

Research article

Music and English Language. State of Art about their connection through Prosody

Música y Lengua Inglesa. Estado de la cuestión sobre su conexión a través de la prosodia

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Abstract

Introduction: Considering a fact that music and a given language are different manifestations of language and that both take sound as their basic constitutional element, to highlight the existing research gap in this area and to reinforce the conception of music as a language is intended. Moreover, given the benefits that many authors state regarding the learning of oral skills in EFL, the need to cultivate aural and vocal education is also considered. **Methodology:** A parameterized bibliographic review following the PRISMA protocol on the material published in relation to the application of the musical element to the teaching of English as a Foreign Language (EFL) in a Spanish-speaking context is presented. **Results:** After the documentary analysis, it has been confirmed that only fourteen publications were selected based on: The year of publication, how the inclusion of the musical element is proposed, the attention to prosodic issues, the type of participants, the

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methodology used, and the impact of the study related to the object of study. **Conclusions:** Despite confirming the similarities between musical language and common language, the existence of a research gap in this type of publications is demonstrated.

Keywords: prosody; music; EFL; didactics; Spanish; English; auditory education; vocal education.

Resumen

Introducción: partiendo de la premisa de que música y una determinada lengua son distintas manifestaciones del lenguaje y que ambas toman el sonido como elemento constitucional básico pretendemos evidenciar el vacío académico existente en esta línea temática y reforzar esa concepción de la música como lenguaje y transversalmente, constatar la necesidad de cultivar la educación auditiva y vocal, dados los beneficios que muchos autores manifiestan respecto al aprendizaje de destrezas orales en el inglés como lengua extranjera. **Metodología:** se realiza una revisión bibliográfica parametrizada siguiendo el protocolo PRISMA de los estudios publicados en relación con la aplicación del elemento musical a la enseñanza del inglés como lengua extranjera dentro de un contexto hispanohablante. **Resultados:** tras el análisis documental se ha constatado que tan solo 14 publicaciones seleccionadas de acuerdo con: el año de publicación, cómo se plantea la inclusión del elemento musical, la atención a cuestiones prosódicas, el tipo de participantes, la metodología empleada y la repercusión que la publicación tiene en relación con el tema objeto de estudio. **Conclusiones:** pese a confirmarse las similitudes entre el lenguaje musical y el lenguaje común, se demuestra la existencia de un vacío considerable en este tipo de publicaciones.

Palabras clave: prosodia; música; EFL; didáctica; español; inglés; educación auditiva; educación vocal.

1. Introduction

There are numerous authors that confirm that music is a language on a par with any other language –Blacking 1974, Chomsky 1968, Lewis 1993, etc.– and this is even more evident if we look at the early stages of development in children and the acquisition of a mother tongue. Thus, as Alonso-Jartín and Chao-Fernández (2018) maintain, the main traditional methods for teaching music consider that language and music do not constitute separate fields for the child so they must be presented and developed at the same time, taking into account the developmental stages of the learner.

In addition, there is an inevitable “direct contact with the constituent elements of music before any literacy” (Rosa Napal & Romero Tabeayo, 2015, p.1) that children have since they begin to interact with their environment. Hence the need for early and continuous exposure to certain language patterns to ensure their correct assimilation: “it appears that early exposure to phonemic categories is crucial in acquiring at least this complex system (or it may be that such complex patterns need lots of input to form)” (Kiesling, 2011, p. 15).

It seems then necessary to state widely that in language teaching –more specifically in regard to foreign languages (FL)– music education should play a more relevant role due to the closeness of both languages morphologies; and this is what experts such as Speh & Ahramjian (2010) state in relation to the acquisition of a foreign language: “Borrowing from each other’s methodologies, teachers can help students create meaningful connections that exploit the ‘music’ of language, as well as the ‘language’ of music” (p. 42).

This is not an isolated finding, neither the assertion that music has the status of a language –Bartoli's comparative study (2022) highlights the numerous similarities found between music and language, and concludes that “music is a language” (p. 88)– nor the benefits derived from aural-vocal training in foreign language acquisition:

Results confirm that music training favours the learning of a L2 and suggest that this research should be pursued further to find out through what kind of methodology music learning can benefit L2 learning, which can lead to the improvement of learning in both disciplines [Own Translation]. (Bartoli, 2022, p. 64).

There is a general agreement when it comes to linking phraseological games with the learning of English grammar (Garcia Rosa, 2023), but discrepancy arises when it has to do with the choice of which methodology should be used to highlight this conclusion (Couto-Cantero, 2020). However, all proposals revolve around the consideration of the ear as the main organ for the developing of communicative skills in spoken discourse:

(I)f Stephen Krashen were [sic] right [...] it would mean that the most useful thing we could do with students would be to expose them to large amounts of comprehensible input in a relaxed setting. [...] If we want students to be effective at spontaneous communication, comprehensible input would be enough. (Harmer, 2015, p. 51).

