

A Study on Correlations Between the College EFL Learners' Phonetic Level and Their Listening Comprehension: A Case Study of Arts & Sciences College, Yangtze University

FU Tingyi^{[a],*}

^[a]Foreign Languages, College of Arts and Science, Yangtze University, Jingzhou, China.

*Corresponding author.

Received 30 August 2014; accepted 23 November 2014
Published online 26 December 2014

Abstract

Phonetics and phonology, especially pronunciation, are the basis of listening and speaking, and the reformed CET4 and CET6 in China further emphasize the importance of listening ability. Thus it is truly necessary to figure out if there is any relationship between the phonetics and listening abilities. Phonetics is among the compulsory courses at the basic stage of English teaching for English majors, whereas the non-English majors don't take this subject. You can imagine their pronunciation. Many college English teachers have found that phonetic problems have affected the students' English learning to a great extent. Students have been largely hindered and discouraged from pursuing accurate pronunciation and intonation. Some even have lost confidence in English learning, especially for the course of listening. In order to find out some measures to solve these problems, the writer conduct the present study on 160 sophomores who are non-English majors at Art & Science College, Yangtze University. The aims of the thesis are to investigate their pronunciation and basic phonetic knowledge. In the aspect of pronunciation, it aims to survey that the students' pronunciation is accurate or not. The basic phonetic knowledge refers to intonation, stress, weak form and strong form of words, incomplete plosives, liaison, assimilation and so on.

Two tests are self-designed based on the materials and existing researches in this area. One test paper is phonetic test, the other is dictation test. After all the necessary statistics are collected, the SPSS is used to analyze the scores to figure out if there is correlation between students' phonetic level and their listening abilities and then get results.

The results of the analyses show that there is correlation between the participants' phonetic level and their listening ability, and their listening ability is closely related to their comprehensive English level. What's more, the participants have similar mistakes and weaknesses in the phonetics, which may instruct teachers and students to some extent. Firstly, the participants are poor in distinguishing the minimum pairs of English sounds. Secondly, the participants' are poor in the skills of reading phrases, or we can say they lack the basic knowledge of liaison, incomplete plosives, assimilation, and etc. Thirdly, although the participants have done a good job in reading sentences in the phonetic test, they have great difficulties in dictating sentences, especially long sentences.

At last, based on the research results, the present study gives some suggestions of improving students' phonetic level and listening ability. The thesis also states its limitations and expectations for improvement.

Key words: Phonetic level; Listening ability; Correlation; Non-English majors

Fu, T. Y. (2014). A Study on Correlations Between the College EFL Learners' Phonetic Level and Their Listening Comprehension: A Case Study of Arts & Sciences College, Yangtze University. *Studies in Literature and Language*, 9(3), 116-127. Available from: <http://www.cscanada.net/index.php/sll/article/view/5729>
DOI: <http://dx.doi.org/10.3968/5729>

INTRODUCTION

Basically speaking, language is a tool of communication. A real and meaningful language is the speech which is based on material basis of human's vocal organs. Therefore, the basis of the existence and development of language is sound. With the vocal sound, people can achieve the purpose of exchanging ideas. The abilities of listening and speaking are playing an essential part in the process of actual communication. In this thesis, I'll focus

on the influence of basic phonetic knowledge on listening comprehension. Phonetics is among the compulsory courses at the basic stage of English teaching and there are three definite requirements in terms of pronunciation, intonation and speech flow, which are specified by The Teaching Program for English Major at Colleges and Universities and are issued by the National Education Department in 2000. However, a large number of college graduates of English major or non-English major are actually pretty poor in oral communication. The problems of the English pronunciation of Chinese students result from various reasons. For example, conventional and rigid teaching approaches have been largely adopted; Students' spontaneity and potential have not been able to be mobilized and inspired due to limited classroom practice as well as the lack of good sample phonetics materials which are designed for teaching and imitation drills; competent teachers are insufficient for those at the critical age of foreign language learning. All the above mentioned factors have led to the deep-rooted problematic pronunciation habits and poor phonetic knowledge, not only in primary schools and also in colleges and universities. These problems have troubled us for many years.

Before my further study, I was a college English teacher who taught college English for non-English majors. From my teaching experience, I have found that phonetic problems have affected the students' English learning to a great extent. In order to find out some measures to solve these problems, I conduct the present study on 160 sophomores who major in International Economy and Trade and Nursing. I will compare their English scores of the final examination with that of listening comprehension. What's more, I'll conduct two questionnaires to survey their basic phonetic knowledge and their ability to distinguish words, phrases and sentences, and then make a comparison. The SPSS is used to analyze the scores to figure out if there is correlation between students' phonetic level and their listening abilities. The result may have some impact on the way how we teach phonetics and listening for non-English majors in universities and colleges.

With the development of economic globalization, English, as an international language, plays a crucial role in the international communication. Therefore, the importance of English has been emphasized by the primary, middle, high schools and universities and colleges. As we know, the basic English skills include listening, speaking, reading and writing. The famous linguist Rivers pointed that, in our daily life, listening accounts for 45%, speaking takes up 30%, reading accounts for 16% and writing just occupies 9%. From the statistic, it could be deduced that, an English learner should pay attention to the basic skill of listening ability. Without listening ability, there is no input. At the same time, input is the important method to absorb the

knowledge. So, listening plays a critical role not only in the language acquisition, but also in the promotion of study motivation. What's more, listening ability has a direct impact on students' expression of opinions, and even affects the smooth development of students' foreign language abilities. Therefore, listening ability has aroused wide public concern in the educational field.

College English, as a compulsory course, is offered specially for non-English majors (among them a part is students of science and engineering) in order to cultivate their English ability at the college stage.

The importance of English listening ability for them has been reflected on the CET4 and CET6 (College English Test), which are used to test college non-English major's English proficiency. Comparing the CET4 before College English reform, we could see that the most dramatic change in the CET exam paper after the reform is the increase of the listening proportion, which accounts for 35% of the entire content of the paper. Here, we could see Chinese Ministry of Education has taken certain method to attach the importance to listen ability in College English teaching. In a word, the feature of listening itself, the language acquisition and social development all call for more attention to the enhancement of English listening ability. This provides us the motivation to find the efficient way of improving the listening proficiency of the EFL learners, especially for the college non-English majors.

