analysis of the factors used, a *Kaiser-Meyer-Olkin Measure of Sampling Adequacy* was conducted to indicate the proportion of variance of each variable that might be caused by underlying factors. The result obtained (.781) indicates that it may be useful to implement a factor analysis with this data. Nevertheless, according to the *Exploratory Factor Analysis for Structure Detection* it is not advisable to reduce the variables given since a convergence of 13 factors would only explain 52% of the variance, and it would be necessary to reach 29 factors to get a minimum of 90% of variance. Thus, we consider and analyse all the variables assessed as part of the study to describe and analyse the results obtained.

If we continue with the description of the data in general, [Table 3](#) below shows the descriptive statistics (Arithmetic means and their standard deviations) associated with all factors grouped under the four categories examined (final category TOTAL) and a greater specificity to results, reflecting the results achieved in all four categories, whilst considering their combination with the various attributive variables used.

[Table 3](#) shows at a global level how the *Teacher's evaluation of factors related to the work of the teacher* are those considered most influential by the teachers when it comes to second language learning. On the other hand, *Teacher's evaluation of factors related to the learning environment* is considered by the participants in this study less relevant in comparison to the other three categories.

The breakdown of results obtained according to the four categories measured, noticing different attributive variables, shows a limited variability in scores. No specific condition prominently stands out from a low standard deviation and excessively diverges from the rest of the conditions for each set variable, as can be seen in [Table 3](#).

Table 3. Descriptive statistics per category (of factors) considered whilst taking notice of the various attributive variables in the sample.

		FVA	FVP	FVEOA	FVEA
		X (SD)	X (SD)	X (SD)	X (SD)
Teacher's age	Under 30	3.77 (0.43)	4.21 (0.49)	3.94 (0.46)	3.37 (0.6)
	30 to 39	3.68 (0.45)	4.24 (0.5)	3.90 (0.57)	3.40 (0.59)
	40 to 49	3.71 (0.6)	4.25 (0.6)	3.86 (0.6)	3.34 (0.6)
	Over 50	3.68 (0.45)	4.38 (0.47)	3.95 (0.53)	3.27 (0.6)
Teacher's gender	Female	3.69 (0.44)	4.26 (0.46)	3.90 (0.52)	3.36 (0.6)
	Male	3.76 (0.49)	4.21 (0.54)	3.91 (0.47)	3.38 (0.56)
Years of teaching experience	Up to 5 years	3.80 (0.43)	4.30 (0.47)	3.97 (0.53)	3.42 (0.67)
	6–10 years	3.57 (0.46)	4.11 (0.5)	3.88 (0.5)	3.31 (0.49)
	More than 10 years	3.71 (0.45)	4.28 (0.48)	3.88 (0.5)	3.35 (0.57)
Regional Educational Authorities (DAT)	Capital	3.72 (0.4)	4.16 (0.48)	3.85 (0.55)	3.38 (0.54)
	North	3.65 (0.49)	4.22 (0.51)	3.98 (0.53)	3.39 (0.57)
	South	3.68 (0.47)	4.28 (0.39)	3.77 (0.36)	3.20 (0.58)
	East	3.88 (0.33)	4.46 (0.38)	4.00 (0.65)	3.48 (0.58)
	West	3.66 (0.49)	4.25 (0.55)	3.95 (0.53)	3.36 (0.68)
School ownership (at place of work)	State-owned	3.72 (0.46)	4.29 (0.46)	3.94 (0.5)	3.37 (0.63)
	Privately-owned but state funded	3.67 (0.43)	4.09 (0.56)	3.78 (0.53)	3.30 (0.51)
	Private	3.72 (0.43)	4.31 (0.45)	3.95 (0.43)	3.43 (0.51)
Highest level of education taught	Infant education	3.74 (0.43)	4.27 (0.44)	3.85 (0.52)	3.49 (0.58)
	Primary education	3.65 (0.48)	4.26 (0.52)	3.95 (0.54)	3.33 (0.65)
	Secondary education	3.77 (0.42)	4.23 (0.47)	3.89 (0.43)	3.29 (0.46)
Teachers at bilingual school	No	3.73 (0.41)	4.27 (0.47)	3.85 (0.53)	3.43 (0.51)
	Yes	3.70 (0.47)	4.24 (0.49)	3.93 (0.5)	3.33 (0.62)
Language of instruction	Mother tongue	3.74 (0.41)	4.26 (0.48)	3.86 (0.49)	3.41 (0.55)
	Second language	3.67 (0.59)	4.38 (0.45)	4.00 (0.52)	3.40 (0.58)
	Both	3.66 (0.45)	4.16 (0.5)	3.96 (0.54)	3.24 (0.66)
TOTAL		3.77 (0.45)	4.25 (0.48)	3.9 (0.51)	3.36 (0.59)

FVA: Teacher's evaluation of factors related to the student.

FVP: Teacher's evaluation of factors related to the work of the teacher.

FVEOA: Teacher's evaluation of factors related to the learning structure and organisation.

FVEA: Teacher's evaluation of factors related to the learning environment assessed by teachers.

We now proceed to analyse the results in greater detail, by each item measured per category. *Communalities percentage* shows the proportion of variance accounted for in each variable by the rest of the variables as a result of the *Exploratory Factor Analysis for Structure Detection*. *Arithmetic means* and their *standard deviations* are shown for each item, where the scale ranges from 1 to 5 under the Likert scale. As the selection of each participant is seen as a discreet quantitative variable and considering that each participant could only decide on 5 possible results, we also show the

mode as a relevant metric for establishing the most selected score. Lastly, with the intention of visually depicting the trend and curve described for each item, we show the frequency distribution histograms for each option of the Likert scale in the form of bar charts.

Table 4 below shows *Teacher's evaluation of factors related to the student* and Figure 2 shows the histograms (from 1 = 'unlikely' to 5 = 'highly likely' in the X axis and participants count in the Y axis).

Table 4. Descriptive statistics of teacher's evaluation of factors related to the student.

