

Factors Affecting College EFL Learners' Listening Comprehension and Listening Problems

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Abstract

Listening comprehension plays a pivotal role in effective communication in spoken language in the global village. However, comprehending English speech is not an easy task for EFL learners in Taiwan. This study aimed to investigate non-English majors' English listening performance and listening problems. Seventy-five college students participated in the study. At last, sixty-eight valid data were used in this study. The instruments comprised of a General English Proficiency Test (GEPT) at the intermediate level and a Listening Comprehension Problem Questionnaire (LCPQ). The results showed that, first, most of the subjects (62%) did not reach the passing score of intermediate level. The subjects generally performed better on the subcategory of Part A followed by Part B, and Part C ranked the lowest of the GEPT listening test. Second, the listening problems met by the subjects were mainly from the input factor, followed by the listener factor and the task factor. Most frequently encountered listening problems included easily forgetting the content, long listening texts, not knowing which strategy to use, unclear pronunciation, and unfamiliar intonation patterns. Third, there was strong relationship between listening problems and listening proficiency. The proficient listeners identified their main problem as easily forgetting the content when hearing new words as the foremost problem. The less proficient listeners identified difficulty to focus on the text while having trouble understanding as the major obstacle. Finally, significant differences existed in listening problems encountered by students from different colleges. Conclusions and pedagogical implications of listening instruction were provided at the end of the paper.

Keywords: listening comprehension, listening problems, GEPT listening test, college student

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大學生英語聽解程度及聽力困難因素之研究

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摘要

為提升大學生英文能力、加強競爭力，台灣各大專院校為學生訂定英文能力檢定畢業門檻。本研究目的在於調查不同學院大學生的英語聽力理解與聽力困難。研究對象為68位來自二個學院的大一學生，其中包含37位來自技職學院及31位教育學院的學生。研究工具包括全民英檢中級聽力測驗、以及聽力困難問卷。問卷資料以SPSS 20.0版進行描述性統計與t檢定分析。研究結果顯示，第一，有六成二的大一學生仍無法通過全民英檢中級聽力及格門檻。教育學院通過比率較高，技職學院通過比率低。第二，對大一學生而言，最主要的聽力困難是聽力內容，其次是聽者個人因素、聽力任務、聽力過程、情意因素及情境因素。第三，除了聽力任務之外，不同學院學生在聽者個人、考題題型、聽力過程、情意因素、情境因素皆有顯著差異。技職教育學院學生比教育學院學生遇到更多聽力困難。此外，教育學院學生表示造成其聽力困難的主因為遇到生字就容易忘記所聽內容、不熟悉的音調、發音不清楚、不知用甚麼策略等，技職學院學生聽力困難的主因為思考不熟悉的字、無法立刻想出意思、內容太長、生字太多、速度太快等。最後，本論文針對大學英語教學上之應用、本研究的限制以及未來相關研究提供進一步建議。

關鍵詞：英語聽力理解、聽力困難、大學生

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Introduction

Listening is an essential skill of language learning as children learn their first language (L1). Just as the fundamental role listening plays in L1 acquisition, it is by no means less important in second language (L2) learning (Rost, 2011). In fact, learners spend over 50% of the time on listening while functioning in a foreign language (Nunan, 2002). Research has also found that improvement in listening skill has a positive effect on other language skills—reading, speaking, and writing (Pearson & Fielding, 1991; Rost, 1994; Yalcinkaya, Muluk & Ashin, 2009). Apparently, listening plays an important role in foreign language learning, so it has gained more and more attention in foreign language classroom.

The Ministry of Education (MOE) of Taiwan embodied an English proficiency benchmark policy for college undergraduates to promote globalization in Taiwan. For college students, they need to provide the evidence of passing the threshold for English proficiency by graduation. For example, for the GEPT intermediate level, college students have to obtain a listening score and a reading score of 80 or higher. Poor listening is a major barrier to effective communication. Therefore, it is necessary to investigate non-English major college students' listening performance and listening problems on the GEPT Listening Comprehension Test at the intermediate level. Based on this purpose, three research questions were developed as follows.

