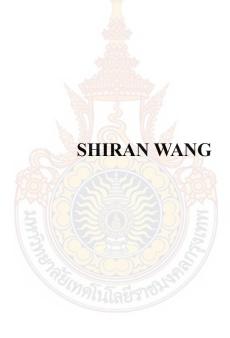
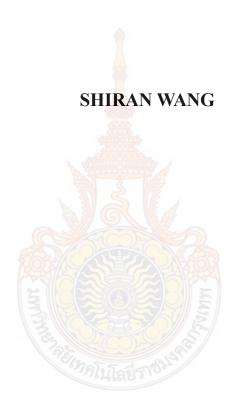


THE IMPACT OF NATIVE LANGUAGE ON MANDARIN ACQUISITION: A STUDY OF ZHUANG AND MIAO STUDENTS



A THESIS SUBMITTED IN PARTIAL FULFILLMENT
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MASTER OF ARTS IN EDUCATION AND SOCIETY
INSTITUTE OF SCIENCE INNOVATION AND CULTURE
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHEP
ACADEMIC YEAR 2023
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Date.....Year.....

Director of the Institute of Science Innovation and Culture

Thesis THE IMPACT OF NATIVE LANGUAGE ON MANDARIN

ACQUISITION: A STUDY OF ZHUANG AND MIAO STUDENTS

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Major Master of Arts (Education and Society)

Advisor Assistant Professor Dr. Saifon Songsiengchai

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ABSTRACT

This study was conducted with Zhuang and Miao students and Mandarin teachers in grades four to six in four township elementary schools in Dehou Township, Wenshan City, Yunnan Province. The purposes of this study were:1) to study the influences of the native language that affect Zhuang and Miao students when they learn Mandarin,2) to study teachers' opinions about their students' native language affects their learning when teaching Mandarin to Zhuang and Miao students. Based on Krejcie and Morgan's table, 186 students for questionnaires and 14 teachers were selected for interviews. The study is a mixed method of quantitative and qualitative research, which was statistically analyzed using percentages, means (χ), standard deviation (S.D.), and narrative analysis. The research instruments were questionnaires and semistructured interviews. The results revealed that 1) the influences of the native language that affect Zhuang and Miao students when they learn Mandarin consisted of four aspects: (1) social context, (2) learner characteristics, (3) learning conditions, and (4) learning process: Social Context was always level (χ) = 2.70 and S.D=0.36; Learner Characteristics was sometimes level (χ) =2.43 and S.D=0.35; Learning Conditions was sometimes level (χ) =2.46 and S.D=0.2936; Learning Process was always level (χ) =2.51 and S.D = 0.30. All four aspects had always level (χ) =2.52 and S.D = 0.33 on Zhuang and Miao students' Mandarin learning, and 2) teachers' opinions about their students' native language affected their learning when teaching Mandarin to Zhuang and Miao students showed that Zhuang and Miao students had difficulty pronouncing Mandarin when they learn it because of the influence of their language; the difference between Mandarin and the expression habits of the ethnic language also affects the learning of Mandarin by Zhuang and Miao students. This suggests that the study should emphasize the creation of a Mandarin language environment for Zhuang and Miao students, enhance students' interest in learning Mandarin, improve the conditions for learning Mandarin, and innovate teaching methods.

Keywords: Native Language, Zhuang and Miao students, Mandarin Learning

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Shiran WANG

CONTENTS

APPROVAL PAGE	i
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
CONTENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER I INTRODUCTION	1
1.1 Background and Rationale	1
1.2 Research Questions	4
1.3 Research Objectives	4
1.4 Research Scope and Limitations	5
1.5 Research Framework	5
1.6 Definition of Key Terms.	6
CHAPTER II LITERATURE REVIEW	
2.1 Related Theories	8
2.1.1 Introduction to the Framework	8
2.1.2 Social and Cultural Theory	9
2.2 Related Studies	11
2.2.1 Overview of Mandarin Learning	11
2.2.2 The Motivation for Learning Mandarin Chinese	12
2.2.3 Barriers to Learning Mandarin	14
2.2.4 Impact of the Cultural Environment	18
2.2.5 Bilingualism	19
2.2.6 Learning Strategy	22