Item	Communalities percentage	Mean	Standard deviation	Mode
Student's age	27.5%	4.06	1.188	5
Student's gender	40.3%	1.34	.749	1
Birth order	43.6%	1.90	1.128	1
Personality (features and traits that define the student)	47.8%	3.74	.993	4
Intelligence (level of cognitive maturity)	42.8%	3.93	.881	4
Level of self-esteem (evaluation of self-worth)	54.5%	4.03	.870	4
Classroom behaviour (presence of disruptive behaviour)	38.2%	3.84	.961	4
Level of linguistic competence in the mother tongue	44.3%	4.10	.937	5
Level of confidence in achieving targeted goals	49.6%	4.11	.779	4
Fear (anxiety) of communicating in another language	43.3%	4.21	.954	5
Motivation for learning the target language (voluntary learning vs. learning forced by circumstances)	40.8%	4.35	.768	5
Level of empathy with the target language	56%	4.09	.903	5
Level of empathy with the monolingual community	51.3%	3.46	1.037	3
Previous language learning experience	35.5%	4.08	.919	5
Strategies developed for target language learning	49.9%	4.23	.767	4
Socio-economic and cultural level of the family background	37.1%	3.64	1.124	4

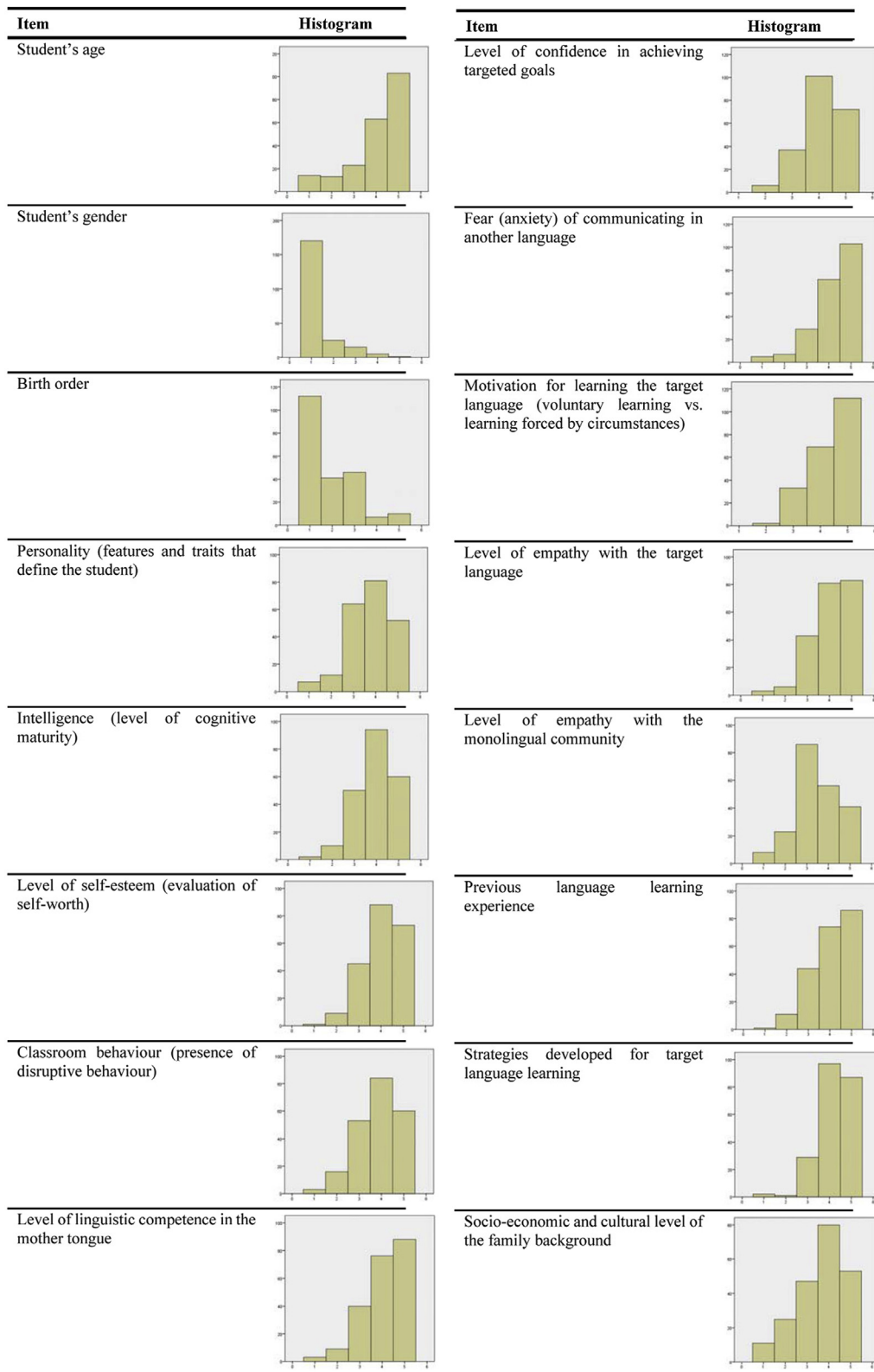


Figure 2. Histograms of teacher's evaluation of factors related to the student.

These results clearly show that the factors considered most relevant are those psychological factors linked to the student's attitude and motivation. The factor most positively related to second language learning is *motivation for learning the target language (voluntary learning vs.*

learning forced by circumstances), followed by *Fear (anxiety) of communicating in another language*. However, the study participants do not deem student attributive variables relevant when thinking of learning a second language. The least relevant would appear to be *student's gender* followed

Table 5. Descriptive statistics of teacher's evaluation of factors related to the work of the teacher.

Item	Communalities percentage	Mean	Standard deviation	Mode
Academic background (university diplomas and specialisation courses)	51.5%	4.05	.931	4
Linguistic input received by the student	53.1%	4.38	.692	5
Communication strategies used (Foreigner talk)	51%	4.34	.677	4
Lesson planning (activities carried out in the classroom or outside the classroom)	56.7%	4.37	.696	5
Use of teaching resources and materials that may be easily adapted to the student's characteristics and to the teaching content.	58.6%	4.50	.668	5
Use of new Information and Communication Technologies (ITCs)	40.9%	3.85	.846	4
Periodic evaluation of programmed objectives	55.3%	3.91	.861	4
Teacher-student relationship	37.1%	4.60	.610	5
Level of linguistic competence in the target language	58%	4.11	.779	5

by birth order. On the other hand, all the items concerning *Teacher's evaluation of factors related to the student* category show a proportion of variance accounted for in each variable by the rest of the variables from 27.5% to 56%, entailing an average degree of individuality and covariance for all the variables.

Table 5 below shows *Teacher's evaluation of factors related to the teacher* and Figure 3 shows the histograms (from 1 = 'unlikely' to 5 = 'highly likely' in the X axis and participants count in the Y axis).

These results clearly show that the factors under the category *Teacher's evaluation of factors related to the work of the teacher* are deemed very relevant by the study participants, as they all show means within the ranges associated with the higher levels of the Likert scale. Particularly, we must highlight *Use of teaching resources and materials that may be easily adapted to the student's characteristics and to the teaching content* with a 4.50 average score and *Teacher-student relationship* with a mean of 4.60. the highest score amongst all items

analysed in this study. On the other hand, all the items regarding *Teacher's evaluation of factors related to the work of the teacher* show a proportion of variance accounted for in each variable by the rest of the variables from 37.1% to 58.6%, entailing an average degree of individuality and covariance for all the variables.

Table 6 below shows *Teacher's evaluation of factors related to the learning structure and organisation* and Figure 4 shows the histograms (from 1 = 'unlikely' to 5 = 'highly likely' in the X axis and participants count in the Y axis).

