

The Positive Effect of Cultural Knowledge on Listening Comprehension of EFL Learners

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Abstract

The objective of this study was to investigate the effect of target cultural knowledge on the listening comprehension proficiency of Chinese EFL learners. Two groups of intermediate-level English language learners participated in the study. One group received English lessons on reading, writing, listening, and speaking, as well as a curriculum focused on target cultural knowledge, specifically the culture of Britain and the US. The other group received only English lessons on reading, writing, listening, and speaking, without any focus on target cultural knowledge. The comparison between the results of a pre-test and a post-test administered to both groups indicated that target cultural knowledge had a positive impact on the listening competence of EFL learners. This finding was also confirmed by interviews with the EFL learners. The study is significant for the teaching of English listening comprehension. Furthermore, the findings also have important implications for the teaching of reading and writing.

Keywords: target cultural knowledge, listening comprehension capability, EFL learners

1. Introduction

Listening comprehension is one of the most important skills in English language learning. However, many students have encountered difficulties in listening comprehension due to its relatively lower emphasis in universities and schools, compared to reading and writing. As one of the two primary input channels of language, listening plays a pivotal role in foreign language acquisition. It is crucial for the development of other language skills, particularly speaking (Rost, 2002). Listening serves as a fundamental component of spoken language processing, and it is inseparable from any form of spoken communication (Rost, 2013). Unfortunately, listening often proves to be the weakest skill among foreign language learners and has received significantly less attention compared to writing, reading, or speaking.

Although often overlooked, listening remains an indispensable component of language teaching over the past five decades. During this period, the way listening activities are conducted has primarily gone through three phases: text-oriented instruction, communication-oriented instruction, and learner-oriented instruction. Text-oriented instruction emphasizes the importance of recognizing and comprehending specific elements of listening input, such as phonological sounds, key words, and phrases. Listening is perceived as a passive process within text-oriented instruction. In contrast, communication-oriented instruction views listening as an active process of constructing meaning. Learner-oriented instruction focuses on a meta-cognitive approach that teaches learners how to listen and engage with auditory input. As more time and attention are dedicated to listening instruction, learners' role has also shifted from passive tape-recorders to active meaning constructors. Listeners are encouraged to employ their relevant background knowledge to interpret the incoming input.

Background knowledge plays a crucial role in language comprehension. Bartlett (1932) has highlighted the significance of background knowledge in language comprehension, which has been formalized as schema theory. According to schema theory, listening comprehension is a dynamic process in which the listener's background knowledge interacts with the incoming input. Piaget (1972) proposed that the interaction between new information and background knowledge involves two fundamental processes: assimilation and adaptation. Assimilation, a quantitative change of schema, refers to the absorption and integration of relevant information

from the external environment into the existing schema. On the other hand, adaptation, a qualitative change of schema, occurs when the original cognitive structure cannot assimilate new information obtained from the environment. This necessitates the reorganization and transformation of the prior schema to accommodate the new information.

According to scholars (Al-Issa, 2000; Huang, 2009; Oller, 1995; Xiao-hui, Jun, & Wei-hua, 2007), three types of schema are crucial for listening comprehension: linguistic schema, formal schema, and content schema. Linguistic schema encompasses knowledge of language, including vocabulary, phrases, sentence structure, grammar, and cohesive structure. Formal schema refers to the organizational forms and rhetorical structures of a discourse, encompassing awareness of genre differences. Content schema pertains to background knowledge related to a specific topic, including factual knowledge systems and social-cultural knowledge. Language is not merely a combination of vocabulary and grammar; it also reflects and carries cultural aspects. Hence, social-cultural knowledge, belonging to content schema, plays a vital role in activating listeners' comprehension of listening texts. It enables them to predict incoming information, filter out ambiguities, and process valuable information based on their relevant prior knowledge. Activating students' related background knowledge, both linguistic and non-linguistic, and leveraging it for preparing for incoming input are key tasks of listening instruction. Therefore, in line with schema theory, this study focuses on content schema and examines the impact of target cultural knowledge on the listening comprehension proficiency of Chinese EFL learners.