Claiming thus, directly or indirectly, the importance of auditory education (Chao-Fernández *et al.*, 2018) must be considered. This literature review is articulated within a larger project that considers the relative ease with which both professional and amateur musicians find it easier to, not only to reproduce certain oral patterns or schemes in a foreign language, but also to recognise and interpret them.

This project aims to establish a relationship between the prosodic elements of a language (English) –pitch range, accentuation, rhythm, and phonetics– and their counterparts in relation to the physical qualities of sound –tone, intensity, duration, and timbre–; based on cross-linguistic similarities and their application to foreign language speech production using aural and vocal education as vehicular tools.

Prosody is understood as the “phonetic and phonological study of the elements bigger than the phoneme like syllables or other groups from a word or sentence [Own Translation]” (Real Academia Española [RAE], 2023); meaning this that *prosody* worries about the most musical part of a language. Thus, as Mualem & Lavidor (2015) corroborate in their research: “(W)e compared musicians, who had undergone long-term music training, to non-musicians regarding their vocal emotion recognition. The results from experiment1 reveal that short-term music intervention [...] significantly improved the vocal emotion recognition of the participants” (p. 413).

Therefore, the necessity of this study and the importance of finding alternatives to the traditional work on oral production in English lies in the fact that mistakes in prosodic features occur even among native speakers; and that is what Overton (2008) states when he says that there is a “widely shared belief among higher education teachers that the knowledge of prosody is important, and an equally widely shared perception that most students begin higher education without it” (p. 266).

However, as Kiesling (2011) mentions, very little research has been carried out on these prosodic issues, also known as suprasegmental variables: "Suprasegmental variables are most often pitch contours or intonation, and very little work has been done to them" (p. 15); although it is true that alterations in the listener's perception of music or prosody are already medically recognised and terminologically coined as *aphasia* or *amusia*.

Using thus various tests and scales including the Montreal Battery of Evaluation of Amusia (MBEA), it is concluded that "there was a clear association between prosody perception and music perception, especially in the domain of rhythm perception" (Hausen *et al.*, 2013, p. 1).

The main objective is to highlight the existence of a research gap in the study of the prosodic issues of a language in relation to the intrinsic qualities of sound; that is, the attention to sound itself through aural and vocal education as a facilitating tool in the teaching-learning process of a foreign language. Thus –and as part of a second objective linked to the previous one– this research also seeks to reinforce the "identification of common specific elements to the two disciplines that can constitute a tool to enhance the level and quality of their learning [Own Translation]" (Bartoli, 2022, p. 88).

This fact is mentioned by many authors when comparing the musical language with the common language and it supports this interlinguistic equivalence. In addition, it will be shown to what extent the use of the musical element in the teaching of EFL in a Spanish-speaking context can be considered scientifically beneficial attending to the opinion of experts.

2. Method

In order to achieve both objectives, a bibliographic review was carried out, which according to Espiñeira-Bellón & Rebollo-Quintela (2017) consisted of "a set of precise information on a given subject which, in order to be able to communicate a series of results in a systematic and organised way, requires a process of exhaustive search and interpretation of the various documentary sources [Own Translation]" (p. 1).

Therefore, research has taken place looking for those works linking music education with the learning of EFL from numerous approaches; however, they all have been oriented to a group of Spanish-speaking subjects. Hence, a parametrized search has been done according to the Preferred Reporting Items for Systematic reviews and Meta-Analyses protocol (PRISMA).

From all of them, a selection has been made based on a series of three criteria to compare these studies on equal terms and in accordance with six aspects related to the subject matter of our line of research. There are thus three requirements for the inclusion of such works considering the purposes of this research:

- That they focus on teaching English as a Foreign Language (EFL).
- That they consider to some extent the influence of music education.
- That the research participants are native Spanish speakers.

Summarizing, in response to objectives 1 and 2, this literary review will also assess to what extent the use of the musical element in the teaching of EFL in a Spanish-speaking environment can be considered scientifically beneficial and what are the variables that condition –in favour or against– such assimilation.

The first two databases consulted were the prestigious Web of Science (WOS) and Scopus; through the university library of the Universidade da Coruña (UDC). Below there are 5 keywords selected to enter in the search engine –music, prosody, education, English and Spanish– and the different volume of results obtained depending on the combination of these words in each database.

It should also be pointed out that works prior to 1985 have been discarded, since it was in that same year when the Spanish *Ley Orgánica del Derecho a la Educación* (LODE) came into force; a document that regulated for the first time in Spain the teaching of music in primary and secondary education, conservatoires and music schools.

From the six final results obtained in Web of Science, only two are noteworthy for their proximity to the object of study. On the one hand, Lorenzo *et al.* (2014) contemplates the positive influence of music on language acquisition of a mother tongue (L1) and not of English among Spanish-speaking subjects (p. 527).

On the other hand, Vangehuchten *et al.* (2013) compares the musical aptitudes of their focus group at the perceptual and productive levels by means of tests to conclude that “statistical analysis using Pearson's correlation coefficient shows a positive correlation between musical skills and foreign language pronunciation competence” (p. 5713).