In relation to *Teacher's evaluation of factors related to the learning structure and organisation*, we can notice how the majority of items are deemed relevant when learning a second language, standing out, in particular, is *Intensity of exposure to the target language*, with a mean of 4.44. However, *In formal contexts, the school's location* shows a mode of 3 and a scatter without a marked trend. Both *'In formal contexts, the size of the school'* and *'In formal contexts, school ownership' (whether state or*

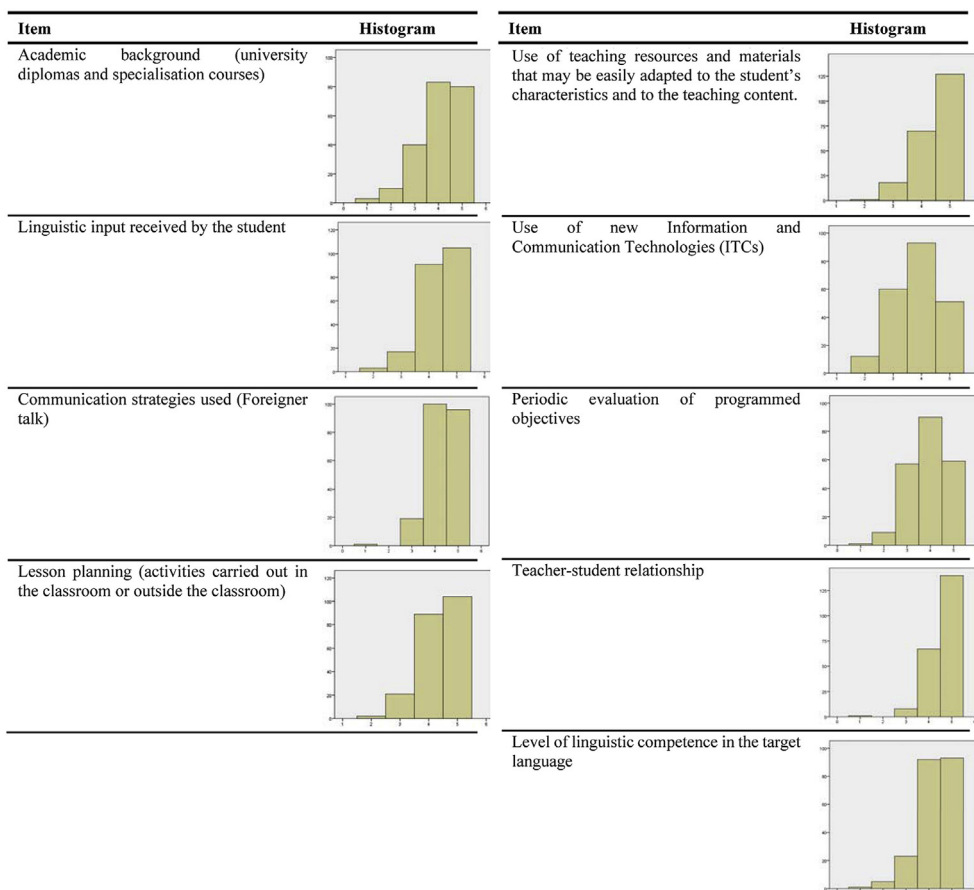


Figure 3. Histograms of teacher's evaluation of factors related to the work of the teacher.

Table 6. Descriptive statistics of teacher's evaluation of factors related to the learning structure and organisation.

Item	Communalities percentage	MeanStandard deviation	Mode
Number of hours of daily instruction	45.1%	4.18 .811	4
Intensity of exposure to the target language	50%	4.44 .713	5
Context where the learning takes place: natural (the student's residing community), formal (school) or a mix of both	34.9%	4.14 .901	4
In formal contexts, school ownership (whether state or private ownership)	58.1%	2.63 1.354	1
In formal contexts, the methodological approach used in teaching (task-based teaching/content-based teaching)	40.4%	4.29 .766	5
In formal contexts, organisation of curricular content	64.6%	4.02 .876	4
In formal contexts, organisation of educational spaces	45.2%	3.67 .949	4
In formal contexts, current level of teacher coordination amongst teachers who deliver in the second language and their mother tongue	54.6%	4.03 .976	4
In formal contexts, the existence of pedagogical advice	59.1%	3.75 1.017	4
In formal contexts, the school's location	60.7%	2.72 1.268	3
In formal contexts, the size of the school	45.4%	2.26 1.112	1

private ownership) are not deemed relevant when learning a second language by most study participants. On the other hand, all the items concerning the *Teacher's evaluation of factors related to the learning structure*

and organisation show a proportion of variance accounted for in each variable by the rest of the variables from 34.9% to 64.6%, entailing an average degree of individuality and covariance for all the variables.

