

An Analysis of Listening Comprehension Difficulties among Korean EFL Learners---A Case Study

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Abstract: This study investigates the difficulties encountered by Korean EFL learners with different proficiency levels in listening comprehension. It identifies significant barriers faced by low-proficiency students, particularly in the perception stage with fast speech rates, accent variations, as well as speech ambiguity. While all the participants struggle with the parsing stage, low-proficiency students exhibit more pronounced issues in information processing and memory. High-proficiency students face fewer challenges in perception but still have difficulties at the parsing stage. The findings highlight the parsing stage as the most challenging process for Korean EFL learners. Based on the findings of the research, some implications are made in the conclusion. Recommendations include enhanced perception stage training, tailored listening activities, and targeted parsing stage practice. Following the current research, a future study examining additional influencing factors, and exploring technology-assisted and multimodal teaching methods aimed at helping Korean EFL learners overcome difficulties in the listening process awaits.

Keywords: listening comprehension difficulties, Korean EFL learners, listening skills

1. Introduction

English has established itself as a vital language for international communication. Listening skills are considered to be essential tools for Korean EFL learners to achieve their communicative competence. Communication relies heavily on listening since it allows individuals to receive and comprehend messages accurately. When communicating with others, without listening, English may turn into a 'deaf' language. According to Wolvin and Coakley (1988), compared to speaking, reading, and writing, listening is the skill that is used the most in-class and out-of-class activities at school. Additionally, listening plays an essential position in preparing for standardized tests such as the TOEIC, IELTS, TOEFL, or the Korean College Scholastic Ability Test (CSAT). However, listening is probably the least explicit of the four language skills, making it the most challenging to learn. As a result, EFL learners will encounter significant barriers or difficulties in achieving proficient listening comprehension.

Nevertheless, listening is not merely the act of hearing what others say. If comprehending what others say is a simple process of repeating the speaker's words, then why do people have different interpretations of the same information? Instead, listening can be seen as a cognitive process to accurately receive, interpret, and comprehend spoken messages. In other words, during listening, learners need to encode incoming information by relating it to their existing knowledge or previous learning experiences. Anderson (1995), a cognitive psychologist, proposed the three-phase model to explain the cognitive process of listening comprehension, which includes three phases: perception, parsing, and utilization.

Hence, this current study is designed to explore the English listening comprehension difficulties of Korean EFL learners of an H University adopting Anderson's (1995) three-phase model from a cognitive perspective.

2. Literature review

2.1 Theoretical foundation: Anderson's three-phase model of listening comprehension

J. R. Anderson (2015), a cognitive psychologist, proposed a model based on first language (L1)

comprehension and divided the process of listening into three interrelated and recursive phases: perception, parsing, and utilization [1]. He emphasized that comprehension does not unfold in a strictly linear process, rather, these three stages are by necessity partly ordered in time; however, they also partly overlap. Despite this three-phase model being based on L1 comprehension, its efficiency of this model in second language (L2) comprehension has been confirmed and endorsed by O'Malley et al. (1989).

During the perception phase, listeners segment phonemes from the continuous speech stream. In other words, listeners focus on the sounds and perceive the speech sound information. This information initially enters into the human's cognitive system, is registered in echoic memory, and quickly fades away. At this time, listener directs their attention to the listening material and temporarily filters and stores the heard text in their short-term memory. The listener's primary task in this phase is to pay attention to sounds that could be potentially meaningful, such as keywords that help with meaning construction and contextual information that aids in the interpretation of meaning. The phonetic representation that listeners are able to retain is then transmitted to the parser for further processing. Additionally, according to Bacon (1992), O'Malley and Chamot (1990), in this phase, listeners should also pay attention to intonation, stress, pause, etc [2].