However, it takes place among a group of Belgian students of Spanish as a foreign language. The results obtained are shown in Table 1.

Table 1.

Results after consulting WOS and Scopus

Keywords	Results	
	WOS	SCOPUS
“Music”	366.586	187.148
“Music” + “education”	29.615	18.443
“Music” + “prosody”	528	471
“Music” + “prosody” + “education”	55	16
“Music” + “prosody” + “education” + “English”	54	3
“Music” + “prosody” + “education” + “Spanish”	6	0
“Music” + “prosody” + “education” + “English” + “Spanish”	6	0

Source: own elaboration (2024).

As for the results obtained in Scopus, it is worth highlighting the work carried out by Danaci *et al.* (2022), which is a qualitative study of the songs included in English textbooks from the Turkish education system and which focuses on the students' aural and vocal development, as well as on the presence of alleged prosodic flaws that would hinder their assimilation (p. 1011).

Applying the 3 restrictions mentioned in the previous section

- 1) –the subject matter of English as a foreign language;
- 2) including the musical element;
- 3) using native Spanish-speaking participants–

and also through the consultation of three other databases such as Dialnet and the libraries of the UDC and the associated centre UNED in A Coruña; we obtained a preliminary list of 14 works or sources that form our compilation dated between 2006 and 2022.

After a thorough reading of each document, it was decided that 6 factors would be contemplated for the subsequent comparative analysis of these documents. The following list offers a brief explanation of the reasons for the selection of these 6 key aspects:

- I. Year of publication of the article/paper to consider the *curricula* and the relevant educational law in force at the time in Spain.
- II. If the study proposes the inclusion of the contents from the music subject in the English classroom (A), the linguistic immersion in English of the music contents (B) or an interdisciplinary proposal that combines both (A+B); being able to determine if both subjects are treated on equal terms (complementary) or if, on the contrary, one of them is used as a vehicle subject to improve the teaching-learning processes of the other one. This strengthens, for example, the so-called OPERA hypothesis or Opera Theory, which states that “when music and speech share sensory or cognitive processing mechanisms in the brain [...] neural plasticity is activated and makes lasting changes in brain structure and function which impact speech processing” (Patel, 2014, p. 98).
- III. Whether the author(s) mentions any special attention to prosodic features and, if so, in relation to the physical qualities of sound and aural-vocal education; demonstrating thus that specific auditory discrimination or phonetic production exercises that contribute to the improvement of spoken discourse skills by students are not usually implemented in the English classroom. This would validate the words of Nayak *et al.* (2022) when they refer to aural recognition of rhythmic patterns in speech as follows: “Psychometric analyses in a large internet-based sample shows excellent reliability, and predictive validity for self-reported difficulties with speech-language, reading, and musical beat synchronization” (p. 1).
- IV. The role (pupils/teachers/both) and the educational level (pre-school/primary/secondary/university) of the sample to find out upon which specific subjects the focus of the research has been recently rested.
- V. The type of research methodology used to draw the conclusions: qualitative, quantitative or mixed.
- VI. The actual impact of the results obtained and the authors' personal assessment. This is presented in the form of a brief quotation summarising the conclusions reached at the end of the study and the nomenclatures *positive* or *negative* are used for the achievement or not of the premise of whether aural and vocal music education can be an ally when working on oral skills in the English language.

After having set out each of the above *criteria* in the form of tables, it will be possible to compare them providing an answer to the question of whether the use of the music element in the teaching of EFL in a Spanish-speaking context can be considered scientifically beneficial and, if so, what are the variables that condition this influence.

2.1. Sample

The analysis carried out with each of the 14 works included in this study and the data obtained for the subsequent elaboration of tables to facilitate the comparison between all of them is shown below. Ordered chronologically, a brief citation is included to justify their inclusion in this literary review due to their accordance with the 3 selection criteria mentioned above:

- 1) the subject matter of English as a foreign language;
- 2) including the musical element;
- 3) using native Spanish-speaking participants.

- *Document 4.1.* Doctoral thesis from the University of Málaga (UMA) based on the fact that “[...] music and language are linked to each other, as both are activated in the brain at a very early age, starting from sounds [Own Translation]” (Silva Ros, 2006, p. 1). It represents the oldest from the works included in this review (November 2006) and it is based on the “inclusion of the contents from the music subject in the English classroom (A)”. Although it mentions prosodic features, it does not relate them to the physical qualities of sound or to auditory-vocal education and it also gives great importance to the motivational factor. It is oriented to students of English Philology at the University of Malaga and uses a quantitative methodology. Silva Ros (2006) concludes that “the use of songs improves the development of the four linguistic skills implicit in the process of learning English as a foreign language [Own Translation]” (p. 325).
- *Document 4.2.* Article published in *Innovación y Experiencias Educativas* journal and its inclusion is justified by conclusions such as: “The reasons for the use of music in language teaching are affective, cognitive and linguistic [Own Translation] (Ruiz Calatrava, 2008, p. 1). It was published in December 2008 –being the second oldest article in this review– and it is based on the “inclusion of the contents from the music subject in the English classroom (A)”. The author makes the reader aware of the “advantages of using music in the language classroom” (Ruiz Calatrava, 2008, p. 5) despite not mentioning any special attention to prosodic issues. She carries out her study among subjects from the three levels of Spanish primary education (6 to 12 years old) and uses a qualitative methodology. In conclusion, she comments as follows:

The use of songs in language teaching is an effective way to achieve a good atmosphere as it makes learners cooperate, captures their attention and interest and [...] reinforces and consolidates learning, makes them achieve greater fluency and phonemic accuracy and at the same time stimulates their imagination [Own Translation] (Ruiz Calatrava, 2008, p. 9).
- *Document 4.3.* Paper published in the proceedings of the *II Congrés Internacional de Didàctiques* and whose authors defend that “the idea is to cooperatively elaborate resources and materials in which music takes a principal role in the English class [Own Translation]” (Bernal Vázquez *et al.*, 2010, p. 1). It was published in February 2010 and promotes “Putting music at the service of English, but at the same time favouring the process of school musicalisation [Own Translation]” (Bernal Vázquez *et al.*, 2010, p. 1)

and “using music in language learning and, in this case, English to learn other musical contents [Own Translation] (Bernal Vázquez *et al.*, 2010, p. 2). It is an “interdisciplinary proposal that combines the inclusion of the contents from the music subject in the English classroom and the linguistic immersion in English of the music contents (A+B)” and that aims to investigate with sound to apply it to a proposed grammatical structure. Like Document 4.2., it does mention prosodic elements (rhythm and melody/pitch) but not in relation to the physical qualities of sound and aural-vocal education; however, this study was carried out among teachers (and not students) of Music Education and EFL in Melilla using a mixed methodology. The paper comes to the following conclusion:

Specialist English teachers do not have the necessary didactic and methodological musical knowledge to ensure that the musical resources they use in their teaching activities favour the musical development of their pupils [Own Translation]. (Bernal Vázquez *et al.*, 2010, p. 3).

- *Document 4.4.* Article published in *ENSAYOS* journal and that expresses the “[...] intention of achieving a series of basic competences from the point of view of the subjects of music and English [Own Translation]” (Ballesteros Egea, 2010, p. 124). It was published in June 2010, and it consists of an “interdisciplinary proposal that combines the inclusion of the contents from the music in the English classroom and the linguistic immersion in English of the contents of music (A+B)”. It mentions prosodic features (rhythm, intensity, and melody/pitch) but not in relation to the physical qualities of sound and aural-vocal education; it is oriented to primary school pupils. This study does not mention the use of any specific methodology and concludes that “songs in English should be worked on in depth in their two fundamental elements: music and text [Own Translation]” (Ballesteros Egea, 2010, p. 132).
- *Document 4.5.* Article published in *Revista Interuniversitaria Teoría de la Educación* and promotes that “the inclusion of songs and/or sound-musical elements in the teaching of foreign languages (LE) brings benefits in the learning process [Own Translation]” (Toscano Fuentes and Fonseca Mora, 2012, p. 197). It was published in February 2012, and it is based on the “inclusion of the contents of the music subject in the English classroom (A)”. It literally mentions some prosodic features (specially melody and rhythm) and relates them, although not to the physical qualities of sound, to aural-vocal education, also giving great importance to the motivational component. The study was carried out upon 49 Spanish students in the sixth year of Primary Education at a school in the town of Lepe (Huelva). Using a mixed methodology, it concludes that “the inclusion of sound elements becomes an appropriate and recommendable teaching tool for foreign languages because it favours the improvement of pronunciation, grammatical structures and the four basic skills [Own Translation]” (Toscano Fuentes & Fonseca Mora, 2012, p. 209).
- *Document 4.6.* Article published in *Revista de Investigación en Educación* and its inclusion on this review is based on the objective of “[...] analysing the value of Music as an interdisciplinary tool in the process of learning English as a Foreign Language [Own Translation]” (Pérez Aldeguer & Leganés Lavall, 2012, p. 127). It was published in April 2012, and it is based on the “inclusion of the contents from the music subject in the English classroom (A)”. It mentions prosodic features (pitch and accentuation) but not in relation to the physical qualities of sound and aural-vocal teaching, focusing on a group of Foreign Language (English) teachers from 20 different public schools in the province of Valencia.

Applying a quantitative methodology, the authors concluded that “The use that teachers make of music to teach English as a Foreign Language is scarce, mainly due to the lack of musical knowledge that they possess [Own Translation]” (Pérez Aldeguer & Leganés Lavall, 2012, p. 138).