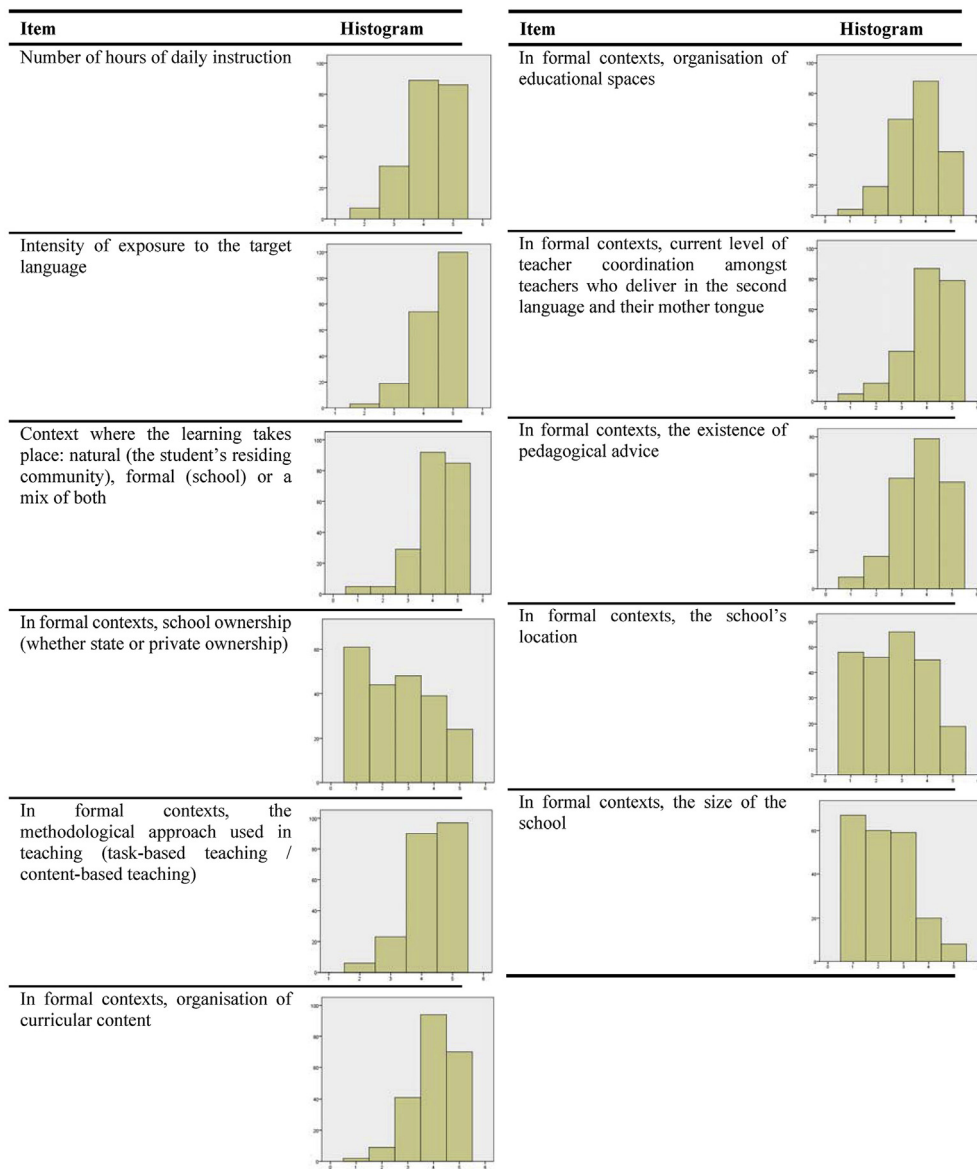


Figure 4. Histograms of teacher's evaluation of factors related to the learning structure and organisation.

Table 7. Descriptive statistics and histograms of teacher's evaluation of factors related to the learning environment.

Item	Communalities percentage	Mean	Standard deviation	Mode
Family's attitude toward the target language	59.8%	4.21	.905	5
Society's attitude towards the target language	70.3%	4.00	.917	4
Institutional attitude towards the target language	69.7%	3.91	.967	4
Phylogenetic proximity or distance between the mother tongue and target language	41.4%	3.51	1.100	3
Coexistence of similar cultural elements	57.7%	3.33	1.095	4
Presence of cultural stereotypes	58.9%	3.17	1.045	3
Historical relationship between mother tongue and target language	49.3%	2.81	1.098	3
Social distance between countries	49.8%	2.67	1.124	3

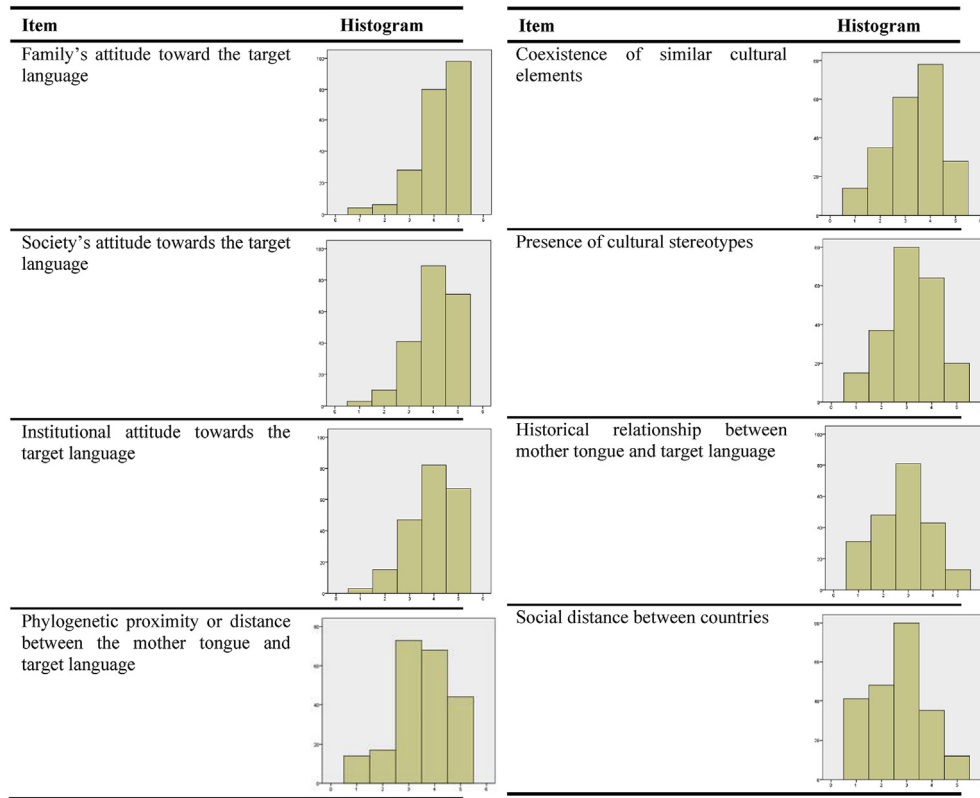


Figure 5. Histograms of teacher's evaluation of factors related to the learning structure and organisation.

Table 7 below shows *Teacher's evaluation of factors related to the learning environment* and Figure 5 shows the histograms (from 1 =

'unlikely' to 5 = 'highly likely' in the X axis and participants count in the Y axis).

Table 8. Mean comparison using ANOVA on teacher's evaluation of factors related to the student according to the different attributive variables under consideration.

Variables	Sum of squares	Degrees of freedom	Root mean square	F	Sig.
Gender	8.205	38	.216	1.097	.336
Teacher's age	.243	3	.081	.402	.752
Years of teaching experience	1.399	2	.700	3.579	.030
Regional Education Authorities (DAT)	1.229	4	.307	1.551	.189
School ownership	.105	2	.053	.262	.770
Teachers at infant education level	.278	1	.278	1.392	.239
Teachers at primary education level	.434	1	.434	2.180	.141
Teachers at secondary education level	.298	1	.298	1.490	.224
Teachers under a bilingual programme	.060	1	.060	.297	.586
Language of instruction	.264	2	.132	.657	.519

*Mean comparison is significant with a confidence level of 95%.

Concerning *Teacher's evaluation of factors related to the learning environment*, we clearly observe how these show the least relevance in respect of second language learning according to the study participants. Nevertheless, the most relevant item in this category is *Family's attitude toward the target language* with a mean of 4.21 and a mode of 5 as it appears to have great relevance for the majority of participants. On the other hand, all the items regarding the *Teacher's evaluation of factors related to the learning environment* show a proportion of variance accounted for in each variable by the rest of the variables from 41.4% to 70.3%, entailing an average degree of individuality and covariance for all the variables.

