The Effects of Listening Encoding Strategy Use on Korean EFL Learners' EAP Listening Comprehension

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Cha, Hyun Ji. (2016). The Effects of Listening Encoding Strategy Use on Korean EFL Learners' EAP Listening Comprehension. The Linguistic Association of Korea Journal, 24(2), 73-100. The present study examined intermediate EFL Korean College students' academic listening comprehension when they listened to different types of EAP (English for academic purposes) listening texts such as lectures and academic seminars. The current study would examine whether there would be any differences between lecture listening and academic seminar listening. This study would look into what impact these listening encoding strategies would have on listening comprehension. Their performance was based on several tests such as recognition tests, free recall tests and cued recall tests. The results presented that there was a statistically difference between note-taking and listening-only. Note-taking significantly influenced EFL college learners' academic listening comprehension. There was a statistically significant effect of proficiency on listening comprehension. Learners in the high-intermediate level performed better on listening comprehension than those in the low-intermediate level. The result revealed a significant difference between outlining and listening-only in recognition tests. Outlining was statistically different from note-taking in free recall tests. In addition, a significant difference between note-taking and listening-only in free recall tests was detected. The result showed a significant difference between outlining and note-taking on academic listening of free recall tests. There was a significant difference between note-taking and listening-only on academic listening of free recall tests. High-intermediate learners reported that in academic seminars and lectures, note-taking strategy was useful. For high-intermediate learners, guiding outline to listening to academic seminars and lectures was helpful. High-intermediate listeners were likely to outperform other groups in cued recall tests and reported this test as the easiest one.

Key Words: Listening process, Listening strategy, Academic Listening, Listening texts, Listening tests

1. INTRODUCTION

Listening plays a critical role in everyday life. In reality, people usually spend of their time communicating for roughly 9 percent writing, 16 percent reading, 30 percent speaking, and 45 percent listening (Hedge, 2000). But listening has been vastly underestimated in EFL (English as a Foreign Language) settings. Nowadays almost all college students have been required to take English-medium lectures in tertiary education in Korea. In this regard, it is essential to acquire English skills for academic purposes. Furthermore, Field (2008, p. 307) emphasizes strategy instruction in a listening program. He states that the type of strategy used and its usage are closely connected to the English proficiency level of the learner. He maintains that it is more critical for learners in the early stages of listening acquisition than for more proficient listeners to use strategies in second language listening for compensatory purposes. As the learners acquire automatic decoding skills overtime, they reduce their dependency on strategy use.

1.1. Purpose and Significance of the Study

The purpose of the current study examines intermediate EFL Korean College students' academic listening comprehension when they listen to EAP (English for Academic Purposes) listening text types such as, lectures and academic seminars.

Researching into one-way listening and two-way listening is significant in this field. Lynch (2011) reviewed a decade of academic listening research in the 21st century. He divided the notion of academic listening into two main sections. The first section regarding one-way listening covered real course-embedded lecturers, experimental lectures, and conference presentations. The second section on two-way listening dealt with interactive lectures, student presentations, small-group discussions and team projects, tutorials, seminars and so on. Lynch (2011) and Chaudron (1995) stated the significance of interactive

lectures or two-way listening. Lectures are stereotypically monologues but today's lectures are more likely to have one speaker who is aware of the listener's presence and needs. Lynch emphasizes the research in interactive academic listening: "For some years I have been advocating more interactive lectures, in order to increase the chances that students—all the students, not merely second-language listeners—will be able to follow the lecturers' arguments (p. 84)."

This experiment investigated the effects of listening encoding strategy instruction on comprehension of different types of listening texts. Their performance will be based on several tests such as recognition (multiple choices), free recall (summary) and cued recall (fill-in-the-blank).

1.2. Research Questions

The study was designed to investigate the effects of listening encoding strategy instruction such as note-taking, outlining, and listening-only on comprehension of different text types. The following research questions were addressed:

- 1. What are the effects of listening encoding strategy instruction in comprehension of different types of listening texts (lecture, academic seminar)?
- 1-(1) Will the learners of different proficiency levels use encoding strategies differently on different types of text?
- 2. What are the effects of the listening encoding strategies on different listening tests (recognition tests, recall tests, cued tests)?
- 2-(2) Will the learners of different proficiency levels use encoding strategies differently on different listening tests?
- 3. What perception will learners have regarding the use of listening strategies on different types of text?
- 3-(1) What perception will learners have regarding the use of listening strategies on different listening tests (recognition tests, free recall tests, cued recall tests)?

2. LITERATURE REVIEW

There have been research findings from empirical studies on processes of listening, listening strategy instruction, and academic listening. The current study will discuss several aspects of research findings on them.

2.1. Processes of Listening

As part of academic listening comprehension, it is significant to deal with the processes of listening. The processes of listening are a beginning step of listening instruction. Therefore instructors need to pay more attention to how learners understand. Field (2008) states the goal of listening instruction which is mainly comprehension. He argues that if the goal of listening instruction is to gear up for students with the skills and strategies to comprehend every day, real-world texts, then a teaching approach that focuses on comprehension is of little help to achieve this goal. He also emphasizes on the process approach in which teachers focus less on what their learners are understanding, and more on how they are understanding.