Parsing, the second stage, words are transformed into a mental representation of the combined meaning of the words. The listener segments the heard language and breaks linguistic units down to construct meaning in a representational way according to the syntactic structure and semantic cues. For example, a variety of potential lemmas may emerge when listeners break down 'flaʊə' by isolating its constituent sounds based on their retained phonological representations. Firstly, there is a semantic distinction between 'flour' and 'flower', which can usually be resolved by considering the surrounding context. Secondly, there is a syntactic distinction between 'flower' as a verb or noun [12], which can be determined by its grammatical function within the sentence (Vandergrift, 2012). Meaning is the central aspect of this stage, and the information stored in short-term memory needs to be reorganized into meaningful units. The parsing stage plays a critical role in the listening comprehension process by linking the perceptual input to the listener's utilization of the information.

Finally, in the utilization phase, listeners interpret the intended meanings by establishing connections between the provided information to pre-existing knowledge stored in their long-term memory. The stored information can be reflected in the form of schemata and scripts or interrelated concepts. To illustrate, Anderson (2015) provides an example where a waitress, who had become disillusioned with her job due to rude customers and unwelcome advances from her manager, and faced a challenging situation when a diner complained that the spaghetti she had served was cold. This encounter led to a loss of control for the waitress. According to Anderson (2015), individuals with a high level of proficiency would make the inference and associate a word like 'dump' with this situation, while those with lower proficiency might not.

These three stages are recursive and interrelated. All the listening comprehension problems may happen at these three stages (Goh, 2000). Any hindrances encountered in these three stages can lead to difficulties in listening.

2.2 Previous studies on listening comprehension difficulties using Anderson's three-phase model

Over the past couple of decades, researchers have devoted their efforts to comprehensively investigating the process of listening comprehension processes and the factors affecting listening comprehension from a cognitive perspective. The research methods are broadly divided into two aspects. Some researchers collected data through learners' dairies, self-reports, interviews [4-6], listening comprehension tasks, immediate stimulated recall, and some researchers through questionnaires.

Goh's (2000) study aimed at exploring real-time listening difficulties encountered by ESL learners. The data of this research was collected through multiple methods, including learners' dairies, self-reports, small group interviews, and immediate retrospective verbalizations. She identified ten problems encountered by learners during the perception, parsing, and utilization phases of listening. Among these ten problems, five pertained to word recognition and attention failure during the perception phase (unable to recognize words they know; neglect the next part when focusing on meaning; difficulty in chunking streams of speech; missing the beginning of texts; struggling to maintain concentration).

Additionally, three problems were identified during the parsing phase: difficulty in retaining

information heard; forming a mental representation of the words heard; and understanding subsequent parts of the input. The remaining two problems were related to the utilization phase, i.e., confusion about the main ideas in the message and understanding of individual words but not the intended message. The findings laid a solid foundation for future research in this area [4].

In China, some researchers also delved into the listening comprehension difficulties faced by Chinese students [5-6] based on Anderson's three-phase model and summarized the listening comprehension difficulties faced by the students. For instance, Wang (2008) made a study on the listening comprehension difficulties faced by 121 Chinese English major EFL students using questionnaires and interviews. The study revealed that the primary difficulties were in the perception stage, followed by the parsing stage, and then the utilization stage. Specifically, the study found that 1) difficulties in discriminating sounds, activating words, and maintaining attention were responsible for creating problems in the perceptual processing stage; 2) limited memory capacity and deficiencies in making connections between ideas contributed to difficulties in the parsing stage; and 3) lack of schemata or prior knowledge of the topic being discussed led to some difficulties in the utilization stage.

In recent years, there has been a growing trend among researchers to employ Anderson's three-phase model to investigate difficulties or problems in listening comprehension. For example, Cao (2018), taking 30 Chinese non-English major vocational and technical students as examples, examined their listening comprehension difficulties. He divided these 30 participants into three groups: high-level, middle-level, and low-level. The findings revealed that the primary difficulties were in the parsing stage, followed by the perception stage, and then the utilization stage. It can be found that the low and middle-level groups of students have similar listening comprehension difficulties, whereas the main difficulties for high-level students are in the parsing phase [3].