Our research question aims to investigate the potential facilitative effect of target cultural knowledge on the listening comprehension of Chinese EFL learners. Drawing upon schema theory, we hypothesize that the incorporation of target cultural knowledge can enhance the understanding of listening materials by Chinese EFL learners. Should our hypothesis be confirmed, our research would provide valuable insights not only into English listening instruction but also into other aspects of language teaching.

2. Literature Review

Despite being an essential skill in language learning, listening has often received less attention compared to writing, reading, and speaking. This is due to the greater emphasis on productive skills in teaching methods, while listening is often perceived as a more passive activity (Cross, 2010). However, an increasing number of researchers have recognized its significance. Listening comprehension is an active and conscious process wherein the listener actively constructs meaning by utilizing contextual information and existing knowledge (O'Malley et al., 1989). Consequently, the impact of prior knowledge, including cultural background knowledge, on listening comprehension has been extensively explored.

2.1 *The Effect of Prior Knowledge on Listening Comprehension*

Prior knowledge, stored in schemata, encompasses conceptual knowledge and life experiences that language learners have acquired and can draw upon for comprehension. The influence of prior knowledge on listening comprehension has garnered attention in recent studies. Several studies have sought to determine the significance of background knowledge and topic familiarity in L2 listening comprehension. Long (1990) and Schmidt Rinehart (1994) examined participants' listening comprehension of two passages—one familiar and the other unfamiliar. However, the research results yielded contrasting outcomes. Long's study did not observe a significantly better performance, whereas Schmidt Rinehart's study demonstrated the opposite.

Several studies have explored whether topic familiarity positively influences listening comprehension. In Sadighi and Zare's (2002) study, preparation classes were provided for both the experimental and control group students who were preparing for the TOEFL exam. However, only the experimental group received treatment related to topic familiarity to stimulate their background knowledge. Both groups were required to take the TOEFL listening comprehension test, and the experimental group achieved a significantly higher score. This finding indicates that topic familiarity indeed has a noteworthy effect on listening comprehension. Similarly, Othman and Vanathas (2004) pursued the same research objective with a group of 34 intermediate-level students majoring in Business Studies. They conducted a pre-test followed by a four-week training program focused on expanding students' background knowledge of the topic. After the topic-related training, a post-test was administered, revealing significantly higher scores. These results further confirm the positive impact of topic familiarity on listening comprehension.

Other studies have aimed to further investigate how the influence of prior knowledge on listening comprehension varies across the perceptual, parsing, and utilization phases. Bacon (1992) conducted a study with students majoring in Spanish, where they listened to the Voice of America broadcasts in Spanish. Subsequently, interviews were conducted to explore both the listeners' strategy use and their comprehension of the passage. The results indicated that the impact of background knowledge was most pronounced during the utilization phase,

while little utilization was observed during the perceptual phase. Furthermore, more proficient listeners demonstrated significantly better utilization of their prior knowledge and background information compared to less proficient listeners.

2.2 The Effect of Culture Background Knowledge on Listening Comprehension

Recent studies have shown a growing interest in exploring the relationship between target culture background knowledge (a specific form of prior knowledge) and listening proficiency. Some studies have investigated whether listeners comprehend material related to their own culture significantly better than that of other cultures. Markham and Latham (1987) confirmed this hypothesis in their research. They selected 16 Muslim, 20 Christian, and 28 religion-neutral students as participants to listen to passages describing prayer rituals in Islam and Christianity. The passage related to the participants' own cultural religion yielded higher mean scores and fewer distortions. A similar pattern of results was observed in a subsequent study conducted by Ervin (1992). In this study, 25 Scottish pupils and 21 Texan pupils listened to both same-culture and other-culture passages. The Scottish group demonstrated significantly higher scores on the same-culture test, while the Texan group did not show significant differences, although a slightly better score was observed in the same-culture test. Additionally, both the Scottish and Texan pupils achieved significantly higher scores in the other culture post-test compared to the pre-test, following their participation in a one-week thematic instruction on the other culture.