2.2.7 Differences in Chinese Studies between Chinese and Foreign	
Researchers	24
CHAPTER III RESEARCH METHODOLOGY	27
3.1 ResearchDesign	27
3.2 Research Population and Simple Group	27
3.2.1 Sample Group	27
3.2.2 Sampling Methods	30
3.3 Data Collection	30
3.4 Research Instrument	31
3.5 Content Validity and Reliability	33
3.6 Data Analysis	35
3.7 Limitation	35
CHAPTER IV ANALYSIS RESU <mark>LT</mark>	37
4.1 Analysis of Student Interviews	37
4.1.1 Basic information about the participants in the questionnaire	37
4.1.2 Social context	38
4.1.3 Learner characteristics	39
4.1.4 Learning conditions.	40
4.1.5 Learning process	41
4.1.6 Mean and standard deviation of social context, learner	
characteristics, learning conditions, and learning process	42
4.2 Analysis of Teacher Interviews	42
4.2.1 Language of instruction and effectiveness	43
4.2.2 Student expression and communication	43
4.2.3 Challenges faced by students and teaching strategies	45
4.2.4 Perceptions of learning difficulties	46
4.2.5 Way of Teaching for Enhancing Native Language on Manda	rin48
CHAPTER V CONCLUSION	49
5.1 Conclusion	49
5.2 Discussion	50
5.2.1 To discuss objective 1) to study the influences of the native	
language that affect Zhuang and Miao students when they learn	

Mandarin can explain as follows:	50
5.2.1.1 The Impact of Social Context on the Acquisition of	
Mandarin by Zhuang and Miao Students	.50
5.2.1.2 The Effect of Learner Characteristics on the Acquisition	
of Mandarin by Zhuang and Miao Students	51
5.2.1.3 The Impact of Learning Conditions on the Acquisition of	
Mandarin by Zhuang and Miao Students	.52
5.2.1.4 The Impact of the Learning Process on the Acquisition of	
Mandarin by Zhuang and Miao Students	53
5.2.2 To discuss for objective 2) Teachers' opinion of the impact of	
their native language on Zhuang and Miao students' learning of	
Mandarin had 5 issued as follows:	.53
5.2.2.1 Language of Instruction and Effectiveness	.53
5.2.2.2 Student Expression and Communication	.54
5.2.2.3 Challenges Faced by Students and Teaching Strategies	54
5.2.2.4 Perceptions of Learning Difficulties	55
5.2.2.5 Way of Teaching for Enhancing Native Language in	
Mandarin	.55
5.3 Recommendation	56
5.4 Recommendation for Future Research	57
REFERENCES	
APPENDICES	71
BIOGRAPHY	.79

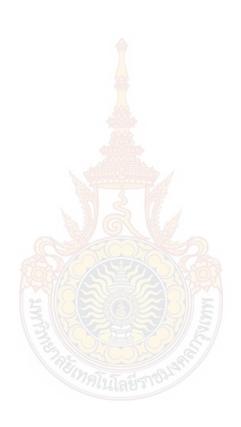
LIST OF TABLES

Table	Page
Table 3.1: Krejcie and Morgan Table	29
Table 4.1 Demographic Data of Valid Subjects (N=186)	37
Table 4.2 Descriptive Statistics of Social Context(N=186)	42
Table 4. 3 Descriptive Statistics of Learner Characteristics (N=186)	39
Table 4.4 Descriptive Statistics of Learning Conditions (N=186)	40
Table 4.5 Descriptive Statistics of the Learning Process (N=186)	41
Table 4.6 Descriptive Statistics of Social Context, Learner Characteristics,	
Learning Conditions and Learning Process	42