Furthermore, it is worth noting that researchers have investigated processes of listening. The study of O'Malley, Chamot, and Küpper (1989) focused on the mental processes second language learners' use in listening comprehension, and the strategies they use between students. Participants were from Hispanic backgrounds and intermediate in English proficiency. This study used think-aloud procedures. In this procedure, students were interrupted during a listening comprehension activity and asked to tell what they were thinking. Their findings showed that mental processes in listening comprehension were perceptual processing, parsing, and utilization. Moreover, effective listeners use strategies such as self-monitoring, elaboration, and inferencing.

Another study on process of listening shows that process-based approaches would be greatly intertwined in listening instruction in terms of helping learners improving their listening proficiency. Vandergrift and Tafaghodtari (2010) examined the effects of a metacognitive, process-based approach to teaching second language listening over a semester. Participants consisted of 106 students taking FSL (French as a second language) courses. The experimental group

listened to texts with metacognitive processes such as prediction/planning, monitoring, evaluating, and problem solving. The control group listened to the same text without any guided attention to process. The metacognitive awareness listening questionnaire (MALQ) was used at the beginning, middle, and end of the study to measure awareness. The experimental group significantly outperformed the control group and the less skilled listeners in the experimental group made greater gains than their more skilled counterparts.

Field (2008a) examined how first and second language listeners adjust their segmentation assumptions as new perceptual information comes in. They used the gating tasks in which subjects transcribe a short utterance presented in sections of gradually increasing length. The results indicated a significant difference in the way in which first and second language listeners deal with incorrect segmentation hypotheses. Whereas native listeners naturally change their interpretations on the basis of incoming stimulation, non-native listeners are considerably slower to do.

The process of listening should come first in a L2 listening class. Therefore instructors should be aware of how learners understand.

2.2. Listening Strategy Instruction

There has been research conducted on listening strategy. But they reported the effects of strategy instruction in listening positively and negatively. Kim (2008) investigated Korean college students' use of note-taking strategies and the relationship between the students' use of note-taking strategies and their listening proficiency. This study also looked into the effects of note-taking strategies on the students' English listening proficiency. 142 university students participated in identifying their use of note-taking strategies, perceptions on note-taking strategies, and experience of being recommended to use note-taking strategies. The experimental group received note-taking strategy training. The findings showed that the students held a positive perception on using note-taking strategies in their English learning, but they were less likely to use note-taking strategies. There was a relatively high relationship between the students' use of note-taking strategies and their listening proficiency. The findings showed significant positive effects of note-taking strategy training on the students' listening proficiency as well.

Bozorgian and Pillay (2013) examined the effectiveness of teaching listening strategies delivered in L1 (Persian) and its effect on listening comprehension in L2. Five listening strategies (guessing, making inferences, identifying topics, repetition, and note-taking) were used. Participants consisted of 60 lower-intermediate students taking EFL courses. The results indicated that the experimental group in which five listening strategies were taught in L1 performed better than the control group.

On the other hand, Oh (2011) showed negative aspects of listening strategy instruction. She examined the instructional effects of listening strategies on Korean students' use of TOEIC listening strategy and their listening achievement. Ninety-five students took part in the study. A questionnaire and two sets of TOEIC test scores were used. This research aims to identify the differences in the use of TOEIC listening strategies between students who were taught explicit TOEIC listening strategies and students who were not. It also examines the effects of TOEIC listening strategies instruction on students' TOEIC listening scores. The findings indicate that the frequency of use of TOEIC strategies by the experimental group was not significantly different from that of the control group. Listening strategies training did not have a significant effect on the participants' listening achievement. The findings imply that types of questions and corresponding strategies should be considered in listening strategy instruction to make the lesson more effective.

Furthermore, Park (1999) examined the effect of strategy instruction on listening comprehension with EFL university students in Korea. The participants were taught metacognitive strategies - attention, monitoring and evaluation- and cognitive strategies - prediction, inference, and elaboration- for 30 minutes per week for 12 weeks. In this paper, strategy instruction had some effect on listening comprehension but it was not significant.

The following researchers suggest that the effect of listening strategy needs to be applied into classroom settings. Song (2012) examined the relationships among the quality of L2 test takers' notes evaluated in terms of different levels of information and test takers' performance on open-ended listening tasks using different comprehension sub-skills. This study investigated the invariance of the structural relationships among the variables across two different note-taking

formats, that is, a blank format and an outline format, by using a multi-group structural equation modeling (SEM) approach. The results showed that note quality measures, in particular the number of topical ideas found in the notes and the organization of these notes, may be good indicators of test takers' second language academic listening proficiency. It was also found that despite the invariance of structural relationships among variables across the two note-taking formats, the associations between the open-ended listening measures and note quality measures were slightly stronger in the outline format than in the blank format.

Vandergrift (2003) investigated listening strategy applications by grade seven students learning French. The researcher examined the types of strategies used and the differences in strategy use by more skilled and less skilled listeners while these students listened to authentic texts in French. Think-aloud data was used and analyzed both quantitatively and qualitatively. Significant differences were found in the use of the category of metacognitive strategies as well as in individual strategies for comprehension monitoring, questioning for elaboration, and translation. He noted that his participants were engaged in one-way, non-participatory, decontextualized, and transactional so the results of his study do not necessarily apply to listening contexts that are more participatory and interactional in nature. The author presented both an emerging model of the skilled listener and a pedagogic program for developing listening skills.