Although the English listening competence of non-English majors has been improved by the professional training, there is still much room for improvement. According to the random sampling investigation, listening is still a weakness for the college students. During the past decades, being able to claim knowledge of English for most people means being able to write and read English materials fluently. So listening is neglected and is assumed to develop automatically through exposure to the language and through practice of grammar and vocabulary (Hedge, 2002)

It is known that listening activity is the combination of sending and reception of acoustic signals. Before the content of the acoustic signal sent by the speaker is understood, the features of the signal must be known by the listener first. Namely the first step for a listener to understand what he/she is listening to is that he/she has to know the properties of the acoustic signals, which form the listening materials.

Incidentally, the nature of the acoustic signals is the very study subject of phonetics which is a basic branch of linguistics. Thus the mastery of some basic phonetic knowledge is the foundation to understand what the English speaker has said. It can be said that how much the EFL learners know about the English phonetic knowledge is of crucial importance for their understanding of the English listening materials.

From the teaching experience of mine and many English teachers, there are many non-English majors who are poor in pronunciation and lacking certain listening skills. Many of them can't pronounce English words accurately, nor can they read sentences with the right pause. It seems that many of them even don't know the basic phonetic knowledge, such as the right way to pronounce an individual sound in English, to say nothing of the awareness of the sound change in connected speech. At the same time, their English teachers seem to have seldom taught them such necessary phonetic knowledge. Despite the necessary simple phonetic knowledge in the listening textbook, the college English teachers always skip over such knowledge when teaching because they think that it is just a waste of time.

The problems or weakness in the learning and teaching of English listening offer the urgency to conduct some study on the teaching of the English listening for college non-English majors. Listening, speaking, reading and writing are four basic skills of language. But, among the four language skills, listening is maybe the most important for language learning. It is necessary to study on the Chinese students' phonetic performance and listening ability to give some implications both in listening and phonetic teaching. The aim to conduct this study is to try to figure out if there is any correlation between students' phonetic performance and their listening ability in college. Also I'd like to call college English teachers' attention to the way and focus on teaching phonetics and phonology and listening, especially for non-English major students.

1. CHAPTER TWO RESEARCH DESIGN

1.1 Brief Description of Participants and the Final English Test in Art & Science College, Yangtze University

I want to compare the participants' comprehensive English level with their listening ability before my questionnaire paper, so I chose 160 sophomores of Art and Science College, Yangtze University. Thus I can compare their English level with their listening ability according to their final English test of last semester.

The final English test in this college is usually designed according to the structure of CET4. That is to say, the test structure is just the same as that of CET4. The test paper includes writing (accounts for 15%), skimming and scanning (accounts for 10%), listening comprehension (accounts for 35%), intensive reading (accounts for 25%), cloze (accounts for 10%) and translation (accounts for 5%). The total score of the final English test paper is 100, we give the part of writing 15 points, skimming and scanning 10 points, with one point for each question. The part of intensive reading includes two minor parts, one part consists of two short

passages followed with five multiple choices for each passage. This part accounts for 15 points. The other part of intensive reading is the selection of given words. Students are given a passage with 10 blanks. They are also given a word bank with fifteen words. The form and tense of these words are given; students should select only ten of them to best fill the ten blanks in the passage. This part accounts for 10 points. Students are given a passage of twenty blanks in the part of cloze, each blank accounts for 0.5 point. In the part of translation students will be given five uncompleted sentences, they should translate them into English according to the Chinese meaning given in the brackets. For listening comprehension, there are four parts: Understanding short conversations, understanding long conversations, understanding passages and compound dictation. The first part consists of 8 short conversations followed by one question for each conversation. There are two long conversations and seven questions in the part of understanding long conversations. Understanding passages consist of three passages, total followed by ten questions. All of the listening materials mentioned above will be given only once. In the part of compound dictation, students have to complete a passage. There are eight words and three sentences missing. The passage will be read three times. The first time and the third time will be read with the normal speed, the second time, there will be some pause after each blank.

From the structure of the test paper, we can see that the basic English skills are tested, except for the speaking. That is why I say the scores of the final test paper can stand for students' comprehensive English level to some extent. It can reflect the correlation between listening ability and the comprehensive English level more obvious.

1.2 Instruments

In order to investigate the correlation between students' phonetic knowledge and their listening ability, several kinds of instruments will be used in the study. First, collect the final scores and that of listening comprehension of these participants. Then, a phonetic test and a dictation test will be given to them. The two test papers are correlated designed.

A tape recorder and an MP3 were prepared, the latter was used to record the participants' phonetic reading and the former was used to give them the dictation test. The software of SPSS (the statistical package for social science) was used to analyze the data collected during the experiment.

1.2.1 Phonetic Test

Given the fact that no phonetics tests could be found, one phonetics paper had been designed by the writer carefully and elaborately. Their reliability was tested by SPSS (referring to Chapter Three).

As I mentioned above, the phonetic knowledge in this thesis refers to both the segmental feature and some

suprasegmental features. The segmental features, which include the pronunciation of the individual speech sound, the strong and weak forms of certain words, assimilation and incomplete plosives and so on, is the study object of phonetics in a narrow sense. While the suprasegmental features, which contain stress, intonation patterns and so on, is traditionally the study object of phonology. So the phonetic test aims to test the basic phonetic knowledge of participants. It consists of four parts, reading monosyllables, reading two-syllable words and polysyllables, reading phrases and reading sentences. Monosyllables are chosen from *Practical English Phonetic Textbook* (Yang, 2010), words and phrases in Part Two and Three are chosen from the students' English textbook: *New Horizon College English Book I* (Zheng, 2008); Part Four, reading sentences are chosen from *Practical English Phonetic Textbook* (Yang, 2010), including the simple sentences and complex sentences.