1. How do non-English major college students perform on the GEPT Listening Comprehension Test?
2. What listening problems do college students encounter while taking the listening comprehension test?
3. Is there any difference in listening problems between different colleges?

Review of Literature

Factors Affecting Listening Test Performance

Listening comprehension is a complex process. There are various factors influencing the comprehension in the process. Alderson et al. (2006), Bridley and Slatyer (2002), Kostin (2004), Ying-hui (2006), Wagner (2010), Rost (2011) and others have synthesized several factors that are likely to influence performance and interpretation of test results. L2 listening test-takers and instructors must take into account a variety of factors in order to reduce the effect of these factors on test performance of the listening abilities. Based on Jamieson et al.'s (2000) learner process models during listening tests, Rost (2011) added a number of variables that may affect listeners' test performance during each stage. These variables included stimulus variable, listener variable and item variable.

Furthermore, Rost (2011) listed four factors as a summary, including medium of the input, nature of the input, nature of the assessment task, and individual listener factors.

First of all, medium of the input includes video or audio-only presentation or accompaniment with graphic or text enhancement. Enhancements tend to improve test taker performance, such as video presentation, graphic cues, text subtitling or selective captioning. Second, nature of the input refers to dialect, speech rate, length, background, prepositional density, and amount of redundancy. Third, nature of the assessment task involves use of visual context, amount of context given, clarity of instructions, availability of question preview, and types of thinking process. The final one is individual listener factor, including memory, interest, background knowledge, motivation, and readiness to take the test.

Studies on L2 Learners' Performance on Listening Test

Students of English in a foreign language environment have difficulty comprehending the spoken language, especially in one-way listening situations. Test takers are not informed of the test topics in advance, they are allowed to listen to the input only once, and they may not receive any supporting information (Chang & Read, 2006). It is not surprising that EFL learners experience considerable stress when taking a high stakes listening tests.

In order to examine the effects of test format and text type on the listening comprehension of senior high school students, Luo (2005) conducted an intermediate listening test of the GEPT. The results showed that senior high school students performed significantly better on the tests with pictures than those without pictures. They also scored significantly higher in response to statements than dialogues. On the contrary, Yang and Lee (2008) investigated the performance of 250 college students from a University of Technology on the intermediate GEPT listening comprehension test. Almost half of the students failed the listening test. The results showed significant differences among three sections. The students performed best on the Part A; Part B ranked the second; and the Part C scored the worst.

Taxonomy of the Factors Affecting L2 Listening

In the last two decades, several studies on the effects of specific factors on the learner's listening comprehension have been pointed out (e.g. Boyle, 1984; Brown, 1995; Chang & Roehl, 2011; Chiang & Dunkel, 1992; Lotfi, 2012; Rubin, 1994; Rubin & Thompson, 1994; Teng, 2002; Yagang, 1993). Rubin (1994) was the first to classify listening factors into five categories, including text, interlocutor, task, listener and process characteristics. Text characteristics refer to features of the listening content delivered to the listeners. Interlocutor characteristics identify the speaker's personal variations. Task characteristics refer to the tasks teachers use in class. Listener characteristics identify the listener's personal traits. Process characteristics reveal listeners' cognitive activities while listening. According to Teng (2002), there are two factors that influence listening comprehension, the internal factor and the external factor. Internal factor indicates the inside factor of the listener. The external factor represents the factor outside of the listener, for example the speaker, stimulus, and context.

Moreover, Chang and Roehl (2011) investigated the factors affecting listening difficulties by a six-point Likert scale questionnaire containing 31 items. The results largely supported previous research that L2 listening difficulties come from text, listener, speaker, and task. They added two more factors— 'input channel and surroundings' and 'relevance.' The former was particularly important in test situations because noise may come at a critical point, which can be frustrating for listeners. The latter has been widely discussed in communication contexts, and refers to listeners only paying attention to information that is relevant to them in order to obtain maximal contextual effect with minimal effort.

