

Video-Based English Subtitles as a Listening Comprehension Strategy for EFL learners

Subtítulos en Inglés en Vídeos como Estrategia de Comprensión Auditiva para Estudiantes de Inglés como Lengua Extranjera

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Abstract

Listening comprehension constitutes a fundamental skill in the development of communicative competence in learners of English as a Foreign Language (EFL). Nowadays, learners encounter limitations in understanding spoken language due to factors such as speech rate, lexical limitations, and limited authentic material exposure. Given this, video-based English subtitles have gained relevance as a pedagogical strategy facilitating simultaneous visual, auditory, and written information processing. The objective of this research is to analyze subtitle impact on EFL learners' listening comprehension. Following PRISMA guidelines, a systematic review was carried out in ERIC, DOAJ, and Google Scholar (2020-2026), analyzing 13 studies (n=13). Results confirmed that subtitles function as cognitive scaffolding given that multimodal material implementation reinforces phonological decoding and syntactic analysis across proficiency levels. Nonetheless, their effectiveness is dynamic and conditional since it depends on learners' decoding ability and material complexity balance. Likewise, a marked study concentration was found in Asia and university contexts, evidencing a research gap in South American and early education contexts. Furthermore, to guarantee effective teaching, teachers should leave behind using audiovisuals as passive entertainment by implementing pedagogical activities with short subtitled videos and gradually decreasing textual aid. Hence, developing non-Western longitudinal studies is imperative to foster contextualized pedagogical approaches.

Resumen

La comprensión auditiva constituye una habilidad fundamental en el desarrollo de la competencia comunicativa de los estudiantes de inglés como lengua extranjera (EFL). En la actualidad, los estudiantes enfrentan dificultades para comprender el lenguaje hablado debido a factores como la velocidad del habla, las limitaciones léxicas y la escasa exposición a materiales auténticos. Ante esto, los subtítulos en inglés para videos han cobrado relevancia como estrategia pedagógica que facilita el procesamiento simultáneo de información visual, auditiva y escrita. El objetivo de esta investigación es analizar el impacto de los subtítulos en la comprensión auditiva de los estudiantes de EFL. Siguiendo las directrices PRISMA, se llevó a cabo una revisión sistemática en ERIC, DOAJ y Google Scholar (2020-2026), en la que se

analizaron 13 estudios (n = 13). Los resultados confirmaron que los subtítulos funcionan como andamios cognitivos, ya que el uso de material multimodal refuerza la decodificación fonológica y el análisis sintáctico en todos los niveles de dominio. No obstante, su efectividad es dinámica y condicional, ya que depende del equilibrio entre la capacidad de decodificación de los estudiantes y la complejidad del material. Asimismo, se observó una marcada concentración de los estudios en Asia y en contextos universitarios, lo que pone de manifiesto una brecha de investigación en los contextos sudamericanos y de educación temprana. Además, para garantizar una enseñanza eficaz, los docentes deben dejar de utilizar los recursos audiovisuales como entretenimiento pasivo e implementar actividades pedagógicas con videos cortos subtítulados, reduciendo gradualmente la ayuda textual. Por lo tanto, es imperativo desarrollar estudios longitudinales no occidentales para fomentar enfoques pedagógicos contextualizados.

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INTRODUCTION

In the context of a globalized and interconnected society, intercultural and international communication has significantly intensified, making language proficiency an essential tool for accessing knowledge, engaging in social interaction, and participating in academic, social, and professional settings. Specifically, the globalization of English has established it as the lingua franca in most of the aforementioned fields, providing greater opportunities for personal and professional growth. From this perspective, the development of communicative competence involves the integrated development of the four fundamental language skills: listening, speaking, reading, and writing (Hamudi Ali, 2022).

Among these skills, listening comprehension plays a key role in the development of communicative competence and is a fundamental skill in learning English as a Foreign Language (EFL). Furthermore, listening is not only the first receptive skill acquired by human beings but also a core component for improving pronunciation, intonation, and stress in spoken language (Renukadevi, 2014). In line with this, the use of subtitles in audiovisual materials emerges as a supportive strategy for learners, as they help them recognize word pronunciation and understand spoken English (Ünal & Ekmekçi, 2022). Consequently, enhancing listening skills is essential for language learning and can be supported by multimodal resources, which facilitate this process in EFL contexts.

In line with the need for such resources, an overall change in traditional educational habits is inevitable. The growing exposure to audiovisual media in everyday life has transformed the dynamics of teaching and learning, leading to increased use of video-based materials in educational settings. This constant exposure to such content has contributed to learners' growing need for stimulation and their struggle to maintain focus and cognitive engagement (Head, 2025). To address these changing needs, educators have integrated audiovisual resources into EFL contexts to promote a more engaging and dynamic classroom environment.

Nonetheless, it has been demonstrated that mere exposure to videos does not necessarily improve students' listening skills (Alabsi, 2020). This issue highlights the need to design and implement teaching strategies that genuinely strengthen comprehension. Thus,

despite the high exposure to audiovisual resources, many EFL learners still encounter significant difficulties when processing auditory information effectively (A'R et al., 2025), which creates a gap between access to pedagogical tools and actual linguistic comprehension. In order to address this gap, researchers have explored various tools, among which subtitles stand out as one of the most effective.

Hence, the use of subtitles as a strategy for developing EFL listening comprehension has been a topic of increasing interest in educational research. Internationally, several studies have demonstrated that incorporating subtitles into videos fosters the development of students' listening skills, suggesting that their use in educational settings can enhance comprehension and engagement with audiovisual content (Manurung et al., 2024). In Latin American contexts, recent research has highlighted the potential of subtitles as an innovative tool for listening comprehension development, indicating that although improvements in scores may vary in terms of statistical significance, learners generally express satisfaction, motivation, and appreciation for the role of subtitles in spoken English (Chacana et al., 2023). Finally, at the national level, research in Ecuador has also shown that subtitles facilitate the integration of spoken and written language through visual support (Ramos Moyano, 2024). Overall, these studies support the pedagogical potential of subtitles for the enhancement of listening comprehension across a wide range of educational and social settings.

