JTS

The Journal of Transdisciplinary Studies, 4(1): 41-55, 2020
https://doi.org/10.22685/JTS.2020.4.1.041

A Study on Korean Speech Ability of Chinese Students Studying in Korea

Won-kyung Park[1], You-Kyoung Kong[2], Soon-Bok Kwon[3]

[1]Doctoral Student, Dept. of Cognitive Science, Pusan National University (boonsoek@hanmail.net), First Author
[2]Ph.D., Dept. of Child and Family Studies, Pusan National University (smily79@naver.com)
[3]Professor, Dept. of Language and Information, Pusan National University (sbkwon@pusan.ac.kr), Corresponding Author

ARTICLE INFO

Article history:
Received 11 May 2020
Revised 22 June 2020
Accepted 23 June 2020

Keywords:
Chinese Students Studying in Korea,
Korean Speaking Ability,
Expressive Vocabulary Ability,
Sentence Comprehension Ability

ABSTRACT

The purpose of this study was to investigate Chinese students' language proficiency in Korean and chance to understand Chinese students' language . Thus, this study was designed to help Chinese bilinguals' language education and language mediation. The research subjects were 9 male and 11 female Chinese students in their 20s. Their language proficiency were measured with Receptive and Expressive Vocabulary Test and Urimal-Test of Articulation and Phonology. The sentence comprehension levels, duration of stay in Korea, having Korean friends were chosen as factors related to Chinese students' speaking ability. In Receptive and Expressive Vocabulary Test, their average score was 38.70. And age equivalent was 3 years to 3 years 5 months. In sentence comprehension test, average score was 29.45. And age equivalent was between 5 and 6. In U-TAP test, average score was 39.20. In results of pearson correlation was varied. There was a correlation between expressive vocabulary ability and sentence comprehension ability. And there was a correlation between having Korean friends and overall language ability. There was a correlation between expressive vocabulary and sentence comprehension. And there was a correlation between having Korean friends and expressive vocabulary.

1. Introduction

Korea is actively engaged in human exchanges with other countries in the midst of globalization, and the number of foreigners living in Korea is increasing steadily due to various reasons such as international marriage, dispatch work, immigration, and studying abroad. According to the 'Ministry of Foreign Residents of Local Governments in 2017' by the Ministry of Public Administration and Security, the number of long-term foreign residents living in Korea is 1,861,084 an increase of 5.5% compared to 2016 (1,764,664). This figure is 3.6% of the total population of Korea, which

is the ninth scale compared to the population of 17 cities. According to Hwang (2014), due to the increase in foreigners living in Korea, Koreans and foreigners speak bilingually as the number of opportunities for Koreans to be exposed to other cultures or foreigners from other cultures increases.

A bilingual speaker is a person who can speak two different languages. However, there are many ways to define bilinguals according to scholars. First, bilinguals can be distinguished based on fluency. Park (2005) distinguished bilinguals as maximalists who perfectly speak two languages and minimalists with minimal ability in second languages. The bilingual was divided into the equivalent case, where the ability of the two languages are equally excellent, and the case where the ability of one of the two languages was excellent (Moon, 2012). On the other hand, there are cases where bilinguals are classified according to the acquisition time. That is, it can be classified into an early bilingual who acquired a second language before puberty and a late bilingual who acquired a second language after puberty (Johnson & Newport, 1991). In addition, depending on the learning method, it can be divided into cases in which both languages are exposed at the same time of birth as well as the case where the second language is acquired after first learning the native language (Jung et al., 2008; Grosjean, 1982). In addition, there are a variety of ways to learn two languages, some of which naturally acquired bilingualism in the context of a second language, while some acquired bilingualism through formal education in schools or language schools. Therefore, although there is no conclusive implication of the precise term for bilinguals, bilinguals may refer to those who can use two languages by default, although the proficiency of the two languages used may not be equal and the acquisition time may be different.

On the other hand, bilinguals who are studying in Korea report the difficulty of communication due to lack of Korean proficiency as the biggest problem (Kim & Shin, 2014). Korean language proficiency of international students is related not only to adaptation in college life (Zou, 2009) but also to cultural adaptation stress, lack of self-esteem, anxiety and depression. Therefore, Korean proficiency is an important factor in the psychological and social adaptation of bilinguals (Kim, 2013; Lee, 2012). Therefore, it is necessary to study the bilinguals' ability to use Korean to help their adaptation and to achieve effective education.