- *Document 4.7.* Article published in *Encuentro* journal that considers “materials that use music in the English classroom from an interdisciplinary perspective [...] the value of music in education in general and in foreign language learning in particular (Leganés Lavall, 2012, p. 115). It was published in October 2012 and constitutes an “interdisciplinary proposal that combines the inclusion of the contents from the music subject in the English classroom and the linguistic immersion in English of the music contents (A+B)”. In addition, it does mention prosodic features (mainly rhythm) but not in relation to the physical qualities of sound and aural-vocal teaching. It is oriented to the Pre-school and Primary Education stages but does not specify the type of methodology used. Finally, it concludes by saying:

It is not necessary for English teachers to be experts in music literacy. However, the more knowledge a teacher acquires, the more resources he/she will have to carry out his/her profession effectively [...] it is considered important to continue research into the possibilities of music as a facilitating vehicle in the teaching of English as a foreign language [Own Translation] (Leganés Lavall, 2012, p. 10).

- *Document 4.8.* Article published in *Revista Electrónica Complutense de Investigación en Educación Musical* which aims to “[...] analyse the relationship between music education and learning English as a foreign language [Own Translation]” (Fonseca Mora *et al.*, 2015, p. 29). It was published in September 2015, and it is an “interdisciplinary proposal that combines the inclusion of the contents from the music subject in the English classroom and the linguistic immersion in English of the contents of music (A+B)”. As with previous documents, it does mention prosodic features (pitch, rhythm and accentuation) but does not relate them to the physical qualities of sound or to aural-vocal education and gives great importance to the motivational value of music and the self-efficacy. The subject group is formed by 454 students from Secondary Education (IES Lopez Neyra, Córdoba, Spain) and a quantitative methodology is used. The study concludes that “The results obtained indicate the existence of a statistically significant influence of instrumental music training on the learning of English as a foreign language [Own Translation]” (Fonseca Mora *et al.*, 2015, p. 1).
- *Document 4.9.* Communication published in the proceedings of the *III International Virtual Congress on Pedagogical Innovation and Educational Praxis* and its author comments that “The aim of our study was to analyse the didactic possibilities of music in the teaching of English as a foreign language in Primary Education [Own Translation]” (del Barrio Aranda, 2016, p. 20). It was published in November 2016 and constitutes an “Interdisciplinary proposal that combines the inclusion of the contents from the music subject in the English classroom and the linguistic immersion in English of the contents of music (A+B)”. In this case, it does mention some prosodic features (rhythm and melody/pitch) and relates them, although not to the physical qualities of sound, to aural-vocal education; it is oriented to teachers and students in the second, third and fourth years of Primary Education and uses a mixed methodology. It concludes by confirming that “the potential of music, both as an end and as a didactic medium, has favoured the work of music in the four fundamental communicative skills [Own Translation]” (del Barrio Aranda, 2016, p. 26).

- *Document 4.10.* Article published in *Eufonía* journal and defined as an “[...] experimental project for teaching-learning English through music at an early childhood education stage [Own Translation]” (Asensio, 2017, p. 49). It was published in January 2017, and it is an “interdisciplinary proposal that combines the inclusion of the contents from the music subject in the English classroom and the linguistic immersion in English of the contents of music (A+B)”. Although it does mention prosodic features (rhythm, timbre and pitch), it does not do so in relation to the physical qualities of sound and aural-vocal education. It is worth noting the mention of the emphasis on the motivation that emerges from the interdisciplinary nature of the proposal among the group of infant subjects. It does not refer to a specific type of methodology and ends by saying that “Through the English songs [...] the motivation of the pupils for both subjects grows, while at the same time learning becomes more meaningful” (Asensio, 2017, p. 49).
- *Document 4.11.* Article published in *ReHuSo* journal, and which aims to “identify the influence of music on English language learning [Own Translation]” (Almeida Luque and Zambrano Montes, 2020, p. 33). It was published in January 2020 and promotes the “inclusion of the contents from the music subject in the English classroom (A)”. Also giving great importance to the motivational value of music in second language teaching, it mentions prosodic elements (accentuation and rhythm) but does not relate them to the physical qualities of sound or to aural-vocal education. It was implemented among students from the Educational Unit *Sara Belén Guerrero Vargas* in Bahía de Caráquez (Manabí, Ecuador) and uses a mixed methodology. Both authors summarise their findings as follows:

The advantages of learning English through music can be summarised in the following aspects: it motivates the students' learning a little more, develops their intellect better and predisposes them to assimilate new contents [Own Translation]. (Almeida Luque & Zambrano Montes, 2020, p. 6).

