Subtitles as a Learning Aid: Impacts on English Proficiency in China's English as a Foreign Language (EFL) Students

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Abstract

This study explores the impact of various subtitling modes on the comprehension and vocabulary acquisition of secondary school students in China, a crucial yet underexamined area in English as a Foreign Language (EFL) education. Subtitling, as an instructional support, plays a pivotal role in non-native environments by bridging language gaps and enhancing learning engagement. The modes analyzed include no subtitles, Chinese subtitles, English subtitles, and bilingual subtitles. A qualitative methodology, involving interviews with five Chinese EFL teachers, assessed their perceptions of these modes. Results suggest that bilingual subtitles most effectively enhance comprehension and vocabulary learning due to their convenience. English subtitles, while promoting deeper engagement with the language, encourage authentic comprehension and proactive vocabulary exploration. Chinese subtitles, though immediately clarifying, were less effective in supporting long-term vocabulary retention. Absence of subtitles was least effective, often resulting in disengagement among learners with moderate English skills. The study underscores the influence of learner proficiency and autonomy on subtitle effectiveness, offering insights for optimizing subtitle use in language education.

Keywords

English comprehension; Subtitles; Vocabulary acquisition; EFL in China; Educational technology.

1. Introduction

Subtitles, often seen as a simple educational tool, are crucial in the realm of language learning, particularly in environments where English is taught as a foreign language (EFL). Research spanning several decades has consistently highlighted the profound impact of subtitling on enhancing language comprehension and vocabulary acquisition among learners. With the advent of digital media, the dynamic interaction between visual text and auditory input has become an increasingly important aspect of language education. Studies have explored various dimensions of subtitling, such as the cognitive load imposed by different subtitling modes and their effects on the retention and recall of vocabulary. Pioneering studies such as those by Branch (2014), Saree (2016), and Alabsi (2020) highlight the growing utilization of such technologies to facilitate language comprehension and engagement. Furthermore, the emphasis on English language education in non-English speaking regions, particularly in Asia, has spurred the development of various technological aids to support EFL learning. These include not only subtitled videos but also comprehensive English learning applications and other technological devices that have been integrated into English instruction, as documented by researchers like Lwo & Lin (2012), C. Hsu et al. (2013), Wang & Wu (2014), Li (2016), Mardani & Najmabadi (2016), and Pratama et al. (2021).

This study builds on previous research by delving deeper into the specific impacts of four distinct subtitling modes-no subtitles, Chinese subtitles, English subtitles, and bilingual subtitles-on secondary school students' English comprehension. Each of these modes offers unique advantages and presents specific challenges that can significantly influence a learner's engagement with the language and, consequently, their learning outcomes. For example, while the absence of subtitles may encourage more focused listening and deeper language processing, it can also pose significant challenges for students with lower proficiency, potentially leading to disengagement or misunderstanding (Lwo & Lin, 2012; C. Hsu et al., 2013; Wang & Wu, 2014.). Furthermore, the use of bilingual subtitles might aid comprehension immediately but could also hinder the development of autonomous language skills if learners rely too heavily on their native language. Thus, this study seeks to explore these nuances and provide empirical data on how these different subtitle modes affect language acquisition. By integrating insights from interviews with EFL teachers and thematic analysis of classroom observations, the research aims to offer a grounded perspective on the practical implications of subtitling in educational settings.

Moreover, this investigation also considers the broader pedagogical strategies that involve subtitling. It critically examines how educators can effectively balance the use of subtitles to cater to diverse student needs without compromising the development of more advanced language skills. In doing so, it reflects on the potential for subtitles not just as a tool for immediate language comprehension, but as a strategic element in fostering long-term linguistic proficiency. (Li, 2016; Mardani & Najmabadi, 2016; Pratama et al., 2021). As we delve into the specific effects of no subtitles, Chinese subtitles, English subtitles, and bilingual subtitles in the forthcoming sections, our discussion will focus on drawing connections between empirical observations and theoretical insights from prior studies. This approach will help in formulating a nuanced understanding of the strategic use of subtitling in enhancing language learning, aiming to provide actionable recommendations for educators and curriculum developers in the field of EFL education.

2. Literature Review

2.1. Subtitles

In previous scholarly works, the terminology used to describe various styles of presenting text on a screen has not been uniform. Subtitles generally are defined as on-screen texts that appear in the audience's native language, paired with an audio track in a second language. This definition contrasts with that of captions, which are on-screen texts presented in the same language as the accompanying soundtrack (Markham et al., 2001). Cordella (2007) further classifies subtitles into two categories: intralingual, where the text and audio are in the same language, and interlingual, where they are in different languages. Neves (2008) contends that, despite common usage, there is fundamentally no difference between the terms subtitling and captioning. However, a prevalent belief persists that distinguishes the two: captioning is primarily viewed as a support mechanism for individuals who are deaf or hard of hearing, whereas subtitling is often tailored for audiences who are hearing but may not understand the language of the audio track. This study acknowledges that the literature does not consistently apply these definitions; hence, for the purposes of this research, the term 'subtitles' will encompass all forms of on-screen text, regardless of the auditory condition or language alignment.

2.2. English Comprehension

Research has extensively documented the impact of subtitles on the enhancement of both listening and reading comprehension in second language learning. These two facets are crucial

in the overall language acquisition process. Listening comprehension involves the ability to understand spoken language, integrating both linguistic sounds and their meanings within a conversational context. This has been described as a dynamic process where the listener's cognitive faculties are engaged to interpret and internalize spoken words (Gilakjani & Sabouri, 2016b). On the other hand, reading comprehension is characterized by the interaction between the reader and the text. It is not merely about decoding written symbols but involves a deeper engagement where the reader constructs meaning based on both the textual content and their pre-existing knowledge and insights (Gilakjani & Sabouri, 2016a). This cognitive interaction enables learners to assimilate new information, reflect on it, and incorporate it into their understanding.