These findings concluded that listening strategy could positively and negatively impact learners' listening comprehension. Therefore instructors should play a critical role in applying appropriate listening strategies in their lesson based on their learners' proficiency and needs.

2.3. Academic Listening

In academic listening research, many researchers examine the effects of note-taking and its instruction's effects. Song(2010) investigated the effect of the note-taking format on Korean L2 learners' note-taking process and strategy use. She used the effect of two note-taking formats: a conventional blank format and an outline format. This study only used qualitative methods, the analysis of their videotaped note-taking procedure and retrospective verbal report about

learners' note-taking process and strategy use. She concluded that some low L2 listeners were disturbed by the outline format. She suggested that there should be training in arguing the effectiveness of the outline format on Korean low level L2 learners while lecture listening.

Kim (2012) investigated the effects of note-taking and note-taking strategy training in academic English listening tests on Korean college students' performance and perceptions. Ninety-two college students were randomly assigned to one of the three groups: (A) training group which was allowed to take notes during the test, (B) no-training group which was allowed to take notes during the test, and (C) no-training group which was not allowed to take notes during the test. All three groups took listening tests before and after Group A received instruction, while Groups A and B were allowed to take notes, Group C was not allowed to do so. Along with the test administration, the participants were surveyed twice with questionnaires, after each test. Interviews were also conducted with nine students. Findings show that there is a relation between the students' language proficiency and note-taking behaviors; listeners of higher proficiency took more notes than listeners of lower proficiency. Second, note-taking instruction positively impacted on students' note-taking in a manner of quantity and quality. Though note-taking and note-taking strategy training did affect the trained group's test performance, it is not statistically significant. Kim states that note-taking training had a limited effect on students.

Yang, Kim and Cha (2010) investigated the relative effectiveness of note-taking on Korean university students' second language (L2) listening performance. The result of the statistical analysis showed that there is no statistically significant difference between a note-taking group and a non-note-taking group. In-depth analysis of students' notes shows that the high performers actively took part in the listening process by encoding the information through visualization whereas the low performers merely stored the information by listing the words they heard. The authors suggest that classroom practitioners should encourage students to be active listeners by visualizing contents during the L2 listening process.

3. METHODOLOGY

Many researchers have presented the theoretical models of listening, but Field's process approach on listening is arguably the best. This study is theoretically based on Field's theories on listening.

3.1. Participants

Participants in this study consisted of 79 university students taking a *Practical English* course during the fall semester of 2014. Among the 79 students, two students were ethnic-Korean Chinese. Eight-one students were supposed to take part in the two session, academic seminar listening and lecture listening, but a few students were absent in each test. In the test of academic seminar, 79 students took the test, and in the test of lecture listening conducted one week later, 72 students performed the test. In addition, 8 students did not report the TOEIC score. Consequently, there occurred the missing values in data calculation. Participants were asked to take a pre-test (TOEIC listening) and their pre-test scores ranged from 178 to 351 out of 495 (the mean score of the outline group = 254, the mean score of the note-taking group = 270, the mean score of the listening group = 297).

3.2. Instruments

Participants listened to two types of TOEFL listening texts; transactional and interactional. This experiment was completed over two class periods. Before the experiment was administered, participants received strategy instructions for three to four weeks. The listening texts, taken from TOEFL: Beginner (2013), consisted of three lecture texts (1:30-2 min) and three academic seminar texts (1:30-2 min). The topics for the lecture listening were about zoology, music history and geography. In academic seminars, there were three speakers: a professor, student A, and student B. Participants listened to texts on ecology, linguistics and history. All participants had two chances to listen to each text since they were in the low-intermediate and high-intermediate level of language proficiency (according to TOEIC listening test).

3.3. Data Collection

Participants were engaged in two types of EAP listening texts. The present study's experiment took place within three weeks of the class session, but the instructions of encoding strategy were carried out throughout half of the semester. Before the listening task, participants had opportunities to activate lexical and background knowledge related to the given topics. Participants listened to three texts and responded to the three tests including the recognition test, the free recall test and the cued recall test. Then, three skilled listeners and three less skilled listeners from each group were chosen to take part in verbal reports which were recorded (see Figure 1).

Figure 1. Summary of the Procedure

	Group 1 Note-taking	Group 2 Outlining	Group 3 Listening only					
	Pre-listening test							
Listeni	ing encoding strategy i	nstruction (10 min/d	ay for weeks)					
Academic Note-taking Outlining Listening-only seminar 1 Test Test Test								
Academic seminar 2	Note-taking Test	Outlining Test	Listening-only Test					
Academic seminar 3	Note-taking Test	Outlining Test	Listening-only Test					
	The 1 st	verbal report						
	1 we	ek interval						
Lecture 1	Note-taking Test	Outlining Test	Listening-only Test					
Lecture 2	Note-taking Test	Outlining Test	Listening-only Test					
Lecture 3	Lecture 3 Note-taking Outlining Listening-only Test Test Test							
	The 2 nd verbal report							
	Post- 1	istening test						

3.4. Data Analysis

In this paper, SPSS (version 22.0) was used to analyze the data quantitatively. Statistical analysis used in this paper was ANOVA (Analysis of Variance).