The impact of culture instruction on listening comprehension has also been the subject of investigation. Tsou (2005) conducted a controlled experiment involving 109 Grade 5 pupils from southern Taiwan to explore the effect of culture instruction. The experimental groups received culture instruction, while the control groups received regular EFL instruction. The experimental groups achieved significantly higher scores, and interviews with EFL teachers, culture instructors, and students revealed that culture instruction enhanced students' motivation and interest.

Similar conclusions were reached by Genc and Bada (2005) when investigating students' attitudes towards a culture class. They surveyed students from the ELT department of Cukurova University in Turkey, assessing the impact of a 28-hour culture course through a five-item questionnaire. The results indicated that participants recognized the positive effect of culture class on language skills, cultural awareness, and attitudes towards native and target societies.

Hayati (2009) divided 120 Iranian pre-intermediate language learners randomly into four groups based on their scores on a listening comprehension test. Each group was exposed to a specific condition: TC (Target Culture), ITC (International Target Culture), SC (Source Culture), and CF (Culture Free). At the end of the experiment, a post-test was administered to assess any changes in their listening proficiency. The results suggested that familiarity with culturally-oriented language material enhances the listening proficiency of EFL learners.

Mohammad (2020) conducted a diagnostic test and a questionnaire with a group of 31 Saudi EFL students. The findings suggest that cultural background significantly affects their listening process. From the studies mentioned above, it can be concluded that listeners performed better when listening to passages they were familiar with or related to their own cultural background or religion. However, few empirical studies have focused on whether cultural instruction has a significant effect on EFL learners' listening comprehension, leading to a gap in the research that needs to be addressed. Therefore, this study aims to investigate the effect of the instruction of target cultural knowledge on the listening comprehension proficiency of Chinese EFL learners.

3. Methodology

3.1 Subjects

The participants in this research consist of thirty-two male medical workers who were sent to the Republic of Ghana to provide medical assistance. Sixteen medical workers were dispatched in 2016 and returned to China in 2017 (referred to as Team1), while another sixteen were dispatched in 2017 and returned to China in 2018 (referred to as Team2). The practice of sending medical teams to African countries has been in place since the 1960s, with each Chinese province being assigned responsibility for one or more African countries. Guangdong Province, for instance, has dispatched 53 batches of medical teams (consisting of 808 medical personnel) to Equatorial Guinea, Ghana, Gambia, and Dominica since 1971.

The thirty-two subjects in this study are professional physicians from various hospitals in Guangdong Province, including Sun Yisien Medical School, Guangzhou Chinese Traditional Medicine University, and Guangdong No.1 People's Hospital. They specialize in fields such as cardiovascular diseases, orthopedics, neurosurgery, and anesthesiology, among others. All the dispatched doctors hold Master's or Ph.D. degrees in medicine obtained in China. On average, they have studied English for 14 years during their schooling, although the quality of English

teaching may vary across different regions of China. Table 1 provides a detailed breakdown of the demographic characteristics of the subjects.

Table 1. Demographic characteristics of subjects

	Team1	Team2	Sig. (2-tailed)
N	16	16	
Age	36.1 ± 4.1 (30–45)	35.9 ± 5.0 (29–46)	0.258
Education	13.6 ± 0.8 (11–14)	13.4 ± 0.5 (13–14)	0.393

Note. Values are mean ± standard deviations (ranges).

3.2 Research Design

The thirty-two subjects participated in a rigorous 4-month English language training program prior to their deployment to Ghana. The program involved 8 hours of training per day, 5 days a week. This training was essential because English serves as the official language in Ghana and is the primary working language in local hospitals. The English language training program was conducted by experienced lecturers and professors from Guangdong University of Foreign Studies and the Southern Medical University. The syllabus of the training program was carefully designed to cater to the specific needs of medical workers in their professional duties and daily life. It encompassed the development of listening, speaking, reading, and writing skills, providing a comprehensive approach to language proficiency.