Unlike previous studies, Lotfi (2012) conducted an exploratory factor analysis of the responses of a sample of Iranian EFL learners and then designed a forty-item questionnaire with six distinct factors: process, input, listener, task, affect and context to assess EFL learners' beliefs about the English listening comprehension problems they may encounter in unidirectional listening. The first factor, process, reflects learners' beliefs about listening problems associated with different aspects of listening comprehension process—applying cognitive and metacognitive strategies. The second factor, input, represents learners' beliefs about problems related to different aspects of aural input—vocabulary, speech clarity, grammatical structure, speech rate, prosodic feature, accent, pause, and text length. The third factor, listener, reflects learners' beliefs about listeners' characteristics, including attention, attitude, and memory. The fourth factor, task, reflects learners' beliefs about problems associated with characteristics of listening tasks—task type and type of responses demanded when answering global and local questions. The fifth factor, affect, reflects learners' beliefs about problems related to affective dimension of listening, such as comprehension failure and the level of anxiety. The sixth factor, context, reflects learners' beliefs about unfavorable characteristics of the learning context affecting listening comprehension, including inferior machine and acoustically unsuitable rooms. Among all taxonomies of listening difficulties, Lotfi's taxonomy is one of the most comprehensive classifications.

Studies on L2 Listening Problems in Taiwan

In Taiwan, there were studies investigating learners' problems in comprehending listening input (e.g. Chen, 2002; Cheng, 2004; Chien, 2007; Chiu, 2008; Chuang, 2009; Sun, 2002; Teng, 2002; Yang, 2011). Teng (2002) investigated EFL listening difficulties of 95 college students at a university of technology in Taiwan through a 43-item questionnaire with eight open-ended questions. The results showed that stimulus factor ranked the highest, followed by speaker factor, context factor, and listener factor. With regard to the greatest difficulty in each factor, vocabulary load and vocabulary expression was the main problem in stimulus factor. Clarity of the speech enunciation was the main problem in speaker factor. Noise and interference was the main problem in context factor. English proficiency was the main problem in listener's factor.

In addition, Chen and Cheng (2007) investigated listening difficulties of 51 civil engineering students enrolled in the two-year junior college program at a technical college.

The data were based on three listening exams the students took during two semesters of a general English course and a survey conducted at the end of the course. According to students' responses, fast, natural native-sounding speech, limited vocabulary capacity to understand the message, speakers' habitual expression of spoken English such as accent, stress, linking, and omitting of sounds, and insufficient knowledge or cultural differences were four major listening problems.

Recently, Yang (2011) conducted a study on exploring the English-listening difficulties encountered by 32 students at an institute of technology in order to better understand the listening process from the perspective of EFL learners. The subjects were asked to keep a listening diary about their English listening experience and their listening problems. From an analysis of the diaries of EFL learners, listening comprehension problems were divided into five categories: text, listener, listening process, speaker, and task. The top five listening problems encountered by the subjects were unknown words in the text, the speedy delivery of listening text, limited vocabulary knowledge, insufficient practice, and inability to pay attention to the next part of the text when thinking about the meaning of the previous text.

Based on the findings of the studies, most Taiwanese EFL learners seemed to encounter different listening problems. As regard to the listening problems encountered by college students, apparently a fairly large body of research focused on listening problems related to learners with different proficiency level. However, few studies focused on university students' listening problems from different colleges. Therefore, the present study aimed to investigate college student's listening performance and listening problems. It is hoped to provide useful insights into learners' performance on the listening comprehension test and its relation to listening problems.

Methodology

Subjects

The participants in the study were 75 non-English major college students. However, since there were seven subjects who did not complete the questionnaire or hand in the listening test sheet, their data was treated as invalid. Therefore, finally, 68 valid data were analyzed, including 37 students from College of Technology and 31 from College of Education.

Instruments

The instruments employed in the study included a listening comprehension test and a listening problem questionnaire. The listening section of the GEPT at the intermediate level was adopted to determine the subjects' listening proficiency. Each section contained 15 questions so that there were 45 questions in total, as shown in Table 3.1. All of the test items were the multiple choice type. The Part A was the picture description, the Part B was question or statement response, and the Part C was short conversation. As for scoring, the scoring list was adopted from Talovich and Liu (2006). The total score of the GEPT

Listening Test at the intermediate level was 120.