- *Document 4.12.* Doctoral thesis carried out at the University of A Coruña (UDC) in January 2021. It states that “[...] the integration of Music Education as a tool in the foreign language classroom favours its acquisition [Own Translation]” (Cancela Pose, 2021, p. 11) and involves an “interdisciplinary proposal that combines the inclusion of the contents from the music subject in the English classroom and the linguistic immersion in English of the contents of music (A+B)”. In this piece of work, prosodic features (specially accentuation, pitch and rhythm) are mentioned, and they are also related –although not to the physical qualities of sound– to auditory discrimination or aural-vocal education. It is oriented to Pre-school students, uses a qualitative methodology and ends by stating that “there is a need for greater teacher training, both in methodologies for multilingualism and for music teaching in Early Childhood Education” (Cancela Pose, 2021, p. 11).
- *Document 4.13.* Article published in *DIGILEC* journal, and which expressly mentions that: “The aim of this study is to investigate the relationship between music and second language (English) learning” (Bartoli, 2022, p. 64). It was published in May 2022, and it is based on “English language immersion of music content (B)” (Bartoli, 2022, p. 64); including prosodic elements of language and relating them –although not directly to the physical qualities of sound– to auditory discrimination or aural-vocal education. It took place among a group of 41 students between 9 and 10 years old (Primary Education) and uses a quantitative methodology.

It concludes stating that “the results of the present study indicate that there are elements that could represent the foundation for the design of a methodology focused on L2 learning through musical competence training [Own Translation]” (Bartoli, 2022, p. 78).

- *Document 4.14.* Article published in *Dominio de Las Ciencias* journal and whose authors summarise their work as the “[...] use of music as a didactic resource and its contribution to English language learning in secondary school students [Own Translation]” (Triviño Delgado & García Farfán, 2022, p. 1096). It was published in August 2022, and it is based on the “inclusion of the contents from the music subject in the English classroom (A)”. There is no mention of any specific prosodic feature, nor does it relate to the physical qualities of sound or aural-vocal education either; however, like many other documents in this study, it gives great value to the motivational power of music. The participants were a teacher and 78 students of Basic Middle Education (from the Ecuadorian educational system; boys and girls aged between 9 and 11) and a mixed methodology was used. It concludes by highlighting the motivational component: “The use of music in the teaching-learning process in the English language subject [...] generates a high increase in motivation when learning the language [Own Translation]” (Triviño Delgado & García Farfán, 2022, p. 1110).

3. Results and Discussion

As mentioned before in the introduction to this article, there is currently evidence of the relevant role that music teaching (aural and vocal) plays in solving difficulties in the assimilation and subsequent production of prosodic patterns in English. This interdisciplinary synergy strengthens the motivational component mentioned by 6 of the 14 authors and encourages the research with this type of educational proposals. Thus, as Asensio (2017) mentions, “the motivation of students for both subjects increases, while learning becomes more meaningful [Own Translation]” (Asensio, 2017, p. 1); a conclusion with which other authors also agree when they affirm that:

The inclusion of instrumental music training according to our study [...] affects their whole belief system about their ability to achieve it or not and therefore the long-term motivation that is essential in language learning [Own Translation]. (Fonseca Mora *et al.*, 2015, p. 7).

The results are then analysed and discussed according to the following categories: the volume of publications published according to the legislation in force, the typology of the research, the inclusion of the prosodic element and the type of methodology used.

3.1. Volume of publications published and legislation in force

The fact that the final number of publications eligible for inclusion in this review amounts to only 14 in a time span of 38 years, makes evident that the research gap mentioned at the beginning of the document exists; validating the first of the objectives. There is thus a literary gap in this type of publications from 1985 to 2006; since then, a volume of publications increases from zero to three per year, with the highest publication peak in 2012 (Figure 1).

Figure 1.
Number of publications published between 1985 and 2022

Source: Own elaboration (2024).

Briefly summarised, Pérez Aldeguer & Leganés Lavall (2012) offer us in the following quote a chronology of the Spanish history in educational legislation as far as music is concerned:

The inclusion of music in the Spanish public education did not occur until 1970 under the Villar Palasí Law. In 1985, the *Ley Orgánica del Derecho a la Educación* (LODE) regulated the teaching of music in Primary and Secondary Education, conservatoires and music schools. In Primary Education and despite the entry of the LOGSE in 1990, Music does not have the same status as other subjects. Finally, after the LOPEG (1995) and the LOCE (2004), with the entry into force of the LOE in 2006, some curricular aspects of the subject of Music are globalised with those of the area of Plastic Arts, causing the subject of Music to lose even more importance [Own Translation] (Pérez Aldeguer & Leganés Lavall, 2012, p. 129).

The more recent approval of the *Ley Orgánica para la Mejora de la Calidad Educativa* (LOMCE) from December 2013 and the *Ley Orgánica para la Modificación de la Ley Orgánica de Educación* (LOMLOE) from December 2020 are also worth mentioning.

In relation to the educational legislation of the moment, May 2006 coincides with the entry into force of the *Ley Orgánica de educación* (LOE) and in November of that same year Silva Ros published his thesis on the use of popular songs for educational purposes in the Faculty of English Philology at the University of Malaga (Silva Ros, 2006). In general, a slight increase in the number of publications can be seen in the years before and after the legislative changes; this peak in 2012 preceding the implementation of the *Ley Orgánica para la Mejora de la Calidad Educativa* (LOMCE) in December 2013 and another slight increase after the consolidation of the LOMLOE in December 2020.