Defining English comprehension more broadly, it encompasses the recognition and interpretation of language at multiple levels: syntactic, lexical, pragmatic, and discourse. This multi-layered understanding implies that comprehension extends beyond mere word recognition to include the inference of meaning from complex structures and contexts (Ahmadi, 2016). Moreover, the overall proficiency in English is often seen as an amalgamation of various skills, where comprehension is fundamental. It involves a spectrum of abilities from understanding basic vocabulary to grasping more complex grammatical structures and interpreting the nuances of factual and implied content within the language (Sawaki et al., 2008). Influential factors in this process include familiarity with cultural nuances, structural knowledge of the language, the extent of vocabulary known, prior contextual knowledge, and the learner's attitude towards the material being studied. These elements collectively facilitate or hinder the comprehension process, highlighting the interdependence of language skills and cognitive engagement (Karimvand, 2011).

2.3.   Vocabulary Acquisition

The acquisition of vocabulary is often highlighted as a cornerstone of developing effective communication skills and literacy, pivotal for second language proficiency. This critical element of language learning has been a focus among educators and scholars. Initial steps in the vocabulary learning process necessitate a clear understanding of what it means to 'know' a word. Milton (2009) suggests that word knowledge is commonly categorized into two types: receptive (or passive) knowledge and productive (or active) knowledge. This distinction is crucial as it delineates between merely recognizing words and being able to use them appropriately in context. Expanding on this framework, Webb and Nation (2012) argue that comprehensive word knowledge encompasses three primary aspects: the form, meaning, and use of a word. Each of these facets is extensively analyzed, recognizing that a holistic grasp of vocabulary extends beyond simple definitions.

Further discourse in lexical studies introduces the concepts of vocabulary breadth and depth. Qian's research, as referenced by Marzban and Hadipour (2012), delineates these dimensions where breadth pertains to the extent of vocabulary a person recognizes—the sheer number of words, and depth refers to a profound understanding of each word, including pronunciation, spelling, meanings, usage contexts, frequency of use, and collocational relationships with other words (Schmitt, 2014; Gass et al., 2020). Brezina and Gablasova (2015) assert that mastering vocabulary is an intricate endeavor. Learners must not only acquire a variety of lexical forms but also delve into the complex interplay of meanings and contextual uses associated with each term. Thus, effective vocabulary learning involves developing both the breadth and depth of language knowledge, equipping learners with the tools needed for fluent communication and comprehensive language use.

2.4.   Previous Findings on the Use of Subtitles in EFL Instruction

Subtitles have been extensively studied within various ESL/EFL contexts, with the majority of research highlighting their beneficial role in enhancing vocabulary acquisition and listening

comprehension. However, alongside these positive effects, there are also noted drawbacks, particularly in relation to the type of subtitles used—whether they are in English or the learners' native language. This section will restructure the discussion to provide clearer insights into the specific arguments, supported by relevant studies.

Vocabulary Enhancement through Subtitles The integration of English subtitles in EFL settings can significantly bolster vocabulary acquisition. This is mainly because subtitles allow learners to correlate the visual text with spoken words, facilitating quicker and more effective learning. Hayati and Mohmedi (2011) emphasize that this dual input of auditory and visual information helps solidify the learners' understanding and retention of new vocabulary. Moreover, such subtitles support comprehension across both listening and reading dimensions, broadening the scope of learning.

Potential Limitations of Subtitles on Listening Skills While subtitles can aid in vocabulary learning and overall comprehension, their presence might sometimes impede the development of pure listening skills. This is because learners may become overly reliant on textual cues, thus hindering their ability to process spoken language independently. It is crucial for instructional designers to consider these potential downsides when implementing subtitles in language learning curricula, ensuring a balanced approach that promotes comprehensive language skills development. This restructured approach provides a clearer understanding of how subtitles affect EFL learning, distinguishing between their advantages in vocabulary acquisition and potential challenges for listening comprehension. By organizing the content into specific thematic points with detailed explanations and supporting citations, the analysis becomes more accessible and logically coherent.

The advantages of subtitles improving learners' English comprehension have threefold. Firstly, with English subtitles students are able to have the opportunity to acquire vocabulary more easily and quickly by associating visual and aural forms of words (Hayati and Mohmedi, 2011). It is also indicated that the use of English subtitles can enhance the learners' comprehension competence in listening and reading. Furthermore, it is easier for students to understand some feelings and expressions of foreign idioms, proverbs and slang under the different cultural context through the use of native language subtitles. Moreover, Black (2021) concludes that interlingual subtitles can help children develop decoding skills due to the subtitles allow them to improve word recognition. Jiang (2018) also argues the captions are more beneficial for EFL learners with lower English proficiency in facilitating English comprehension and serving as a shelter for them to consolidate this learning behavior. Subtitles in foreign language education may have unintended negative consequences on the long-term development of students' listening comprehension skills. Zanón (2006) argues that subtitles might serve as a distraction, impeding the improvement of listening proficiency as learners may become overly reliant on textual input rather than focusing on the spoken language. This dependency can create a comfort zone, making it challenging for learners to engage with language learning without the aid of text, potentially stunting their listening development.

Hayati and Mohmedi (2011) further suggest that prolonged exposure to subtitles can lead to an excessive dependence on on-screen text. This reliance can shift the learner's focus away from actively engaging with the English language to simply following along with the subtitles. This shift might reduce the effectiveness of listening practices, as confirmed by Latifi et al. (2011), who observed that overreliance on subtitles does not favorably contribute to the enhancement of English listening skills. On the flip side, some studies indicate positive aspects of using subtitles. For instance, Fang et al. (2019) noted that subtitles can help expand learners' vocabulary and improve their ability to use words in appropriate contexts. Peters (2019) supported this view by pointing out that on-screen texts facilitate the recognition and recall of words, enhancing vocabulary learning. However, researchers like Hulstijn (2003) and Vandergrift (2007) have argued that the absence of subtitles may better promote listening skills

and deeper linguistic knowledge, particularly in pronunciation aspects such as assimilation, elision, and resyllabification.

Despite these benefits, the presence of subtitles can sometimes introduce errors in spelling or translation, leading to confusion and mistrust among students regarding the accuracy of the language presented (Suetrong, 2015). Furthermore, while the literature, including works by Kruger & Steyn (2013) and Vanderplank (2016), recognizes the significant influence of both target and native language subtitles on language education, the extent to which subtitled materials can effectively support the development of productive language skills remains underexplored. Moreover, most empirical studies face limitations such as brief experimental durations and small participant groups, which can undermine the reliability of their findings. Research is predominantly focused at the university level, with less attention given to how subtitles impact language learning at the elementary and secondary school levels. Particularly in Mainland China, there is a notable absence of systematic research exploring how different modes of subtitles influence English comprehension and vocabulary acquisition from the perspective of educators.