For reading monosyllables, there are ten groups of words, it aims to test the accuracy of the participants' pronunciation and if they can distinguish the similar vowels or consonants. For example, the group of the two words *eat* and *it* aims to test if the reader can distinguish /i:/ and /ɪ/. If the reader can distinguish, he/she would get two points, if he/she can't, he/she would get one point or zero. For this part, several typical minimum pairs are chosen. Apart from the group mentioned just now, some other minimum pairs are tested /e/ and /ɪ/ in the group of *fell* and *fill*, /e/ and /æ/ in the group of *beg* and *bag*, /u:/ and /ʊ/ in the group of *pool* and *pull*, /v/ and /f/ in the group of *view* and *few*, /s/ and /θ/ in the group of *sin* and *thin*, /z/ and /ð/ in the group of *breeze* and *breathe*, /ei/ and /e/ in the group of *gate* and *get*, /ai/ and /æ/ in the group of *bike* and *back*, /au/ and /ou/ in the group of *loud* and *load*. The reason I chose these minimum pairs is based on my teaching experience. Not all of the minimum pairs are difficult for Chinese non-English majors to pronounce; just some of them are hard to be distinguished. These minimum pairs I have chosen are most frequently mispronounced by non-English majors.

The second part consists of ten words; it aims to test the participants' stress. They include some normal two-syllable words and polysyllables. Without the traditional taught about the knowledge of phonetics and the phonetic alphabet, many students don't know how to pronounce a word more than one syllables correctly; they can't tell the difference from one phonetic alphabet to another, they even don't know what stress is. The following words are tested in this part: *teacher*, *reading*, *decide*, *employ*, *possible*, *society*, *comfortable*, *environmental*, *responsible*, and *essential*. Some students can't tell the stress is at the first syllable or the second syllable of two-syllable words, so I select some two-syllable words both with first-syllable stressed and second-syllable stressed.

For the polysyllables, I chose some easily mispronounced words from my daily observation. For example, many students pronounce *society*/sə'saiəti/ as /'səʊʃiəti/. This is because some students can't distinguish the word *society* and *social*.

There are ten phrases in the third part; it aims to test the participants' abilities of liaison, assimilation, weak and strong forms of words and incomplete plosives. The phrases are as follows: 1. *a piece of lean meat* 2. *in peace and quiet* 3. *look up* 4. *instead of* 5. *reach out to* 6. *make it* 7. *check in* 8. *in addition* 9. *point of view* 10. *once in a while*. The first phrase aims to examine if the participants can realize the liaison in this phrase, including the three long vowels. Number 2 aims to test the incomplete plosive of the word *and*. The word *and*/ənd/ should be read as /ən/ in this phrase. Number 3 and Number 4 aim to check the liaison and the pronunciation of *look* and *instead*. The vowel group of *oo* is usually pronounced as /u:/, but here, it is pronounced as /ʊ/. The vowel /e/ is a little bit difficult to pronounce in the word *instead*. Number 5 aims to test the liaison and incomplete plosive. There are two /t/ sounds in this phrase, one is at the end of a word, and the other is at the beginning of one word next to the word mentioned. In this case, we usually omit one /t/ sound instead of pronouncing them both. Number 6 and Number 7 aim to test the liaison and pronunciation. Number 8 aims to test liaison and assimilation. The phrase *in addition* is pronounced as /ɪn ə'dɪʃən/ in the phonetics, but we usually pronounce it as /ɪnə'dɪʃən/. Number 9 aims to test the liaison, incomplete plosives and assimilation. In the phrase *point of view*, there is liaison between *point* and *of*, incomplete plosive and assimilation between *of* and *view*. The word *of* is usually pronounced as /əf/, since the following word is began with /v/ sound, it is assimilated as /əv/, then there are two /v/ sounds linking together, so we omit one of them, so *of view* is pronounced as /əvju:/. The last one aims to test the liaison and the pronunciation. The phrase *once in a while* is pronounced as /wʌns ɪn ə wɑɪl/ according to the international phonetics, but it actually is pronounced as /wʌns ɪn nə wɑɪl/. The ten phrases score one point each, any mistake or weakness would be marked down when teachers mark their readings.

The last part aims to test if the participants can make the suitable pause, accurate pronunciation and proper intonation when reading the five sentences. The scores for each part are 20 points, 10 points, 10 points and 17 points respectively. The total score is 57 points.

1.2.2 Dictation Test

The dictation test is designed according to the phonetic test. It aims to test whether the participants can distinguish certain words or phrases while listening and write them down on the answer sheet. All of the listening materials are chosen from the phonetic test. This test consists of three parts. The first part requires participants to write

down the exact words they hear. It accounts for 10 points. The second part requires them to write down certain phrases. It accounts for 10 points. The third part asks participants to write down three sentences, from simple sentences to complex ones. It accounts for 10 points, with number 1 to number 3 accounts for 3 points, 3 points and 4 points respectively. The total score of the dictation test is 30 points.

1.3 Variables

In the present study, the variables are score A (the participants' scores of phonetic test), score B (the participants' scores of dictation test), score C (the participants' scores of their final English test in last semester) and score D (the participants' scores of their listening comprehension in the final English test in last semester).

1.4 Procedures

In the present study, research purposes are to investigate if there is correlation between the participants' phonetic level and their listening ability, if there are same or similar phonetic weaknesses of the participants, the influence of the same or similar phonetic weaknesses on the listening comprehension, if there is correlation between the participants' listening ability and their comprehensive English level.

1.4.1 Data Collection

Firstly, all the participants were required to finish the dictation test in one afternoon when they didn't have regular classes. Secondly, they were asked to do the phonetic test one by one from November 15th to 20th. Their readings were recorded by an MP3. When the two tests were finished, two English teachers and I would mark their readings according to the recording, and then I would adopt the average scores of the participants. After that, I would collect the participants' scores of their final English test and their listening comprehension.

1.4.2 Data Analysis

Three steps were adopted according to the research aims.

The first step is to conduct a correlation analysis for investigating the relationship between the participants' phonetic test scores and their dictation test scores. The second step is to conduct a correlation analysis for investigating the relationship between the participants' final English scores and their English comprehension scores. If they are correlated, we can say that the degree of basic phonetic knowledge has some influence on the listening ability, listening ability in turns has influence on the comprehensive English level. In other words, the phonetic level has impact on the comprehensive English level. The third step is to find out if there are same or similar phonetic weaknesses of the participants and the weaknesses' influence on their listening ability. Measures to improve their weaknesses would be suggested.