Nonetheless, regardless of the contribution of the aforementioned studies, there is still a critical gap in the research topic. On the one hand, although the existing evidence generally highlights positive student perceptions, there remains an inconsistency in determining whether these attitudes result in measurable improvements in listening comprehension. A great deal of current literature is largely based on opinions or perceptions that are subjective to participants, instead of a thorough evaluation of their linguistic performance. On the other hand, the studies do not present specific methodological details regarding learners' proficiency levels or age groups, which leaves teachers without clear guidance on how to incorporate subtitles successfully into their lessons. Therefore, it is of crucial importance to carry out research that closes this knowledge gap by evaluating the actual impact of subtitles beyond students' perceptions only.

For this purpose, this study addresses the following research question: What is the impact of video-based English subtitles on the listening comprehension of EFL learners, according to the available scientific evidence? Consequently, in order to answer this question, the general objective of this research is to analyze the impact of video-based English subtitles on EFL learners' listening comprehension through a systematic review of recent scientific studies. The specific objectives are to identify the demographic and methodological trends reported in recent research, including countries, age groups, and types of audiovisual materials, to analyze the effectiveness of English subtitles on listening performance and how it relates to learners' English proficiency levels, and to determine the pedagogical implications derived from the reported findings of using subtitles for teaching listening comprehension in EFL classrooms.

Dual Coding Theory

One of the main theoretical frameworks supporting this study is Dual Coding Theory (DCT), which states that there are two separate subsystems that process different types of information. One subsystem processes verbal material such as spoken or written language, while the other handles nonverbal information, including images, sounds, and visual events (Paivio, 1990). According to this perspective, learning can be more effective when information

is presented through multiple channels simultaneously given that learners can establish connections in an easier way between auditory and visual input.

From an analytical perspective, the combination of these channels suggests that subtitles enhance listening comprehension by allowing the brain to associate the auditory stimulus with its graphical representation. Nevertheless, a critical evaluation of this process reveals that the potential benefit is not automatic; when a learner cannot catch up with the speed of the text or the materials are too complex, the verbal and nonverbal subsystems might compete for the learner's attention (Zhou, 2025). Hence, according to the principles of DCT, subtitles cannot be considered an independent mechanism but a multimodal reinforcement strategy, whose effectiveness depends on the visual channel supporting rather than distracting the auditory channel.

Listening Comprehension

Within this framework, examining the cognitive requirements of the auditory channel is essential. As a crucial component of language learning, listening comprehension can be defined as a complex cognitive processing phenomenon in which learners are required to execute synchronous phonological decoding and syntactic analysis, linking the linguistic features of the audio input to their previous knowledge and mental structures (Tran & Duong, 2020). This definition suggests that listening comprehension is achieved through both the decoding of sounds and their interpretation in a meaningful context.

From a critical viewpoint, this concept implies that successful comprehension does not merely depend on the accumulation of vocabulary but on the speed with which the brain processes momentary stimuli. In an EFL context, difficulties might arise because the speed at which the native spoken language is produced usually surpasses learners' instantaneous decoding abilities (Ping & Tao, 2025), affecting the synchronization between the auditory input and their prior knowledge. As a result, learners are forced to rely on inferencing or guessing to be able to construct meaning. Therefore, the integration of visual text and auditory input is essential to support this brief acoustic signal, allowing learners to process both information channels simultaneously through the implementation of video-based subtitles.

Video-based Subtitles

In the context of language learning, subtitles play an important role in facilitating the comprehension of spoken content. Subtitling is defined as a systematic process of transforming spoken dialogue from audiovisual materials into synchronized written text, typically embedded in the lower region of the visual display. It can be classified into two main categories: interlingual subtitles, which refer to the translation of dialogue from one language to another, and intralingual subtitles, which use the same language and are commonly intended for people with hearing impairments (Alnusairat & Jaganathan, 2022). For the purposes of this study, the focus is on intralingual subtitles as a pedagogical tool rather than in their application for hearing impairments.

Based on this classification, it is evident that intralingual subtitles do not serve as simple visual aids, but as a direct connection between what learners hear and what they read. By presenting text and audio simultaneously, this resource eliminates the barrier that fast speech or confusing pronunciation represents (To, 2024). In an EFL classroom, this completely changes the learners' experience by enabling them to immediately confirm what they hear instead of feeling frustrated when trying to decode unknown words. In this way, exposure to video-based subtitles allows the brain to associate correct sounds with their written

representation more fluently, transforming difficult input into accessible and meaningful material, and establishing a direct link between the use of video-based subtitles and the enhancement of listening comprehension.

Video-based Subtitles and Listening Comprehension

The relationship between video-based subtitles and listening comprehension reveals a changing connection that goes beyond automatic benefits, generating important debates. On the one hand, it is widely recognized that the use of subtitles enhances listening comprehension in EFL contexts. Subtitled videos support students in processing authentic material through the integration of visual and written information. This interaction allows students to reflect on meaning, connect different language input, and interpret messages accurately. In relation to this, Alabsi (2020) claimed that subtitles facilitate comprehension, develop listening skills, and function as an effective tool for linguistic reinforcement. Consequently, they constitute a valuable teaching tool that fosters both listening comprehension and academic engagement.