At the end of the 4-month training program, a post-test on listening skills was administered to the subjects in Team1. The results of the post-test indicate that there was no significant improvement in the listening skills of Team1. In response, modifications were made to the syllabus for Team2. A new course titled “Introduction to British and American Culture” was introduced, focusing on various aspects such as history, geography, population, cities, arts, literature, traditions, festivals, and more. Both Team1 and Team2 had similar teaching syllabi, with the exception of the culture course added to Team2. To ensure the research’s validity, the total teaching hours for both teams remained unchanged. Therefore, the learners’ background knowledge of the target culture served as the independent variable, while the impact of the treatment on the Chinese EFL learners’ listening competence was observed as the dependent variable. During the training program, both teams underwent a pre-test and post-test using the same criteria for assessment. Data were collected to conduct independent samples t-tests and paired samples t-tests in order to analyze and validate the research hypothesis.

3.3 Procedures

The research was conducted over a period of two years, from 2016 to 2018. Team1 commenced their English language training in June 2016 and completed it in September 2016 before their deployment to Ghana. On the other hand, Team2 began their training in June 2017 and concluded it in September 2017 before being dispatched to Ghana.

Before the commencement of the training sessions, both teams underwent a pre-test, as specified by the syllabus. Additionally, they received listening lessons three times a week, amounting to a total of 6 hours per week, from the same tutor. This consistency aimed to ensure the research’s reliability and minimize potential confounding factors. To maintain uniformity and comparability, both teams utilized the same textbook, titled “Step by Step for Intermediates.”

In Team1, the pedagogical sequence of the listening lessons consisted of three steps: pre-listening, during-listening, and post-listening. At the pre-listening stage, the trainees were provided with the task requirements and the purpose of the listening task. During the during-listening stage, the listening materials were played twice, and the trainees were tasked with completing the exercises in the textbook. Finally, at the post-listening stage, the tutor checked the answers to the exercises and required the trainees to orally summarize or retell the listening materials to ensure their understanding.

In Team2, in addition to the courses specified in the syllabus, the “Introduction to British and American Culture” course was introduced once a week. This course comprised 12 chapters and was delivered over 16 consecutive weeks. All other aspects of the training program remained the same for Team2. Following the completion of the training sessions, both teams underwent a post-test to assess their listening competence.

4. Data Acquisition

In this research, a combination of quantitative and qualitative research methods was employed. The quantitative

data involved the collection of scores from two tests: the pre-test and the post-test. The tests included various question types such as sentence completions, multiple choice questions, short answer questions, and passage dictation, with a total score of 100 marks. The difficulty level of these tests was designed to be equivalent to the listening test of TEM4 (Test for English Majors-Band 4). These scores were used for cross-sectional and longitudinal analyses to examine the impact of target culture background knowledge on the learners' listening competence. Statistical analysis using the Statistical Package for the Social Science (SPSS) version 16.0 was conducted on the collected data.

Qualitative data was also gathered through interviews conducted with both Team1 and Team2. The purpose of these interviews was to gain deeper insights into the learners' experiences during the language training program and to supplement the quantitative data obtained from the tests. The qualitative data provided additional qualitative information and perspectives that enriched the understanding of the research findings.

The combination of quantitative and qualitative methods allows for a more comprehensive and holistic exploration of the research question, providing both statistical evidence and qualitative insights into the effects of target culture background knowledge on the listening competence of Chinese EFL learners.

5. Results

5.1 Pre-Test

To determine if there were significant differences in the English proficiency levels of Team1 and Team2 prior to the language training, both teams were given a pre-test at the start of their training sessions in June 2016 and June 2017, respectively. An independent samples t-test was conducted to compare the scores of the two teams. The results are presented in Table 2, indicating that there was no significant difference in the listening competence between Team1 and Team2 prior to the research ($t = 0.417$; $P(\text{Sig.}) = 0.68 > 0.05$). Therefore, it can be concluded that the two teams had similar English proficiency levels prior to the language training.