Table 3.1

Structure of the Listening Comprehension Test

Part	Nature of the Task	Nature of Input	Question Number
A	Picture recognition	description	Qs 1~15
B	question response	dialogue	Qs 16~30
C	written options	conversation	Qs 31~45

The listening problem questionnaire employed in the study was based on the six categories specified by Lotfi (2012). The questionnaire was comprised of two sections: the background information and the listening comprehension problems. The listening comprehension problems included six factors: Process Factor (Item 1 to 12), Task Factor (Item 13 to 15), Input Factor (Item 16 to 25), Listener Factor (Item 26 to 35), Affect Factor (Item 36 to 39), and Context Factor (Item 40 to 41). Responses to each item were on a six-point Likert scale, ranging from 1 for “strongly disagree” to 6 for “strongly agree.”

This questionnaire was proved to be reliable and practicable. Cronbach's alpha was employed to test the internal consistency reliability of the questionnaire using in this study. The results yielded .96 for all 41 items on the LCPQ. As for each category, the reliability coefficients of the process factor, the task factor, the input factor, the listener factor, the affect factor, and the context factor were .94, .87, .89, .89, .90, and .94 respectively.

The data collection was conducted in class. All of the participants followed the same procedures. First of all, the purpose and the procedures of the study were explained in five minutes. Second, the GEPT Listening Comprehension Test took approximately 30 minutes to finish. After the participants finished the test, the Listening Comprehension Problem Questionnaire was distributed to students. In order to obtain more comprehensive results, students were welcome to give their feedbacks about the questionnaire at the end. The approximate time of the whole experiment was about an hour. The data gathered from the listening comprehension test and the listening comprehension problem questionnaire was analyzed quantitatively on the SPSS, version 18.0 for Windows, such as descriptive statistics and the independent-samples t-test.

Results and Discussions

To answer the first research question, descriptive statistics and the independent-samples t-test were employed to analyze the data of listening comprehension test. The passing and failure rates of college students on the GEPT Listening Comprehension Test are shown in Table 4.1.

Table 4.1

The Passing and Failure Rates on the GEPT Listening Comprehension Test

	Education	Technology	Total
Passing	17 (55%)	9 (24%)	26 (38%)
Failure	14 (45%)	28 (76%)	42 (62%)
Total	31 (100%)	37 (100%)	68 (100%)

It shows that only 38% college students passed the GEPT Listening Comprehension Test, but 62% college students failed the listening test. For College of Technology, only 24% students passed the test. Most of students (76%) failed the test. For College of Education, 55% students passed the test. It means that more than half of students could not pass the threshold of the GEPT intermediate level listening comprehension test, especially those in College of Technology.

The results of students' performance on three different sections of the GEPT Listening Comprehension Test are shown in Table 4.2. It shows that the students generally performed best on Part A; Part B the second, and Part C was the worst. The means of students from College of Education were significantly higher than those from College of Technology in overall and for each section of the GEPT Listening Comprehension Test.

Table 4.2

Students' Performance on the GEPT Listening Comprehension Test

College	Technology (N=37)		Education (N=31)		<i>t</i>	
	Mean	SD	Mean	SD		
Part A	24.00	6.24	29.97	5.17	4.24	***
Part B	20.62	7.20	27.39	7.54	3.78	***
Part C	18.11	8.33	25.29	9.10	3.40	**
Overall	62.73	17.63	82.65	18.45	4.54	**

Note. ** $p < .01$, *** $p < .001$.

The finding shows that most of college students' listening comprehension has not reached the intermediate level. Students from college of Education performed better than college of Technology. Based on the learners' performance on the each section of the listening comprehension test, picture cues did enhance listening performance significantly because they can activate background knowledge. However, comprehending dialogues involves the ability to grasp the main ideas and framework of utterances. Moreover, figuring out the purpose of talking or the relationship between speakers, locating important details, and making inference made college the listening more problematic to understand the listening texts for college students.