This viewpoint about the benefits of multimodal support is complemented by learners' persistence when facing difficult tasks. In this regard, Nakamura & Spring (2020) state that while their study did not determine if students overcame the problem of encountering difficult videos, the fact that they demonstrated significant improvement suggests that they might have done so. Therefore, teachers might find it necessary to motivate students to keep watching this type of material even when they find it difficult. Both approaches agree that subtitles do not function as a visual distraction, but as scaffolding that allows learners to process authentic material that they might find inaccessible otherwise.

Nonetheless, other researchers suggest that this benefit presents serious cognitive limits that cannot be ignored. In contrast to the aforementioned perspectives, Aldukhayel (2021) considered that the presence of subtitles may not lead to improved listening comprehension, which might be caused by cognitive load, consistently influenced by learners' proficiency levels. Based on this contrast, it is evident that subtitles in an EFL classroom can function as a dependent resource whose effectiveness varies according to learners' conditions. Hence, the abovementioned stances make it fundamental to systematically analyze how these variables interact in global research. Understanding the real impact of video-based subtitles requires examining the available scientific records to determine under what conditions this resource shifts from being a visual barrier to a cognitive aid for EFL learners.

MATERIALS AND METHODS

The current investigation was carried out by making use of a systematic review, which proves to be ideal to synthesize the scientific evidence gathered regarding the use of subtitles in the development of listening comprehension in EFL contexts. This type of design refers to a thorough summary of literature through a collection process that allows researchers to minimize bias (Nunn & Chang, 2020). In order to guarantee methodological strictness and transparency when reporting the findings, the study is grounded on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. The use of this protocol offers guidance for reporting systematic reviews by reflecting on the methodological advances used to locate, select, evaluate, and synthesize studies (Page et al., 2021). Therefore, this standardized framework led to a systematic identification of literature, which assured the alignment of the search factors with the specific objectives of the review.

Search Strategy and Databases

The data collection phase spanned from December 2025 to April 2026 and solely included studies published from 2020 to 2026. Regarding the databases, ERIC and DOAJ were selected because of factors such as open access and their educational focus. Additionally, Google Scholar was also selected in order to guarantee a thorough coverage of grey and academic literature. The search process was structured based on a combination of terms such as "Subtitles," "Listening," "EFL," "Captions," and "Captioning." The search equations included ("EFL" OR "English as a Foreign Language") AND ("Listening Comprehension") AND ("Subtitles"), ("EFL" OR "English as a Foreign Language") AND ("Listening Comprehension") AND ("Captions"), and ("EFL" OR "English as a Foreign Language") AND ("Listening Comprehension") AND ("Captioning"). Consequently, the initial search on the three selected databases showed a total of 11,231 results. As for the specialized databases, 15 results were obtained from ERIC and 16 from DOAJ, which were characterized by a high specificity in the field of education. Accordingly, Google Scholar reported an initial estimated number of 11,200 results. Nonetheless, due to the technical visualization limitations of the latter platform, the screening process could only be focused on the first 100 pages with a total of 979 results. Thus, the analysis targeted the articles with the highest relevance level and in alignment with the search terms employed.

Inclusion and Exclusion Criteria

In order to guarantee the currency and relevance of the findings, specific criteria were established for the selection of studies. Firstly, the timeframe solely allowed for the inclusion of articles published from 2020 to 2026, with the purpose of addressing learning dynamics in the modern digital era. Secondly, given the focus on EFL students, the selected studies had to be written in English and published in academic journals. Therefore, theses, citations, conference proceedings, and preprints were excluded to ensure a review process that guarantees the validity of the documents. In accordance with the aforementioned criteria, previous systematic reviews were also excluded in order to avoid duplication of data and ensure the inclusion of empirical and original studies. Lastly, documents solely focused on students' perceptions were discarded given that the present article prioritizes research that measures the actual impact on listening comprehension. The screening and selection of studies were conducted by a single reviewer according to the established criteria.

Selection Process

The screening process was carried out in three critical phases to guarantee the quality of the final sample. In the first phase of identification, studies were excluded if their titles were unrelated to the topic, lacked open access, were solely citations, were duplicates, or presented technical loading errors. During the second phase of selection, the abstracts of the remaining studies were analyzed. Documents were discarded if they involved the use of interlingual subtitles, failed to specify the type of subtitles used, contained significant writing errors, or were focused on populations with hearing impairments. Finally, during the third phase of inclusion, the full text of the remaining articles was assessed. A few studies were excluded in this phase given that they focused solely on audio input without visual support or evaluated general language comprehension instead of specific listening comprehension.

Study Selection

After the consolidation of the databases and the elimination of the technical limitations of visualization, an initial sample of 1,010 records was obtained for the screening process. Consequently, the thorough application of the inclusion and exclusion criteria previously mentioned yielded a final sample consisting of 13 scientific articles (Aldukhayel, 2021; Avello & Muñoz, 2023; Febrina, 2022; Firdausi, 2024; Haider & Al-Salman, 2022; Li, 2025; Nakamura & Spring, 2020; Nilawati & Lutviana, 2022; Özgen & Gündüz, 2020; Papadopoulou & Kantaridou, 2024; Pradana & Fakrhurriana, 2023; Shayeb & Abu-Zahra, 2023; Solijonova, 2024).

Quality Assessment

The methodological quality of the included studies was evaluated by means of the JBI Critical Appraisal Checklist for Quasi-Experimental Studies (Barker et al., 2024). The evaluation considered key methodological aspects such as study design, comparability of groups, validity and reliability of the instruments, control of confounding factors, and the appropriateness of statistical analysis. Overall, the included studies demonstrated strong methodological quality with 76.92% of the studies classified as high quality and 23.07% as moderate due to certain methodological limitations. The detailed results of the evaluation are presented in Table 1, based on the numerical identifiers assigned to each article in Table 3.