2. CHAPTER THREE RESULTS AND DISCUSSIONS

2.1 Description of the Statistics of the Three Tests

There are three tables in this study. Table 1 is the scores of the participants' phonetic test given by three teachers, which are adopted by the rounding-off method. Table 2 is the average scores of the dictation test. Table 3 is the participants' scores of their final English test and listening comprehension. They are shown as follows:

Table 1
Scores of the Participants' Phonetic Test

	N	SA	N	SA	N	SA	N	SA
1	45	41	39	81	22	121	33	
2	44	42	37	82	19	122	36	
3	32	43	21	83	28	123	30	
4	34	44	42	84	31	124	31	
5	40	45	44	85	36	125	27	
6	37	46	37	86	32	126	34	
7	40	47	40	87	26	127	39	
8	36	48	36	88	34	128	46	
9	38	49	37	89	32	129	42	
10	40	50	38	90	32	130	39	
11	41	51	39	91	36	131	36	
12	37	52	35	92	38	132	38	
13	43	53	45	93	29	133	32	
14	43	54	37	94	30	134	42	
15	44	55	34	95	31	135	40	
16	45	56	35	96	43	136	38	
17	36	57	23	97	38	137	25	
18	37	58	35	98	47	138	28	
19	35	59	34	99	40	139	24	
20	37	60	43	100	41	140	25	
21	39	61	20	101	45	141	29	
22	40	62	19	102	33	142	41	
23	38	63	36	103	31	143	29	
24	39	64	47	104	41	144	40	
25	28	65	48	105	40	145	19	
26	29	66	23	106	39	146	42	
27	29	67	36	107	36	147	40	
28	28	68	38	108	44	148	38	
29	33	69	48	109	34	149	45	
30	39	70	33	110	33	150	44	
31	36	71	49	111	37	151	26	
32	20	72	36	114	29	152	28	
33	37	73	47	113	27	153	37	
34	49	74	26	114	36	154	36	
35	19	75	25	115	34	155	38	
36	23	76	27	116	35	156	22	
37	20	77	50	117	46	157	37	
38	17	78	32	117	37	158	34	
39	20	79	38	119	39	159	41	
40	19	80	22	120	20	160	33	
Average score						34.95		

Table 2
Scores of the Participants' Dictation Test

N	SB	N	SB	N	SB	N	SB
1	27	41	24	81	8	121	23
2	25	42	23	82	6	122	22
3	21	43	13	83	8	123	20
4	21	44	24	84	12	124	22
5	24	45	25	85	14	125	17
6	23	46	22	86	13	126	23
7	26	47	23	87	7	127	19
8	22	48	21	88	14	128	23
9	21	49	20	89	13	129	21
10	22	50	21	90	13	130	17
11	23	51	20	91	16	131	15
12	23	52	20	92	19	132	15
13	26	53	25	93	10	133	18
14	26	54	23	94	20	134	24
15	27	55	21	95	20	135	22
16	27	56	23	96	24	136	20
17	22	57	13	97	18	137	8
18	20	58	19	98	25	138	9
19	21	59	17	99	23	139	6
20	24	60	25	100	22	140	7
21	23	61	12	101	23	141	10
22	24	62	10	102	21	142	24
23	23	63	20	103	20	143	10
24	25	64	25	104	24	144	23
25	20	65	25	105	22	145	7
26	22	66	10	106	20	146	22
27	20	67	18	107	17	147	23
28	18	68	19	108	24	148	19
29	24	69	25	109	15	149	24
30	25	70	17	110	15	150	23
31	23	71	25	111	16	151	12
32	14	72	20	112	9	152	13
33	23	73	25	113	7	153	19
34	29	74	10	114	10	154	16
35	7	75	9	115	12	155	15
36	12	76	7	116	12	156	6
37	9	77	26	117	24	157	17
38	13	78	18	118	19	158	14
39	11	79	19	119	19	159	24
40	6	80	8	120	5	160	21
Average score				18.4			

From Table 1 and 2, we can see that the average score of the phonetic test is 34.95 points. There are 97 participants' scores are higher than the average score. The average score for the dictation test is 18.4 points; with 98 people of the participants get the scores higher than the average score. It is obvious that the persons who score higher than the average score of the phonetic test get scores higher than that of the dictation test.

Table 3
Scores of the Participants' Final English Test and Listening Comprehension

N	SC	SD	N	SC	SD	N	SC	SD	N	SC	SD
1	92.5	31	41	64.5	23	81	57	19.5	121	49.5	13.5
2	88.5	33	42	76.5	26	82	42	15.5	122	65.5	23
3	88	29.5	43	59.5	18	83	66	23.5	123	50	22.5
4	87.5	32.5	44	78	28	84	68	23	124	61.5	24.5
5	87	32	45	81	27	85	77.5	27.5	125	41	16
6	85.5	30	46	71	26.5	86	65	18.5	126	61.5	23
7	84	32	47	73.5	27	87	42	14.5	127	76	30
8	82	27	48	60	23.5	88	71.5	24	128	84	27
9	81.5	27.5	49	58	21.5	89	70	21	129	82.5	27.5
10	81	30.5	50	61.5	23	90	65	20.5	130	63	22.5
11	81	28.5	51	62	22.5	91	68.5	24	131	66	26.5
12	80.5	26	52	53	14.5	92	74.5	25.5	132	73	28
13	80	24	53	89	30	93	44	17.5	133	56.5	24
14	78.5	30	54	73	26	94	56	21	134	79.5	30
15	78	26	55	67	24.5	95	64	19	135	65.5	26
16	77	31	56	66	24.5	96	83	24.5	136	64.5	25
17	77	24.5	57	54.5	17	97	76	26	137	48.5	20.5
18	75.5	26.5	58	66.5	25.5	98	89	28	138	42	20.5
19	74	27.5	59	62.5	23	99	74.5	23	139	40.5	18.5
20	72.5	26	60	79	27.5	100	73	21.5	140	42.5	20
21	70.5	26	61	46	13	101	76	22	141	45.5	23.5
22	70.5	23	62	43	11.5	102	42	13.5	142	73.5	27
23	70	26.5	63	66	19	103	50.5	19.5	143	49	19.5
24	70	22.5	64	84.5	31.5	104	79	28	144	71	25.5
25	69.5	20	65	84.5	30	105	70	26	145	28.5	8
26	67.5	30.5	66	48.5	14.5	106	68	26	146	71.5	30.5
27	67.5	24.5	67	70	26.5	107	61	23	147	77.5	27.5
28	65.5	23	68	72.5	27	108	77.5	26.5	148	59.5	20
29	65	18	69	87	29	109	57	19.5	149	81.5	28
30	64.5	26	70	65.5	19	110	50.5	18	150	80.5	26
31	61.5	23	71	90	32	111	58.5	21.5	151	40	14
32	59.5	16	72	66.5	25	112	61.5	22	152	50	16.5
33	58.5	24	73	84.5	32	113	62.5	22.5	153	75	22.5
34	58	23.5	74	48.5	16	114	74.5	25	154	67.5	21.5
35	55.5	11.5	75	49	18	115	73	25	155	65.5	22
36	55.5	20.5	76	49.5	20	116	74.5	25.5	156	39.5	12.5
37	55	17	77	92.5	33	117	88.5	29.5	157	75	26
38	51	11	78	67.5	24	118	58.5	22.5	158	64.5	17.5
39	50.5	14.5	79	80.5	26	119	46	13	159	73.5	23.5
40	45	12.5	80	48.5	16	120	20	7	160	65.5	20.5
Average scores				SC: 66.28				SD: 23.15			