2.5.   Hypotheses

This study aims to systematically assess how Chinese EFL teachers in secondary education perceive the effectiveness of four distinct modes of subtitling on English comprehension and vocabulary acquisition. These modes include subtitles in the target language (English), the first language (Chinese), bilingual subtitles, and no subtitles, providing insights into how subtitles can be optimally utilized in EFL classrooms to support language learning objectives. The following hypotheses guide the inquiry:

Hypothesis 1: Teachers perceive that the four different modes of subtitling variably impact English comprehension.

This hypothesis explores the extent to which each mode of subtitling facilitates or hinders the understanding of English among students. It considers whether certain modes are more conducive to comprehension, especially in terms of contextualizing vocabulary and grammatical structures within the audio-visual content.

Hypothesis 2: Teachers perceive distinct effects of the four types of subtitles on vocabulary acquisition.

This hypothesis examines teachers' perceptions of how subtitles in English, Chinese, both languages, or the absence of subtitles affect students' ability to acquire new vocabulary. It investigates whether direct exposure to English subtitles, for example, leads to better retention and usage of new words compared to other subtitling modes.

Hypothesis 3: Teachers advocate the use of specific modes of subtitling to enhance their students' learning.

This hypothesis addresses whether teachers prefer to use any particular subtitling mode over others in their instructional practices. It also explores the reasons behind their preferences, such as increased engagement, improved comprehension, or more effective vocabulary acquisition.

3. Methodology

This qualitative study engaged five Chinese EFL teachers from private educational institutions in Shanghai and Zhejiang, focusing on secondary education. The participants were selected based on their extensive experience and keen interest in the research topic. Participation was contingent upon their informed consent, detailed in the Participant Information Sheet and formalized with a Consent Form.

3.1. Participant Demographics

The participants comprised five female EFL teachers with varying years of teaching experience ranging from 2 to 10 years, all of whom have utilized subtitle instruction in their teaching practices. Detailed demographic data initially intended for presentation in Table 1 is summarized in the text to maintain confidentiality and streamline data presentation. Group A: Represents newer teachers with initial experience in using subtitles; Group B: Comprises teachers with moderate experience, fully comfortable using various subtitling modes; Group C: Includes the most experienced teachers, with a mix in subtitle usage reflecting varying pedagogical approaches.

Table 1. Demographic information of participants.

Group	Number of Teachers	Gender	Teaching Experience	Teaching in China	Target Age Group	Experience with Subtitles
Group A	10	Female	2-4 years	Yes	Secondary	Yes
Group B	15	Female	5-7 years	Yes	Secondary	Yes
Group C	25	Female	8-10 years	Yes	Secondary	Mixed (Yes and No)

3.2. Data Collection

Semi-structured interviews were conducted to gather insights into teachers' perceptions of different subtitle modes on English comprehension and vocabulary acquisition. These interviews, lasting between 15-30 minutes, were held via MS Teams, recorded with consent, and conducted in Chinese to ensure clarity and comfort for the participants. The interview protocol provided a structure that included key questions and prompts for participants.

3.3. Transcription of Data

Interviews were transcribed using MS Teams' transcription feature, and the accuracy of these transcripts was verified by the researcher Davidson (2009). Translations from Chinese to English were performed using Youdao Translator, ensuring that the translations maintained the original meanings and adhered to confidentiality standards. One of the reasons to select this website is that it owns a high reputation in China on account of the considerable efficient and accurate translation. Moreover, regarding the concern about the protection of translated content, the privacy policy of this website states that the personal information security is taken for priority based on the requirements of national laws and regulations. In addition, twofold needed attention when making English translations of interview transcripts. One is to compare the English translation with the original Chinese transcript to check whether the meanings are clear and understandable enough; the other is to check whether the meaning are the same with Chinese texts.

3.4. Data Analysis

Data was analyzed using thematic analysis facilitated by NVivo 12 software. The analysis involved identifying and reporting patterns within the data related to the impact of subtitles on language learning. Thematic analysis (TA) is a widely used qualitative analytic approach on the way of 'identifying, analysing and reporting themes within data' (Braun & Clarke, 2008, p. 79). The theme refers to extracting the important information from some data items relevant to the research question and representing some degree of patterned response or meaning under the data set. Hence, the researcher's judgement plays a significant role in the determination of what

a theme is (Braun & Clarke, 2008). Basically, the process of TA involves three stages that are data engagement, coding, and theme development. It is further mentioned that coding is the essential component for the theme construction, in which the objectiveness and unbiasedness of codes may be of core concerns (Braun & Clarke, 2020).

With respect to thematic analysis in this study, the analytic work was conducted in NVivo12 software. With the English transcripts of five participants' interviews imported into NVivo12, the researcher started to make some codes. The number of initial coding reached 20 codes, which is related to different aspects of the relationship among subtitling modes, English comprehension and vocabulary acquisition. By reviewing and comparing these codes, certain themes of various degree in relation to research questions were identified.

4. Results and Discussion

4.1. Impact of Subtitling Modes on English Comprehension

Figure 1. Teachers' perception: the impact of four subtitling modes on English comprehension.

Figure 1 presents a thematic map detailing how various subtitling modes influence English comprehension, based on teachers' insights.

4.1.1. No Subtitles

Teachers have noted that the absence of subtitles can significantly enhance the learning experience for students by fostering a more immersive engagement with authentic English content. Without the presence of textual cues, students are encouraged to rely on their existing linguistic competencies to navigate and comprehend the material. This subtitle-free environment is particularly beneficial for those with intermediate to advanced levels of English proficiency, as it demands a concentrated effort on listening skills and the comprehension of complex linguistic features. Engaging with content that lacks subtitles forces students to attentively listen and interpret spoken English, which can lead to a more nuanced understanding of the language's natural flow and nuances. This practice enhances their ability to discern subtle aspects of pronunciation, tone, and rhythm, which are crucial for effective communication. The focus on auditory cues alone helps in honing skills such as assimilation, where sounds or syllables are altered based on their phonetic environment; elision, which involves the omission of certain sounds in speech; and resyllabification, the process of reorganizing syllables across word boundaries (Hulstijn, 2003; Field, 2003; Vandergrift, 2007).