The descriptive statistics were employed to analyze the data from the Questionnaire. As shown in Table 4.3, the overall mean of the participants' listening problems was slightly high ($M = 4.05$). Among the six listening problem factors, the input factor ($M =$

4.26) had the highest frequency, followed by the listener factor ($M= 4.20$), the task factor ($M= 4.00$), the process factor ($M=3.92$), the affect factor ($M=3.80$), and the context factor ($M= 3.69$). Then, listening problems of each item in each listening factor category were presented as follows. The mean scores above 4.00 as 'slightly agree' are included in the results of the study.

Table 4.3

The Rank of Listening Problems Factor Category

Factor Category	Mean	SD	Rank
Input Factor	4.26	0.71	1
Listener Factor	4.20	0.79	2
Task Factor	4.00	1.00	3
Process Factor	3.92	0.94	4
Affect Factor	3.80	0.96	5
Context Factor	3.69	1.35	6
Overall	4.05	0.73	

The top five listening problems encountered by college students are presented in Table 4.4. It demonstrated that the students met with listening problems the most frequently in two listener factors: "I forget the content when hearing the new words" and "not knowing which strategy to use" and three input factors: "long listening texts", "unclear pronunciation" and "unfamiliar intonation patterns".

Table 4.4

The most frequently encountered listening problems

Item	Description	Category	Mean	SD	Rank
30	When I hear the new words, I forget the content which was mentioned before.	Listener	4.62	0.96	1
19	The listening text is too long.	Input	4.46	0.85	2
34	I don't know which strategy to use while listening.	Listener	4.46	1.08	3
21	Words are not pronounced clearly.	Input	4.38	0.91	4
24	Unfamiliar intonation patterns interfere with my listening comprehension.	Input	4.38	1.17	5

The findings showed that the listening problems met by the college students were mainly from input factor and listener factor. College students considered that easily forgetting the content, long listening texts, not knowing which strategy to use, unclear pronunciation, and unfamiliar intonation patterns as most difficult listening problems. These findings were similar to Chien's (2007) findings in which English majors

considered text factor and listener factor as their primary obstacles. In Teng's (2002) study, however, most technical college students selected stimulus factor and speaker factor as their major problems in listening.

In order to find out if there were any significant differences in listening problems between different colleges, the independent sample t-test was used. A comparison of listening problems between two different colleges in each listening factor category is presented in Table 4.5.

Table 4.5

Differences in Each Listening Factor Category between Different Colleges

Category	Technology (N=37)			Education (N=31)			t	
	Mean	SD	Rank	Mean	SD	Rank		
Process Factor	4.32	0.91	3	3.44	0.75	5	4.28	***
Task Factor	4.11	1.15	4	3.87	0.78	3	1.00	
Input Factor	4.49	0.77	1	3.98	0.50	1	3.28	**
Listener Factor	4.44	0.79	2	3.92	0.70	2	2.83	**
Affect Factor	4.04	1.15	5	3.52	0.56	4	2.44	*
Context Factor	4.00	1.45	6	3.32	1.14	6	2.11	*
Overall	4.33	0.75		3.72	0.55		3.74	***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

It indicated that there were significant differences between different colleges overall. There were five significant differences between the students from different colleges, except for task factor. Generally, the students from college of Technology reported listening problems more strongly than college of Education. The results also showed that students from both colleges encountered problems in the input factor and the listener factor more frequently than the other factors.

The top five listening problems encountered by college of Education are presented in Table 4.6. It demonstrated that the students met with listening problems the most frequently in two listener factors: "I forget the content when hearing the new words" and "not knowing which strategy to use," two input factors: "unfamiliar intonation patterns" and "unclear pronunciation," and one task factor: "having difficulty to answer wh-questions."

Table 4.6

Top Five Listening Problems Encountered by the College of Education

Item	Description	Category	Mean	SD	Rank
30	I forget the content when hearing the new words	Listener	4.81	0.87	1

34	I don't know which strategy to use.	Listener	4.77	0.88	2
24	unfamiliar intonation patterns	Input	4.55	1.06	3
15	difficulty to answer wh-questions	Task	4.48	0.72	4
21	unclear pronunciation	Input	4.32	0.60	5

Moreover, the top five listening problems encountered by college of Technology are presented in Table 4.7. Generally speaking, these top five listening problems are totally different from and all of the means are higher than those of college of education. It showed that the students from college of Technology had great difficulty in two listener factors: "neglect the next part of the listening text when thinking about meaning of unfamiliar words" and "cannot recall their meaning immediately although some words sound familiar" and three input factors: "long listening texts," "too many unfamiliar words" and "fast speech".