4. RESULTS AND DISCUSSION

4.1. Effects of Listening Strategy on Listening Texts

This section examined the effects of three encoding strategy instructions on different types of texts, academic seminar and lecture. A two-way ANOVA was administered to investigate the statistically significance of encoding strategy instructions on both lecture and academic seminar. The results indicated that there was a significant effect of three encoding strategies on listening comprehension scores of both the lecture and the academic seminars (F(2, 145)=4.349, p=0.015) (see Table 2). There was a significant effect of text types (p=0.00). There was no significant interaction effect between strategy and text types. Participants in the note-taking group gained a mean score of 6.02, which means that they outperformed other groups. The outline group scored 5.61 and the listening group's mean score was 4.89 (see Table 1). The degree of difficulty in the type of text indicated that the difficulty of the monologue delivery of lectures was more difficult than that of the academic seminar.

Table 1. Descriptive Statistics of Strategy Groups on Academic Listening

Type of Text	Strategy	N	Listening Comprehension Score		
J 1	0.5		M SD		
	Outlining	28	5.06 2.05		
Lecture	Note-taking	24	5.08 1.23		
Lecture	Listening-only	20	4.35 1.88		
	Total	72	4.87 1.76		
	Outlining	28	6.16 2.22		
Academic Seminar	Note-taking	27	6.86 0.91		
Academic Jeninai	Listening-only	24	5.35 2.46		
	Total	79	6.15 2.03		
	Outlining	56	5.61 2.17		
Total	Note-taking	51	6.02 1.39		
Total	Listening-only	44	4.89 2.25		
	Total	151	5.54 2.01		

	Score	SS	df	MS	F	р
	Corrected Model	98.309	5	19.662	5.643	0.000
	Strategy	30.306	2	15.153	4.349	0.015
Listening	Text Types	62.020	1	62.020	17.799	0.000
Comprehension Total Score	Strategy*Text Types	4.479	2	2.240	0.643	0.527
	Error	505.23 9	145	3.484		
	Corrected Total	603.54 8	150			

Table 2. Results of Strategy Groups on Academic Listening

 R^2 = .163 (Adj R^2 = .134), * p<0.05

Table 3. Post-hoc Test Results of Strategy Groups on Academic Listening

	Strategy	Strategy	Mean SD	р
Listening	Outlining	Note-taking	-0.408 0.35	0.569
Comprehension		Listening-only	0.718 0.45	0.295
Total Score	Note-taking	Listening-only	1.126 0.39	0.016

^{*} p<0.05, post-hoc test, Dunnett T3

In post-hoc comparison, there was a statistically difference between note-taking and listening-only (p= 0.016) (see Table 3). Therefore, note-taking significantly influenced EFL college learners' academic listening comprehension.

4.2. Effects of Strategy on Listening Texts of Learners at English Proficiency Levels

This analysis aimed to investigate whether the learners at different levels use encoding strategies differently when listening to different types of listening texts. In order to examine the statistical significance effect between strategy and proficiency on listening comprehension scores, a two-way ANOVA was administered.

Table 4. Descriptive Statistics of Strategy on Academic Listening Comprehension of Learners at Proficiency Levels

English Proficiency Levels	Strategy	N	Listening Comprehension Scores
Levels			M SD
	Outlining	25	4.94 2.31
Low Intermediate	Note-taking	23	5.46 1.27
Low Intermediate	Listening-only	24	4.03 2.23
•	Total	72	4.80 2.07
	Outlining	28	6.37 1.84
High Intomorphists	Note-taking	21	6.72 1.13
High Intermediate	Listening-only	16	6.27 1.79
	Total	65	6.46 1.62
	Outlining	53	5.70 2.18
T-1-1	Note-taking	44	6.06 1.35
Total	Listening-only	40	4.92 2.33
•	Total	137	5.59 2.04

Table 5. Results of Strategy on Academic Listening Comprehension of Learners at Proficiency Levels

	Score	SS	df	MS	F	р
	Corrected Model	120.541	5	24.108	7.123	0.000
	Strategy	18.200	2	9.100	2.689	0.072
Listening	Proficiency	89.399	1	89.399	26.412	0.000
Comprehension Total Scores	Strategy*Proficiency	5.604	2	2.802	0.828	0.439
	Error	443.404	131	3.385		
	Corrected Total	563.945	136			

 R^2 = .214 (Adj R^2 = .184), * p<0.05

Note-taking group gained a mean score of 6.06 for listening comprehension. Outline group received a mean score of 5.70 while the listening group received a score of 4.92 (See Table 4). There was no statistically significant effect of strategy groups on comprehension scores.

However, there was a statistically significant effect of proficiency on listening comprehension (F = 26.412, p = .000) (see Table 5). There was no significant interaction effect between strategy and proficiency.

The mean scores of listening comprehension indicated that learners in the high-intermediate level (M=6.46) performed better on listening comprehension than those in the low-intermediate level (M=4.80) (See Table 4).

4.3. Effects of Strategy on Listening Tests

This section examined the effects of listening encoding strategy on different listening tests, recognition tests, free recall tests and cued recall tests in academic seminars and in lectures.

In lecture listening comprehension of recognition tests, outlining group outperformed among others (M= 1.65). Note-takin group received the highest score in lecture listening comprehension of free recall tests (M=2.29). Listening-only group performed the highest score in lecture listening comprehension of cued recall tests (M= 1.50) (see Table 6).

In academic seminar listening comprehension of recognition tests, note-taking group outperformed among others (M=2.06). Further, note-taking group received the highest score in academic seminar listening comprehension of free recall tests (M= 2.81). Outlining group performed the highest score in academic seminar listening comprehension of cued recall tests (M=2.01).