Table 2. Independent samples t-test of English listening pre-test

	N	Mean	S.D.	t	df	Sig. (2-tailed)
Team1	16	66.68	4.75	0.417	30	0.68
Team2	16	67.56	6.91			

5.2 Post-Test

At the conclusion of the 4-month English training session, both Team1 and Team2 underwent a post-test in September 2016 and September 2017, respectively. The format and difficulty of the post-test were the same as those of the pre-test. To test our research hypothesis that target cultural background knowledge can enhance understanding of listening materials, an independent samples t-test was conducted between Team1 and Team2. The statistical analysis presented in Table 3 revealed a significant difference between Team1 and Team2 ($t = -3.35$; $P(\text{Sig.}) = 0.002 < 0.05$), thereby confirming our hypothesis. Furthermore, paired samples t-tests were performed on both Team1 and Team2 to assess the improvement in their English listening competence. The results, as indicated in Table 4 and 5, align with our assumption, demonstrating that significant improvement was observed in both teams (Team1: $t = -8.895$; $P(\text{Sig.}) = 0.000 < 0.05$; Team2: $t = -10.01$; $P(\text{Sig.}) = 0.000 < 0.05$).

Table 3. Independent samples t-test of English listening post-test

	N	Mean	S.D.	t	df	Sig. (2-tailed)
Team1	16	75.12	3.84	-3.35	30	0.002
Team2	16	80.12	4.55			

Table 4. Paired samples t-test for Team1

	N	Mean	S.D.	Mean Difference	t	df	Sig. (2-tailed)
pre-test	16	66.68	4.75	-8.43	-8.895	15	0.000
post-test	16	75.12	3.84				

Table 5. Paired samples t-test for Team2

	N	Mean	S.D.	Mean Difference	t	df	Sig. (2-tailed)
pre-test	16	67.56	6.91	-1.25	-10.01	15	0.000
post-test	16	80.12	4.55				

6. Discussion

Our study provides empirical support for the hypothesis that target cultural background knowledge can enhance listening comprehension, which is in line with the findings of previous researchers such as Tsou (2005), Genc and Bada (2005), Hayati (2009), and Gilakjani and Ahmadi (2011). However, further research is necessary to validate and expand upon these findings. It is important to note that our study exclusively focuses on the impact of target cultural background knowledge on listening comprehension and does not delve into other potential advantages or disadvantages of integrating cultural knowledge into language learning. Future studies could explore additional benefits or drawbacks and investigate the role of cultural knowledge in other language learning skills. Overall, this study contributes to the growing body of research on the significance of culture in language learning and offers insights into potential strategies for enhancing listening comprehension.

This study employs schema theory in the context of EFL teaching, recognizing its positive effects. Schema theory suggests that knowledge acquisition takes place through the interaction between existing knowledge and new information, and the stronger the connection between new and prior knowledge, the better learners can comprehend and acquire new information. In terms of vocabulary teaching, enhancing the connection between new and existing words can be achieved through various methods such as association, collocation, combining words, identifying synonyms and antonyms, understanding homonyms, exploring hyponyms, recognizing words with the same root or affix, comparing and contrasting words, chunking, and constructing stories. These techniques aim to store words as a structured system within learners' cognitive processes and facilitate the expansion and reconstruction of their vocabulary schema.

Schema theory has also provided valuable insights for reading instruction. According to schema theory, reading is an interactive process that involves the connection between the reader's background knowledge and the text being read. It is through this connection that the reader can achieve comprehension and understanding of the text. In reading classes, introducing related background knowledge as a lead-in activity using visual aids such as pictures, audio recordings, and videos has proven to be effective. This approach activates students' existing schema, preparing them for the introduction of the text and enhancing their comprehension. Additionally, engaging students in activities such as retelling or restating the text after reading helps consolidate the acquired information and strengthen overall understanding of the article. Through the activation and application of schema, the acquired knowledge is transformed into a reading skill.