Having grouped all factors into categories, we proceeded to carry out an inference and correlation analysis. In the first instance, we linked the four categories established with these sample's descriptive variables: teacher's age, years of teaching experience, teacher's gender, school ownership, level of education taught (Infant, Primary, Mandatory Secondary), the modality of programme (bilingual or not bilingual), where the teaching takes place, and language of instruction (mother tongue, second language or both), using an analysis of variance (*One-way ANOVA*). Secondly, we interlinked the established categories with *Paired samples t-tests*, and, lastly, we proceeded to the correlation analysis of the study taking into account the 4 categories with each one another and with the other quantitative variables of the study under consideration (teacher's age and years of experience).

Table 8 below shows the mean comparison for the various attributive variables in the study taking notice of the results by the different items related to *Teacher's evaluation of factors related to the student* using a *One-way ANOVA*.

The only significant result corresponds to *years of teaching experience*. We note that the mean obtained by teachers with 6–10 years of experience ($X = 3.57$) is significantly different to that of more junior teachers with up to 5 years of experience ($X = 3.8$) and to that of the more senior teachers with more than 10 years of experience under their belts ($X = 3.71$).

Table 9 below shows the mean comparison for the various attributive variables in the study taking notice of the results by the different items related to *Teacher's evaluation of factors related to the work of the teacher* using a *One-way ANOVA*.

The only significant result corresponds to *school ownership*. We note that the mean obtained by teachers in privately-owned but state-funded schools ($X = 4.09$) is significantly different to that of teachers in state-owned schools ($X = 4.29$) and to that of teachers in private schools ($X = 4.31$).

Table 10 below shows the mean comparison for the various attributive variables in the study taking notice of the results by the different items related to *Teacher's evaluation of factors related to the learning structure and organisation* using a *One-way ANOVA*.

None of the results obtained under *Teacher's evaluation of factors related to the learning structure and organisation* according to the different

attributive variables under consideration shows significant results. Thus, we can deem this category as not showing any relevant differences according to the variables of the study.

Table 11 below shows the mean comparison for the various attributive variables in the study taking notice of the results by the different items related to *Teacher's evaluation of factors related to the learning environment* using a one-way ANOVA.

The only significant result bears relation to teachers in infant-level education. We note how the mean obtained by teachers in infant education ($X = 3.47$) is significantly different to that of teachers not delivering lessons at infant-level education ($X = 3.29$). Hence, we may consider that teaching at this level of infant education has a significant impact on the relevance under consideration for *Teacher's evaluation of factors related to the learning environment*.

In order to assess the suitability of the 4 categories established hereunder we should take into account their interrelation using *Paired samples t-tests*. If the categories are well designed, the different *Student t-tests* obtained will show a high degree of significance, more than 99%. Moreover, a high significance of the differences shown does enable the determination that the differences shown amongst the different categories are not random and possibly reflect stable differences of consideration amongst the teachers participating in the study.

Table 12 below shows the *Paired Samples t-test* taking notice our 4 categories correlated with one another.

Significance higher than 99% has been confirmed in all contrasts carried out by the *Student t-test*, which tells us of an excellent differentiation amongst the 4 categories established with one another. These differences are significant and, thus, not random, confirming the good initial design of the 4 categories and the differences shown amongst the different categories are stable, not random and symptomatic of the various considerations amongst the participants.

Finally, the existing correlations amongst the 4 categories are measured using *Pearson's r-test* with the intention of assessing how they relate to one another and if there is a significant direct or inverse correlation.

Table 13 below shows the *Paired Samples t-test* taking notice our 4 categories correlated with one other.

As can be seen in **Table 13**, all correlations amongst the 4 categories are direct, high and significant. This confirms great stability in the responses of the study participants. And it confirms a proper questionnaire design.

4. Discussion

The general goal of this research was to dive deep into the existing pre-eminence of those factors that the scientific community has established as determining, to a greater or lesser extent, second language

Table 9. Mean comparison using ANOVA on teacher's evaluation of factors related to the work of the teacher according to the different attributive variables under consideration.

Variables	Sum of squares	Degrees of freedom	Root mean square	F	Sig.
Gender	10.254	38	.270	1.200	.216
Teacher's age	.560	3	.187	.799	.496
Years of teaching experience	1.127	2	.563	2.452	.089
Regional Education Authorities (DAT)	1.917	4	.479	2.101	.082
School ownership	1.597	2	.798	3.509	.032
Teachers at infant education level	.055	1	.055	.235	.628
Teachers at primary education level	.010	1	.010	.041	.840
Teachers at secondary education level	.049	1	.049	.208	.649
Teachers under a bilingual programme	.025	1	.025	.108	.742
Language of instruction	.947	2	.474	2.054	.131

*Mean comparison is significant with a confidence level of 95%.

Table 10. Mean comparison using ANOVA on teacher's evaluation of factors related to the learning structure and organisation according to the different attributive variables under consideration.

Variables	Sum of squares	Degrees of freedom	Root mean square	F	Sig.
Gender	8.205	38	.216	.812	.772
Teacher's age	.227	3	.076	.292	.831
Years of teaching experience	.380	2	.190	.737	.480
Regional Education Authorities (DAT)	1.370	4	.343	1.342	.256
School ownership	.872	2	.436	1.708	.184
Teachers at infant education level	.005	1	.005	.020	.887
Teachers at primary education level	.269	1	.269	1.047	.307
Teachers at secondary education level	.024	1	.024	.094	.759
Teachers under a bilingual programme	.298	1	.298	1.161	.282
Language of instruction	.705	2	.353	1.377	.255

*Mean comparison is significant with a confidence level of 95%.

Table 11. Mean comparison using ANOVA on teacher's evaluation of factors related to the learning environment according to the different attributive variables under consideration.

Variables	Sum of squares	Degrees of freedom	Root mean square	F	Sig.
Gender	11.847	38	.312	.886	.661
Teacher's age	.374	3	.125	.358	.783
Years of teaching experience	.416	2	.208	.601	.549
Regional Education Authorities (DAT)	1.286	4	.322	.931	.447
School ownership	.382	2	.191	.551	.577
Teachers at infant education level	1.739	1	1.739	5.140	.024
Teachers at primary education level	.378	1	.378	1.096	.296
Teachers at secondary education level	.418	1	.418	1.215	.272
Teachers under a bilingual programme	.516	1	.516	1.500	.222
Language of instruction	1.073	2	.536	1.564	.212

*Mean comparison is significant with a confidence level of 95%.

Table 12. Paired t-test taking notice of our 4 categories correlated with one another.

	FVA	FVP	FVEOA	FVEA
Teacher's evaluation of factors related to the student	-	-16.219**	-5.536**	9.040**
Teacher's evaluation of factors related to the work of the teacher	-16.219**	-	10.641**	21.271**
Teacher's evaluation of factors related to the learning structure and organisation	-5.536**	10.641**	-	14.620**
Teacher's evaluation of factors related to the learning environment	9.040**	21.271**	14.620**	-

FVA: Teacher's evaluation of factors related to the student.

FVP: Teacher's evaluation of factors related to the work of the teacher.

FVEOA: Teacher's evaluation of factors related to the learning structure and organisation.