Table 4.7

Top Five Listening Problems Encountered by College of Technology

Item	Description	Category	Mean	SD	Rank
26	I neglect the next part of the listening text when thinking about meaning of unfamiliar words.	Listener	4.89	0.74	1
29	I cannot recall their meaning immediately although some words sound familiar.	Listener	4.81	0.81	2
19	the long listening texts	Input	4.78	0.89	3
16	too many unfamiliar words	Input	4.70	1.00	4
22	fast speech	Input	4.62	1.19	5

The findings show that there were significant differences between college of Education and Technology in overall. Except for task factor, students from college of Technology reported listening problems more strongly than those from college of Education. As for the top five listening problems for each college, the major listening problems met by college of Education students were primarily associated with memory, strategy, intonation patterns, difficulty to answer wh-questions, and unclear pronunciation. Due to poor memory and limited strategy use, it's hard for college of Education students to retain information. Because of lacking practice, when Education students listen to different speakers' accents, intonation patterns and pronunciation cause them listening problems. As compared, for college of Technology students, their listening problems were related to attention, inability to recall meaning, a long listening text, too many unfamiliar words, and fast speech. Since college of Technology students with low listening proficiency had limited vocabulary and relatively short attention span, the length of the input and speed of delivery can affect their listening comprehension.

Conclusions

As the findings of this study shown, most freshman college students failed to pass the GEPT intermediate level Listening Comprehension Test. They performed best on the Part A, followed by the Part B, but worst on the Part C. In addition, the main listening problems identified by all college students were input factor and listener factors, such as easily forgetting the content while encountering new words, long listening texts, and not knowing which strategy to use as the most frequently encountered listening problems. Moreover, there were significant differences in listening problems between students from college of Education and students from college of Technology. Students from college of Technology reported greater listening problems than those from college of Education students did.

According to the findings of this study, a number of pedagogical implications were suggested. First-year college students listening comprehension is still under the standard of graduation threshold. This may be due to the fact that they take English courses for only three hours per week in each semester. Apparently, they need more specific instruction in listening to improve their listening ability. The strategy-based listening instruction with authentic listening materials may facilitate college students EFL listening comprehension. Furthermore, the findings provide teachers information to train students developing proper EFL listening strategies to eliminate problems in comprehending the authentic listening in order to accommodate the need of communicative competence in the global village.

References

- Alderson, J. C., Figueras, N., Kuiper, H., Nold, G., Takala, S., & Tardieu, C. (2006). Analysing tests of reading and listening in relation to the Common European Framework of Reference: The experience of the Dutch CEFR construct project. *Language Assessment Quarterly*, 3(1), 3-30.
- Boyle, J. P. (1984). Factors affecting listening comprehension. *ELT Journal*, 38(1), 34-38.
- Brindley G., & Slatyer H. (2002). Exploring task difficulty in ESL listening assessment. *Language Testing*, 19(4), 369-394.
- Brown, G. (1995). Dimensions of difficulty in listening comprehension. In D. Mendelsohn & J. Rubin (Eds.), *A guide for the teaching of second language listening* (pp. 59-73). San Diego: Dominie Press.
- Chang, A. C.-S., & Read, J. (2006). The effects of listening support on the listening performance of EFL learners. *TESOL Quarterly*, 40(2), 375-397.
- Chang, C.-S., & Roehl, K. M. (2011). A reconsideration of research on second language listening difficulties. *Selected papers from the twentieth International Symposium on English Teaching* (pp. 183-195). Crane: Taipei, Taiwan.
- Chen, S. W. (2002). Problems in listening comprehension for learners of EFL. *Studies in English Language and Literature*, 10, 57-70.
- Cheng, Y. P. (2004). *An investigation of listening difficulties encountered by EFL students in senior high schools*. Unpublished master's thesis, National Chuanghua University of Education, Changhua, Taiwan.
- Chiang, C. S., & Dunkel, P. (1992). The effect of speech modification, prior knowledge, and listening proficiency in EFL lecture learning. *TESOL Quarterly*, 26(2), 345-374.
- Chien, L. Y. (2007). *A study of college English majors' EFL listening difficulties and strategies while taking TOEFL*. Unpublished master's thesis. National Changhua University of Education, Taiwan.
- Chiu, H. H. (2008). Low-achieving technological university students' test-taking difficulties and strategies in the GEPT picture description listening comprehension test. *Journal of Kun Shan University*, 6, 61-75.
- Chuang, M. C. (2009). *A study of junior high school students' problems in English listening comprehension from students' and teachers' perspectives*. Unpublished master's thesis, National Chengchi University, Taipei, Taiwan.
- Jamieson, J., Jones, S., Kirsch, I., Mosenthal, P., & Taylor, C. (2000). *TOEFL 2000 framework: A working paper*. TOEFL Monograph Series Report No. 16. Princeton, NJ: Educational Testing Service.
- Kostin, I. (2004). *Exploring item characteristics that are related to difficulty of TOEFL dialogue items*. (Research Report No. 79). Princeton, NJ: Educational Testing Service.
- Lotfi, G. (2012). A questionnaire of beliefs on English language listening comprehension problems: Development and validation. *World Applied Sciences Journal*, 16(4), 508-515.