The score of the Korean Proficiency Test (TOPIK), which is administered by the National Institute of International Education, is used as an index to measure the Korean language ability of bilinguals in Korea. It is implemented for the purpose of measuring and evaluating and using the results to apply to domestic universities and employment. However, the current TOPIK exam consists only of listening, reading, and writing skills, and does not evaluate speaking skills. On the other hand, learners try to use their language resources meaningfully through the experience of direct speaking and pay attention to verbal expression methods or syntactic processing through the opportunity to practice their language skills (Moon, 2007). Accordingly, recently, the speaking area has been emphasized as one of the important indicators in measuring language proficiency (Oh, 2018), and a view has emerged that a speaking area should be added to accurately assess Korean language proficiency of bilingual speakers. Therefore, it is necessary to first grasp the status of bilinguals' ability to speak Korean.

Researchers interested in the development of language skills have developed several test tools to evaluate language comprehension and expression skills. Among them, it is mainly used to evaluate speaking skills in the current clinical scene. Receptive & Expressive Vocabulary Test (REVT) and

'Urimal-Test of Articulation and Phonology' (U-TAP) tools. Most of the language test tools developed so far have been standardized for children and not for adults, so there is a limit in measuring language ability of adults. However, in the clinical scene, people with disabilities tend to use test tools regardless of age, and the Chinese students studying in Korea are adults, but since they do not speak Korean as their native language, there will be a significant difference in Korean proficiency from university students in Korea. In addition, Since the data obtained through the language test tools enable quantitative and qualitative analysis, it is believed that measuring bilinguals' Korean speaking ability using standardized language test tools for children will provide ample information to understand their Korean speaking skills. This study will provide a wealth of information. This study uses REVT's expressive vocabulary test to evaluate how much vocabulary appropriate to the situation can be expressed, and U-TAP to evaluate how accurately to pronounce Korean consonants and vowels of short vowels. This study want to grasp of the level.

According to the Ministry of Public Administration and Security's data in 2017, in terms of the country of origin of foreigners living in Korea, China is the highest with 709,728 (48.0%), followed by Vietnam with 147,519 (10.0%) and Thailand with 93,077 (6.3%). In addition, when looking at the types of foreigners living in Korea, the number of foreign workers is 495,792 (33.5%). However, compared to the previous year, foreign workers showed a decrease of 8.5%, while foreign students increased by 22.1% to 117,127. In particular, according to the statistics from the Ministry of Education and Human Resources Development in 2016, Chinese international students accounted for 57.7% of the total foreign students, accounting for more than the half. Therefore, this study evaluated the level of Korean speaking ability by conducting a language test on Chinese foreign students who were second-language learners who acquired a second language through regular education after puberty. I would like to examine the actual condition and characteristics of Korean speaking skills.

It is reported that expressive language abilities such as speaking are closely related to accepting language abilities. Regarding the relationship between the accepted language and the expressive language, scholars' opinions on whether they are separate or integrated abilities, or whether one ability precedes the other, vary, but when they are learned collectively. As it can be said that Chinese students have the ability to speak properly, it is considered that examining the meaning of syntax as a variable related to Korean speaking ability of bilinguals will provide useful information that can be used in the field of Korean language education for bilinguals. And for international students, this study was based on studies that interaction with Korean students is important in improving school life adaptation and communication skills (Lee et al., 2014; Lee, 2016; Won, 2013). This study aims to examine the relevance of Chinese language students' understanding of phrase meaning as a variable related to Korean speaking ability, length of stay in Korea, and selection of Korean friends.

The purpose of this study is to grasp the current situation of Korean speaking ability of Chinese students who are bilingual in Korean and Chinese, and to understand the meaning of syntax, the length of time they live in Korea, and the relationship with Korean friends. Therefore, this study will specifically understand the characteristics of bilingual Korean-Chinese speaking and provide information to help them improve their speaking skills in the field of Korean language education for foreigners. The specific research questions according to the purpose of this study are as follows.

First, what is the status of the Chinese speaking ability (expressive vocabulary and pronunciation)

of the Chinese students?

Second, does the ability of the Chinese students to speak Korean (expressive vocabulary and pronunciation) correlate with understanding of syntax, length of stay in Korea, and Korean friends?