From Table 3, we can see that the average score of the final is 66.28, 23.15 for the listening comprehension. 30 participants score higher than 80, all of the people score higher than the average score of listening comprehension. From 70 to 79, there are 43 people, among whom 36 people score higher than the average score of listening comprehension. For the rest of the 87 people, there are only 20 people scoring higher than the average score of the listening comprehension.

2.2 Correlations Between the Collected Data

In order to investigate the correlation between phonetic level and listening ability, the correlation analysis on are computed as shown in Table 4.

Table 4
Correlation Between Scores of Phonetic Test and Dictation Test

		Score A	Score B
Score A	Pearson Correlation	1	.841(**)
	Sig. (2-tailed)		.000
	N	160	160
Score B	Pearson Correlation	.841(**)	1
	Sig. (2-tailed)	.000	
	N	160	160

Note. ** Correlation is significant at the 0.01 level (2-tailed).

In Table 4, Score A stands for the scores of phonetic test, and Score B stands for the Scores of dictation test. From the table, we can see that the correlation between scores of phonetic test and dictation test is .841, and correlation is significant at the .01 level ($P \leq .01$). That is to say the two types of scores are highly correlated. In other words, the level of the participants' phonetic knowledge does have influence on their listening ability, at least their dictation performance.

The correlation between scores of the participants' final English test and their listening comprehension is shown in Table 5 as follow:

Table 5
Correlation Between the Scores of Participants' Final English Test and Listening Comprehension

		Score C	Score D
Score C	Pearson correlation	1	.876(**)
	Sig. (2-tailed)		.000
	N	160	160
Score D	Pearson correlation	.876(**)	1
	Sig. (2-tailed)	.000	
	N	160	160

Note. ** Correlation is significant at the 0.01 level (2-tailed).

In Table 5, Score C stands for the scores of the participants' final English test, and Score D stands for the scores of their listening comprehension. From the table, we can conclude that the correlation between the participants' two types of scores is pretty obvious. The correlation between them is .876, correlation is significant at 0.01 ($P \leq .01$). That is to say, the level of the participants' listening is highly correlated with their comprehensive English abilities.

Table 6
Correlations Between the Participants' Scores of Tests

		Score A	Score B	Score C	Score D
Score A	Pearson correlation	1	.841(**)	.788(**)	.792(**)
	Sig. (2-tailed)		.000	.000	.000
	N	160	160	160	160
Score B	Pearson correlation	.841(**)	1	.717(**)	.683(**)
	Sig. (2-tailed)	.000		.000	.000
	N	160	160	160	160
Score C	Pearson correlation	.788(**)	.717(**)	1	.876(**)
	Sig. (2-tailed)	.000	.000		.000
	N	160	160	160	160
Score D	Pearson correlation	.792(**)	.683(**)	.876(**)	1
	Sig. (2-tailed)	.000	.000	.000	
	N	160	160	160	160

Note. ** Correlation is significant at the .01 level (2-tailed).

I have explained that what the Score A, Score B, Score C and Score D stand for, so we can clearly see the correlation between them from Table 6. The correlation between Score A and Score B is .841, and the correlation between Score C and Score D is .876, which are discussed above. From the table, we can also see that the correlation between Score A and Score C, Score A and Score D is .788 and .792 respectively. That is to say, the scores of phonetic test are also correlated with the participants' final English test and their scores of listening comprehension. The correlation between the scores of phonetic test and the listening comprehension is more obvious than that of the phonetic test and the final English test, which confirm the fact that the level of basic phonetic knowledge has greater impact on the participants' listening ability. It still reveals that the level of basic phonetic knowledge is closely related to the participants' comprehensive English abilities.

2.3 Reliability Analysis of the Phonetic Test

Since I design the phonetic test paper by myself, it is necessary to test the reliability of the test. The reliability analysis is computed as follows.

Table 7
Reliability Statistics

Cronbach's Alpha	N of items
.892	4

From the table above, we can see that the Cronbach's Alpha is .892, which means the phonetic test has a high reliability degree, and the high reliability enhances the results we get from the tests and correlation analysis of the tests.

2.4 The Comparison Between the Participants' Phonetic Test Readings

Since the scores of phonetic test are highly correlated with the dictation test and the listening comprehension of the final English exam, it is advisable to analyze the readings of the participants to find out their weaknesses and mistakes. In that way, we can give corresponding measures to improve the weaknesses.

2.4.1 The Analysis of the First Part of the Phonetic Test

As mentioned above, the first part of the phonetic test contains ten groups of monosyllables. All of them belong to the minimum pairs. We can see clearly the mistakes and weaknesses of the participants from the following table.