LIST OF FIGURES

	Page
1 5 Research Framework	6



CHAPTER I INTRODUCTION

1.1 Background and Rationale

Wenshan Zhuang and Miao Autonomous Prefecture, or Wenshan Prefecture for short, is an autonomous prefecture under the jurisdiction of Yunnan Province of the People's Republic of China, located in the southeastern part of Yunnan Province, on the southeast edge of the Yunnan-Guizhou Plateau, a predominantly karstic mountainous plain. Wenshan Prefecture is inhabited by more than 20 ethnic groups, including Han, Zhuang, Miao, Yi, Yao, Hui, Dai, Buyi, Mongol, and Bai, with a total population of 3.7 million, of which 1.943 million are ethnic minorities, accounting for 56.6% of the total population. The proportions of the Han, Zhuang, and Miao populations are about 43%, 29%, and 14%, respectively (Wikipedia, n.d.). The Zhuang language belongs to the Zhuang-Dai branch of the Zhuang-Dong language family of the Sino-Tibetan language family. A set of square Zhuang characters was created to imitate the Chinese characters, but it was not popularized.

In contrast, the Miao language belongs to the Miao branch of the Miao-Yao language family of the Sino-Tibetan language family. It uses the new Miao language that was newly created by the state. The Miao have oral literature passed down from generation to generation (Ma, 2009).

The development of minority education over the past 70 years since the founding of New China can be roughly divided into four stages: the period of initial establishment and development of minority education system (1949-1965), the period of tortuous development of minority education (1966-1976), the period of recovery and reconstruction of minority education (1977-1999), and the period of improvement and quality enhancement of the minority education system (2000-present) (Wan & Hai, 2019). In the early years of the founding of New China, ethnic minority education emphasized the learning of ethnic languages and the "integration of both the Chinese and the people" in terms of content and ensured that ethnic minority students enjoyed preferential treatment and care in terms of policy (Wan & Hai, 2019). For example, ethnic primary and secondary schools were established in ethnic areas, ethnic colleges,

and universities in higher education were restored and built, preferential policies were given to ethnic minority students, and different types of bilingual teaching modes in primary and secondary schools in ethnic areas were perfected (Wan & Hai, 2019). After 2000, the Chinese government issued a series of policies and regulations to promote the development of ethnic education. It began to reform or adjust the structure and content of the education system for ethnic minorities (Wan & Hai, 2019). The National Medium and Long-Term Educational Reform and Development Plan Outline (2010-2020), issued in 2010, proposes. "Vigorously promote bilingual teaching. The Chinese language curriculum shall be fully introduced, and Mandarin and Chinese characters shall be fully promoted. The rights of minority nationalities to receive education in their languages and scripts are respected and safeguarded. Comprehensively strengthen pre-school bilingual education." (Wan & Hai, 2019) The Decision of the State Council on Accelerating the Development of Ethnic Minority Education, promulgated in 2015, also states, "All ethnic minority areas shall, by national laws and in the light of the local situation, unswervingly promote education in the state's common language and script, ensure that ethnic minority students master and use the state's common language and script and that ethnic minority college graduates can proficiently master and use the State's common language and script." (Wan & Hai, 2019) The above policy shows that China attaches importance to the education of Mandarin in ethnic areas. Mandarin is a standardized modern Chinese language, the common language of the modern Han Chinese people, and the national common language of China, and its scope of use includes the areas inhabited by the Han Chinese people as well as the areas inhabited by the national autonomous regions and ethnic minorities (Li & Hou, 2006). China is a multi-ethnic and multi-lingual country, and people in different language areas must use Mandarin for social and linguistic communication. Because minority students' first language is not Mandarin, they need to learn Mandarin to lay the foundation for their subsequent education.

"Bilingual education" refers to the education in minority languages and the dominant national language practiced in multi-ethnic countries or regions (Dai, 1996). At present, there are four modes of bilingual education in China's ethnic areas: teaching in the minority language and teaching Chinese as a subject; teaching each subject in Chinese and offering another subject in the minority language; teaching mainly in the

minority language and gradually transitioning to Chinese; and teaching all subjects entirely in Chinese (Lei & Miao, 2010). The purpose of bilingual education for ethnic minorities in China should be to improve the comprehensive use of Chinese (Mandarin) by ethnic minority students through the medium of two languages, namely, ethnic minority languages and Chinese (second language), and to enhance the social and linguistic communication ability of people in different language areas (Lei & Miao, 2010).