Hamad Al-khresheh (2020) explored whether Saudi EFL students face difficulties in listening comprehension. Data were collected through diagnostic tests and questionnaires administered to 31 students, as well as required reflective essays written by eight EFL teachers. The results showed that listening was the most challenging skill, with serious problems at every stage. The main problems in the perception stage were difficulty concentrating and not being able to identify some sounds and words. Parsing problems included unfamiliar topics, guessing the exact meaning of words and sentences, and understanding large amounts of new information within a limited time. Difficulty in understanding the intended message of the speaker was found during the utilization stage [7]. The findings also suggest that cultural background can also have an impact on their listening process.

Another research was conducted by Tran & Duong (2020) to look into the listening comprehension difficulties encountered by senior high school students in Vietnam. 368 high school students and 8 EFL teachers participated. The results showed that both teachers and students noted that the problems faced by listening were related to three stages [13]. The difficulties in the perception stage were the inability to identify many sounds, coping with rapid speech rates, and inattention. The main problems in the parsing stage were forgetting what was just heard due to the length of the text or certain sentences and the inability to acquire new information in a limited amount of time. In addition, unfamiliar topics and the inability to grasp the expected information are the main problems in the utilization stage, which were in line with Si's study [14].

From the above discussion, it is evident that listening skills are of utmost importance, and many EFL students struggle with listening comprehension. It is obvious that Anderson's three-phase model offers us a lens that can be used to assess FL learners' listening difficulties. However, there is a dearth of research in Korea on listening comprehension difficulties using Anderson's three-phase model. Although recent studies have explored certain aspects of listening comprehension difficulties, such as phonetics [8-9] and discrimination of minimal pairs [15], the overall understanding of listening difficulties adopting this model in the Korean context remains limited.

Anderson's three-phase model has proven to be effective in identifying and addressing listening difficulties in other countries. Therefore, it is crucial to investigate its applicability in the Korean context. The current study aims to fill this research gap by employing Anderson's three-phase model to explore the listening comprehension difficulties encountered by Korean EFL college students when they take listening tests or examinations so as to provide solutions to deal with them and help improve the teaching and learning of listening skills in the Korean EFL context.

3. Research methodology

3.1 Research participants & instruments

The current research was carried out at an H university in Cheonan City, Korea. A total of 30 sophomore students who are English majors participated in this study. There are two different instruments in this current study. First, the TOEIC (Test of English for International Communication) listening test sample paper was used to test students' listening comprehension scores. The listening test includes 10 multiple-choice questions, for a total score of 5 points. The listening test consists of 4 parts, 1) photographs (1 question); 2) question-response (3 questions); 3) short conversation (3 questions); and talks (3 questions).

Second, a survey is used to find out students' listening comprehension difficulties in each phase (perception, parsing, utilization). Although a few previous researchers attained similar findings, indicating that the difficulties were all aligned with these three stages, unfortunately, when carefully looking into these available instruments in the literature, it was observed that there is a lack of consistency in how researchers categorize listening comprehension difficulties. Hence, this current research addresses combining and modifying the existing questionnaires to develop a new instrument [10-12]. As is shown in Table 1.

Table 1: Reliability statistics of the questionnaire

Cronbach's Alpha	Numbers of Items
0.836	16

The Cronbach alpha value of this questionnaire is .836 (.83 > .70), which is considered acceptable. Among the 16 items, 1-6 items are related to perception; 7-11 items are concerned about the parsing stage, and 12-16 are used to find difficulties in the utilization stage. The answer sheet is a 5-point Likert scale [1= never (0%), 2= rarely (20%), 3= occasionally (50%), 4= usually (80%), and 5= always (100%)]. In order to make Korean EFL learners have a better understanding, the questionnaires are also translated into Korean. One sample of the questionnaire is displayed in Figure 1.