Table 1
Methodological Quality Assessment of Included Studies

Studies	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Overall
Article 1	Yes	Yes	No	Yes	Unclear	Yes	Yes	Yes	Yes	High
Article 2	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	High
Article 3	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	High
Article 4	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	High
Article 5	Yes	Yes	Yes	Yes	Unclear	Yes	No	Yes	Yes	High
Article 6	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	High
Article 7	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Moderate
Article 8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High
Article 9	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	High
Article 10	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	High
Article 11	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	Moderate
Article 12	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	High
Article 13	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Moderate

Note. JBI Checklist: Q1=cause/effect; Q2=similar participants; Q3=control group; Q4=similar measurement; Q5=follow-up; Q6=reliable measurement; Q7=confounding factors; Q8=confounding control; Q9=statistical analysis

Data Extraction

In order to analyze the final selected studies, a master matrix was developed to organize the variables extracted from the articles. The information included the database of origin, country, age group, number of participants, and the learners' mother tongue (L1). Furthermore, methodological aspects such as institution type, proficiency level, type of audiovisual input, group design, research type, and the skills measured were included along with the main results. This systematic organization allowed for the creation of geographical distribution

maps and methodological trend graphs, which facilitate the understanding of the main identified findings and are presented in the following section.

Prior to the systematization of data, the specific variables to be extracted from the selected studies were aligned with the objectives of the research. This step guaranteed that the systematic review maintained an analytical approach instead of remaining merely descriptive by the operationalization of each objective as follows:

Table 2

Alignment between Research Objectives and Analytical Variables

Research Objective	Variables Analyzed	Analysis Procedure
Objective 1	Country, age, institution type, audiovisual material (short videos, clips, movies, TV series).	Descriptive frequency analysis and graphical representation.
Objective 2	Proficiency level (Low, Intermediate, High, NR) and reported intervention outcomes (Significant, No Significant, Mixed).	Comparative categorical synthesis and matrix cross-tabulation.
Objective 3	Interaction between intervention outcomes, pedagogical strategies, and contextual limitations.	Interpretive pedagogical synthesis and thematic discussion.

Note. Own elaboration based on the study's analytical design.

Based on this analytical alignment, Table 3 presents the mother matrix with all the variables extracted from the selected studies, while Figure 1 depicts the PRISMA diagram, detailing the information flow and the specific reasons that led to the exclusion of studies in each phase.

Table 3*Documentary Analysis Matrix of Selected Studies*

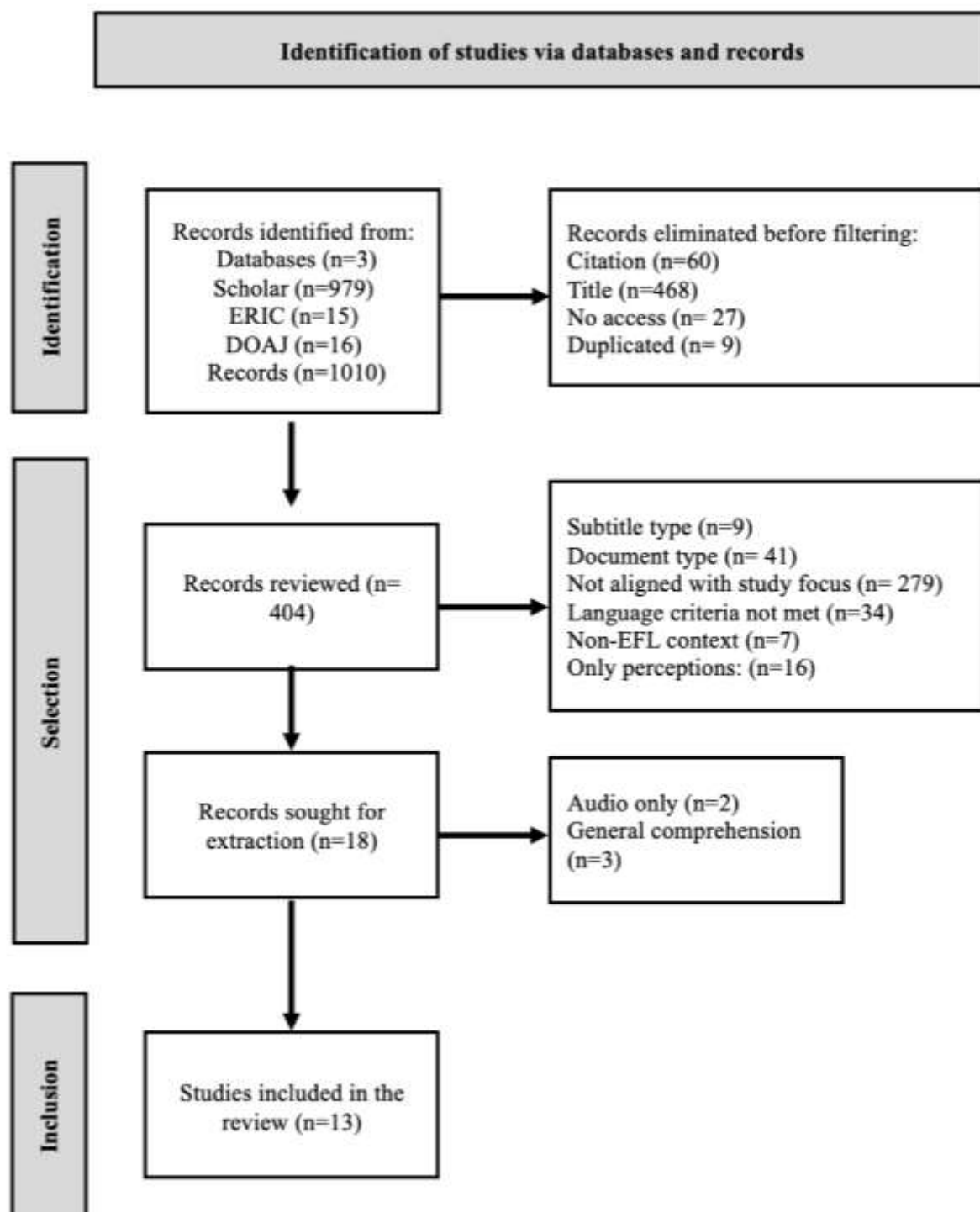
		1	2	3	4	5	6	7	8	9	10	11	12	13
	Titl e	Listen or Read? The Impact of Profici ency and Visual Compl exity on Learne rs' Relian ce on Captio ns	The effects of captions on L2 learners' compreh ension of vlogs	The Develo pment of Recepti ve Langua ge Skills from Caption ed Video Viewin g in Primary School EFL Learner s	Authenti c Captione d Sitcom as Listening Compreh ension Material in English Languag e Teaching	The Effects of Intrali ngual Subtitl es on Jordan ian Univer sity Studen ts' Foreig n Langu age Learni ng	Improvin g Students' Listening Compreh ension in Foreign Languag e Classes through Subtitled Videos	The Effects of English Subtitle in English Video on Listening Compreh ension	The Impact of Watchi ng Films without Subtitle s on Listenin g Skills of EFL Learner s	The Correlati on Between the Frequenc y of Watching Bimodal Subtitled Videos and Students' Listening Compreh ension	Using Intraling ually Subtitled Videos in EFL Class: Effects on Motivati on and Linguisti c Performa nce	How Watch ing Subtitl ed YouTu be Videos Can Affect EFL Listeni ng and Readi ng Abiliti es	Developi ng 10th- grade Students' English Listening Compreh ension Skills Through Films	Impro ving stude nts listeni ng skill using Scoob y Doo Englis h subtitl e movie
	Yea r	2025	2021	2023	2020	2022	2023	2024	2023	2022	2024	2020	2024	2022
	Aut hor	Yan Li	Dukhaye l Aldukha yel	Daniela Avello, Carmen Muñoz	Mehmet Özgen, Nazlı Gündüz	Ahmad S. Haider , Saleh Al- Salma n	Ahmad Sh. Shayeb, Majdi J. Abu- Zahra	Lusi Firdausi	Muham ad Ihsan Rangga Pradan a, Ria Fakhrur riana	Millenia Berlian Febrina	Nikoleta- Kalliopi Papadop oulou, Zoe Kantarid ou	Sachik o Naka mura, Ryan Spring	Mohlaroy im A. Solijonov a	Chan dra Nilaw ati, Rizky Lutvia na
Database	Eric DOAJ Scholar	1	1	1	1	1	1	1	1	1	1	1	1	1