Table 8
The Cases of the Mistakes in the First Part

Words	Cases of mistakes	Option (%)
eat	52	32.5
it	72	45
fell	60	37.5
fill	44	27.5
beg	40	25
bag	84	52.5
pool	36	22.5
pull	76	47.5
view	80	50
few	36	22.5
sin	44	27.5
thin	60	37.5
breeze	48	30
breathe	112	70
gate	80	50
get	40	25
bike	24	15
back	60	37.5
loud	24	15
load	80	50

From the table, we can see that the minimum cases of mistakes is 24, the maximum is 112. We can get a more obvious scene in Figure 1. From Figure 1, we can clearly see that there is one word's cases of mistake weighting 70%, which means most of the participants have difficulty in pronouncing this word *breathe*. Actually, the difficulty lies in pronouncing the consonant /ð/. Since Chinese don't have the sound /ð/ and /θ/, many Chinese people have difficulties in pronouncing them. Relatively speaking, the cases of mistake of the sound /θ/ is much lower than that of the sound /ð/ among these participants. The cases of mistake of the word *bag* is weighting 52.5%, which means there are 52.5% of the participants can't accurately pronounce the vowel /æ/. Apart from these, there are three words' cases of mistake weighting 50%. They are: *view*, *gate* and *load*. That is to say, half of the participants have difficulties in pronouncing the sound /v/, /eɪ/ or /əʊ/. There are 47.5% of the participants have difficulty in pronouncing the word *pull* /pu:l/. Most of them pronounce is as /pu:l/. From this case, we can see that some of the participants have difficulty in distinguishing the short vowels and long vowels. The situation is similar in the cases of the words *eat*, *it* and *breeze*, with their cases of mistake weighting 32.5%, 45% and 30% respectively. Three words' cases of mistake are weighting 37.5%. They are *fell*, *thin* and *back*. The rest of the words' cases of mistake are weighting below 30%. We can assume that these words' influences on listening comprehension are not so important.

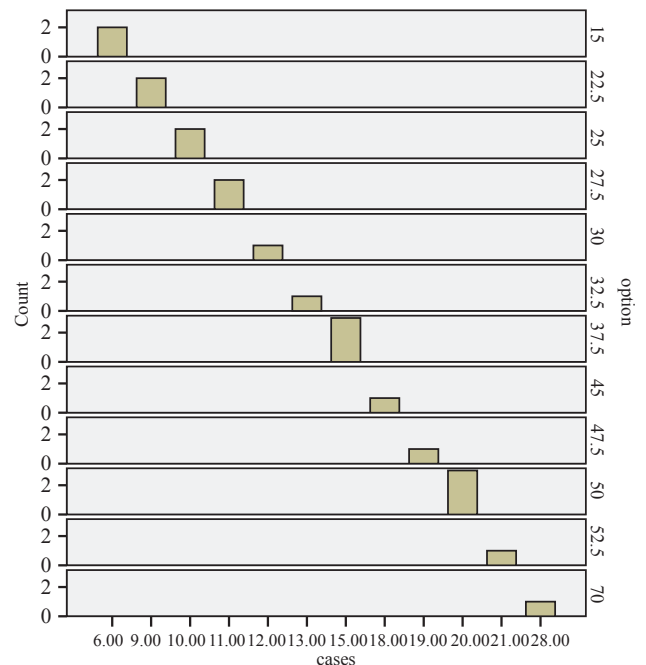


Figure 1
The Cases of the Mistakes in the First Par

2.4.2 The Analysis of the Rest Three Parts of the Phonetic Test

For the second part of the phonetic test, most of the participants can accurately pronounce the two-word

syllables, except for the word *society*. The mistake doesn't lie in the stress, but in the pronunciation. Most of them pronounce it as /'səʊʃɪəti/ by mistake. This means that they can't distinguish the word *society* from the word *social*. Nearly 65% of the participants make mistakes in pronouncing the polysyllabic words *comfortable* and *environmental*. They pronounce them with wrong stress.

Part Three is reading the phrases. As I mentioned above, this part aims to test the participants' abilities of liaison, assimilation, weak and strong forms of words and incomplete plosives. The cases of mistakes are shown in the following table, in which the numbers 1 to 10 stand for the ten phrases.

Table 9
Cases of Mistake of the Phrases in the Third Part

Phrases	Cases of mistake	Option (%)
1	76	47.5
2	128	80
3	64	40
4	64	40
5	104	65
6	72	45
7	64	35
8	140	87.5
9	108	67.5
10	128	80

We can see the result more clearly in Figure 2

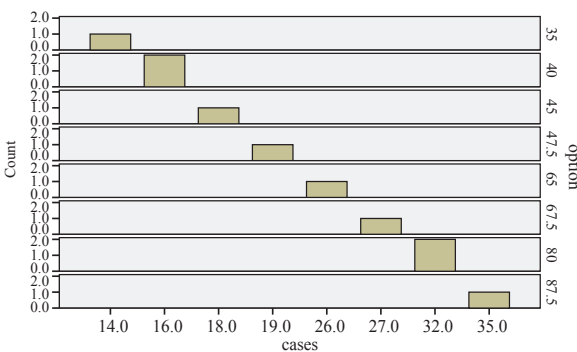


Figure 2
Cases of Mistake of the Phrases in the Third Part

We can get some conclusions from Table 9 and Figure 2. Firstly, the percentage of mistakes for every phrase is much higher than that of the monosyllables in the first part, which reveals a fact that most of the participants don't master the skills of reading phrases. They treat phrases as words plus words, so they read the words in the phrases one by one.

Secondly, we can know which basic phonetic knowledge of reading phrases is missing on the

participants by comparing the options. The highest option of cases of mistake is Number 8, weighting 87.5%. As I mentioned above, Number 8 aims to test liaison and assimilation. The phrase *in addition* is pronounced as /ɪnə'dɪʃən/ in the phonetics, but we usually pronounce it as /ɪnnə'dɪʃən/. We can say that 87.5% of the participants badly lack the knowledge of liaison and assimilation. The lowest option of cases of mistake is Number 7, weighting 35%, which are actually not low. Number 7 aims to test the liaison and pronunciation. Therefore, we can conclude that the knowledge tested in the part of reading phrases is necessary to be taught for most participants.

For the last part, reading sentences, most participants made a good performance, they can make proper pause when reading sentences, except for the word *golden* in the first sentence. Many participants can't pronounce it correctly.

2.5 The Comparison Between the Participants' Dictation Test

The dictation test is designed according to the phonetic test. In order to find out the correlation between the two more clearly and more specifically, a comparison between the participants' dictation test is necessary.