While this approach benefits advanced learners, it presents considerable challenges for those with lower English proficiency. Without subtitles, these students might find it difficult to follow along and fully understand the content. The absence of visual textual support means that they must rely heavily on their limited vocabulary and grammatical knowledge, which can lead to frustration and disengagement. This difficulty is compounded by the lack of immediate linguistic support to aid comprehension, potentially resulting in a reduced interest in the learning material. To mitigate these challenges, educators may consider using no subtitles selectively, based on the proficiency level of students and the complexity of the content. For lower proficiency learners, intermittent sessions without subtitles could be integrated with more supported viewing to gradually build their listening and comprehension skills. Such a balanced approach can help all students benefit from the immersive, authentic exposure to the language while ensuring they are not overwhelmed by the difficulty of the tasks.

4.1.2. Chinese Subtitles

Chinese subtitles are appreciated for their role in breaking down language barriers, allowing students to readily understand English content through direct translation. This immediate access to the meaning of words and phrases helps students feel more comfortable and confident as they engage with English-language media. By providing a straightforward translation, these subtitles can be particularly beneficial in a classroom setting where the primary objective is to ensure comprehension of the material presented. Despite their utility, Chinese subtitles may not effectively contribute to deeper learning of English linguistic structures. Students who rely solely on these subtitles may find themselves engaging less with the actual English language and more with its translated version. This can limit their exposure to the English language's unique grammatical and syntactical elements, which are crucial for becoming proficient in any language. The effectiveness of subtitles in teaching linguistic nuances like idioms and colloquial expressions is often compromised as translations may not accurately reflect the contextual meanings of such phrases (Napikul et al., 2018).

The accuracy of translations in Chinese subtitles is a significant concern, particularly when dealing with English idioms, slang, and colloquial language that are culturally and contextually rich. Translators often face the challenge of providing an equivalent phrase in Chinese that maintains the original phrase's meaning, tone, and humor. Misinterpretations or overly literal translations can lead to misunderstandings, which not only detract from the learning experience but also potentially misinform about the language's actual usage. The use of Chinese subtitles should be strategically employed depending on the learning objectives and the students' proficiency levels. For beginners, these subtitles can be an essential aid, helping them bridge the gap between their native language and English. However, as students progress, gradually phasing out Chinese subtitles and introducing more English-only segments could encourage deeper linguistic engagement and better retention of English language structures.

4.1.3. English Subtitles

English subtitles are highly valued for their ability to keep students focused on the English language itself, devoid of distractions that might come from native language translations. This approach immerses students directly in the language as spoken and written by native speakers, providing an authentic environment that mimics real-life English usage. The use of English subtitles enables students to connect spoken language with written text in real-time, which can significantly improve their language processing skills and auditory comprehension. One of the major advantages of English subtitles is the precision and authenticity they bring to language comprehension. Students have the opportunity to see the language as it is structurally and contextually used by native speakers, including the colloquialisms and idiomatic expressions that are often lost in translation. This direct exposure allows learners to develop their

interpretative skills, as they are not merely passive recipients of translated content but active participants in understanding and internalizing the language.

The effectiveness of English subtitles, however, heavily depends on the learner's existing English proficiency. For students with a solid foundation in English vocabulary and well-developed listening skills, subtitles can be a powerful tool that complements their learning by providing clear visual reinforcement of spoken words. This can aid in better retention and understanding of the language nuances, which are critical for effective communication. Conversely, for learners who are still developing their English skills, particularly those with limited vocabulary and listening comprehension, English subtitles might pose a challenge. These students might struggle to keep up with the pace of spoken language and simultaneously process the textual information. This could potentially lead to a cognitive overload, where the student is unable to effectively learn from the subtitled material due to the high demands it places on their language processing capabilities. To maximize the benefits of English subtitles, educators might consider integrating this tool progressively. Starting with slower-paced videos or segments that use simpler language could help lower proficiency learners adjust to this learning style. As their comprehension improves, more complex videos with faster speech and more advanced vocabulary can be introduced. This gradual increase in difficulty helps build confidence and skills in a scaffolded manner, ensuring that students of all proficiency levels benefit from using English subtitles in their language learning journey.

4.1.4. Bilingual Subtitles

Bilingual subtitles serve as a valuable tool for students by facilitating the direct correlation between English phrases and their Chinese translations. This is particularly advantageous for expressions deeply embedded in cultural contexts, where understanding nuances and connotations can be challenging. By presenting both languages simultaneously, bilingual subtitles help students grasp complex English expressions more readily, making the acquisition of linguistic elements smoother and more intuitive. This subtitle mode is particularly effective in teaching language through cultural lenses. Students can see how certain phrases are used in different cultural scenarios, improving their cultural literacy alongside their language skills. This dual exposure helps in understanding not just the language itself, but also the way it interacts with cultural norms and practices, which is crucial for achieving fluency.

However, the convenience of bilingual subtitles can also lead to dependency, particularly among less disciplined students. The presence of Chinese translations can tempt students to rely more on their native language, thereby diminishing their engagement with the English components of the dialogue. This over-reliance can impede the development of full English comprehension, as students might not feel compelled to understand the English audio when they can easily read the Chinese subtitles. Another significant challenge with bilingual subtitles is the potential for discrepancies between the English audio and the Chinese text. Translations might not always convey the exact meaning of the original language, leading to possible misunderstandings. These discrepancies can be particularly problematic when dealing with idiomatic expressions or slang, where literal translations do not effectively capture the intended meanings or nuances. Educators using bilingual subtitles must carefully consider when and how to employ this tool to maximize learning outcomes while minimizing dependency. It may be beneficial to use bilingual subtitles selectively, perhaps as an introductory tool or in complex linguistic situations where dual-language support can significantly aid comprehension. Over time, gradually reducing the reliance on Chinese subtitles can encourage deeper engagement with the English audio, fostering better listening skills and greater language proficiency.