		1	1	1	1	1	1	1	1	1	1
Country	China	1									
	Saudi Arabia		1								
	Chile			1							
	Turkey				1						
	Jordan					1					
	Palestine						1				
	Indonesia							1	1	1	
	Macedonia									1	
	Japan										1
	Uzbekistan										1
Age	Kids (8-11)			1							
	Teenagers (12-17)		1						1	1	1
	Young Adults (18-25)	1			1	1	1	1		1	
Institution	Elementary School			1							
	High School								1		1
	University	1			1	1	1	1		1	
	English Program		1								
	Language School								1		
Proficiency	Low	1	1	1			1	1	1		
	Intermediate		1		1		1		1		1
	High	1	1				1				

Audiovisual Input	NR				1				1		1		1
	Short videos/clips	1	1		1	1	1		1	1	1		1
	Movies/Films							1				1	
	TV series/episodes			1	1								
Skills Measured	Listening		1		1		1	1	1			1	1
	Listening and Reading	1		1							1		
	Multiple Skills				1					1			
Results	Significant Effect	1		1	1	1		1	1	1			1
	No Significant Effect		1								1	1	
	Mixed Results						1						
	(Proficiency dependent)												

Note. Data extracted from the 13 selected studies for the systematic review.

Figure 1
PRISMA Flow Diagram for Study Selection



Note. Flow chart modified from (PRISMA 2020), describing the literature search and study selection.

RESULTS

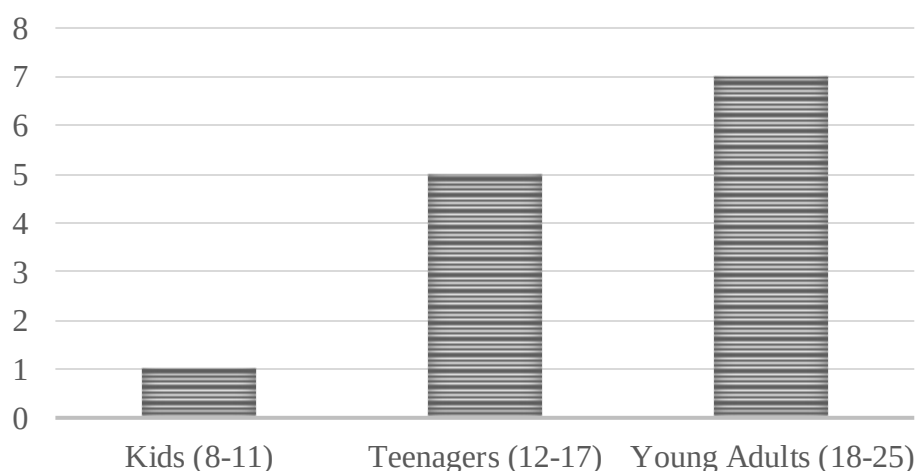
Figure 2
Geographical Distribution of Studies



Note. Distribution of studies by country, with a strong focus on Asia.