- Luo, J. J. (2005). *Effects of test format and text type on listening comprehension and strategy use*. Unpublished master's thesis, National Taiwan Normal University, Taiwan.
- Pearson, P. D., & Fielding, L. (1991). Comprehension instruction. In R. Bar, et al (eds.) *Handbook of Reading Research*. vols. 2815-860. New York: Longman.
- Rost, M. (2011). *Teaching and researching listening* (2nd ed.). London: Longman.
- Rubin, J. (1994). A review of second language listening comprehension research. *The Modern Language Journal*, 78(2), 199-217.
- Rubin, J. (1995). The contribution of video to the development of competence in listening. In D. J. Mendelsohn, & J. Rubin (eds.), *A guide for the teaching of second language listening* (pp. 151-165). San Diego, CA: Dominic Press.
- Rubin, J., & Thompson, I. (1994). *How to be a more successful language learner* (2nd ed.). Boston, MA: Heinle & Heinle.
- Sims, J. M. (2004). Changes in the language ability of incoming freshmen in Taiwan. *Proceedings of the 9th Conference of Pan-Pacific Association of Applied Linguistics* (pp. 314-321). Japan.
- Sun, K. C. (2002). Investigation of English listening difficulties of Taiwan students. *Selected Papers from the Eleventh International Symposium on English Teaching/Fourth Pan-Asian Conference* (pp. 518-525). Taipei, Taiwan: Crane.
- Teng, H. C. (2002). An investigation of EFL listening difficulties for Taiwanese students. *Selected Papers from the Eleventh International Symposium on English Teaching/Fourth Pan-Asian Conference* (pp. 526-533). Taipei, Taiwan: Crane.
- Wagner, E. (2010). The effect of the use of video texts on ESL listening test-taker performance. *Language testing*, 27(4), 493-513.
- Yagang, F. (1993). Listening: Problems and solutions. *English Teaching Forum*, 31(2), 16-19.
- Yalcinkaya, F., Muluk, N. B., & Ashin, S. (2009). Effects of listening ability on speaking, writing and reading skills of children who were suspected of auditory processing difficulty. *International Journal of Pediatric Otorhinolaryngology*, 73(8), 1137-1142.
- Yang, H.-Y., & Lee, F. M. (2008). The analysis of college students' listening comprehension ability. *Journal of Far East University*, 25(2), 253-270.
- Yang, M.-N. (2011). A study on EFL learners' listening comprehension difficulties by using listening diaries. *Journal of Chang Gung Institute of Technology*, 14, 133-147.
- Ying-hui, H. (2006). An investigation into the task features affecting EFL listening comprehension test performance. *The Asian EFL Journal Quarterly*, 8(2), 33-54.