There was a statistically significant effect of strategy on academic listening comprehension of recognition test scores (p=.007). There was a significant effect of types of tests on academic listening comprehension of recognition test scores (p=.000) (see Table 7).

In academic listening comprehension of free recall test scores, a significant effect of strategy was detected, p=.000**. Further, there was a significant effect of types of tests (p=.021).

In addition, a significant effect of test types on academic listening comprehension of cued recall test scores was reported (p=.000).

Table 6. Descriptive Statistics of Strategy on Listening Tests

		•		•
Type of Text	Test	Strategy	N	Listening Comprehension Scores
	rest	Strategy	1 4	M SD
		Outlining	28	1.65 0.53
	5	Note-taking	24	1.32 0.57
	Recognition	Listening-only	20	1.23 0.61
		Total	72	1.42 0.59
		Outlining	28	1.93 1.12
Ŧ .	- D 11	Note-taking	24	2.29 0.59
Lecture	Free Recall	Listening-only	20	1.63 0.92
		Total	72	1.97 0.94
		Outlining	28	1.49 0.74
	C 1 D 11	Note-taking	24	1.47 0.63
	Cued Recall	Listening-only	20	1.50 0.73
		Total	72	1.48 0.69
		Outlining	28	1.92 0.63
	Recognition	Note-taking	27	2.06 0.36
		Listening-only	24	1.62 0.67
		Total	79	1.88 0.59
	Free Recall	Outlining	28	2.23 1.07
Academic		Note-taking	27	2.81 0.31
Seminar		Listening-only	24	1.88 1.24
		Total	79	2.32 1.02
		Outlining	28	2.01 0.92
	Cual Dar-11	Note-taking	27	1.98 0.63
	Cued Recall	Listening-only	24	1.85 0.84
		Total	79	1.95 0.80
		Outlining	56	1.78 0.59
	Dogo switi an	Note-taking	51	1.71 0.59
	Recognition	Listening-only	44	1.44 0.67
		Total	151	1.66 0.63
		Outlining	56	2.08 1.09
Total	Free Recall	Note-taking	51	2.57 0.53
rotai	rree Kecan	Listening-only	44	1.76 1.10
		Total	151	2.15 0.99
		Outlining	56	1.75 0.87
	Cued Recall	Note-taking	51	1.74 0.68
	Cued Recall	Listening-only	44	1.69 0.80
		Total	151	1.73 0.78

Table 7. Results of Strategy on Listening Tests

	Score	SS	df	MS	F	р
	Corrected Model	12.715	5	2.543	7.892	0.000
	Strategy	3.272	2	1.636	5.077	0.007**
Recognition Test	Type of Tests	8.129	1	8.129	25.228	0.000**
Scores	Strategy*Type of Tests	1.554	2	0.777	2.412	0.093
	Error	46.722	145	0.322		
	Corrected Total	59.438	150			
R^2 = 0.214 (Adj R^2	= 0.187)					
	Corrected Model	21.304	5	4.261	4.876	0.000
	Strategy	15.513	2	7.756	8.877	0.000**
Free Recall Test	Type of Tests	4.795	1	4.795	5.487	0.021**
Scores Scores	Strategy * Type of Tests	0.515	2	0.257	0.294	0.745
	Error	126.693	145	0.874		
	Corrected Total	147.997	150			
$R^2 = 0.144 \text{ (Adj } R^2$	= 0.114)					
	Corrected Model	0.896	5	1.739	3.041	0.012
	Strategy	0.142	2	0.071	0.124	0.883
Cued Recall Test	Type of Tests	8.034	1	8.034	14.046	0.000**
Scores Scores	Strategy * Type of Tests	0.218	2	0.109	0.191	0.826
	Error	82.941	145	0.572		
	Corrected Total	91.637	150			
R^2 = 0.095 (Adj R^2	= 0.064)					

Table 8. Post-hoc Test Results of Strategy on Listening Tests

	Strategy	Strategy	Mean ± SD	p
	Outlining	Note-taking	0.071 ± 0.12	0.850
Recognition Test Scores		Listening-only	$0.340 \!\pm\! 0.12$	0.019
rest Scores	Note-taking	Listening-only	0.269 ± 0.13	0.089
	Outlining	Note-taking	-0.488 ± 0.16	0.011
Free Recall Test Sores		Listening-only	0.319 ± 0.22	0.390
rear gares	Note-taking	Listening-only	0.807 ± 0.19	0.000

^{*} p<0.05, Post-hoc Test, Tukey's HSD & Dunnett T3

The post-hoc comparison revealed a significant difference between outlining and listening-only in recognition tests (p= 0.019) (See Table 8). Outlining was statistically different from note-taking in free recall tests (p= 0.011). In addition, a significant difference between note-taking and listening-only in free recall tests was detected (p= 0.000). Thus, outlining significantly influenced Korean EFL college learners' multiple-choice tests in academic listening comprehension. Furthermore, note-taking significantly affected L2 students's summary ability in academic listening comprehension.

4.4. Effects of Strategy on Listening Tests of Learners at English Proficiency Levels

This section investigated whether the learners at different proficiency levels use encoding strategies differently on listening tests, recognition tests, free recall tests and cued recall tests.