2. I have difficulty recognizing sounds due to fast speaking, speaker's accents and intonation.

Never

Rarely

Occasionally

Usually

Always

Figure 1: Example of questionnaire

3.2 Research questions

1) What are the listening comprehension difficulties experienced by high and low-proficiency listeners in each of the three phases: perception, parsing, and utilization? Do they encounter similar or different difficulties?

2) Which phase(s) of the listening process is the most difficult for Korean EFL learners?

3.3 Data collection and analysis

In this study, quantitative data was collected by using a listening comprehension test as well as a survey. First of all, the researcher talked about the purpose of this current research and asked the teacher if it was feasible to do a survey with her students. Then the participants in this study were also informed about the purpose of this current research and it took them about 5 minutes to finish the survey.

The average score of this listening test was 3.95, according to the listening test scores, students were divided into two groups, a high-proficiency group (16) and a low-proficiency group (14). However, through SPSS 27, among the results of these 30 students, there were 4 outliers. Hence, the researcher rearranged the groups into a high-proficiency group (14) as well as a low-proficiency group

(12).

4. Findings and discussion

4.1 Research findings

The first research question seeks to explore the listening comprehension difficulties encountered by two groups of learners at H University across the three phases (perception, parsing, utilization). Subsequently, an examination will be conducted to determine if these two groups experience similar difficulties. The findings of each phase are shown below. As is shown in Table 2.

Table 2: Results of Perception Difficulties Encountered by Two Groups

Perception	H	L
	Average	Average
Q1: I don't recognize words quickly enough.	2.50	3.08
Q2: I have difficulty recognizing sounds due to fast speaking, speaker's accents and intonation.	2.71	3.17
Q3: I have difficulty recognizing sounds due to linking, assimilation and omission in speech.	2.29	3.25
Q4: I mistake one word for another similar sounding one (e.g., found, fund).	2.57	3.25
Q5: I know the meaning of a word when I see the word but not when I hear it.	2.36	3.00
Q6: I have difficulty fully concentrating on listening in the listening test.	2.36	2.25

Note: H (High-proficiency group); L (Low-proficiency group)

As illustrated in Table 2, during the perception phase, the high-proficiency group students exhibit relatively proficient performance compared to their low-proficiency counterparts. The scores for all six questions in the perception phase fall below 3. Among these questions, the biggest challenge for high-proficiency group students lies in the difficulty of recognizing sounds caused by factors such as fast-paced speech, varied accents, and intonation, with a score of 2.71.

On the other hand, low-proficiency group students acknowledge struggling with sound recognition due to issues like linking, assimilation, and omission in speech, reflected in a score of 3.25. Additionally, they face challenges such as confusing one word with another that sounds similar (3.25), difficulty in recognizing sounds due to speakers' fast-paced delivery, accents, and intonation (3.17), and the ability to understand the meaning of a word when seen but not when heard (3.00).

According to Table 3, in the parsing phase, it comprises a total of five questions. The predominant challenge faced by both groups of students during this phase is that they struggle to deal with a substantial amount of new information within a limited timeframe. Conversely, the low-proficiency group students expressed a tendency to quickly forget what they had heard, indicated by a score of 3.17. Furthermore, in contrast to the high-proficiency group, the low-proficiency group students encounter difficulty in discerning the correct meaning of words with multiple meanings, with a score of 3.00. As is shown in Table 3 and Table 4.