When it comes to writing, a significant aspect of language production, it significantly differs from language input as it involves a highly complex process of encoding. Writing not only entails gathering and processing input information but also involves the generation of output. Schema theory emphasizes that learning is a process of constructing meaning based on learners' prior experiences. Given that learners have diverse accumulated experiences, cultural backgrounds, and social contexts, their perspectives on a particular topic will naturally vary. Therefore, during the pre-writing phase, activities such as group discussions, games, debates, and brainstorming sessions provide opportunities for the exchange of views among learners. This exposure to different perspectives, as well as the collision and integration of diverse viewpoints, helps activate learners' existing schemas and greatly enhances their writing inspiration.

This paper focuses on the importance of listening comprehension, highlighting that it is not merely a passive process of decoding, but rather a dynamic interaction between incoming information and the listeners' background knowledge. This interaction involves the coordination and interaction of linguistic schema, content schema, and formal schema, ultimately leading to the construction of meaning from the listening material. The study reveals that target cultural background knowledge significantly enhances listening comprehension. This can be attributed to the fact that instruction on cultural background helps expand students' content schema. When the content schema is activated during the processing of the listening material, learners are able to predict incoming information, filter out ambiguities, and extract relevant information based on their relevant prior knowledge.

Due to the variations in geographical location, environmental climate, cultural traditions, customs, and habits, listeners may construct different schemas even when exposed to the same audio input. Therefore, the introduction of target cultural background knowledge, including aspects such as history, geography, population,

cities, arts, literature, traditions, festivals, etc., is an indispensable part of EFL teaching. Ignoring cultural differences or lacking background knowledge can lead listeners to interpret materials based solely on their own cultural backgrounds, resulting in numerous misunderstandings.

In addition to content schema, linguistic knowledge and the understanding of the structure of the listening material also play crucial roles in listening comprehension. Linguistic schema is essential for identifying words, phrases, grammar, stress, intonation, and sentences in the listening material. It serves as a prerequisite for activating appropriate content and formal schema, enabling listeners to extract useful clues and contextual hints from the text. Only when the listening process progresses from “meaning support” to “meaning construction” can the information in the material be comprehended. Linguistic schema largely facilitates this transformation, as the lack of linguistic schema would pose an insurmountable obstacle to understanding the text.

Furthermore, prior knowledge of the formal structure of the listening material also enhances comprehension. “Formal schema” refers to the background knowledge of the rhetorical structures of different types of texts. It encompasses textual features, genres, themes, and degrees of formality. For example, when listening to a material focused on argumentation, listeners who possess knowledge of argumentation structures can create a mental map of the audio input, make predictions, and monitor whether their expectations align with the incoming information.

Overall, schema theory, encompassing linguistic, content, and formal schema, has significantly contributed to the field of listening instruction, shedding light on effective strategies for improving listening comprehension.

In addition to the quantitative evidence indicating significantly higher post-test scores in the experimental group, interviews conducted with the language learners provided further insights into their perspectives on the course “The Introduction to British and American Culture.” The feedback obtained from the interviewees confirmed that the instruction of cultural background knowledge not only improved students’ listening comprehension but also sparked their interest and boosted their confidence in listening classes. According to the interviewees, the instruction of cultural knowledge had two main positive effects.

Firstly, it enriched learners’ linguistic schema. By incorporating cultural background knowledge into the language learning process, learners were exposed to a wider range of vocabulary, idiomatic expressions, and linguistic nuances. This expansion of linguistic schema enhanced their ability to understand and interpret the listening material more effectively.

Secondly, the instruction of cultural background knowledge expanded learners’ content schema related to the target language culture. This expansion stimulated their interest in the listening material as they were able to make connections between the content and their prior knowledge or experiences. By having a deeper understanding of the cultural context in which the language is used, learners felt more engaged and motivated to comprehend the listening material.