2. Subject and Method of Study

2.1 Subject of study

The subjects of this study were 20 male and female Chinese students attending universities and graduate schools in Busan. The target of this study was selected as a Chinese student because the proportion of Chinese among the foreigners living in Korea is the highest, and the number of foreigners living in Korea for the purpose of studying abroad is increasing. Looking at the gender of the study subjects, there were 9 male students and 11 female students. The average age of the study subjects was 23.52 years, and the average period of stay in Korea was 37.36 months. If you look at the Korean Proficiency Test (TOPIK) series, the 5th grade was the most, with 4 in the 3rd grade, 6 in the 4th grade, 8 in the 5th grade, and 2 in the 6th grade. They had Korean language skills above the recognized intermediate level.

Table 1. Participants information

Classification		Subjects
sex	male	9
	female	11
Mean age (years)		23.52
residence period in Korea (months)		37.36
TOPIK class	3 class	4
	4 class	6
	5 class	8
	6 class	2

2.2 Procedure of study

This study was conducted to examine the expressive vocabulary and pronunciation characteristics of Chinese international students by conducting REVT's 'expressive vocabulary test' and U-TAP test to find out the Korean speaking ability of Korean-Chinese bilingual Chinese students. As a related variable, the understanding of syntax meaning, duration of residence in Korea, and Korean friends were measured.

2.2.1 Expressive vocabulary

In this study, REVT's 'expressive vocabulary test' was used to examine the characteristics of

Korean expressive vocabulary of Chinese students. REVT (Kim et al., 2009) was designed to measure the vocabulary ability and expressive vocabulary ability of adults aged 2 to 6 months and over 16 years of age. Those who are expected to delay in the development of the accommodating and expressive vocabulary due to environmental factors (e.g., multi-cultural families, low-income families, etc.), genetic factors, or developmental factors (e.g., premature babies, low-weight children, late-talking children, etc.), simple It can be performed for those who are expected to delay in the development of receptive vocabulary and expressive vocabulary due to language disorder, mental retardation, hearing impairment, brain damage, autism, general developmental disorder, and cerebral palsy.

This test is composed of 185 questions each of the vocabulary and expressive vocabulary of nouns, verbs, adjectives and adverbs. In this study, only 185 items corresponding to the expressive vocabulary of REVT were measured. The calculation of scores followed the guidelines, but considering that the subject of this study was not Korean, it was conducted from item 1, and after the ceiling was passed, tests were conducted for analysis. At this time, most of the subjects were tested up to 90 questions and one of them was conducted up to 105 times.

2.2.2 Pronunciation

The pronunciation characteristics of Chinese international students were measured by U-TAP (Korean articulation-phonological evaluation). U-TAP (Kim & Shin, 2004) was designed to evaluate the pronunciation characteristics of subjects who produce Korean consonants and vowel sounds from words and sentences. In particular, this test is suitable for articulation evaluation of children who are suspected of articulation disorders because the articulation development is late or the articulation is not clear. The main subjects for this test are children from 2 to 12 years old, but infants who lack expressive vocabulary or adults who are not suitable for using pictures may be tested by imitation or reading.

This test allows you to assess whether an infant or child is in the normal articulation process, and who are concerned about defects in articulation or those with organic defects in speech or language organs, have, or to what extent, articulation problems. And allows you to identify which phonemes are defective. In this study, for the accuracy of the analysis, the pronunciation of the subject was recorded and confirmed by two first-level language rehabilitation personnel.

2.2.3 Sentence comprehension test

To measure the degree of understanding of the meaning of syntax by Chinese students, KOSECT was used. KOSECT (Bae et al., 2004) evaluates the meaning of syntax and semantics at the age of 4 to the 3rd grade of elementary school. It consists of a total of 57 questions, and includes syntax structure, grammatical morphemes, and semantic elements. In the case of this research tool, there is no standardized test tool for children or a standardized test tool for measuring the ability to understand sentences in adults in Korea, and the research subject is a foreign researcher considering that the research subject is a foreigner. The ability to understand sentences was evaluated.

2.3 Data collection and analysis method

This study collected data through the method of survey and examination from June to October 2016 for Chinese students who agreed to participate in the research. First, we collected information on the gender, age, score of the Korean Language Proficiency Test, length of residence in Korea, and Korean friends through the questionnaire. Next, one-on-one inspectors who were skilled in the use of language inspection tools conducted REVT, U-TAP, and KOSECT tests to collect data on Korean expressions, pronunciation, and understanding of syntax.

The data collected in this study were analyzed by the SPSS Statistics 18.0 Statistical Program. First, frequency analysis was conducted to examine gender, age, length of residence in Korea, and scores of the Korean Language Proficiency Test, which are the general items of the study subjects, and then frequency analysis was conducted to examine the characteristics of Korean expressions and pronunciation of Chinese students, and finally Pearson correlation was conducted to examine their ability to speak Korean (expression and pronunciation) and their understanding of syntax, duration of residence in Korea, and their relationship with Korean friends.