The use of subtitles in language learning varies significantly depending on the proficiency level of the learners and the specific educational goals. For intermediate to advanced learners, opting

for no subtitles can foster deeper engagement with the language, encouraging students to utilize their existing linguistic skills and enhancing their listening capabilities. This mode challenges students to improve through active listening and interpretation, thus providing a more immersive learning experience. In contrast, Chinese subtitles are particularly effective at the initial stages of learning, acting as a supportive tool that helps students overcome initial language barriers. This approach allows learners to build confidence as they understand and follow along with English content; however, educators are advised to gradually reduce the reliance on these translated subtitles to push students towards more direct interaction with the English language. English subtitles serve as an ideal aid for those who already possess a basic understanding of English, effectively bridging the gap between listening and reading comprehension. It is crucial, however, to carefully select content that matches the learners' language proficiency to prevent cognitive overload and ensure effective learning. Finally, bilingual subtitles can be extremely beneficial in explaining complex linguistic or cultural nuances, helping students correlate English phrases with their native language and enhancing their cultural and contextual understanding. Yet, they should be used sparingly to avoid fostering dependency on translations, instead promoting an autonomous and direct engagement with English. Each of these approaches has its benefits and limitations, and choosing the right one depends on the specific needs and skills of the learners.

4.2. Effects of Subtitling Modes on Vocabulary Acquisition

4.2.1. Impact on Vocabulary Size

Understanding vocabulary acquisition involves considering how learners develop knowledge of word forms, meanings, and usage, and how they expand the size of their vocabulary (Brezina & Gablasova, 2015). This section explores how different subtitling modes influence these aspects of vocabulary learning. The impact of subtitling on vocabulary size varies significantly across different modes, as observed in the feedback from several educators. Subtitling can be an effective tool for vocabulary expansion, but its efficacy depends largely on the format used and the instructional context. Bilingual subtitles, which provide both English and Chinese translations concurrently, were highlighted for their practicality in classroom settings. Educators noted that this mode significantly reduces the cognitive load on students who are just beginning to learn English. By immediately presenting the meaning of words in a familiar language, bilingual subtitles can quickly expand the number of words a student understands and can recognize. This method is particularly beneficial for introducing technical vocabulary or phrases that are dense with cultural references, which might otherwise be inaccessible to students without extensive explanation.

In contrast, English subtitles are valued for fostering a more active learning environment. Teachers reported that when students encounter English subtitles, they are more likely to engage with the material by pausing the video to look up unfamiliar words, thereby enhancing both their vocabulary size and depth of knowledge. This mode encourages learners to interact with new vocabulary in context, which not only aids in memorizing the words but also helps in understanding their use in different situations. This can be especially effective for intermediate to advanced students who need less linguistic support and more exposure to varied sentence structures and idiomatic expressions. While bilingual subtitles provide immediate comprehension, English subtitles challenge students to develop their research skills and linguistic independence. This approach can lead to a more sustained vocabulary retention as students are not just passively receiving information but are actively engaging with the language. It also promotes better pronunciation and listening skills as learners must rely on the audio input without the crutch of their native language. The choice of subtitling mode should therefore be aligned with educational goals and the specific needs of the student population. For instance, in mixed-ability classrooms, a combination of both methods might be employed

strategically: bilingual subtitles for complex content to ensure understanding and English subtitles for review sessions to enhance vocabulary retention and language skills.

4.2.2. Mastery of Vocabulary Knowledge

English subtitles are widely recognized among educators for enhancing the depth of vocabulary knowledge. This mode encourages learners to engage actively with the language, focusing on how English is naturally used in various contexts. By exposing students to the language in its authentic form, English subtitles help learners appreciate the nuances of word usage, including grammatical structures and colloquialisms. This intensive exposure is crucial for students to not only learn new words but also understand their applications, variations, and subtleties in different contexts. The use of English subtitles promotes active learning by requiring students to listen carefully and read simultaneously, effectively doubling their channels of language input. This dual engagement helps solidify their understanding as they can correlate the spoken words with their written forms. Furthermore, encountering vocabulary in real-life contexts within videos enhances retention and fosters a more comprehensive grasp of the language, including idiomatic expressions and slang that are often missed in traditional learning environments.

Conversely, some educators have concerns regarding the use of Chinese subtitles. While they provide immediate understanding, there is a risk that they oversimplify or alter the complexity of English expressions. This can lead to a superficial understanding where students might recognize a word but fail to fully grasp its correct usage or nuances. Chinese subtitles might also prevent learners from fully engaging with the English audio, as they could become reliant on the text in their native language, thus missing out on important auditory learning opportunities. Educators emphasize that for true mastery of vocabulary, students must not only encounter words but engage with them critically. English subtitles support this process by compelling students to interpret language actively, enhancing their critical thinking skills as they analyze and infer meaning based on context. This active engagement is less likely with Chinese subtitles, which can provide immediate translations that bypass the need for deeper cognitive processing. To optimize vocabulary learning, educators might consider integrating both types of subtitles strategically throughout their curriculum. For example, introducing new content with English subtitles can challenge students, followed by occasional reviews with Chinese subtitles to ensure comprehension. Such a balanced approach can help mitigate the limitations of each mode while maximizing the educational benefits.