The interviews revealed that the instruction of cultural background knowledge played a vital role in paving the way for incoming information. Learners expressed that having knowledge about the cultural aspects of the target language helped them anticipate the content and context of the listening material, making it easier for them to extract and process information effectively.

Overall, the qualitative data collected through interviews provided valuable insights into the learners’ perspectives on the impact of cultural background instruction on listening comprehension. The feedback from the interviewees confirmed the positive effects of integrating cultural knowledge into language learning, including increased linguistic schema, heightened interest, and improved confidence in listening classes.

In this research, a combination of quantitative and qualitative research methods was employed. The quantitative data involved the collection of scores from two tests: the pre-test and the post-test. The tests included various question types such as sentence completions, multiple choice questions, short answer questions, and passage dictation, with a total score of 100 marks. The difficulty level of these tests was designed to be equivalent to the listening test of TEM4. These scores were used for cross-sectional and longitudinal analyses to examine the impact of target culture background knowledge on the learners’ listening competence. Statistical analysis using the Statistical Package for the Social Science (SPSS) version 16.0 was conducted on the collected data.

7. Conclusion

The current study is aligned with schema theory, which suggests that listening comprehension is an interactive process involving the interaction between listeners’ background knowledge and the incoming input. Focusing specifically on content schema, the study aimed to investigate the effectiveness of incorporating target cultural background knowledge into EFL listening classes. The results of the research demonstrated that the instruction

of target cultural knowledge played a significant role in expanding learners' content schema, thereby positively impacting their listening comprehension.

In addition to the quantitative evidence of significantly higher post-test scores in the experimental group, qualitative data from the interviews provided further support for the positive effects of target cultural knowledge instruction. The interviews revealed that the instruction of cultural background knowledge not only enriched learners' linguistic and content schema but also stimulated their interest and enhanced their confidence in listening classes. By activating social-cultural knowledge during the listening process, learners were better equipped to comprehend the listening material. They were able to predict incoming information, filter out ambiguities, and process relevant information based on their prior knowledge.

The application of schema theory in listening classes has demonstrated its positive effects. Furthermore, it is worth exploring the potential effects of schema theory on other EFL classes as well. By incorporating learners' background knowledge and activating relevant schemas, instructors can facilitate the learning process and enhance learners' overall language proficiency. Further research can investigate the application of schema theory in different language skills and contexts, providing valuable insights into effective language teaching methodologies.

8. Limitations

Despite the careful control of factors in this study, there are several limitations that should be acknowledged. Firstly, the limited number of research subjects may raise concerns about the generalizability of the findings. A larger sample size would enhance the validity and reliability of the results. Additionally, there are external factors, such as learners' motivation and interest in English, which were not directly controlled in this study but could potentially influence learners' listening competence.

Furthermore, to ensure equal teaching hours between Team1 and Team2, adjustments were made by deducting two hours from the reading course and introducing a two-hour course on "The Introduction to the British and American Culture" in Team2. This discrepancy in teaching time between the two teams may have inadvertently influenced the results, as more time was devoted to the listening course in Team2.

In conclusion, while the study provides evidence of the positive effect of target culture background knowledge on the listening comprehension proficiency of Chinese EFL learners, it is important to acknowledge the limitations. Future research should consider addressing these limitations by increasing the sample size, controlling additional variables, and exploring other schemas, such as formal and linguistic schema, in order to gain a more comprehensive understanding of the application of schema theory in EFL teaching and learning.