In relation to the geographic distribution illustrated in Figure 2, the results demonstrate a clear concentration of research on the Asian continent, which accounts for the vast majority of the selected articles. More specifically, Indonesia stands out as the country with the highest number of academic publications on the topic, representing 30.8% of the analyzed studies. Moreover, the rest of the sample articles are equally distributed, with one study per country in Asian nations such as China, Saudi Arabia, Turkey, Jordan, Palestine, Japan, and Uzbekistan. Conversely, the presence of studies in other regions is limited, with only one record identified in Europe (North Macedonia) and one in South America (Chile); each of these remaining cases account individually for 7.7% of the sample.

Figure 3
Age Distribution of the Participants

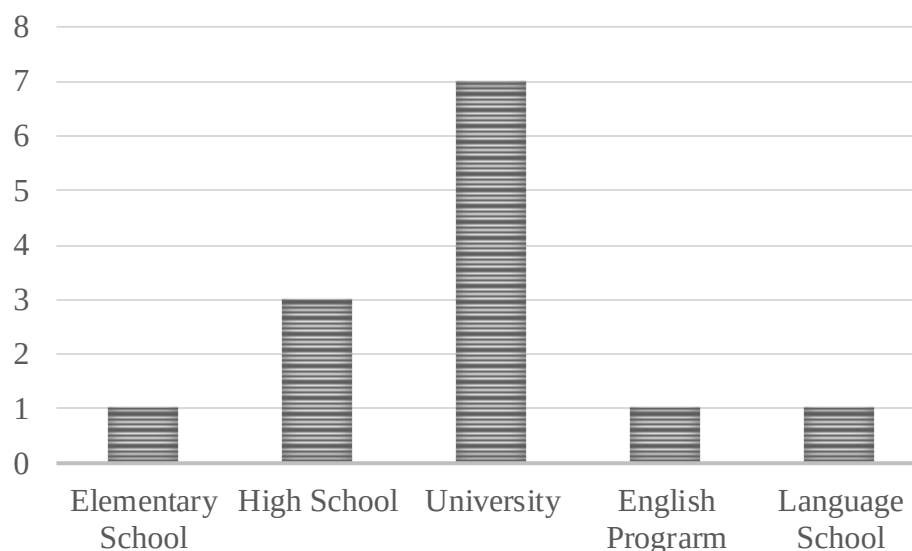


Note. Distribution of participants by age group, demonstrating a predominant focus on young adults.

With respect to the demographic profile of the participants illustrated in Figure 3, the results indicate a predominant trend toward the study of older populations. Thus, the group of young adults (18-25) constitutes the most frequent category, representing 53.8% of the literature. Secondly, the group of adolescents (12-17) accounts for 38.5% of the identified records. Nonetheless, research on children is significantly scarce, with only 7.7% focused on young learners (8-11), corresponding to a single study.

Figure 4

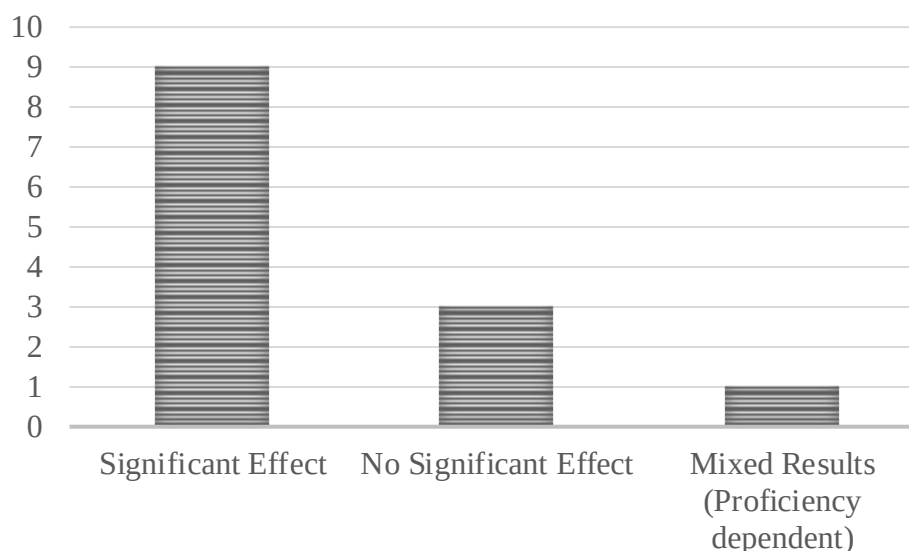
Institution Type



Note. Distribution of analyzed studies by academic environment, showing a predominant focus on higher education contexts.

In relation to the academic environment in which the interventions were carried out, Figure 4 reveals that universities are the predominant institution type, representing 53.8% of the studies of the sample. In second place, high schools are found with 23.1% of the identified records. Conversely, the presence of research in other educational contexts is minimal and evenly distributed, with only one study that took place in an elementary school, one in an English program, and one in a language school. Each of these remaining environments accounts individually for 7.7% of the sample. This distribution evidences that current research interest is mainly centered on higher education, which is aligned with the previously identified demographic profile of the participants.