4.2.3. Challenges and Limitation with Bilingual Subtitles and Subtitles in Vocabulary Learning

Figure 2 presents a theme map that illustrates the impact of different subtitling modes on vocabulary acquisition, summarizing the nuances of how each mode supports or limits vocabulary development. Although bilingual subtitles are convenient for rapid understanding, they were noted to potentially inhibit full mastery of vocabulary usage, including phrase collocation and idiomatic expressions. The dual presentation might lead students to rely too heavily on the Chinese translation without fully engaging with the English expression, thus requiring ongoing study and practice to integrate new words into their active vocabulary. Despite the utility of subtitles in supporting vocabulary acquisition, teachers universally agreed that relying solely on subtitles is insufficient for achieving thorough vocabulary learning. Vocabulary acquisition is a multifaceted process that involves repeated exposure, practice, and active use, aspects that subtitles alone cannot fully provide. Educators emphasized the importance of traditional learning methods, such as direct instruction and contextual usage, to effectively learn and retain new vocabulary.
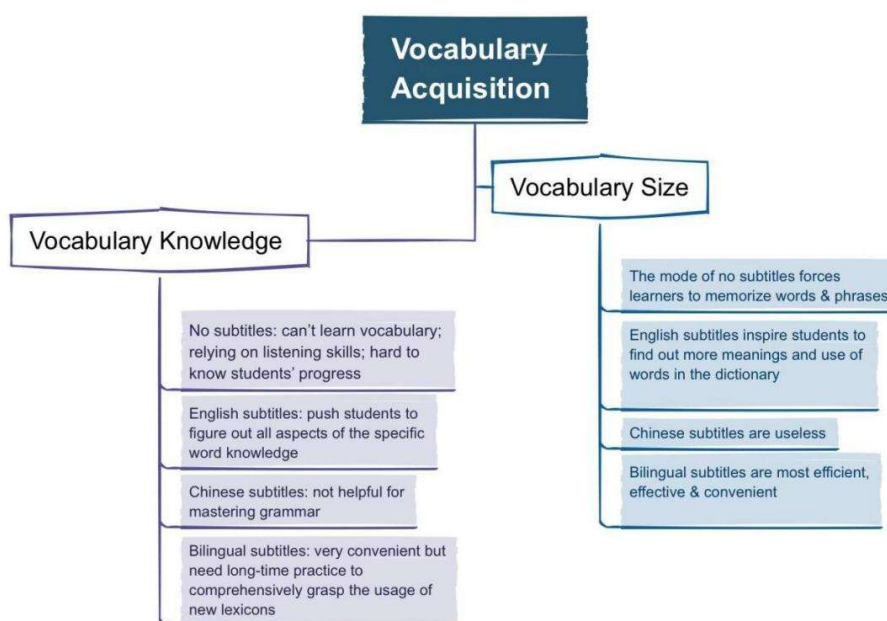
Figure 2. The impact of four subtitling modes on vocabulary acquisition.

4.3. Teacher Recommendations on Subtitling Modes

Teachers generally advocate for a strategic use of subtitling modes tailored to the English proficiency levels of secondary school students. The consensus is that bilingual subtitles serve as an effective auxiliary tool, especially for beginners or intermediate learners. This mode not only aids in understanding the general content but also helps students focus on specific English phrases and their meanings concurrently. A more nuanced strategy involves the sequential use of different subtitling modes within the learning process. One proposed method starts with Chinese subtitles to help students grasp the basic plot or content. This initial step is crucial for building confidence and comprehension without overwhelming students with language complexity. As students become familiar with the content, the strategy shifts to English subtitles. This transition encourages deeper engagement with the language, where students can focus on linguistic features such as grammar, vocabulary, and idiomatic expressions. Following this, bilingual subtitles are introduced to reinforce understanding, allowing students to verify their comprehension of specific terms and phrases against the Chinese translation. Finally, the removal of subtitles challenges students to rely solely on their listening skills and understanding of English, promoting both language retention and auditory comprehension. This phased approach not only enhances understanding and retention but also encourages active learning and self-assessment.

Choosing the right subtitling mode is not a one-size-fits-all decision. It requires consideration of the learning objectives, the students' language proficiency, and their learning autonomy. The educational material itself must also be appropriate for the chosen subtitling strategy to be effective. Reflecting on the effectiveness of each subtitling type, it becomes evident that each has distinct impacts on different aspects of language acquisition. For instance, no subtitles might hinder initial comprehension but significantly boost vocabulary retention as students are forced to focus more intensively on listening. Conversely, Chinese subtitles might enhance immediate understanding but limit exposure to English structure and usage, potentially stalling advanced language acquisition. To better illustrate these nuances, a revised approach to assessing subtitling effectiveness might include a more detailed analysis rather than a binary positive/negative framework. For example, detailing specific benefits such as "enhances immediate comprehension" or "improves listening accuracy" and drawbacks like "may inhibit

vocabulary retention" or "limits exposure to English phonetics" would provide clearer guidance on when and how to use each subtitling mode. Besides, participants mentioned that before determining to use which type of subtitles, it was significant to choose appropriate English material based on learning objectives and English proficiency. The learning autonomy was a crucial factor as well. Table 2 briefly concludes how different types of subtitles may possibly affect English comprehension and vocabulary acquisition.

Table 2. Detailed effects of subtitling types on English comprehension and vocabulary acquisition.

Subtitling Type	English Comprehension	Vocabulary Acquisition
No Subtitles	**Challenges:** Requires higher proficiency; may hinder initial comprehension but fosters active listening and concentration.	**Advantages:** Encourages students to focus more on auditory cues, enhancing retention and deeper vocabulary recall.
Chinese Subtitles (L1)	**Advantages:** Facilitates immediate understanding, suitable for beginners.	**Challenges:** Limits exposure to English structure and usage, potentially stalling deeper linguistic development.
English Subtitles (L2)	**Advantages:** Enhances understanding of context and use in natural settings; provides direct exposure to English.	**Advantages:** Promotes active learning through dictionary use and contextual comprehension; enhances retention of usage and context.
Bilingual Subtitles (L1+L2)	**Advantages:** Supports comprehension by clarifying difficult concepts and vocabulary through immediate translation.	**Advantages:** Allows easy reference between languages, aiding in the initial acquisition of complex vocabulary and phrases. **Challenges:** May lead to over-reliance on native language, inhibiting full immersion in English.

Table 2 critically assesses the impact of different subtitling modes on English comprehension and vocabulary acquisition. For advanced learners, the absence of subtitles promotes rigorous language practice, compelling students to enhance their listening and comprehension skills without relying on text, which can lead to superior long-term language retention. Conversely, Chinese subtitles provide essential support for beginners by ensuring content understanding, yet this assistance might hinder full immersion in English, potentially stalling progress toward achieving higher proficiency levels. English subtitles strike a delicate balance, exposing learners to the language within its authentic context, making it particularly beneficial for those at an intermediate level who aim to refine both their comprehension and vocabulary. Finally, bilingual subtitles are indispensable for navigating complex materials, facilitating immediate comprehension. However, there exists a necessity to gradually reduce dependency on native language translations, which encourages learners to delve deeper into English usage, enhancing their overall language mastery. This nuanced analysis underscores the importance of strategically selecting subtitling modes based on specific learning objectives and the proficiency levels of students, aiming to maximize educational outcomes while minimizing potential drawbacks.