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References

- AL-Issa, A. (2000). Schema theory and L2 reading comprehension: Implications for teaching. *Journal of College Teaching and Learning*, 3(7), 41–46. <https://doi.org/10.19030/tlc.v3i7.1700>
- Bacon, S. M. (1992). Phases of listening to authentic input in Spanish: A descriptive study. *Foreign Language Annals*, 25, 317–334. <https://doi.org/10.1111/j.1944-9720.1992.tb00552.x>
- Bartlett, F. C. (1932). *Remembering*. Cambridge: Cambridge University Press.
- Carrell, P. L. (1984). Evidence of a formal schema in second language comprehension. *Language Learning and Communication*, (2), 87–112. <https://doi.org/10.1111/j.1467-1770.1984.tb01005.x>
- Cross, J. (2010). Listening in the language classroom. *ELT Journal*, 64(1), 103–105. <https://doi.org/10.1093/elt/ccp090>
- Ervin, B. K. (1992). Does knowledge of culture and instruction using thematic units affect listening comprehension. *Reading Psychology Journal*, 12, 43–61.
- Genc, B., & Bada, E. (2005). Culture in language learning and teaching. *The Reading Matrix*, 5(1), 73–84.
- Gilakjani, A. P., & Ahmadi, S. M. (2011). The effect of text familiarity on Iranian EFL learners' listening comprehension. *Journal of Language Teaching and Research*, 2(4), 783–789. <https://doi.org/10.4304/jltr.2.4.783-789>

- Goodman, K. S. (1970). *The Psychology of Second Language Learning*. Cambridge University Press.
- Hayati, A. M. (2009). The Impact of Cultural Knowledge on Listening Comprehension. *English Language Teaching*, 2(3), 144–152. <https://doi.org/10.5539/elt.v2n3p144>
- Huang, Q. (2009). Background knowledge and reading teaching. *Asian Social Science*, 5(5), 138–142. <https://doi.org/10.5539/ass.v5n5p138>
- Long, D. R. (1990). What you don't know can't help you: An exploratory study of background knowledge and second language listening comprehension. *Studies in Second Language Acquisition*, 12, 65–80. <https://doi.org/10.1017/S0272263100008743>
- Markham, P. L., & Latham, M. (1987). The influence of religion-specific background knowledge on listening comprehension of adult second language students. *Language Learning*, 37, 157–170. <https://doi.org/10.1111/j.1467-1770.1987.tb00563.x>
- Mohammad, H. A. (2020). The Impact of Cultural Background on Listening Comprehension of Saudi EFL Students. *Arab World English Journal*, 11(3), 349–371. <https://doi.org/10.24093/awej/vol11no3.22>
- O'Malley, J., Chamot, A., & Kupper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10, 418–437. <https://doi.org/10.1093/applin/10.4.418>
- Oller, J. J. W. (1995). Adding abstract to formal and content schemata: Results of recent work in Peircean semiotics. *Applied Linguistics*, 16(3), 1–38. <https://doi.org/10.1093/applin/16.3.273>
- Othman, J., & Vanathas, C. (2004). Topic familiarity and its influence on listening comprehension. *The English Teacher*, 8, 19–32.
- Piaget. (1972). *Psychology and Epistemology: Towards a Theory of Knowledge*. Penguin Books, Reprint edition.
- Rost, M. (2002). *Teaching and Researching Listening*. London, UK: Longman.
- Rost, M. (2013). *Teaching and Researching Listening* (2nd ed.). New York, USA: Routledge. <https://doi.org/10.4324/9781315833705>
- Rumelhart, D. E. (1980). Schemata: The Building Blocks of Cognition. In J. Rand et al. (Eds.), *Theoretical Issues in Reading Comprehension*. NJ: Lawrence Erlbaum Associates.
- Sadighi, F., & Zare, S. (2002). Is listening comprehension influenced by the background knowledge of the learners? A case study of Iranian EFL learners. *The Linguistics Journal*, 1(3), 110–126.
- Schmidt Rinehart, B. C. (1994). The Effects of Topic Familiarity on Second Language Listening Comprehension. *The Modern Language Journal*, 78, 179–189. <https://doi.org/10.1111/j.1540-4781.1994.tb02030.x>
- Tsou, W. (2005). The effects of cultural instruction on foreign language learning. *RELC Journal*, 36(1), 39–57. <https://doi.org/10.1177/0033688205053481>
- Xiao-hui, L., Jun, W., & Wei-hua, W. (2007). Analysis of schema theory and its influence on reading. *US-China Foreign Language*, 5(11), 18–21.

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