Table 3: Results of parsing difficulties encountered by two groups

Parsing	H	L
	Average	Average
Q7: I don't know how to divide long complex sentences into several meaningful parts.	2.71	2.58
Q8: I tend to neglect the following part because I keep thinking on the meaning of the utterances just heard.	2.93	2.92
Q9: I tend to forget quickly what is heard.	2.78	3.17
Q10: I have difficulty dealing with a lot of new information in a short time.	3.14	3.25
Q11: I have difficulty identifying the appropriate meaning of the words which have more than one meaning.	2.50	3.00

Table 4: Results of utilization difficulties encountered by two groups

Utilization	H	L
	Average	Average
Q12: I feel confused about the main idea of the message.	2.21	2.25
Q13: I have difficulty getting the supporting sentences or ideas of the listening passage.	2.50	2.42
Q14: I can't grasp the intended message even though I know the words.	2.43	2.42
Q15: I have difficulty getting the details of listening message.	2.64	2.75
Q16: I have difficulty getting the overall organization or structure of the long listening passage.	3.00	3.17

Table 4 presents the results of difficulties in the utilization phase. In general, it is evident that most of the participants relatively have fewer difficulties in the utilization phase. Both the high-proficiency and low-proficiency groups encounter challenges in grasping the overall organization or structure of the long listening passage during the listening test.

Overall, as shown in Figure 2, it can be seen that in each phase, the low-proficiency group has more difficulties than their high-proficiency counterparts. In the perception phase, the average scores for the two groups are 2.46 and 3, respectively. Interestingly, both groups demonstrated similar scores in the parsing and utilization phases. The high-proficiency group encounters the most challenges in the parsing phase (2.81), followed by utilization (2.56) and perception phase (2.45). Conversely, the low-proficiency group encounters the most difficulty in the perception phase (3.0), followed by parsing (2.98) and utilization phase (2.6). To explore the potential relationship between listening comprehension difficulties and language proficiency, an independent-sample T-test was conducted. As is shown in Figure 2 and Table 5.

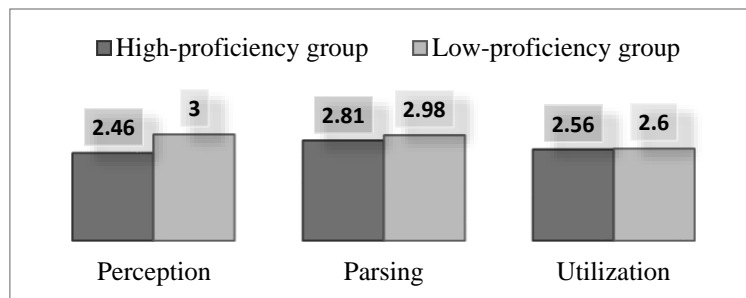


Figure 2: Average scores of difficulties in each phase for two groups

Table 5: Results of independent-sample T-test of three phases difficulties of high-proficiency group and low-proficiency group

Three Phases		M	SD	F	Sig.	T	Sig.(2-tailed)
Perception	H	2.464	0.507	1.708	0.204	-2.333	0.028*
	L	3.000	0.663				
Parsing	H	2.814	0.610	2.097	0.161	-0.781	0.443
	L	2.983	0.471				
Utilization	H	2.557	0.628	0.777	0.387	-.0.181	0.858
	L	2.600	0.572				

Note: The asterisk (*) denotes statistical significance at the 0.05 level.

Table 5 below presents the results of the independent-sample T-test comparing the difficulties in three phases between the high-proficiency (H) and low-proficiency (L) groups. Based on the T-test results, p (perception)=0.028<0.05, which indicates a statistically significant difference in the perception phase between the high-proficiency and low-proficiency groups. Whereas, the t-test suggests no statistically significant difference in the parsing (p=0.443>0.05) and the utilization phase (p=0.857>0.05) between the two proficiency groups. This means that the main difficulties for low-proficiency students are in the perception phase, whereas there are no significant differences between these two groups in the parsing and utilization phases.

In Figure 3, the overall difficulties in listening comprehension for 26 students are presented, with these students not categorized into different groups. Without grouping, the average difficulty scores for

each phase are as follows: perception phase (2.71), parsing phase (2.89), and utilization phase (2.58). Considering that the scores for each phase are below 3, it can be inferred that these Korean students generally perform well in various aspects of listening comprehension without encountering significant challenges. As is shown in Figure 3.