3. Results

3.1 Chinese students' ability to speak Korean (expression, pronunciation)

3.1.1 Level of Korean speaking ability of Chinese students

In order to find out what the level of Korean speaking ability of Chinese students is like, the average of expression and pronunciation was found to be like Table 2.

Table 2. Korean speaking ability of Chinese students studying in Korea

Classification	Subjects	Mean	SD
Expressive vocabulary	20	38.70	15.74
Pronunciation	20	39.20	1.79

Table 2 shows that the average score of Korean expressions for Chinese students is 38.70 points and the average score of pronunciation is 39.20 points. Therefore, the level of Korean speaking ability is low.

3.1.2 Characteristics of expressive vocabulary of Chinese students

The frequency analysis was conducted to find out the characteristics of the expressive vocabulary of Chinese students and the positive response average for each expressive word was obtained as

shown in Table 3.

Comparing the positive responses of Chinese students studying abroad in Table 3, the positive responses of the Chinese students were most common in the order of nouns (M=26.50), verbs (M=13.20), and adjectives (M=4.50), and Chinese students acquired nouns the most.

Table 3. Mean and standard deviation of Chinese students studying in Korea

Classification	Subjects	Mean	SD
Noun	20	26.50	6.81
Adjective	20	4.50	2.06
Verb	20	13.20	4.96

In order to find out the characteristics of the expression vocabulary acquired by Chinese students in Table 3, I examined up to 60% of the words with high error rate and high positive response rate in the noun that showed the most positive response, respectively, and found that Table 4 was the same.

Table 4. Expressive vocabulary frequency accuracy response and percentile of Chinese students studying in Korea

Noun	Frequency	Percentile	Noun	Frequency	Percentile
Slide	0	0	Computer	20	100
Swan	0	0	Sea	20	100
Cliff	0	0	Airport	20	100
Sports day	0	0	Police man	20	100
Pinwheel	0	0	War	20	100
Chimney	0	0	Grand father	20	100
Dice	0	0	Fruits	19	95
Skate	0	0	pencil	19	95
Seesaw	1	5	Numbers	19	95
Horn	1	5	pepper	19	95
Dew	1	5	Flower pot	19	95
Stem	1	5	Traffic light	18	90
Drum	2	10	fridge	17	85
Chick	2	10	Snack foods	17	85
Bowl	2	10	Crab	16	80
Ginkgo leaf	3	15	Fisherman	16	80
Rain boots	3	15	Gate	16	80
Maple leaf	4	20	Newspaper	16	80
Candle light	4	20	Fire truck	15	75
Square	4	20	Toothpaste	15	75
Play-ground	6	30	Cloud	14	70
Toy	8	40	Tooth brush	12	60

As shown in Table 4, the wrong reaction nouns of Chinese students included words related to children (slide, playgrounds, toys, drums, dice, sports events, seesaw) and pure Korean words (dew, horns, ginkgo leaf, maple leaf, candles, bowls, stems, chimneys), animal name words (chick, swan), and a loanword like skates (not frequently encountered in everyday life). On the other hand, the most responsive nouns of Chinese students included words (pencil, refrigerator, police officer, traffic light, cloud, fire truck, airport, toothpaste, toothbrush) and family words (grandfather), words for body parts (snack foods, fruits, pepper, crab), and Chinese characters (moon, fisherman, newspaper, fire powder, and war).

3.1.3 Pronunciation characteristics of Chinese students

To find out the pronunciation characteristics of Chinese students studying abroad, frequency analysis was conducted to determine the frequency and percentage of positive responses for each pronunciation word, which was the same as Table 5.