The table of descriptive statistics of strategy on listening tests of learners at proficiency levels indicated that as expected, the high-intermediate group performed better in all tasks scores than the low-intermediate group (see Table 9).

The statistical analysis indicated that there was a significant effect of proficiency on academic listening comprehension of recognition tests (p=.000) (see Table 10). There was a significant effect of strategy (p=.002) and proficiency on academic listening comprehension of free recall tests (p=.006). Further, there was a significant effect of proficiency on academic listening comprehension of cued recall tests (p=.000).

Table 9. Descriptive Statistics of Strategy on Listening Tests of Learners at Proficiency Levels

Proficiency	Test	Strategy	N	Liste Compreher	ening sion Scores
Tronciciety	Test	Suaregy	14	M	SD
		Outlining	25	1.58	0.60
	Recognition	Note-taking	23	1.61	0.52
		Listening-only	24	1.19	0.66
		Total	72	1.46	0.62
-		Outlining	25	1.92	1.16
Low-Intermediate	E D- 11	Note-taking	23	2.50	0.60
	Free Recall	Listening-only	24	1.48	1.17
		Total	72	1.96	1.09
-		Outlining	25	1.44	0.93
		Note-taking	23	1.35	0.54
	Cued Recall	Listening-only	24	1.36	0.77
		Total	72	1.39	0.76
	Recognition	Outlining	28	2.01	0.52
		Note-taking	21	1.84	0.66
		Listening-only	16	1.82	0.52
		Total	65	1.91	0.57
	Free Recall	Outlining	28	2.32	0.97
High Intones allata		Note-taking	21	2.67	0.43
High-Intermediate		Listening-only	16	2.25	0.84
		Total	65	2.42	0.81
•		Outlining	28	2.04	0.75
	C 1 D . 11	Note-taking	21	2.21	0.48
	Cued Recall	Listening-only	16	2.20	0.63
		Total	65	2.14	0.64
		Outlining	53	1.81	0.59
	Danie 10	Note-taking	44	1.72	0.59
	Recognition	Listening-only	40	1.44	0.68
		Total	137	1.67	0.63
-		Outlining	53	2.13	1.07
FD 4.1	- D "	Note-taking	44	2.58	0.53
Total	Free Recall	Listening-only	40	1.79	1.10
		Total	137	2.18	0.99
-		Outlining	53	1.76	0.89
	a 15 "	Note-taking	44	1.76	0.67
	Cued Recall	Listening-only	40	1.70	0.67
		Total	137	1.74	0.80

Table 10, Results of Strategy on Listening Tests of Learners at Proficiency Levels

	Score	SS	df	MS	F	р
	Corrected Model	10.037	5	2.007	5.897	0.000
	Strategy	2.005	2	1.003	2.945	0.056
Do :::	Proficiency	6.071	1	6.071	17.836	0.000
Recognition	Strategy*Proficiency	0.835	2	0.417	1.226	0.297
	Error	44.591	131	0.340		
	Corrected Total	54.628	136			
$R^2 = 0.214$ (Adj	$R^2 = 0.184$)					
	Corrected Model	21.442	5	4.288	5.045	0.000
	Strategy	11.104	2	5.552	6.532	0.002
Free Recall	Proficiency	6.616	1	6.616	7.783	0.006
rree Recaii	Strategy *Proficiency	1.887	2	0.944	1.110	0.333
	Error	111.353	131	0.850		
	Corrected Total	132.796	136			
$R^2 = 0.161$ (Adj	$R^2 = 0.129$)					
	Corrected Model	19.766	5	3.953	7.723	0.000
	Strategy	0.050	2	0.025	0.049	0.952
Cued Recall	Proficiency	19.527	1	19.527	38.148	0.000
Cued Recall	Strategy *Proficiency	0.508	2	0.254	0.496	0.610
	Error	67.057	131	0.512		
	Corrected Total	86.824	936			
R^2 = 0.228 (Adj	$R^2 = 0.198$)					

^{*} p<0.05

Table 11. Post-hoc Test Results of Strategy on Listening Tests of Learners at Proficiency Levels

	Strategy	Strategy	Mean SD	р
	Outlining	Note-taking	-0.448 0.16	0.011
Free Recall		Listening-only	0.319 0.22	0.390
	Note-taking	Listening-only	0.807 0.18	0.000

^{*} p<0.05, Post-hoc Test, Dunnett T3

The post-hoc comparison revealed a significant difference between outlining and note-taking on academic listening of free recall tests, p=.011 (see Table 11). There was a significant difference between note-taking and listening-only on academic listening of free recall tests (p=.000). Thus, it can be said that note-taking significantly influenced Korean EFL college learners at different proficiency levels on summary tests when they were evaluated in lectures instructed in English.

4.5. Learners' Perception on Listening Strategy Use in Listening Texts

This section examined the learners' perception regarding the listening strategy use for different types of texts. In this study, eighteen participants who listened to the academic seminars and the lectures, joined in the verbal interviewed following the completion of the experiment (three informants were absent in verbal interview of lecture listening).

In the summary of verbal report, nine high-intermediate and nine low-intermediate listeners expressed their opinions to participate in the academic listening experiment. Among those who listened to the academic seminars, three high-intermediate participants in the note-taking group mentioned that note-taking strategy was helpful when they comprehended the academic seminars. While taking notes, they said that they could focus more on the content of the academic seminars. One listener pointed out that the note-taking strategy was efficient when listening to long passages because he could take notes that he would otherwise forget or miss out without this strategy. Another listener stated that the note-taking strategy was very helpful and it would be helpful in improving L2 listeners' English, but this is only because the academic seminar was easy; he doubted that it would be applicable to more difficult listening passages such as TOEIC.