FVEA: Teacher's evaluation of factors related to the learning environment.

*Student t-test is significant at 0.05/**Student t-test es is significant at 0.01.

Table 13. Correlations amongst the 4 categories under consideration in the study against one another.

	FVA	FVP	FVEOA	FVEA
Teacher's evaluation of factors related to the student	-	0.444**	0.402**	0.441**
Teacher's evaluation of factors related to the work of the teacher	0.444**	-	0.538**	0.357**
Teacher's evaluation of factors related to the learning structure and organisation	0.402**	0.538**	-	0.513**
Teacher's evaluation of factors related to the learning environment	0.441**	0.357**	0.513**	-

FVA: Teacher's evaluation of factors related to the student.

FVP: Teacher's evaluation of factors related to the work of the teacher.

FVEOA: Teacher's evaluation of factors related to the learning structure and organisation.

FVEA: Teacher's evaluation of factors related to the learning environment.

*Correlation is significant at 0.05/** Correlation is significant at 0.01.

Table 14. Degree of percentage agreement attributed by the participants to the different factors per category.

Factors related to the student	The strategies developed for target language learning (85.2%) The motivation for learning the target language (83.7%) The fear of communicating in another language (81%) The level of confidence in achieving targeted goals (80.1%)
Factors related to the teacher	Teacher-student relationship (95.8%) Use of appropriate teaching resources and materials (91.1%) Communication strategies used (90.7%) Input received by the student (90.6%) Lesson planning (89.2%) Level of linguistic competence in the target language (86.1%)
Factors related to the learning structure and organisation	Intensity of the exposure to the target language (90.4%) Methodological approach used in teaching (85.9%) Number of hours of daily instruction (81.8%) Context where learning takes place (81.7%)
Factors related to the learning environment	Intensity of the exposure to the target language (82.3%)

teaching-learning, from the perspective of educators in the Community of Madrid in Spain.

The relevance of quantifying the importance attached to these factors lies in the possibility of converting them into useful tools capable of improving, in an academic context of formal instruction, the process of acquiring a second language (Levesque et al., 2017).

To that end, we have analysed as specific goals the degree of relevance shown by the factors linked to the student, the teacher, the learning structure and organisation, and the learning environment.

The analysis of the percentage of agreement attributed by the participants to the different factors that constitute each one of the established categories (considering levels 4 and 5 of each item of the Likert 1–5 scale as those valued as ‘in agreement’ by the participant when measuring the relevance of each factor) has allowed us to arrange their level of influence by order of importance. Moreover, the study has enabled us to accordingly state that 15 out of the 44 factors examined have more than 80% of participants in agreement with the relevance of every factor (see Table 14 below). The strategies developed for target language learning is the factor that gains greater agreement out of all the factors related to the student (85.2%). The teacher-student relationship, on its part, is the one reaching the highest agreement out of the factors related to the teacher (95.8%). The intensity of the exposure to the target languages is the highest amongst the factors related to the learning structure and organisation (90.4%). Finally, the family's attitude toward the target language achieves greater agreement out of the factors related to the learning environment (82.3%).

Furthermore, the degree of percentage of agreement attributed to each of the factors examined has allowed us to also state that, for ninety percent of teachers, the factors linked to the work of the teacher (Cochran-Smith and Zeichner, 2005; McKinsey Report, 2017) – whether directly or indirectly through its structuring and organisation in the classroom (Long, 2017; Richards, 2015; Saville-Troike and Barto, 2016) – would be amongst the most preeminent positions out of the 15 factors examined as the most significant. This result is confirmed when performing the correlation analysis, where the mean of the *Teacher's evaluation of factors related to the work of the teacher* ($M = 4.25$) reaches a value noticeably higher to the rest of the means of the factors grouped under the other three categories. That is to say, for *Teacher's evaluation of factors related to structure and organisation in the classroom* ($M = 3.91$); for *Teacher's evaluation of factors related to the student* ($M = 3.71$) and for *Teacher's evaluation of factors related to the learning environment* ($M = 3.36$).

Although nowadays there is broad consensus concerning the involvement of these factors when acquiring a second language, should there be any discrepancy regarding the significance obtained, it is the teacher's perception of the quality of their academic performance, of their competence in social and institutional relations and their knowledge of the family environment the element that could positively or negatively condition the results obtained (Beltrán-Arias, 2015; Rao, 2016).

However, the hierarchy established and the relevance that this group of factors has for the teacher are widely justified if we think that, in today's society, the teacher's role and pedagogical practice have had to be transformed to adapt to new educational requirements (Duff, 2019) – where the student is considered a user-apprentice of the language (Bueno and Steffen, 2018). Furthermore, the teacher is considered a mediator responsible for planning curricula content (Escobar, 2015) and for facilitating contexts for the student to practise the thing learned (Alcaraz-Marmol, 2018; Cordero and Gil-Izquierdo, 2018). Moreover, the teacher's role and pedagogical practice have had to be transformed to adapt to a multiethnic and multicultural society that has forced curricula modifications aimed at ensuring access to learning opportunities for foreign schoolchildren (Verdeja-Muñiz, 2018; Yuan, 2018).

If we move forward in the analysis of the data and look at the significance attributed to each of the items that make up the group of factors linked to the work of the teacher, we observe that teachers give greater importance to those factors directly related to the needs of the student (Herrera-Torres and Mohand, 2017), and the skills and resources needed in order to address the classroom activity: teacher-student relationship, use of adequate teaching resources and materials for learning, communication strategies used, and linguistic input received by the student (Vives, 2016). They do not attach as much significance to those factors related to the teacher's individual activity (lesson planning, linguistic competence in the target language (Good and Lavigne, 2017), academic background, and evaluation of targeted goals.

A report prepared by the Cervantes Institute (2011) designed to find out teachers' and students' beliefs concerning the question *What does it mean to be a good teacher in teaching Spanish as a foreign language?* can be used here as a reference in order to compare these data.

The results of the Cervantes Institute reflect that, for the teacher, teaching-centred characteristics are those that obtain a higher rating (62%), followed, in order of importance, by personal characteristics (19.6%), the ability to work as a team (7.3%), institutional commitment (6.3%) and cultural sensitivity (4.8%). Among the characteristics focused on teaching, the importance of good training (33.1%) and promoting student-centred teaching (26%) constitute the most outstanding qualities, followed, at a considerable distance, by professional development (18.1%) and management of the learning process (12.8%). The least valued qualities would be the ability to adapt (7.5%), teaching experience (1.4%) and the ability to promote values (1.1%). As can be seen, the two studies assign the highest level of significance to the skills, resources and characteristics needed by the teacher to approach teaching activity in the classroom. In this respect, teaching focused on the needs of the student, expressed through their different facets, is regarded as one of the most prominent features in both studies.