Table 5. Pronunciation words frequency accuracy response and percentile of Chinese students studying in Korea

Pronunciation words	Frequency	Percentile	Pronunciation words	Frequency	Percentile
patɕi	20	100	horaɲi	16	80
tɕadoɲtɕʰa	20	100	tɕʰɛksaɲ	16	80
ky	20	100	satʰaɲ	15	75
namu	20	100	tʰok*i	15	75
kapaɲ	19	95	kʰk*li	14	70
kɯne	18	90	doɲmulwɛn	14	70
kɯrim	18	90	met*uki	13	65
dantɕʰ	18	90	mot	12	60
semari	18	90	ʌmma	12	60
tɕʰamsɛ	18	90	t*aɲkʰoɲ	12	60
jɛnpʰil	17	85	p*op*o	11	55
ropot	17	85	k*ori	9	45
kwemul	17	85	s*aum	8	40
pʰuɲsʌn	16	80	nuns*ʌp	7	35
tɕʌnhwa	16	80	tɕ*ɛktɕ*ɛk	2	10

According to Table 5, the word with the least pronunciation errors among Chinese students responded 100 percent to "patɕi, tɕadoɲtɕʰa, ky and namu" 95 percent to 95 percent to "kɯne, kɯrim, tɕʰamsɛ and semari" to 90 percent to 90 percent to " On the other hand, if you look at the error-prone words, 10 percent responded to "tɕ*ɛktɕ*ɛk" 35 percent to "nuns*ʌp" 40 percent to "s*aum" and 45 percent to "k*ori".

At this time, Chinese students studying abroad conducted a frequency analysis by type of pronuncia-

tion error to identify the characteristics of visible pronunciation errors, and found that Table 6.

Table 6. Pronunciation errors frequency and percentile of Chinese students studying in Korea

Pronunciation words	Pronunciation Errors	Frequency	Percentile(%)
Substitution	labialization	1	5
	velarization	6	30
	laxing	19	95
	tensing	9	45
	aspiration	2	10
Omission	k	17	85
	t	5	25
	l	7	35
	m	4	20
	b	2	10
	ŋ	2	10
Addition	l	5	25
Vowel error	i-ɛ	1	5
	a-o	2	10
	a-u	1	5
	a-ja	1	5
	ʌ-u	1	5
	ʌ-a	1	5
	ʌ-o	6	30
	ɸ-y	1	5
	jʌ-jɛ	1	5
	jʌ-jo	1	5
	ɛ-a	1	5

In Table 6, if you look at the form of pronunciation errors, 95 percent were relaxed, 45 percent was tensing, 30 percent was composed velarization, 10 percent was aspirated, and 5 percent was composed labialization. Errors to be omitted were 85% /k/, 35% /l/, 25% /t/, 20% /m/, 10% /b/, and 10% /o/. On the other hand, the addition error was found in 25 percent of Chinese students and relatively less than omitted. On the other hand, vowel errors were the most common with 30% pronouncing /ʌ/ as /o/, and 10% pronouncing /a/ as /o/. Analyzing vowel errors, showed the most errors with 40% and /ʌ/ with 20% in /a/ and 10% in /jo/.

3.2 A variable related to Chinese students' ability to speak Korean (expression, pronunciation)

In order to explore the variables related to Chinese students' ability to speak Korean, Pearson correlation was conducted between oral understanding, duration of residence in Korea, and Korean speaking ability (expression and pronunciation) with Korean friends, and the result was Table 7.

Table 7. Correlation analysis in variables of Korean speech ability of Chinese students studying in Korea

	1	2	3	4	5
1. Sentence comprehension test	1.00				
2. Residence year	.40	1.00			
3. Having Korean friends or not	.53*	.23	1.00		
4. Expressive vocabulary test	.77**	.37	.57**	1.00	
5. U-tap test	.25	-.14	.41	.30	1.00

*p<.05, **p<.01

As shown in Table 7, the Chinese students' comprehension of expression and syntax (r=.77, p<).01), Korean friends (r=.57, p<.A significant positive correlation between 01) and the period of residence in Korea was not significant. In other words, it means that the level of expressive language increases when Chinese students have Korean friends while understanding the meaning of the phrase. On the other hand, the pronunciation of Chinese students did not have a significant relationship with their oral understanding, their length of residence in Korea, and their Korean friends.

4. Discussion

The purpose of this study was to conduct a language test for Chinese students who acquired a second language through regular education after puberty to evaluate their ability to speak Korean and investigate variables related to speaking to help them understand Korean language ability and speak Korean. To this end, the actual condition of Korean speaking ability was identified by using expressive language power of REVT, a language test tool, and U-TAP, and related variables were the understanding of the oral meaning of Chinese students, the length of their residence in Korea, and Korean friends. Summary and discussion of the results of this study are as follows.

First, looking at the level of Chinese students' speaking ability in Korean, the average score of expressive vocabulary was 38.70 points, and the average score of pronunciation was 39.20 points. Therefore, it can be seen that Chinese students are not good at speaking Korean. In general, educational activities in schools are conducted through language-based communication, and considering that the basics of communication depend on vocabulary (Lee, 2011), the results of low scores in the expressions and pronunciation of Chinese students suggest that they may experience poor teaching and self-confidence in schools due to their lack of communication skills and may experience maladjustment in college life. It also means that Chinese students studying abroad may be intimidated and shy due to their lack of ability to produce vocabulary that corresponds to their feelings or thoughts.