On the other hand, three low-intermediate listeners who listened to the academic seminar mentioned that using the note-taking strategy was a burden because of the lack of their vocabulary knowledge. However, it did help them focus more on listening and answer questions. One listener also argued that this strategy reminded him of being in academic seminars, so he could answer the questions better.

Three high-intermediate listeners in the outline group took part in verbal interviews and two of them stated that the outline strategy was helpful. Due to

the well-organized outline, gilding memos helped listeners predict what to listen for and to figure out the content and its story. Moreover, note-taking was time consuming but provided memos were helpful to referring to certain words or organizing the contents that they were listening to. However, one participant mentioned that the outline strategy was not helpful to some extent. Due to the provided outline, there were some loopholes when listening. She only listened to what was written in the outline but missed what was not written. But the well-organized memos made the outline helpful in comprehending the content.

Three low-intermediate listeners in the outline group had different opinions from their counterparts. They mentioned that the outline strategy was disadvantageous. They had lack of vocabulary knowledge and low level of English proficiency so they could not understand the outline and using the outline was not helpful in listening comprehension. The only helpful one was that in the pre-listening stage, words that were activated as background knowledge.

Three high-intermediate listeners who used the listening only strategy reported that listening only was helpful in understanding the content without any activities such as note-taking and consulting with outline. One listener said that this strategy was her usual way of listening. When listening, she did not take notes or see any written materials. Another listener mentioned that the listening only strategy was helpful in comprehending the texts because topics for the academic seminars were clear. Another listener suggested that listening only was disadvantageous because he has to rely solely on his listening skill. So he answered the questions with his background knowledge.

Three low-intermediate learners reported that the listening only strategy was disadvantageous for comprehension. Since most of them stated that they usually take notes or have memos or handouts in hand when listening, the listening-only strategy could not make them focus on listening. One listener said that she only caught a few words using the listening only strategy.

In the summary of lecture listening, three high-intermediate listeners mentioned that because one speaker talked from start to finish, note-taking was advantageous in comprehension and by writing down important points, it made them avoid confusion. Therefore, note-taking was helpful in organizing the overall framework as well as subtle points.

All three low-intermediate listeners who listened to lectures reported that the note-taking strategy was efficient in remembering important words and points and visualizing what they listened to was helpful.

High-intermediate learners used outline strategy during listening to lectures and expressed their opinions on using the outline. One listener reported that outlining was helpful in figuring out the topic, the structure and the content. However, another listener stated that guiding outline was useless because it makes her focus only on the provide outline and make her disregard contents that are not written in the outline. In addition, she had to wait for the written text to come up in the listening text. Another listener mentioned that outlining was more applicable in academic seminars than in lectures. She mentioned that in lectures, the provided outlines allowed her to listen to the lectures with her eyes closed and just listen to missing parts in the outline, which in turn helped her focus more on listening.

Low-intermediate learners reported that the outline was efficient because key points were written on the outline and they could refer to the outline to follow along. However, one mentioned that it was useless due to the lack of his vocabulary knowledge.

A high-intermediate learner who used the listening only strategy was not applicable in lectures because he could not pay attention to listening due to his poor physical condition that day. Another listener stated that he could focus more on listening using this strategy and felt that lectures were more difficult than academic seminars. One low-intermediate listener reported that while using listening-only mode, she could not pay attention to the speaker because she was bored of one speaker saying everything from start to finish.

4.6. Learners' Perception on Listening Strategy Use in Listening Tests

The current section investigated the learners' perception regarding listening strategy use on different test types. Eighteen listeners participated in verbal interviews (three informants were absent in verbal report of lecture listening). In verbal reports, listeners mentioned that academic seminars were easier than lectures. It was not difficult in doing three different tests which were recognition tests (multiple choices tests), free recall tests (summary tests in Korean or in

English), and cued recall tests (fill-in-the blank tests) in academic seminars. High-intermediate learners stated that cued recall tests was easy because they would only focus on filling in the blanks (They listened to each sentence twice and they also dealt with words to fill in at pre-listening stage as activating background knowledge) (See Table 12). One listener also pointed out the fact that note-taking strategy helped them in recognition tests, because he took notes of specific points. Moreover, one informant said that free recall tests was easy as well.

All low-intermediate learners chose free recall tests as an easy test. It is assumed that they were less burdened to write a topic in a key word or a phrase, or a sentence either in Korean or in English. They also took advantage of note-taking during the free recall test because it helped them remember words that they wrote and sum up what they heard.

	Recognition Tests	Free recall Tests	Cued recall Tests
AS: HI	4	3	5
AS: LI	3	3	2
Lect.: HI	2	1	5
Lect.: LI	1	3	2

Table 12, Learners' Responses on Difficulty of Test Types

(5=easy, 1=difficult, Total =18 in AS, Total=15 in Lect.)

All high-intermediate listeners in the outline group answered that cued recall tests were the easiest. They were familiar with words that already appeared in outline. Low-intermediate learners in the outline group mentioned that recognition tests were also easy because they could follow the flow when they listened to key words without comprehending specific contents. One informant reported that he felt all tests were difficult. Another listener said that cued recall tests were relatively easy because she learned the words during the pre-listening session.