Schools are the primary place for ethnic minority students to learn the lingua franca to learn and master the lingua franca, Mandarin, which is the main content of language classes. The Language Curriculum Standards for Compulsory Education (2022 Edition) states, "Language and writing are the most important communication tools and information carriers in human society, and are an important part of human culture." "The language course is comprehensive and practical for learning Mandarin and using Chinese characters. The unity of instrumentality and humanity is the basic characteristic of the language curriculum." However, in ethnic minority areas, especially in remote rural schools, students in most cases only use Mandarin, the lingua franca, during class time and use their language more of the time otherwise, so most of them are ethnic minority students with weak language expression skills, and the language has become a weak subject for them.

In the theory of mispronunciation analysis, language errors may be caused by the influence of the mother tongue (Chen, 2007). The mother tongue of ethnic minority students may cause students' cognitive errors in Chinese (Mandarin). Based on this, this paper investigates Zhuang and Miao students in selected areas to find out whether the reason why they have more difficulty in learning Chinese (Mandarin) is related to their language. Cognitive linguistics states that language is based on people's experience of the world, and cognition has an organizing effect on human experience (Zhao, 2000). When minority students learn Chinese (Mandarin), do they draw on their experience of learning their language, and does this cause problems for their learning of Chinese (Mandarin)? Whether teachers can draw on minority students' cognitive experience of their language to improve their Chinese (Mandarin) learning ability. In socio-cultural theory, children and all developing individuals develop their minds by interacting with people who have more extended intellectual abilities than they do

(mainly through verbal communication), so verbal communication, the use of language, is of great importance in the psychological development of an individual (Liu, 2011). This shows the importance of the environment for ethnic minority students to learn Mandarin; a good language environment helps them learn Mandarin well.

Because of this, the researcher, as a teacher in the primary school in Dehou Township, hopes to lead the research on improving the learning and teaching of Zhuang and Miao students, who are ethnic minority cultures, in the teaching of Mandarin language in rural primary schools through the study of these issues. Therefore, the researcher will conduct a survey and research on Zhuang and Miao students in grades 4-6 in four primary schools in Dehou Township. Through interviews and surveys with Mandarin language teachers and questionnaires with students, the researcher will find out the specific situation of Zhuang and Miao students' Mandarin learning, find out whether students are affected by the ethnic language in learning the Mandarin language, which results in difficulties in learning, and find out whether teachers' teaching of Mandarin to ethnic minority students is affected by the students' languages, causing difficulties in teaching, and to and summarise these situations and put forward reasonable suggestions.

1.2 Research Questions

- 1. What influences does the native language affect Zhuang and Miao students when they learn Mandarin?
- 2. How do teachers' opinions about their students' native language affect their learning when teaching Mandarin to Zhuang and Miao students?

1.3 Research Objectives

- 1. To study the influences of the native language that affect Zhuang and Miao students when they learn Mandarin.
- 2. To study teachers' opinions about their students' native language affects their learning when teaching Mandarin to Zhuang and Miao students.

1.4 Research Scope and Limitations

The author teaches in a primary school in Dehou Township, Wenshan City, where most students are ethnic minorities. While communicating with the students and their parents, it is found that they tend to use their language daily, but Mandarin, the common language, is seldom used. Outside of class time, students are also accustomed to using their language for communication at school. Learning Mandarin and the Lingua Franca is important for students' future learning and development. In China, Mandarin is used in schools to teach and communicate with people from other ethnic groups or regions, so ethnic minority students need to learn Mandarin well.