Second, the expressions of Chinese students showed less than 40 percent positive reactions in words related to children, pure Korean words, animal name words, foreign words that are difficult to encounter in everyday life, while more than 60 percent positive responses were found in words that are easy to encounter in everyday life, family, body parts, food-related words, and Chinese

characters. As such, Chinese students were more responsive to the vocabulary they often encounter or Chinese characters similar to their mother tongue, which is partly in line with their view on the development of early vocabulary by children (Owens, 2002; Workel, 2009) that children acquire many words first related to their high frequency of words and experiences in their daily lives. In fact, in the case of "ge," a food noun in which 80 percent of Chinese students responded positively, those born in northwestern inland regions who had never encountered "ge," showed a bad reaction. In addition, toothbrushes showed a 60 percent positive response, with Chinese students confused with toothpaste, an object that they often encounter with toothbrushes, showing relatively low positive reactions and similar characteristics to errors seen by children in language development machines.

Meanwhile, Chinese students responded less than 40 percent to "playgrounds" as a "park" and "jackboots" as a "boots" with Chinese students using something similar to "jackboots" used in cold winter, rather than wearing "boots" when it rains, without a word equivalent to "playgrounds." Hence, the mis-reaction in these words is judged to reflect the cultural differences between China and Korea. Therefore, the results of this study emphasize that in order for international students to be proficient in speaking Korean, they must be frequently exposed to various experiences in their daily lives and understand Korean culture that is different from their culture. It also suggests that when teaching vocabulary to foreigners, they should teach vocabulary that is frequently accessible to them, and that professors should take into account cultural differences depending on the nationality of the subjects.

Third, if you look at the Korean pronunciation of Chinese students, the words "patɕi, tɕadoʃtɕʰa, ky and namu" were less error-prone, while the words "tɕ*ɛktɕ*ɛk, nuns*ʌp, s*aum, k*ori" were more error-prone. At this time, the results of analyzing the errors in pronunciation shown by Chinese students showed that substitution errors were common in the order of relaxation sound (95%), tension sound (45%), velariaztion sound (30%), aspiration sound (10%), and labialization sound (5%), and omission errors were / k/ (85%), /l/ (35%), /t/ error (25%), and /m/ error (20%). Added errors were /l/ at 25%. Collective errors were found to be 40% in /ʌ/, 20% in /a/, 10% in /jʌ/, and the most common errors were pronounced /ʌ/ as /o/.

The results of many substitution errors between relaxed and tense sounds among Korean pronunciation of Chinese students are similar to those of Chung (2008), who suggested that Chinese learners have flat, horn, and sharp tones due to pronunciation errors that are easy to see. It is easy for learners of Chinese-speaking Korean to show errors in the form of /k, t , p, tɕi, s/, and erroneous pronunciation of /k*, t*, p*, tɕ*, s*/. This is because Chinese learners confuse them because there is no confrontation between flat and light (Cui, 2002). In other words, it is easy for Chinese students to show the phenomenon of flat-toned and hard-tone horn in their Korean pronunciation. Yu (2009) said that Chinese learners have shown a phenomenon of horn hardening, because Chinese tends to start with a high pitch at the beginning of the ignition, and a strong sense of boundary between words during the ignition. In addition, horn sounds are pronounced by tightening the muscles of the corresponding speech organs and larynx, and because there is no such way of pronunciations in Chinese, it is not easy for Chinese learners to relax the vocal organs while speaking, so they also have the phenomenon of flat-sounding.

Therefore, the result of many pronunciation errors between relaxation and tension sounds in this study is interpreted as the reason that Chinese students cannot distinguish it because there is no confrontation between relaxation and tension tone in Chinese. In addition, the results of Chinese students' high level of omission errors along with the consonant confrontation are interpreted as many omission errors because most Chinese pronunciation does not correspond to the endings. These results are in part consistent with the research by Baek and Kim (2014), who showed the omission of /p, t, k, l/ in the end, and Chung (2008) who said that the Chinese showed a lot of omission errors in /p, t, m, n, o/ in the consonants.