4.4. Implications for Pedagogical Practice

The findings from this study provide actionable insights for EFL teachers in China, emphasizing the strategic use of subtitled English videos or movie clips to enhance language teaching. The inclusion of subtitles not only captivates students' attention, making lessons more engaging and

dynamic, but also introduces them to authentic English language materials, thereby enhancing their language proficiency. Effective instruction begins with the careful selection of English materials that align with the students' language proficiency levels. Teachers must consider the complexity of the content and the linguistic capabilities of their students to ensure that the materials are neither too challenging nor too simplistic. Following this, the choice of subtitle type should directly support the instructional objectives of the lesson:

No Subtitles: This mode can be particularly entertaining and challenging, encouraging students to infer meanings and engage critically with the content, which can be a fun and interactive method of learning.

Chinese Subtitles (L1): For beginners or when introducing complex new content, Chinese subtitles can provide immediate comprehension, ensuring that students grasp the main ideas without becoming overwhelmed by language barriers.

English Subtitles (L2): More suited for students with higher English proficiency, this mode allows learners to see and hear English simultaneously, reinforcing their understanding and helping them to acquire new vocabulary and grammatical structures.

Bilingual Subtitles (L1+L2): These can be used to clarify specific linguistic concepts or vocabulary, aiding in the comprehension of detailed and nuanced language use.

A diversified approach, utilizing a combination of different subtitling modes, can be highly effective. For instance, starting a new topic with bilingual subtitles to ensure comprehension, transitioning to English subtitles to challenge students, and occasionally using no subtitles to assess understanding and listening skills, can provide a comprehensive learning experience. This method ensures that students are continually adapting and applying their language skills in varying contexts, which can significantly enhance their listening, speaking, reading, and writing capabilities.

5. Conclusion

This qualitative study explored the perceptions of Chinese EFL teachers regarding the impact of various subtitling modes on students' English comprehension and vocabulary acquisition. The findings indicate distinct effects associated with each subtitling mode:

No Subtitles: This mode encourages students to focus intensely on the authentic English audio. However, students with lower proficiency may struggle to grasp the content, often relying on non-verbal cues such as facial expressions and background music to infer meaning. This method challenges students to enhance their listening skills but may not adequately support comprehension for all learners.

Chinese Subtitles: Providing direct translations, Chinese subtitles facilitate immediate comprehension of the English material, which is particularly helpful for beginners. Nevertheless, the accuracy of these translations is critical as errors or cultural misrepresentations, especially in idioms and slang, can lead to misconceptions about the language.

English Subtitles: By eliminating distractions from the native language, this mode helps students develop a personal understanding of the English content. It is most effective for intermediate learners who already have a substantial vocabulary base and can benefit from direct English exposure.

Bilingual Subtitles: These are highly beneficial for quickly conveying the meaning of complex English content alongside corresponding Chinese translations, aiding in the initial comprehension and subsequent learning of English linguistic features. However, the dual-language format may cause students, particularly those with less self-discipline, to focus predominantly on the Chinese text, potentially detracting from English language engagement.

The study also highlights the impact of subtitles on vocabulary acquisition. Modes like English and bilingual subtitles can facilitate learning by allowing students to access meanings easily, which is crucial for building vocabulary. However, reliance solely on subtitles without engaging in more comprehensive language practice may not suffice for thorough vocabulary mastery. Moreover, the research suggests that the choice of subtitling mode should be informed by students' individual English proficiency levels and learning styles. For advanced learners with strong autonomous learning skills, modes that challenge their language capabilities, such as English-only or no subtitles, are advisable. Conversely, for less proficient learners, a mixed approach utilizing all four modes might be more effective, catering to diverse needs and supporting gradual language development. Further research could employ a mixed-methods approach with a larger participant pool to better understand the combined effects of these subtitling modes. It is also recommended to extend the study over a longer period to assess the long-term impact of subtitles on language skills. Additionally, exploring the application of mixed subtitling strategies in different geographical and cultural contexts could provide deeper insights into their effectiveness across diverse EFL learning environments.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Competing Interests

The authors declare no conflict of interest.

References

[1] Ahmadi, S. M. (2016). The Importance of Listening Comprehension in Language Learning. International Journal of Research in English Education, 1(1), 7–10.

[2] Alabsi, T. (2020). Effects of Adding Subtitles to Video via Apps on Developing EFL Students' Listening Comprehension. Theory and Practice in Language Studies, 10(10), 1191–1199.

[3] Black, S. (2021). The potential benefits of subtitles for enhancing language acquisition and literacy in children: An integrative review of experimental research. Translation, Cognition & Behavior.

[4] Branch, G. (2014). The effect of movie subtitling on incidental vocabulary learning among EFL learners. International Journal of Asian Social Science, 4(9), 1013–1026.

[5] Braun, V., & Clarke, V. (2008). Using thematic analysis in psychology Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.

[6] Braun, V., & Clarke, V. (2020). One size fits all? What counts as quality practice in (reflexive) thematic analysis? Qualitative Research in Psychology, 1–25. https://doi.org/10.1080/14780887.2020.1769238.

[7] Brezina, V., & Gablasova, D. (2015). Is There a Core General Vocabulary ? Introducing the New General Service List. Applied Linguistics, 36(1), 1–22. https://doi.org/10.1093/applin/amt018.

[8] Cordella, M. (2007). Subtitling the film" The children of Russia": enhancing understanding through a series of linguistic transformations. IC Revista Científica de Información y Comunicación, 4, 78–87.

[9] Davidson, C. (2009). Transcription: Imperatives for Qualitative Research. International Journal of Qualitative Methods, 8(2), 36–52.

[10] Fang, F., Zhang, Y., & Fang, Y. (2019). A Comparative Study of the Effect of Bilingual Subtitles and English Subtitles on College English Teaching. Revista de Cercetare Si Interventie Sociala, 66, 59–74.

[11] Gass, S. M., Behney, J., & Plonsky, L. (2020). The Lexicon. In Second Language Acquisition (5th Editio, pp. 231–265). Routledge.

[12] Gilakjani, A. P., & Sabouri, N. B. (2016a). How Can Students Improve Their Reading Comprehension Skill? Journal of Studies in Education, 6(2), 229–240. https://doi.org/10.5296/jse.v6i2.9201.

[13] Gilakjani, A. P., & Sabouri, N. B. (2016b). The Significance of Listening Comprehension in English Language Teaching. Theory and Practice in Language Studies, 6(8), 1670–1677.