In this study, Zhuang and Miao students and Mandarin language teachers in grades 4-6 of four primary schools in Dehou Township, Wenshan City, Wenshan Zhuang, and Miao Autonomous Prefecture were selected for the study. Interviews and questionnaires were used to investigate and study whether their language would influence the acquisition of Mandarin by Zhuang and Miao students. Due to the small scope of the selected study and the small number of paradigms, the data and information obtained are not generalizable. This study used both quantitative and qualitative analyses. However, there may be design deficiencies with the limited time available for the study, the first time to use a combined methodology, and the absence of a predecessor to draw on.

1.5 Research Framework

This paper examines the factors that influence ethnic minority Mandarin language learning, which, as seen in Figure 1, are sequentially grouped and integrated into the 4 key aspects of the learning process as currently accepted.

Independent Variable Influence of Zhuang and Miao students 1. Social context 2. Learner characteristics 3. Learning conditions 4. Learning process Dependent Variable Mandarin Language Teaching in Dehou Township

Figure 1.1 Framework for Minority Chinese Language Learning
(figure inspired by Amaya Arigita-García et al. (2021), who studied the Second Language Learning
Examination Framework.)

1.6 Definition of Key Terms

The researcher will explain the following three key terms to understand the article better.

- 1. The influence of Zhuang and Miao students refers to the influence of Zhuang and Miao languages on learning Mandarin. This includes the following four areas as follows:
- 1.1 Social context (Stern, 1983) refers to Zhuang and Miao students' use of language at home and outside of school. That is, spaces in which students interact regularly, consisting of cultural, social, political, geographical, historical, religious, linguistic, and economic aspects that are part of the learner's identity (Beltrán-Arias, 2015; Citing & Wendong, 2020).
- 1.2 Learner characteristics refer to factors included in the learner's personality, i.e., the sum of characteristics distinguishing one person from another (Arigita-García et al., 2021) .
- 1.3 Learning conditions refer to the conditions under which learners learn Mandarin at school and at home.
- 1.4 The learning process, which is regulated by the uniqueness of the learner and the conditions of learning, will consist of strategies, techniques, and mental

operations developed by the student from the very beginning of the learning process to the attainment of linguistic competence in the target language (Arigita-Garcíaet al., 2021).

- 2. Mandarin language teaching refers to the use of Mandarin for instruction. Education in both languages, the minority language and the language of the dominant ethnic group, is practiced in multi-ethnic countries or regions (Dai, 1996). Most of the students in the schools selected for study in this paper are Zhuang and Miao, and the Mandarin language teachers use only Mandarin in their teaching.
- 3. Elementary schools are those located in rural areas. Students are primarily from neighboring villages and towns, and the environmental facilities are poor compared to urban primary schools. The rural primary school chosen for this paper is located in Dehou Township, Wenshan City, and most of the students are Zhuang and Miao.
- 4. Dehou Township, located northwest of Wenshan City, Zhuang and Miao Autonomous Prefecture, Yunnan Province, is predominantly inhabited by the Zhuang and Miao ethnic groups. The township has four elementary schools: Dehou Elementary School, Dalong Elementary School, Lelong Elementary School, and Gangu Elementary School.

CHAPTER II LITERATURE REVIEW

This study aims to study the influence of Zhuang and Miao students on Mandarin language teaching in rural elementary schools. Therefore, the relevant literatures are retrieved and reviewed in databases such as

- 2.1 Related Theories
 - 2.1.1 Introduction to the Framework
 - 2.1.2 Social and Cultural Theory
- 2.2 Related Studies
 - 2.2.1 Overview of Mandarin Learning
 - 2.2.2 The Motivation for Learning Mandarin Chinese
 - 2.2.3 Barriers to Learning Mandarin
 - 2.2.4 Impact of the Cultural Environment
 - 2.2.5 Bilingualism
 - 2.2.6 Learning Strategy
 - 2.2.7 Differences in Chinese Studies between Chinese and Foreign

Researchers

2.1 Related Theories

2.1.1 Introduction to the Framework

The theories used in the study get the ideas from various concepts to collect as the framework of the study as follows:

Amaya Arigita-García et al. (2021) studied the Second Language Learning Examination Framework.