In the case of addition errors, there were relatively fewer errors compared to substitution and omission errors, but Chinese students showed errors in adding /l/. Chung (2008) said that there was a substitution for /l/ this /r/, but this study showed an error adding /l/ due to the effect of /r/ followed instead of a substitution error, resulting in inconsistent results. In the case of yin /l/, it can be used as lateral sound and flap sound in Korean, while only lateral sound is used in Chinese (Yoo, 2009). Therefore, it is believed that the reason why Chinese students added /l/ was because it was difficult to pronounce the exclamation point that was not found in Chinese, resulting in the phenomenon of lateral sound.

In vowel errors, Chinese students showed the most errors in /ʌ/, which are considered to be due to the absence of /ʌ/ corresponding vowels in Chinese (Yoo, 2009), and support the study (Oh & Kwon, 2013) that the /ʌ/ vowels are the most difficult to pronounce among Korean vowels.

As for the reason why Chinese students studying abroad show errors in Korean pronunciation, Yoo (2009) attributed the lack of awareness of Korean pronunciation practices, such as intonation and soft notes, to the misapplication of Korean pronunciation rules, while Cui (2002) attributed it to his mother tongue's replacement of Korean pronunciation. Therefore, in order to guide Chinese pronunciation of Korean, education is needed to analyze the pronunciation that is replaced by Chinese and to ensure that Korean pronunciation rules are correctly acquired. In a specific way, Chung (2008) suggested that the strategy of pronouncing the ignition speed quickly, awareness and training of the unit of ignition, and the Korean accent rules should be practiced, while Oh and Kwon (2013) said that training on the location of the chords and the method of chords is needed.

Fourth, after looking at the variables related to the speaking ability of Chinese students, the expressive vocabulary is the understanding of the meaning of syntax ($r=.77$, $p<.01$), Korean friends ($r=.57$, $p<.01$). It had a static relationship and had no correlation with the length of residence in Korea. On the other hand, the pronunciation of the Chinese students was not correlated with the oral understanding, the duration of the residence in Korea, and all of his Korean friends.

The results of a significant correlation between the pronunciation of Chinese students and their Korean friends are somewhat similar to the study by Kim (2007) that the Korean pronunciation of Chinese learners is not related to the Korean language learning period. Kim (2007) suggested that Chinese learners who systematically received pronunciation education in the early stages of learning Korean were faster at correcting errors than those who did not. Therefore, unlike the wording, pronunciation is thought to be necessary for Chinese students to receive more accurate and systematic education in the early stages of learning Korean.

5. Conclusion

The correlation between the expressive vocabulary and the understanding of syntax meaning of a Chinese international student means that the higher the level of understanding a sentence, the more vocabulary it can express and the more vocabulary it can express, the higher the level of understanding the sentence. Therefore, in the Korean language education of Chinese students, an environment in which four language domains of speaking, listening, reading, and writing can be integrated should be prepared. In addition, the correlation between Korean friends and expressive vocabulary means that exchanges with Korean friends help Chinese students speak Korean better. Therefore, there should be an opportunity to interact with Korean friends who can help Chinese students to speak Korean fluently and adapt easily to college life by utilizing a mentoring system.

Because the number of subjects in this study was small, it was difficult to generalize the results of the study, but the low level of Korean speaking ability among Chinese students showed that they could experience many difficulties not only in their studies but also in life in Korea.

Therefore, we think that Chinese students who have a lot of exchanges with Korean friends have a high level of understanding of language expressions and sentences, so exchanges with Korean friends will help Chinese students learn Korean.

References

Bae, S. Y., Lim, S. S., Lee, J. H., & Jang, H. S. (2004). *Korea Sentence Comprehension TEST (KOSECT)*. Seoul: Seoul Community Rehabilitation Center.

Baek, G. M., & Kim, T. K. (2014). Consonant deletion during acquisition of Korean as a second language: Based on the analysis of spontaneous speech date of Korean learning Chinese. *International Language Literature, 63*, 257-281.

Cho, G. D. (2010). A method of correcting Korean consonants pronounced by Chinese students by using inversely Chinese consonant system. *The Language and Culture, 6*(3), 259-287.

Cui, X. Y. (2009). *The pronunciation study of Korean languages learners from China and contrastive study of phonological on Korean and Chinese* (master's thesis). Daegu University Graduate School.

Cui, J. D. (2002). The education of Korean pronunciation for students speaking Chinese. *Journal of Bilingual, 20*, 309-344.