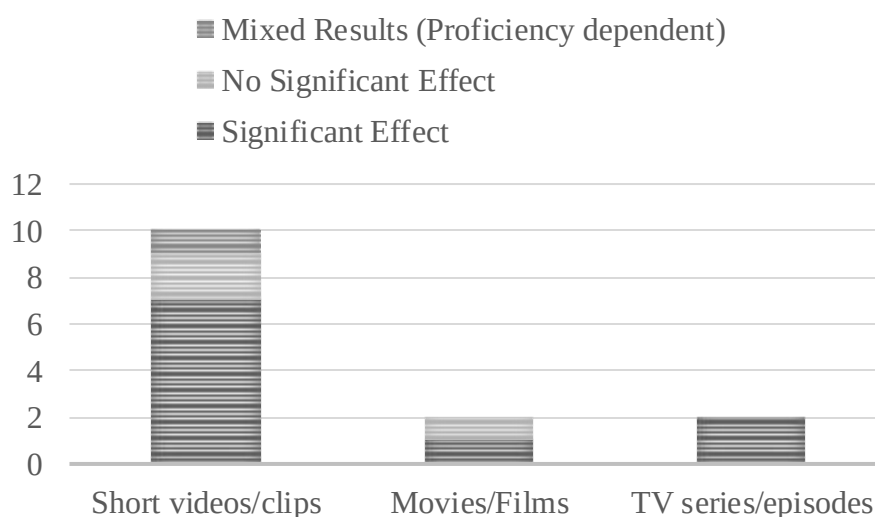
Figure 5
Results of Intervention Effectiveness



Note. Distribution of analyzed studies by intervention outcome, showing a predominant trend toward significant positive effects.

Concerning the effectiveness of the analyzed interventions, Figure 5 illustrates that most of the research articles report positive results. Out of the 13 selected studies, 69.2% reflect a positive outcome (Significant Effect) in the development of listening comprehension through the use of subtitles. In contrast, 23.1% of the studies reported that there were no notable outcomes (No Significant Effect) after the intervention. Finally, only 7.7% of the research presented varied findings (Mixed Results), indicating that the effectiveness of the subtitles depended on the proficiency levels of the participants. These findings demonstrate a predominant trend toward the efficacy of subtitles as a pedagogical strategy in most of the analyzed contexts.

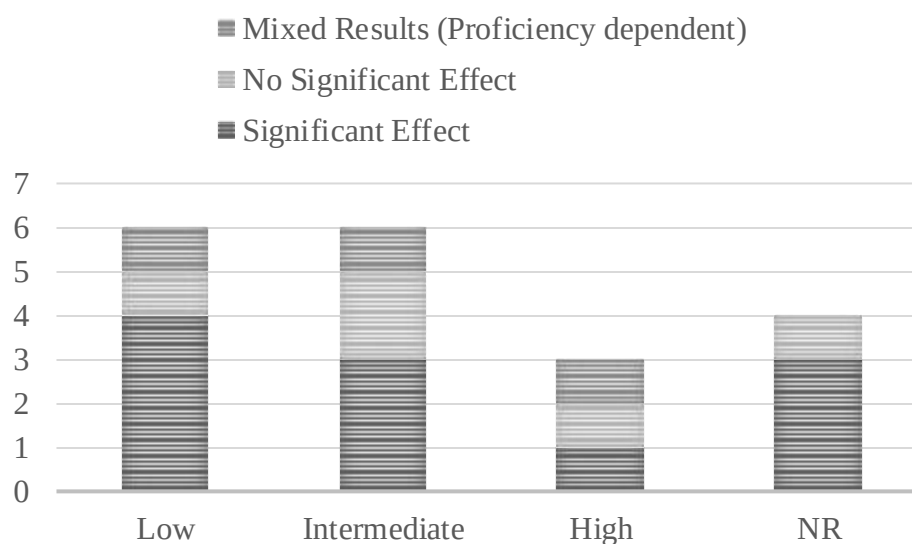
Figure 6
Results by Audiovisual Input



Note. Distribution of intervention effectiveness across audiovisual input types, demonstrating a predominant preference for short videos and clips.

When it comes to the relationship between the effectiveness of subtitles and the type of audiovisual input (Figure 6), the results indicate a notable preference for the use of short videos or clips. In this category, 69.2% of the articles were identified, of which 46.2% reported a significant effect, 15.4% reported no significant effect, and 7.7% presented mixed results that depended on the participants' proficiency levels. In contrast, the use of movies and TV series or episodes showed a lower frequency in the analyzed sample. Specifically, TV series demonstrated significant effectiveness in 15.4% of the total sample, while movies presented contrasting results, representing another 15.4% split into one significant and one non-significant outcome (7.7% each).

Figure 7
Results by Proficiency Level



Note. Analysis of intervention outcomes by language proficiency level, illustrating a predominant trend toward significant effects across all reported categories.

Finally, after analyzing the effectiveness of subtitles in relation to the proficiency levels of the participants (Figure 7), it is observed that a significant effect is the predominant variable across all the registered levels. As evidenced in the data matrix (Figure 1), some studies included participants from more than one proficiency group simultaneously, hence the results are divided into 19 instances of analysis from the 13 selected articles. Thus, for the basic level (Low), 21.1% of the instances reported positive results, while the moderate level (Intermediate) included 15.8% that showed clear effectiveness. Nonetheless, regarding the proficient level (High), the sample is smaller, consisting of 5.3% that reported a significant outcome and another 5.3% with mixed results. Furthermore, it is worth mentioning that the NR (Not Reported) category also reflects a positive trend with 15.8% of the cases demonstrating significant results. The remaining 36.7% of the instances reported non-significant effects. These data indicate that in spite of the participants' prior knowledge of the language, subtitles tend to facilitate listening comprehension in the majority of the analyzed cases.