On the other hand, the results obtained regarding the teacher's academic training differ. The present study (and when categories are compared globally) shows a significantly lower degree of significance (74.5%). However, the results appear similar when we analyse the

Cervantes Institute items under *training* as a category in isolation; where even if it is true that 71.0% of teachers think that 'being properly trained concerning contents' is important, only 3.2% of those interviewed attach the same significance to the concept of 'being up-to-date'.

In our view, the low level of significance obtained by teachers' academic training contrasts with the current conception of a knowledge-based society where education and lifelong learning become key elements to face current social challenges (Bayraktar, 2018; Fandiño, 2017; Fleta, 2016; Yolcu and Dimici, 2020). According to the McKinsey Report (2010), lifelong learning must be part of the teaching personnel's specific competencies profile, and it is essential in order to maintain one's knowledge fresh, to ensure success in the practice of education and to secure the level of education of any given country. Furthermore, even if this did not constitute sufficient motivation, there are more and more voices from the business sector ringing the alarm as to the differences they see in a graduate's training and the high level of professional specialisation that the labour market requires (Hernández and Serrano, 2018). Consequently, we wish to educate for the future; the qualification of teaching staff and their need for lifelong training will have to adapt to the requirements of this new knowledge society and become, in practice and not just in theory, as the results of our study appear to point out, an essential characteristic of their skills profile [8–10]. Likewise, another striking matter in the Cervantes Report (Cervantes Institute, 2011) would be the low degree of significance that teachers attach to digital literacy (8.6%) and, in our study, to the use of ICTs in the teaching-learning process (67%).

The latest review by the Cervantes Institute on what must be the 'key skills of the second language and foreign language teachers' (Cervantes Virtual Center, 2012), encourages teachers to use ICTs to carry out their jobs and urges them to involve themselves in developing their own digital literacy, their own navigation of digital spaces and in learning the use of available software applications and to harness the teaching potential of ICTs (p. 11). Taking notice of such guidelines and assuming that educators are aware of the increasing digital transformation in education and of the gradual integration of new technologies into the curriculum (Üstün and Dimililer, 2017; Villegas et al., 2016), it would seem a priority to bring forward new studies aimed at determining which are the underlying drivers for the seeming disagreement between the scientific community recommendations and actual teaching practice. In this respect, authors and institutions are already starting to indicate some of the possible reasons for such disagreement. Those reasons being: a clear technological gap between teachers and students (Chun et al., 2016); the absence of palpable improvement in the areas of reading, mathematics and science; disparaging results obtained (concerning learning optimisation) depending on who is handling the technological tool, students or teachers (McKinsey Report, 2017); rejection of a progressive dehumanisation of education or the fear that education online may subtract value away from face-to-face student training (Kear et al., 2020). Nevertheless, and despite such realities, it seems clear that if education, digital literacy and ITCs become components in the pillars that support this new knowledge society (Van Hove, Vanderhoven and Cornillie, 2017), the teacher must integrate educational technology in his professional skills profile accordingly, and must defend the incorporation thereof into different education models and learning environments where there is teacher presence.

The degree of agreement amongst the participants regarding the factors related to the student shows that the strategies developed for target language learning and the motivation to learn that language are the most preeminent factors within this category. Even though those factors relate to the key figure that plays the teaching-learning process, only about 20% of the teachers participating in the study give it a lower degree of importance than the factors included in other categories. We can find the explanation to this fact within the European Framework of Reference for Languages: Learning, Teaching, Assessment –CEFR– (Council of Europe. Council for Cultural Co-operation. Education Committee. Modern Languages Division, 2001). In item 6.2.2 on 'How do

learners learn?' the framework talks about the lack of consensus amongst teachers on how learners learn. According to the CEFR (Council of Europe. Council for Cultural Co-operation. Education Committee. Modern Languages Division, 2001), although there are some teachers that consider that the human information-processing abilities are strong enough for acquiring a language and use it for understanding and production, others believe that without appropriate exposure to the target language and active participation in communicative interaction it is not possible to reach language development. A minority believes that students will be able to understand and use the language in the light of their previous experience and common sense provided they have previously learnt the necessary rules of grammar and required vocabulary. Bearing in mind the difference of opinions, it could be said that whilst for some teachers students only need to be given a linguistic environment rich enough to enable learning without academic instruction, others believe that students need to have linguistic material and opportunities to interact in the target language. Finally, a small group of teachers believes it is enough for students to do repetitive exercises in the target language.

Although this disparity of beliefs would justify by itself the lower degree of relevance obtained by the factors included in this category, there could be another reason to support the teachers' feelings.

Cohen (2005) defines the learning strategies as those mental processes and behaviours that the student uses consciously and on purpose to understand and learn new information. Those strategies include four aspects: cognitive, focused on memorising vocabulary and grammatical structures of the target language; affective, aimed to reduce the fear and anxiety and promote self-confidence in the achievement of the goal set; social, focused on fostering the interaction with native speakers in real environments; and meta cognitive, with the purpose of designing and monitoring the appropriate use of the other three strategies (Feng, 2019). Based on this idea and placing it in an environment of formal tuition, such as schools, we could assert that the degree of control teachers have on the development of learning strategies is quite limited and, therefore, their interest on promoting their development in the student may be conditioned, thus subjected to other factors where their contributions show more visible results.

Something similar could happen with the motivation to learn if we think that this depends on the student's own desire to learn, the effort s/he is willing to make, and the concurrence of an appropriate social and cultural environment (Hiver and Al-Hoorie, 2020). Hence, it is not about a teaching technique or method that a teacher can plan or assess, but a continuous process focused on the needs and interests of the learner. In this process the teacher only acts as a facilitator of the process, encouraging curiosity, reflection and critical thinking, at the same time as designing learning environments that, making the most of the previous experiences of the student, awake their interest to acquire new knowledge.

As for the factors linked to the learning structure and organisation, it is observed that more than 90% of the teachers that participated in the study believe the intensity of the exposure to the target language is a key aspect in the teaching-learning process of a second language and, in accordance with former scientific literature, they give that factor a higher percentage value as compared to the other factors included in this category. This belief does not seem to have changed in the last forty years. At the beginning of the eighties, authors such as Krashen, Stern, Lightbown or Spada, already proposed replacing the traditional teaching focused on formal aspects of the language, grammatical correction and the high number of hours of exposure to the target language, with a new model based on the exposure of a learner to quality input, comprehensible, more intense and adapted to their level of linguistic competence and that may promote the use of language in an interactive manner (Juan, 2008; LaScotte and Tarone, 2019).