[14] Hayati, A., & Mohmedi, F. (2011). The effect of films with and without subtitles on listening comprehension of EFL learners. British Journal of Educational Technology, 42(1), 181–192. https://doi.org/10.1111/j.1467-8535.2009.01004.x

[15] Hsu, C., Hwang, G., Chang, Y., & Chang, C. (2013). Effects of Video Caption Modes on English Listening Comprehension and Vocabulary Acquisition Using Handheld Devices. International Forum of Educational Technology & Society, 16(1), 403–414.

[16] Hsu, C. K., Hwang, G. J., & Chang, C. K. (2014). An automatic caption filtering and partial hiding approach to improving the english listening comprehension of EFL students. Educational Technology & Society Society, 17(2), 270–283.

[17] Jiang, J. (2018). Evaluating the Effects of Subtitles and Captions on EFL Learners'Listening Comprehension of Online Videos (Doctoral dissertation, National Taiwan Normal University (Taiwan)).

[18] Karimvand, P. N. (2011). Psycholinguistic Perspectives on Comprehension in SLA. Journal of Language Teaching and Research, 26(2), 1268–1273.

[19] Kruger, J., & Steyn, F. (2013). Subtitles and Eye Tracking: Reading and Performance. Reading Research Quarterly, 49(1), 105–120. https://doi.org/10.1002/rrq.59.

[20] Li, M. (2016). An Investigation into the Differential Effects of Subtitles (First Language, Second Language,and Bilingual) on Second Language Vocabulary Acquisition.

[21] Lwo, L., & Lin, M. C. (2012). The effects of captions in teenagers'multimedia L2 learning. European Association for Computer Assisted Language Learning, 24(2), 188–208. https://doi.org/10.1017/S0958344012000067.

[22] Mardani, M., & Najmabadi, A. (2016). The Effect of Movies with Different Types of Subtitles on Incidental English Vocabulary Learning of Iranian High School EFL Learners. Research in English Language Pedagogy, 4(1), 52–63.

[23] Markham, P. L., Peter, L. A., & Mccarthy, T. J. (2001). The Effects of Native Language vs.Target Language Captions on Foreign Language Students'DVD Video Comprehension. Foreign Language Annals, 34(5), 439–445.

[24] Marzban, A., & Hadipour, R. (2012). Depth versus breadth of vocabulary knowledge: assessing their roles through reading. Procedia-Social and Behavioral Sciences, 46, 5296–5300. https://doi.org/10.1016/j.sbspro.2012.06.426.

[25] Milton, J. (2009). Explanations and Definitions. In Measuring Second Language Vocabulary Acquisition (pp. 6–21). Multilingual Matters.

[26] Mousavi, F., & Gholami, J. (2014). Effects of Watching Flash Stories with or without Subtitle and Reading Subtitles on Incidental Vocabulary Acquisition. Procedia-Social and Behavioral Sciences, 98, 1273–1281. https://doi.org/10.1016/j.sbspro.2014.03.543.

[27] Napikul, S., Cedar, P., & Roongrattanakool, D. (2018). The Effects of Film Subtitles on English Listening Comprehension and Vocabulary. International Journal of Applied Linguistics & English Literature, 6(7), 104–111.

[28] Neves, J. (2008). 10 fallacies about Subtitling for the d/Deaf and the hard of hearing. The Journal of Specialised Translation, 10, 128–143.

[29] Perez, M. M., Noortgate, W. Van Den, & Desmet, P. (2013). Captioned video for L2 listening and vocabulary learning: A meta-analysis. System, 41(3), 720–739. https://doi.org/10.1016/ j.system. 2013.07.013.

[30] Perez, M. M., Peters, E., & Desmet, P. (2015). Enhancing Vocabulary Learning Through Captioned Video: An Eye-Tracking Study. The Moodern Language Journal, 99(2), 308–328. https://doi.org/ 10.1111/modl.12215.

[31] Peters, E. (2019). The Effect of Imagery and On-Screen Text on Foreign Language Vocabulary Learning From Audiovisual Input. Tesol Quarterly, 53(4), 1008–1032. https://doi.org/10.1002/ tesq.531.

[32] Pratama, I. D., Retnaningsih, W., & Prakoso, M. R. (2021). Interlingual Subtitles to Increase High School Students' Ability in Understanding Explanation Texts. Metathesis: Journal of English Language, Literature, and Teaching, 5(1), 19–31. https://doi.org/10.31002/metathesis.v5i1.2701.

[33] Saree, N. (2016). The Effect of Watching English Movies with Standard Subtitles on EFL Learners' Content and Vocabulary Comprehension. Journal of Applied Linguistics and Language Research, 3(5), 284–295.

[34] Sawaki, Y., Stricker, L., & Oranje, A. (2008). Factor Structure of the TOEFL Internet-Based Test (iBT): Exploration in a Field Trial Sample (Issue 1).

[35] Schmitt, N. (2014). Size and Depth of Vocabulary Knowledge : What the Research Shows. Language Learning, 64(4), 913–951. https://doi.org/10.1111/lang.12077.

[36] Suetrong, P. (2015). The learners'attitudes toward the use of English language movies with Thai subtitles and English subtitles to improve listening comprehension skills. Unpublished Master's Independent Study.

[37] Thirakunkovit, S. (2018). The Notions of Language Proficiency and Language Dimensionality. PASAA: Journal of Language Teaching and Learning in Thailand, 55(January), 219–236.

[38] Vanderplank, R. (2016). 'Effects of'and'effects with'captions: How exactly does watching a TV programme with same-language subtitles make a difference to language learners? Language Teaching, 49(2), 235–250. https://doi.org/10.1017/S0261444813000207.

[39] Wang, T. I., & Wu, Y. H. (2014). The Effects of using Synonyms Annotation for English Video Subtitles on Content Understanding, Vocabulary Learning, and Cognitive Loading. SEFI 2014: 42nd Annual Conference.

[40] Webb, S., & Nation, P. (2012). Teaching Vocabulary. The Encyclopedia of Applied Linguistics, 1–7. https://doi.org/10.1002/9781405198431.wbeal1177.

[41] Zanón, N. T. (2006). Using subtitles to enhance foreign language. Porta Linguarum: Revista Internacional de Didáctica de Las Lenguas Extranjeras, 6(June 2006), 41–52. https://doi.org/ 10.30827/Digibug.30659.