3.2. Typology of the research

Taking into account the triple typology into which it has been decided to divide this set of writings according to the use of the musical element –“inclusion of the contents from the music subject in the English classroom (A)”, “the linguistic immersion in English of the contents of music (B)” or “an interdisciplinary proposal combining both (A+B)”– Figure 2 shows how only Bartoli's doctoral thesis (2022) or Document 4.13 is the only example of linguistic immersion (B); the introduction of the musical element –mostly songs– in the English classroom (A) or the combination of this with the previous case (A+B) is the most common.

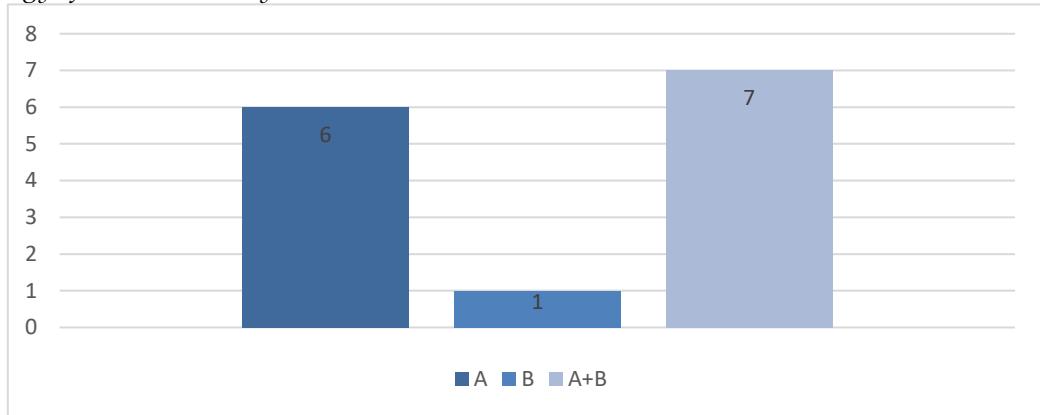
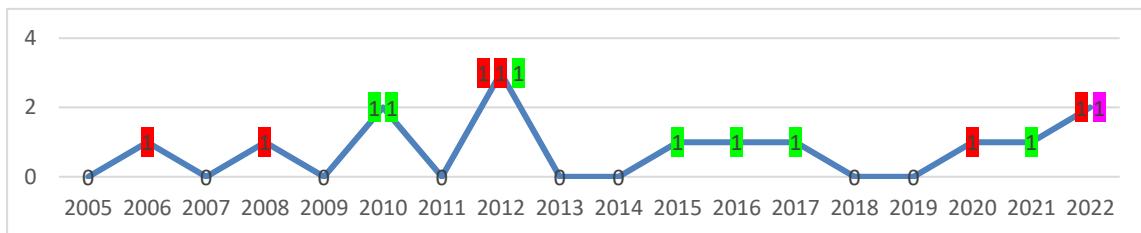
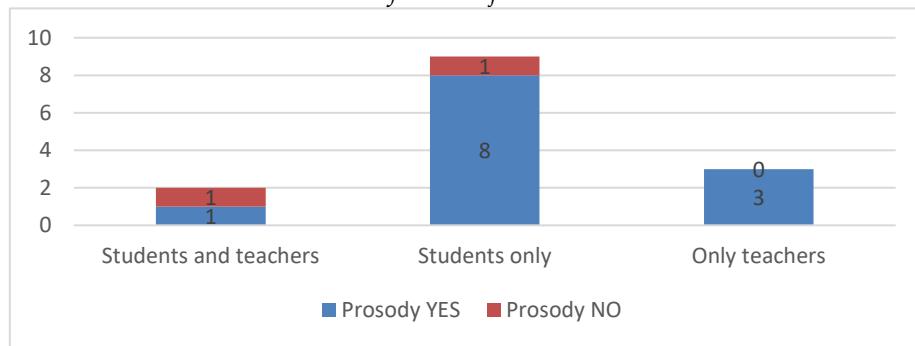
Figure 2.
Typology of the works analysed

Source: Own elaboration (2024).

Figure 3 mixes figures 1 and 2 establishing a relationship between the volume of publications published and the typology of the publications –being A red, A+B green and B purple– according to the year when they were published; however, no trend or pattern relating these variables could be established.

Figure 3.
Relation between the number of publications and the typology of the research

Source: Own elaboration (2024).

3.3. Inclusion of the prosodic element

As to whether any special attention to prosodic issues is mentioned –and, if so, in relation to the physical qualities of sound and aural-vocal education– the classification around the nature of the research subjects (pupils only/teachers only/both) has also been considered; reflected in Figure 4 below:

Figure 4.
Prosodic features in relation with the nature of the subjects

Source: Own elaboration (2024).