The first aspect is the social context (Stern, 1983), i.e. the space in which students interact regularly, consisting of cultural, social, political, geographical, historical, religious, linguistic, and economic aspects that are part of the learner's identity (Beltrán-Arias, 2015), the combination of which will largely determine learners' perceptions of the target language as well as learners' behavior in learning the

target language (Cronin, 2017; Good & Lavigne, 2017). In this paper, we will focus on the selected Miao and Zhuang students' use of the language at home and outside the classroom.

The second and third aspects (directly related and determined by the social environment) will be the characteristics of the student and the learning conditions (Arigita-Garcia et al.,2021). Among the characteristics of the student will be included the factors related to the learner's personality, i.e., the sum of the characteristics that distinguish one person from another (Arigita-Garcia et al.,2021).

The pedagogical context will determine the conditions of learning outcomes through two possible dichotomies (Arigita-Garcíaet al.,2021). On the one hand, "acquisition and formal learning", whether or not we consider that nowadays, we tend to categorize learning contexts into formal and informal learning (Arigita-García et al.,2021). On the other hand, the dichotomy related to educational models is "teaching-centered versus learning-centered models" (Dewey, 1986; Park, 2016; Stern, 1983; Unsworth & Mills, 2020).

The fourth aspect will be the process of learning, a process that, moderated by the uniqueness of the learner and the conditions of learning, will include the strategies, techniques, and mental operations developed by the student from the very beginning of the learning process to the attainment of linguistic competence in the target language (Arigita-Garcia et al., 2021). For example, in acquiring the mother tongue, the learner goes through successive stages of learning as he or she internalizes the new linguistic system, eventually confronting authentic linguistic competence through the correct use of the language (Oxford, 2016; Selinker, 1972).

2.1.2 Social and Cultural Theory

"Sociocultural theory is a theory of individual cognitive development derived from the doctrine created by the Soviet psychologist Vygotsky in the 1930s. The theory is named for its emphasis on the social origins and cultural mediation of an individual's mental development (Wertsch, 1985; Lantolf, 2006). The essential elements of sociocultural theory include mediation, internalization, zone of recent development (ZPD), and activity theory.

Mediation is the most central concept in Vygotsky's thought, and the gist is that the individual's interaction with the external world is not direct but indirect and

instrumentally mediated (Vygotsky, 1978). The use of tools, especially linguistic symbols, is the primary marker that distinguishes the higher mental activities of human beings from the lower mental activities of animals and human beings (Liu, 2011). Parents and teachers are mediators to children in passing on culture and leading development. Children, as well as all developing individuals, develop their minds by interacting with people who are more extended than them in terms of knowledge and ability (mainly through verbal communication), so verbal communication and the use of language are of great significance in the psychological development of an individual (Liu, 2011). Therefore, teachers and parents should be involved in the language learning of ethnic minority students, and vice versa; parents or teachers can also affect the learning of Mandarin for ethnic minority students.

The Zone of Proximal Development (ZPD) theory is derived from Vygotsky's genetic law of cultural development, which centers on the idea that "higher thinking occurs twice in the cognitive development of a person, first at the social level and then at the mental level" (Vygotsky, 1978). The ZPD involves the learner's current and potential ability level. ZPD involves the learner's current level of competence and potential level of competence, which requires certain conditions to be reached, i.e., assistance or guidance from others who are more competent than the learner, e.g., teachers, parents, peers; this scenario is often likened to "scaffolding". From this, we can see the important role of interpersonal interaction in cognitive development (Liu, 2011). New content that second language acquirers can master through native speakers, experts, and peer scaffolding.

In internalization theory, Vygotsky believed that human beings' higher psychological functions always occur twice, the first at the social level and the second at the individual level, i.e., first inter-individual and then intra-individual (Vygotsky, 1978). Sociocultural theory views imitation, self-talk, and internal speech as mechanisms of internalization and their manifestations at different stages (Liu, 2011).