High-intermediate listeners in the listening-only mode responded that recognition tests were easy. They referred to the multiple choice options to predict the answers. One learner also summarized easily with the help of multiple options. Another learner also mentioned that he completed all types of

tests easily. For the low-intermediate learners using the listening-only mode, recognition tests were the easiest due to less burden of selecting one. One participant stated that cued recall tests were easy.

When listening to a lecture, high-intermediate learners in the note-taking group reported that cued recall tests were done without much effort because they just listened to the blanks to come out and filled in those words. Cognitively, they felt less burdened to fill in the blanks. It is assumed that they have developed their decoding processes so their decoding skills became somehow automatized, so they could complete this test without any effort. Low-intermediate listeners in the note-taking group chose recognition tests as an easy test. In addition, they chose cued recall tests as a difficult test due to its lack of the ability to recognize utterances.

Two of high-intermediate listeners in the outline group reported that they found it easy to fill in the blanks. They mentioned that they could just focus on listening to blanked words to come and this test was independent from comprehension the topic. Another participant mentioned that recognition test was easy but it was difficult for her to fill in the blanks and summarize the contents due to the difficulty in finding the main idea.

In the outline strategy group, a low-intermediate learner mentioned that he summarized the main idea with the contents he had memorized from the provided outline. Another learner answered that all tests were hard to perform. Another participant mentioned that the easiest task was the cued recall test because she received some word clues of words from the written multiple choice options of recognition tests, which were placed above in the same test sheet.

In the listening- only mode, high-intermediate listeners summarized the main idea without effort and he comprehended the overall and tried to find key word to write in summary. High-intermediate listeners reported that cued recall tests were easy and free recall tests were hard to figure out a main idea. A low-intermediate listener felt easy to summarize.

5. CONCLUSION

5.1. Summary of Findings

The results presented that there was a statistically difference between note-taking and listening-only. Note-taking significantly influenced EFL college learners' academic listening comprehension.

In addition, there was a statistically significant effect of proficiency on listening comprehension. Learners in the high-intermediate level performed better on listening comprehension than those in the low-intermediate level.

Furthermore, the results revealed a significant difference between outlining and listening-only in recognition tests. Outlining was statistically different from note-taking in free recall tests. In addition, a significant difference between note-taking and listening-only in free recall tests was detected.

Further, the results showed a significant difference between outlining and note-taking on academic listening of free recall tests. There was a significant difference between note-taking and listening-only on academic listening of free recall tests.

High-intermediate learners verbally reported that in academic seminars and lectures, note-taking strategy was useful. For high-intermediate learners, guiding outline to listening to academic seminars and lectures was helpful. High-intermediate listeners were likely to outperform other groups in cued recall tasks and reported this task as the easiest one.

5.2. Pedagogical Implication

Listening practice for meaning representation would be good for L2 learners with developed listening abilities. In order for low-level of English learners to enhance their English skills, they need to train themselves in decoding utterances which was previously considered as trivial in traditional class settings. Field (2008, p.240) argues that inexperienced L2 listeners have certain characteristics:

- (a) A degree of uncertainty about the accuracy of decoding;
- (b) The need to focus much more attention on low-level decoding

operations than a native listener would, thus limiting the mental resources available for meaning building.

He concludes that the listening processing operation is qualitatively different from the operation that the L2 listener would apply to L1. I would like to suggest a pedagogical implication at this analysis point. For L2 listeners with low-level proficiency, it is critical to practice for the raw meaning of what has been decoded. As they decode what the speakers say, their confidence and competence develops. Therefore, it is necessary to provide the language learners consistent practice in applying a well-established meaning-building operations to a foreign or second languages. For L2 beginners and low-intermediate learners, sufficient time allocation for practicing decoding process is needed during classroom activities. Instructors have tended to avoid or exclude or skip practice for decoding process with the excuse of insufficient time. This phenomenon should be rooted out.

In academic listening such as lectures, a listening-only strategy may not be useful, so instructors should encourage L2 listeners to actively take notes or provide a detailed outline (unspecific outline would be useless). Kiewra (1985) suggested that instructors can improve students' learning by providing a partial outline or skeletal notes for reference before lectures. Because the partial outline played an effective role in facilitating more learners' achievement than note-taking that people usually know. Thus, outlining and note-taking were effective academic skills to achieve great test results.

5.3. Limitations and Conclusion

This study has found several issues in experiments. First, all types of tests were on one test sheet. It should have been separated because some students got clues from other tests' options.

The second issue came after the statistical results. The difficulty of listening texts should be a little bit higher. More numbers of task items should have been included for differentiation.

The third weakness of study is that a treatment group such as outline groups and a control group such as listening only joined in the same classroom setting.

It may influence on some listeners to participate in their strategy group. Some interviewees in listening only group reported that they would do better if they could consult with outline or wrote down key points. Next time, treatment and control groups should be separate.

In conclusion, this study would be meaningful to guide L2 listeners and English education instructors to be equipped with some ideas on academic listening, listening tasks and listening tests. In this global academic setting, high proficient listening skills in academic lectures and seminars are required and practical to their daily lives.

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Received on March 23, 2016
Revised version received on June 17, 2016
Accepted on June 30, 2016