DISCUSSION

The purpose of this systematic review was to analyze the impact of video-based English subtitles on the development of EFL learners' listening comprehension (n=13). When comparing the findings to Dual Coding Theory, it is clearly confirmed that the simultaneous presentation of written text and audiovisual material does not lead to visual distraction. On the contrary, this resource functions as cognitive scaffolding that reinforces the evanescent acoustic signal, facilitating the phonological decoding process and syntactic analysis (Malakul & Park, 2023). In this fashion, multimodal integration transforms complex and authentic stimuli into linguistic material that is completely accessible to language learners.

Regarding demographic and methodological trends, the records indicate a noticeable concentration of research in Asia, dominated by Indonesia with four studies, while regions such as South America (Avello & Muñoz, 2023) demonstrate limited production. This geographic gap is reflected in the local context, where few indexed studies are available. As a result, grey literature, such as the theses by Chacana, Hermosilla, and Sandoval (2023) and Ramos Moyano (2024), becomes one of the few available sources for understanding regional realities. Demographically, there is a predominant focus on young adults in university settings (n=7). In contrast, research on children remains minimal, registering only one case. This methodological landscape demonstrates that current scientific interest is centered on higher education and non-Western contexts, leaving critical gaps in the early stages of learners' linguistic, academic, and contextual development.

A critical finding in the results is the effectiveness of subtitles across all the analyzed language proficiency levels (low, intermediate, and high). In low proficiency levels (Febrina, 2022; Nilawati & Lutviana, 2022), subtitles act as essential support that reduces anxiety and frustration when learners encounter fast native speech rates, aligning with Ünal & Ekmekçi (2022) regarding word recognition. Similarly, for advanced learners (Li, 2025; Shayeb & Abu-Zahra, 2023), the written text does not lack pedagogical value but turns into a tool for skill refinement that allows students to identify and overcome complex phonological barriers. These data strengthen the existing literature by providing empirical evidence that video-based subtitles can lead to measurable comprehension improvements.

Nonetheless, the findings also delimit the cognitive boundaries of this pedagogical strategy by validating critical perspectives on cognitive load. Authors who did not report significant effects (Aldukhayel, 2021; Solijonova, 2024) evidenced that the benefits of intralingual subtitles do not occur automatically. Therefore, if the lexical complexity or the speech rate surpasses the learners' instantaneous processing ability, the visual and auditory channels compete directly, which leads to divided attention that overwhelms their cognitive capacity. Hence, the effectiveness of subtitles is dynamic and conditional, depending on the balance between the complexity of the material and learners' decoding proficiency.

Regarding pedagogical applications, vital implications arise for EFL teachers. A clear methodological trend toward using short videos or clips emerged during data analysis (n=9). This demonstrates that brief materials are ideal to prevent cognitive overload and maintain focus in the classroom. Although longer videos (Pradana & Fakhurririana, 2023) prove highly motivating, they require thorough segmenting to avoid overwhelming students. Therefore, teachers must not consider audiovisual exposure as a passive activity, reinforcing Alabsi's (2020) stance on purposeful strategy design. It is imperative to design viewing tasks, synchronized tracking, and a gradual reduction of written text as learners' listening skills achieve greater autonomy.

Despite these implications, this review presents certain methodological limitations. Crucially, the literature search was limited to ERIC, DOAJ, and Google Scholar. The selection

of these databases might have inadvertently excluded valuable empirical studies existing exclusively in alternative repositories or restricted platforms. Additionally, Google Scholar's lack of algorithmic precision presented challenges by restricting access to the complete number of sources initially estimated. Furthermore, language restrictions constituted another barrier by limiting the selection exclusively to published articles in English. Although this decision guaranteed a thorough analysis of the data, it might have caused the unintentional omission of relevant literature produced in other languages, particularly from the Asian continent, obstructing the integration of diverse cultural and pedagogical perspectives.

Ultimately, the reduced size of the final sample, consisting of 13 studies, represents a limitation for the generalization of the findings. As a result, given the relatively limited corpus of literature, the obtained data must be interpreted cautiously since it does not necessarily reflect the pedagogical reality of all global educational contexts. However, the final sample allowed for a rigorous and detailed analysis of every evaluated article, establishing a solid theoretical foundation that must be contrasted in future research with a larger volume of empirical evidence. Given these findings, it is imperative to establish the final implications that derive from this analysis.

CONCLUSIONS

Regarding the first specific objective, it is concluded that there is a profound geographical centralization of scientific production located in Asia. Conversely, South America remains a critical, unexplored area in prestigious high-impact journals, which forces researchers to depend on grey literature to comprehend local realities. Moreover, the marked focus on young adults reveals that modern research often ignores the early academic stages. Consequently, it is necessary to guide further investigation toward early childhood and toward the development of contextualized projects in the South American region.

Additionally, in order to address the general and the second specific objective, it is determined that video-based English subtitles positively impact listening comprehension by functioning as cognitive scaffolding. The evidence confirms that multimodal stimuli do not cause distraction, but rather optimize phonological decoding. Nevertheless, this benefit is dynamic since it acts as affective support for learners at low-proficiency levels to minimize anxiety caused by native speech rates, while operating as a mechanism of phonological precision for advanced learners. However, cognitive load limits this efficacy given that auditory and visual channels compete when lexical complexity surpasses the learners' processing capacity.

Lastly, in order to provide a response to the third specific objective, it is concluded that the effectiveness of subtitled audiovisual material requires teachers to leave aside the use of videos as passive entertainment. The synthesis of the data indicates that short-length videos are the most optimal format to maintain attention in the classroom. Moreover, the use of this resource demands a structured instructional design that goes from pre-viewing preparation to the gradual reduction of the written text. Despite the limitations in sample size encountered in this review, the findings provide strong empirical evidence for pedagogical innovation. For future research and teaching, there is an urgent need to develop longitudinal projects that evaluate the impact of this tool in non-Western contexts, promoting more inclusive and representative pedagogical approaches.

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