Thus, in general terms, it is clear that the type of writings oriented exclusively to a group of pupils is the most common and that practically all the works included mention some of the prosodic features –pitch range, accentuation, rhythm or/and phonetics– although none of them relate them to the parameters of sound –tone, loudness, duration and timbre– and only 2 of them relate them to aural-vocal education.

3.4. Methodology applied

Figure 5 reflects the type of methodology used to obtain the conclusions, being mixed and quantitative methodologies the most commonly used. Regarding the latter, Jorrín Abellán *et al.* points out that it is characterised by “the attempt to obtain a causal explanation of the educational phenomena and the need to achieve the greatest possible control over the study variables [Own Translation]” (2021, p. 51).

Quantitative method represents the most universally used methodology in scientific research in general but –due to the interdisciplinary nature of this study and belonging to the field of social sciences– it is minority here.

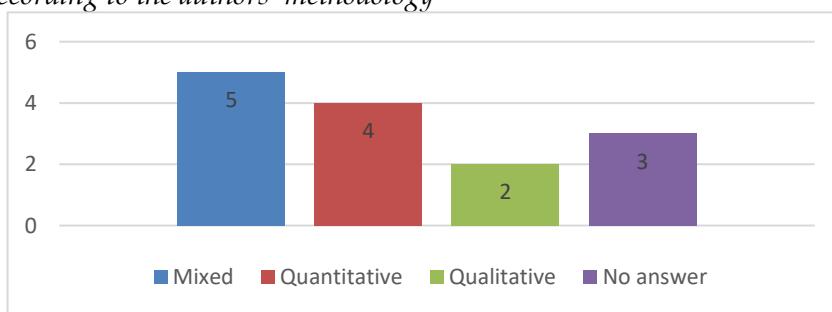
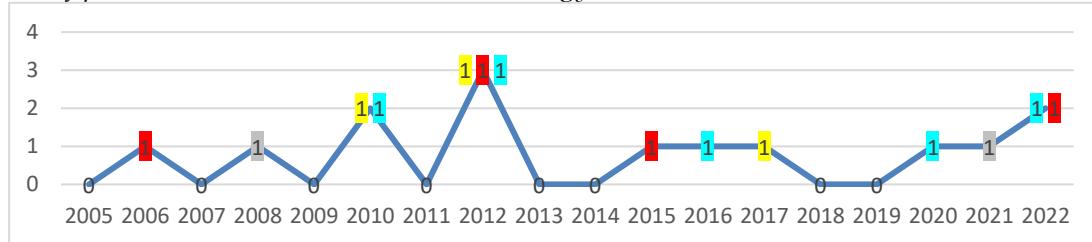
Figure 5.
Distribution according to the authors' methodology

Source: Own elaboration (2024).

Figure 6 –that combines Figure 5 with Figure 1– shows an homogeneous distribution over time of the volume of publications published with respect to the type of methodology used in each research; having qualitative in grey, quantitative in red, mixed in blue and, no answer, in yellow.

Demonstrating thus the complete standardisation of the mixed genre that arises from “the need to respond to the phenomena from the common sense and the vision of the context in which they are produced, which ends up by shaping this new way of understanding research and knowledge [Own Translation]” (Jorrín Abellán *et al.*, 2021, p. 131).

Figure 6.

Number of publications in relation to the methodology



Source: Own elaboration (2024).

4. Conclusions

The main objective of this article, that aimed to highlight the existence of a research gap in the study of prosodic issues in a language in relation to the intrinsic qualities of sound, is demonstrated by the fact that in the end only 14 papers met our search criteria:

- 1) Subject matter of English as a foreign language,
- 2) Inclusion of the musical element and
- 3) Native Spanish-speaking participants.

Furthermore, this last conclusion is shared by several of the authors studied in this review, such as Pérez Aldeguer (2012) when he remarks that:

Given the results obtained and considering that the databases consulted bring together millions of articles and books, we consider that the number of publications on the use of music in the teaching of English as a Foreign Language is quite low [Own Translation] (Pérez Aldeguer & Leganés Lavall, 2012, p. 128).

Regarding the second objective –which sought to reinforce the “Identification of specific elements common to the two disciplines which may constitute a tool for enhancing the level and quality of their learning [Own Translation]” (Bartoli, 2022, p. 88)– almost all the authors accept this interlinguistic equivalence.

Thus, as Bartoli (2022) explains: “every language differs outwardly, that is, in its surface structure. This makes each ‘sound’ different from the others and it is formed by specific combinations of sounds [Own Translation]” (Bartoli, 2022, p. 89); implying that music as a language and any language in general are similar in the most visceral part of their existence: they all use sound as a basic building material.

Finally, this research also answers the question about to what extent the use of the musical element in the teaching of English as a foreign language in a Spanish-speaking context can be considered scientifically beneficial; considering that 13 of the 14 research proposals analysed (92.86%) have had a positive impact and confirming the benefits of interdisciplinarity between the subjects of music and English language.

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