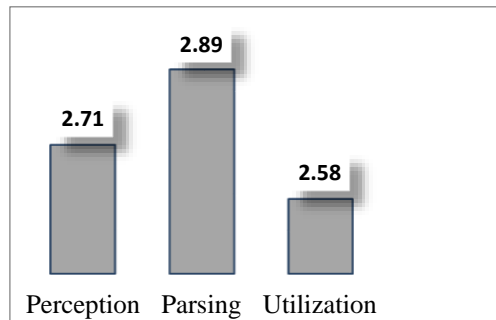


Figure 3: Average scores of difficulties in each phase for all participants

However, concerning students individually of this research, the parsing phase appears to be the most challenging for these Korean EFL learners, followed by the perception phase, while the utilization phase seems to pose relatively fewer difficulties, which is in line with Cao's (2018) findings. In contrast, the findings were different from Munir Laeha (2020), who concluded that the most challenging phase for students is the utilization phase. In addition, the Korean language has a basic word order of subject-object-verb (SOV), which is different from the English language. Hence, Korean EFL learners will encounter more challenges when they learn English.

4.2 Discussion

This current study reveals Korean EFL learners' listening difficulties in three stages (perception, parsing, utilization). The results show that the high proficiency group faces fewer difficulties at the perception stage but still encounters challenges in processing a large amount of information during the parsing stage, which was lined with Cao's (2018) study [3]. The low proficiency group experiences significantly more difficulties at the perception stage, particularly in sound recognition and speech omissions. There is little difference between the two groups in the parsing and utilization stages, indicating that the parsing stage is the most challenging for all students.

Difficulties at the perception stage mainly arise from fast speech rate, different accents, and speech ambiguity, with the low proficiency group facing more issues in these areas. This may be related to their speech recognition skills and adaptability to speech variants. Difficulties at the parsing stage are primarily focused on handling and remembering new information and understanding polysemous words, indicating that the low proficiency group lacks information processing and language parsing abilities. Difficulties at the utilization stage are relatively few, with a need for further improvement in grasping the overall organization of long passages.

5. Conclusion

This study primarily reveals the characteristics of difficulties faced by Korean EFL learners with different proficiency levels in the listening comprehension process. At the perception stage, the low proficiency group encounters significant difficulties, especially with fast speech rate, accent differences, and speech ambiguity. Although the parsing stage is challenging for all the participants, the difficulties are more pronounced for the low proficiency group, mainly in information processing and memory for new information. The high proficiency group faces fewer difficulties at the perception stage but still deals with complex information processing challenges at the parsing stage. Overall, the parsing stage is the most challenging part of listening comprehension for all students.

5.1 Implications

Based on the findings, some implications are put forward. It is recommended that teachers strengthen training at the perception stage in classroom teaching, particularly for low-proficiency students, by providing more practice in speech recognition and adaptability. Teachers should design targeted listening training activities, such as adjusting speech rate and accent adaptation training, to

help students improve their perception skills. Additionally, training at the parsing stage should focus on enhancing information processing and memory skills, which can be supported through simulated tests and staged exercises to help students gradually overcome difficulties. Researchers should focus on applying these training methods in different teaching environments to verify their effectiveness and continually adjust strategies to meet students' needs.

5.2 Limitations

The limitations of this study include a small sample size and a specific group of university students, which may limit the generalizability and interpretation of the findings to all Korean EFL learners. Additionally, the study only focused on three stages of listening comprehension without delving into other potential influencing factors, such as cultural background and individual differences. Thus, future research should expand the sample size, explore more variables affecting listening comprehension, and validate the results in different teaching environments. It is also recommended to delve into listening comprehension training in various teaching environments to validate the effectiveness of teaching strategies and improve existing methods. Exploring the role of technology-assisted tools and multimodal teaching approaches in enhancing listening comprehension is another important direction for future research.

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