Education Ministry. (2017). Foreigner students, present condition information. Retrieved from http://www.moe.go.kr (accessed 25th March, 2020)

Grosjean, F. (1982). *Life with Two Languages: An Introduction to Bilingualism*. Cambridge, Mass: Harvard University Press.

Hwang, B. M. (2014). Phonological short-term memory development for toddlers in a bilingual environment. *Journal of Speech-Language & Hearing Disorders, 23*(4), 101-108.

Jeong. M. S. (2008). Strategic pronunciation instruction for learners of Korean: A case study with Chinese learners of Korean. *Korean Linguistics, 38*, 345-369.

Johnson, J., & NewPort, E. (1989). Critical period effects in second language learning: the influence of maturational state on the acquisition of English as a second language. *Cognitive phonology, 21*, 60-99.

Kim, K., H. & Shin, Y. J . (2014) Intensive Korean study course for foreign students in SungKyunKwan University. *Korean Association of General Education, 8*(6), 169-196.

Kim, K. M. (2007). *The education of Korean pronunciation for students speaking Chinese- Focus monophthongs* (master's thesis). Pu-kyung University Graduate School.

Kim, Y. T., Hong, K. H., Kim, K. H., Jang, H. S., & Lee, J. Y. (2009). *Receptive & Expressive Vocabulary Test* (REVT). Seoul: Seoul Community Rehabilitation Center.

Kim, Y. T., & Sin, M. J. (2004). *Urimal Test of Articulation and Phonology* (U-TAP). Seoul: Hakjisa.

Lee, H. J. (2012). Factors Affecting Depression of the Chinese Students in Korea: Focusing on Socioeconomic Characteristics, Language Skills Language Skills, Acculturative Stress and Social Support. *Korea Society for Wellness, 7(3)*, 129-143.

Lee, E. H., Cho, Y. G., & Kim, N. H. (2014). A study on the analysis for learning difficulties of foreign students in university of south Korea-focusing on Chinese foreign students. *Journal of fisheries and marine sciences education, 26*(6), 1261-1277.

Lee, J. W. (2011). *A study on the correlation among the linguistic ability and the ego-identity and school-related adjustment of adolescent in multicultural families* (master's thesis). Daegu University Graduate School.

Lee, Y. R. (2015). A study on related variable that influences on vocabulary acquisition and the Vocabulary expression ability of Korean language learner. *Korean Semantics, 19*, 73-90.

Liu, X. L. (2009). Analysis of pronunciation errors in the Korean language acquisition process: focus Chinese learners. *Korean Language Education, 6*, 262-278.

Lu, X. F. (2009). *A comparative study on Chinese and Korea consonants pronunciation* (master's thesis). Kyung-hee University Graduate School.

Ministry of Government Administration and Home Affairs. (2016). 2016 A foreign colony survey in a local autonomous entity. Retrieved from http://www.moi.go.kr (accessed 11th Feb 2020).

Moon, J. Y. (2007). *A study on relationship between English speaking and comprehension ability : focused on the third year students in high schools* (master's thesis). Yonsei University Graduate School.

Oh, C. R., & Kwon, S. B. (2013). An acoustic feature comparison on Korean monophthongs between Chinese Korean Learners and Korean. *Journal of Speech-Language & Hearing Disorders, 22*(1), 149-167.

Owens, R. (2002). Mental retardation: Difference and Delay. In D. K. Bernstein & E. Tiegerman-Farber (Eds.). *Language and Communication Disorders in Children* (pp. 436-509). Boston: Allyn and Bacon.

Owens, R. E. (2004). *Language Disorders: A Functional Approach to Assessment and Treatment* (4th ed). Boston, MA. Allyn and Bacon.

Owens, R. E. (2005). *Language Development: An introduction*. Boston, MA: Allyn & Bacon.

Owens, R. E. (2006). *Language Development* (6th ed). Boston: Pearson.

Park, Y. S. (2005). Korean language education and bilingualism in Japan : The fundamentals of bilingual education and needs for international Korean language promotion. *Journal of Bilingual, 29*, 11-33.

Storkel, H. L. (2009). Developmental differences in the effects of phonological, lexical and semantic variables on word learning by infants. *Journal of Child Language, 36*, 291-321.

Won, M. J. (2013). A study on the related variables of vocabulary acquisition: Comparing receptive and productive academic vocabulary knowledge of Korean learners for academic purposes. *The language and Culture, 9*(2), 193-213.

Zou, Z. D. (2009). *A Study on Chinese Students' Adaptation to College Life in Busan Areas* (master's thesis). Pu-kyung University Graduate School.