2.5.1 The Analysis of the First Part of the Dictation Test

The first part of the dictation test contains 10 words choosing from the phonetic test. It aims to test the participants' ability to distinguish the minimal pairs while listening. In this part, there is one word, *breathe*, that all participants can't correctly write, which prove the result we've got in the phonetic test, the participants have great difficulty in pronouncing the consonant /ð/, which leads to the mistakes in listening comprehension. Over half of the participants can't write *few*, *sin* and *bag* correctly. They wrote them as *view*, *thing* or *thin* and *beg* by mistake, which means that they can't distinguish the sound /v/ from /f/, /ð/ from /θ/ and from /s/, and /æ/ from /e/. There are two words that all the participants can write correctly, they are *eat* and *bike*. Most of the participants can write the other words in this part.

2.5.2 The Analysis of the Rest Two Parts of the Dictation Test

The second part of the dictation test contains five phrases, among which the phrases of *in addition*, and *once in a while* turn out to be more difficult for the participants to write than the other three phrases. The result confirms the discussions of the third part of the phonetic test, namely, many participants have difficulties in mastering the skills of liaison and assimilation.

The third part three sentences, one simple sentence, two compound sentences. Most participants can accurately write the first two sentences, but the case is not the same as to the third one. The third sentence is the

longest one, most participants don't know how to divide a long sentence into several short parts to understand and then write down while listening.

2.6 Discussions

All the analyses above prove that the phonetic level correlate with the listening ability, which can further correlate with the comprehensive English level. There are analyses of correlation between scores of phonetic test and dictation test, and correlation between scores of listening comprehension and final English test which stands for comprehensive English level in the study. There are also analyses of reliability of the phonetics tests, graphs and analyses of the participants' reading of phonetic test. Reliability Analysis guarantees that the data collected from the phonetics test are reliable, which is an essential premise of the empirical results that enhance the hypotheses. Correlation analyses confirm the fact that the phonetic level, listening ability and comprehensive English level are correlated with each other. The two Graphs and analyses of the participants' reading of the phonetic test give us the way to figure out some possible solutions to solve the poor situation of Chinese non-English majors' phonetics. Both Graphs and Correlation Analysis pave the way to find out proper methods to improve our phonetic and listening teaching. In a word, all these contribute much, from different perspectives, to the overall conclusion that there are, indeed, direct correlations between an EFL learner's phonetics ability and his listening comprehension. In addition, phonetics training can help enhance students' listening level in an obvious way. Therefore, the subject of learning phonetics should be provided in college not only for English majors, but also for non-English majors. To some degree, non-English majors need the phonetic training more badly.

3. CHAPTER FOUR CONCLUSIONS AND IMPLICATIONS

3.1 Major Findings

This part includes two aspects; one is the correlation analyses, the other is from the comparison of participants' results of the phonetic test and the dictation test. The present study made an effort to figure out the relationship between the non-English majors' phonetic level and their listening ability and the major weaknesses in their readings of the phonetic. Based on the collected data, the major findings of the present study were drawn as follows:

3.1.1 The Correlation Analyses

According to the correlation analyses of the collected data, we have three major findings.

Firstly, there is relation between participants' phonetic level and listening ability.

According to the data from Table 4, we can see that the correlation between scores of phonetic test and dictation test is .841, and correlation is significant at the .01 level ($P \leq .01$), which means the two types of scores are highly correlated. In other words, the level of the participants' phonetic knowledge has great influence on their listening ability.

Secondly, there is relation between the participants' listening ability and their comprehensive English level. According to the data from Table 5, we can see that the correlation between scores of the participants' listening comprehension and their final English test which stands for their comprehensive English level is .876, and correlation is significant at the 0.01 level ($P \leq .01$). That is to say, the correlation between the two types of scores is pretty obvious.

Thirdly, there is relation between the participants' phonetic level and their comprehensive English level. According to the data from Table 6, we can see that the correlation between Score A and Score C, Score A and Score D is .788 and .792 respectively. As I explained above, Score A stands for the scores of phonetic test, Score C stands for the scores of the participants' final English test, and Score D stands for the scores of their listening comprehension. That is to say, the scores of phonetic test are also correlated to the participants' final English test and their scores of listening comprehension. The correlation between the scores of phonetic test and the listening comprehension is more obvious than that of the phonetic test and the final English test, which confirms the fact that the level of basic phonetic knowledge has greater impact on the participants' listening ability. It still reveals that the level of basic phonetic knowledge is closely related to the participants' comprehensive English abilities.

3.1.2 The Comparison of Participants' Results of the Phonetic Test and the Dictation Test

Firstly, the participants are poor in distinguishing the minimum pairs of English sounds. Among the ten groups of minimum pairs, each group has at least one word which is difficult for the participants. There is one or two words in one group are mispronounced. The rate of mistakes is higher or equal to 30% of each group. According to the analysis of the mistakes in the first part of the phonetic test, some sounds are more difficult than the others. That is to say, we should pay more attention to the more difficult sounds, such as /ð/, /æ/, /v/, /eɪ/ and /əʊ/, 70%, of the participants can't pronounce /ð/ correctly. 52.5% for the sound /æ/, 50% for the sounds /v/, /eɪ/ and /əʊ/. These weaknesses are presented clearly in the dictation test.

Secondly, the participants' are poor in the skills of reading phrases, or we can say they lack the basic knowledge of liaison, incomplete plosives, assimilation, and etc.. According to the analysis of the third part of

the phonetic test, we can see that most of the participants badly lack the basic skills of reading phrases. They treat the phrases as word plus word instead of treating them as a whole unit. They read the phrases word by word, there are hardly any skills of liaison, assimilation or incomplete plosives demonstrated by them, which leads to their mistakes in the second part of the dictation test.

Thirdly, the participants have great difficulties in dictating sentences, especially long sentences. Most participants can write down the main idea or the exact short sentences, but they can't write down the long sentence. That is to say, they are poor in understanding the main idea of the long sentence while listening. This is a great problem that we should pay attention and try to find solutions to solve.

Fourthly, although the participants are very poor in reading the minimum pairs and phrases, they do have done a good job in reading the two-syllable word, polysyllables and sentences. This tells us that the participants have mastered the basic skills of stress and pause, except for some typical ones.