As for the epistemological approach taken on in the centre's educational model, it is observed that nearly 86% of the participants in this study believe that the educational approach used in the teaching of a second language is a relevant factor, which correlates with former

observations. Contrary to expectations, nearly 14% of the participants regard this factor as not very relevant when we consider that specialised literature has given relevant importance, during the 20th century, to the study of authors such as Pávlov, Thorndike, Skinner, Bandura, Piaget, Vygotsky, Bruner, Ausubel, Gardner or Gagné, to mention but a few, and their theories on the teaching-learning process of a language (Hong and Mendoza, 2020; Long, 2017; Richards, 2015; Saville-Troike and Barto, 2016). This fact could be related to two circumstances: the knowledge, understanding and perception that teachers acquire during the training on how a second language should be taught (Johnson, 2017; Fandiño, 2017), and the acquired experience during the teaching practice to the way learners learn and interact with the teacher (Bayraktar, 2018).

Contrary to previous studies, the level of agreement with the context where the learning takes place ends up in the fourth place in the ranking following the participating teachers' viewpoint, below the methodological approach or the number of daily hours of instruction. In this regard, it should be noted that since the nineties the semi-immersion context based on the integrated learning of content and foreign languages is part of the EU's alternative to promote multilingualism amongst citizens in formal teaching contexts (Alcaraz-Mármol, 2018). This may be due to two reasons, first, because they meet three key premises: to ensure a high level of exposure to the target language without the need to increase the teaching hours, to enable the development of communication skills by creating language practice opportunities in different situations and to encourage academic skills in the target language (Hong and Mendoza, 2020; Juan, 2008). Secondly, because although they do not guarantee the mastering of the target language, they increase, instead, the student's linguistic competence and cultural awareness and promote the students' self-confidence, independence, and the development of learning strategies (Oxford, 2016; Rao, 2016).

At this point, and before ending this discussion, it is necessary to cast our glance over one of the results arising from the study and that is the importance that infant schoolteachers give - exclusively - to the learning environment.

Although at first this may surprise the reader, for being contradictory as an outcome compared to what we have set forth thus far, this result seems logical if we take into account that children and adults learn differently (Caballero and Milla, 2018; Fleta, 2016). Whilst adults tend to base their learning on reasoning and on the follow-up of methodological proposals that offer the rigid planning of knowledge; children, on the other hand, need natural learning, where a structured investigation and stimuli received from the surrounding environment constitute the main source of learning (Caputo, 2014; Hartshorne et al., 2018; Steffen, 2015). Therefore, formulating a stimuli programme according to child ages (Tomlinson, and Masuhara, 2017) and fostering an environment that favours a positive attitude towards learning and towards achieving set goals (Cook, 2016; Painter, 2015), are singularities and two of the main attitudes for the foreign language teacher at infant-education level (González, 2018).

5. Conclusions

Nowadays we accept that teaching-learning processes taking place in schools are complex, multidimensional and dynamic. They do not work in isolation and they are subject to internal and external factors (Dewey, 1986; Rivkin et al., 2005). Furthermore, due to their closeness to families and their role in the education and training process of our children, the teachers' opinion is a point of view that must be valued when explaining the educational performance and designing pedagogical strategies focused on the learners' needs and requirements (Valenzuela et al., 2016).

Based on those two premises, the research here presented focused on establishing the pre-eminence of the factors identified by scientific literature in terms of how they condition the teaching-learning process, the learning and the effective use of a second language in the formal

context of a school, using the teacher's opinion as the guiding thread of the research.

The analysis of the results obtained in the four categories studied: factors related to the teacher, factors related to the student, factors related to the learning structure and organisation in the classroom, and factors related to the environment, allow us to draw the following conclusions:

- Factors related to the teacher (P):
 - They are the most preeminent group.
 - The teacher-student relationship, the use of teaching resources and materials appropriate for the learning process, the communication strategies used, the linguistic input received by the student and the lesson planning are, in this order, the group of factors that receive a greater degree of importance.
 - Practically all the participants believe that the teacher-student relationship is the most relevant factor of those included in the four categories.
 - The teachers award greater importance to factors directly related to the student's need and the skills and resources needed to perform the activity in the classroom, and consider factors directly related to their individual activity as less important.
 - The teacher's skills and lifelong learning are not relevant factors according to 25.5% of the participants.
 - The use of ICT in the classroom is not considered a relevant factor in the teaching-learning process of a second language according to 33% of the participants.
- Factors related to the student (A):
 - The factors linked to learning were given a lower degree of relevance than those linked to teaching.
 - The strategies developed for target language learning and motivation for learning the target language were, in that order, the most preeminent factors within that category.
- Factors related to the learning structure and organisation in the classroom (E/O):
 - The intensity of the exposure to the target language and the methodological approach used in the teaching were, in that order, the most preeminent factors in that category.
 - The study's participants believe that in the teaching-learning process of a second language, the intensity of exposure to the target language is more important than the number of daily instruction hours.
 - The degree of relevance that the participants gave to the intensity of the exposure to the target language puts it in fourth place and, when placed in the general ranking of all the factors analysed, it reached a similar result to the previous three: the use of appropriate teaching resources and materials for the learning, the communication strategies used and the input received by the student.
 - The methodological approach used in the teaching of a second language is not a relevant factor according to 14.1% of the participants.
 - A total of 18.5% of the participants believes that the existing semi-immersion context present in the classrooms in the Autonomous Community of Madrid, based on the integrated learning of content plus a foreign language, is not a relevant factor in the teaching-learning process.
- Factors related to the learning environment (EA):
 - They are the least preeminent group.
 - The family's attitude toward the target language is a relevant factor exclusively for the participants that develop their activities in infant school.

Based on the conclusions obtained for each of the specific objectives set we can assert that, from the teacher's perspective, the factors that the specialised literature considers capable of conditioning the teaching-learning process of a target language are still in force today, despite

the social, political and economic changes that took place with the turn of the century.

However, given that the pre-eminence of those factors was only based on the perspective of teachers from the Autonomous Community of Madrid in Spain and that the conclusions of the study indicate that factors related to the teacher are the most relevant within that process, it should be proposed that before mentioning the potential pedagogical implications, new studies that include the participation of other stakeholders in the educational process (families, students, representatives of the educational administration and specialised support personnel, language assistants, educational psychologists, speech therapists or social educators), must be conducted in order to be able to extrapolate the information available and to compare results. Moreover, it is advisable to use at least two or three tools and data triangulation in order to establish more efficiently their influence level based on specific variables linked to the learning of a second language (academic results, interest, motivation, among others).

Finally, the results obtained also reveal situations whose analysis, due to space limitations, has not been addressed in depth and that, we believe, they may open the door to future lines of research in this field. For instance, why in a society focused on innovation and knowledge teachers should attach such little importance to lifelong learning? why in a society so dependent on social networks and digital technology the use of ICT has such a low level of significance? or why only teachers who are practicing teachers within the infant education space must consider the learning environment a relevant factor?

Declarations

Author contribution statement

A. Arigita-García: Conceived and designed the experiments; Performed the experiments; Contributed reagents, materials, analysis tools or data; Wrote the paper.

R. Sánchez-Cabrero: Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

A. Barrientos-Fernández, L. Mañoso-Pacheco, F. J. Pericacho-Gómez: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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