3.2 Implications

This thesis gave a general description of students' phonetic level, listening ability, comprehensive English level and the relationship between them. Although there are some potential limitations, the results of the present study might shed some light on the issues of the relationship between students' phonetic level and their listening ability. The findings of the study to give a number of implications as follows:

3.2.1 For Teachers

Rost (1992) pointed out that listening was critical in the language classroom because it provided auditory input for the learner. Learning can not begin until input can be understood at the right level. Thus, how to improve the listening instruction should be deserved the attention. Teachers should focus on the teaching of basic phonetic knowledge which refers to the pronunciation of the individual speech sound, the strong and weak forms of certain words, assimilation, incomplete plosives, stress, intonation patterns and so on, in order to improve students' listening and thus improve their comprehensive English level. Basic phonetic knowledge plays an important role in listening comprehension.

As pointed out by Anderson and Lynch (1988), much information on L2 listening originated from studies done on L1 listening comprehension. However, direct research on L2 listening is rare. Therefore, teachers should pay more attention to the training of phonetic knowledge in L2 listening instruction. Here are some detailed steps teacher may adopt. First, provide several periods of classes of phonetic learning, teach students about the knowledge of minimum pairs. Reading minimum pairs are a good way to distinguish the similar sounds. Second, tell students some knowledge about the International Phonetics, for the

consonants, just focus on some difficult consonants, such as /v/, /θ/, /ð/, /dʒ/ and /ʒ/. All of the vowel sounds should be taught delicately. Third, tell students about the basic knowledge of liaison, assimilation, strong form and weak form of words, incomplete plosives, stress, intonation and so on, and ask them to practice as much as they can. Fourth, advise students to listen to some authentic English recordings or English songs, see English movies, ask them to try to imitate the intonation of the native speakers and try to find out the liaison, assimilation, etc. the native speakers use.

3.2.2 For Students

The improvement of students' listening is not achieved in one day. The traditional listening instruction is teacher-oriented, which emphasizes the massive input to improve students' listening ability. Students seldom have opportunity to devote their intelligence to listen process. This teaching makes students to consider listening comprehension as a passive and receptive activity. There is difference between L1 and L2 listeners. Foreign language listening is obviously different from mother tongue listening. For L1 students, the role of phonology knowledge is often taken for granted and neglected in L1 listening comprehension. L1 listeners have intuitive phonetic knowledge, the knowledge is considered as automatic. However, the role of phonetic knowledge is of importance in L2 listening comprehension. It is necessary to train and enhance the phonetic knowledge for EFL learners, especially for non-English majors. Students also should pay attention to the learning of phonetic knowledge and follow the teacher's instructions to cultivate their brain in English classes. What's more, students should devote some of their spare time to do some phonetic knowledge training or revision. If students can persist, they will certainly achieve success in learning English as time goes by.

3.3 Limitations

One of the objectives of the present study is to reveal the relationship between students' phonetic level and their listening ability. There is still room for improvement in the study; certain limitations need to be considered.

Firstly, the sample of the present study was limited to the students in the certain school. It restricted the generalization of the findings to other populations with different backgrounds. So in further studies, the scope of participants should be enlarged in order to deepen the understanding of the phenomenon of the relationship between students' phonetic level and their listening ability.

Secondly, the phonetic test and the dictation test are self-designed. Although the reliability of the phonetic test is examined by the software SPSS, the validity is not examined, and there are three teachers scoring the phonetic test, the measurement of scoring is hardly the same. This is because it is more difficult to use computer

to score the test. What's more, taking the time needed into consideration, I just design four types of reading materials, and each type doesn't have many items.

Thirdly, the present study just investigates the relationship between students' phonetic level and listening ability, it doesn't do any experiment to put the findings into practice. Therefore, it is hard to evaluate the value of the findings of this thesis. If there is data from the experimental group added, the result of the thesis would be much more persuasive.

REFERENCES

- Adams, C. (1979). *English stress rhythm and the foreign learner*. The Hague: Mouton Publishers.
- Bachman, L. (1990). *Fundamental considerations in language testing*. Oxford: Oxford University Press.
- Baker, A., & Goldstein, S. (1990). *Pronunciation pairs*. Cambridge University Press.
- Dong, Y. F. (2006). *College English — Focus listening and speaking*. China: Shanghai Foreign Language Education Press.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- Fang, Z. Y. (2008). *How to make breakthroughs in the listening test of the reformed CET4*. Beijing, China: Foreign Language Teaching and Research Press.
- Gimson, A. C. (1970). *An introduction to pronunciation of English*. London: Arnold.
- Gimson, A. C. (1975). *A practical course of English pronunciation*. Edward Arnold.
- Hong Kong Examinations Authority. (1994). *Use of English examination: Instructions to oral English examiners*. Hong Kong Examinations Authority.
- Hong Kong Examinations Authority. (1995). *Hong Kong certificate of education examination: Oral English examiner's marking scheme*. Hong Kong Examinations Authority.
- Ladefoged, P. (2001). *A course in phonetics*. USA: Harcourt College Publishers.
- Liu, R. Q. (1991). *Language testing and its methods*. Beijing, China: Foreign Language Teaching and Research Press.
- Nunan, D. (2001). *Second language teaching and learning*. Beijing: Foreign Language Teaching and Research Press.
- O'Connor, J. D., & Fletcher, C. (1989). *Sounds English — A pronunciation practice book*. Longman.
- Roach, P. (2001). *Phonetics*. Oxford: Oxford University Press.
- Sun, Y. F. (1998). The phonetics knowledge and English listening teaching. *College English*, (8), 34.
- Thompson, I. (1981). *Intonation practice*. Oxford: Oxford University Press.
- Wang, G. Z. (2006) *English pronunciation and intonation for communication*. Beijing, China: Higher Education Press.
- Wen, Q. F. (2002). *Testing & teaching spoken English*. China: Shanghai Foreign Language Education Press.
- Yang, Q. (2002). *The exploration and practice of teaching English listening at college*. China: Foreign Language World.
- Yang, X. M. (2011). *Practical English phonetic textbook*. Wuhan, China: Huazhong Normal University Press.
- Zhang, Z. J., & Wu, J. H. (2008). *A collection of test papers of CET4*. Shanghai, China: Shanghai Foreign Language Education Press.
- Zheng, S. T. (2008). *New horizon college English Book I*. Beijing, China: Foreign Language Teaching and Research Press.
- Zhu, Z. Y. (2000). *A shallow exploration of the modes and methods of college English listening teaching*. China: Foreign Language World.