In activity theory, Vygotsky, based on the Marxist view of activity, pointed out after an in-depth analysis of practical human activities that the higher cognitive functions of human beings are developed in the practice of social activities (Vygotsky, 1978). From the perspective of socio-cultural activity theory, individual and even collective cognitive development occurs in the activity system composed of these

elements; individual cognitive development is closely connected with social production practice activities (Liu, 2011). Ethnic minority students, as the main body of social activities, develop their language in social activities, and the environment and people around the students constitute the main body of their social activities. If Zhuang and Miao students want to learn Mandarin well, they should also pay attention to the students' social practice activities. The language environment in which minorities live affects the effectiveness of their language learning, and students may learn Mandarin better when in a Mandarin-speaking language social environment.

2.2 Related Studies

2.2.1 Overview of Mandarin Learning

In 1949, a form of Mandarin in the People's Republic of China, also known as Mandarin ("common language"), based on the Beijing dialect, was legitimized as the country's official language (Ministry of Education, 2005; Kane, 2006). The official language, Mandarin, is the language that Chinese students learn in school. It is considered the most widely spoken language in the world - an estimated 650 million people currently speak it. However, more than 1 billion people may be able to understand written Chinese (Crystal, 2003). Almost all Chinese learners now learn Mandarin (Kane, 2006; Xing, 2006; Nayer, 1997). Mandarin is the medium of instruction at all stages in China, and the government has attempted to promote this through the school system. However, it has not proved easy, particularly in elementary schools in more remote areas (Starr, 2009). In China, each ethnic group has its own language. Although the languages of ethnic minorities are officially recognized as having the same status as Mandarin in some areas, they are also pressured to adopt Mandarin for teaching purposes to communicate with other ethnic groups and regions. The essentially standardized language policy is an important part of preserving the integrity of China's state (Starr, 2009).

For members of minority groups, learning Mandarin, the Lingua Franca, enables them to better integrate into the group or to share in the resources of the majority (Clément & Kruidenier, 1983). In minority areas, minority groups use their language more often, especially in daily communication. As a result, ethnic minority

students know little about the importance of Mandarin, which leads to a lack of awareness of learning Mandarin in their minds, affecting the popularization of Mandarin, and a poor level of Mandarin may prevent them from finding a job after graduation, which may be detrimental to the stable development of the society (Li, Liao & Li, 2010). Members of ethnic minorities need to learn their languages to protect their cultural traditions, develop their economies, and communicate with other ethnic groups and regions. Ethnic minorities must also learn Mandarin, and ethnic minorities in remote mountainous areas especially need to learn Mandarin because they aspire to develop their economies, so it is of great significance to implement bilingual education in ethnic minority areas (Gu, 2014).

2.2.2 The Motivation for Learning Mandarin Chinese

In their study of motivation for learning a second language, Gardner and his colleagues (Gardner & Lambert, 1972; Gardner, 1985) proposed two motivational orientations that indicate why students learn a language. The first orientation is integrative, i.e., "the student's desire to "learn more about other cultural communities as he becomes interested in it in an open-ended way, and ultimately to be accepted as a member of another group" (Gardner & Lambert, 1972). Integration orientation includes emotional identification with the target cultural group, positive attitudes toward the language community, and interest in and desire for social interaction with the language community, all of which reflect a positive view of the L2 and its culture (Gardner, 2001; Csizér & Dörnyei, 2005). The second orientation is instrumental. That is, students want to derive particular benefits from learning a language, such as career opportunities, and the tools include pragmatic reasons and utilitarian values, as well as learners' perceptions of the benefits of the language, such as finding a better job, traveling, making friends, and understanding foreign media (Gardner, 2001; Csizér & Dörnyei, 2005).

"Heritage learners" or "heritage language learners" (Campbell & Peyton, 1998) are students who speak a language other than English as their first or native language, either having been born in another country or speaking a language other than English at home. They are sometimes referred to as "minority learners" (Walker, 1991) or "traditional students" (Sung & Padilla, 1998). According to Campbell and Peyton (1998), heritage language students have varied historical and cultural backgrounds.

Their language proficiency varies from knowing only a few words or phrases to nearnative proficiency, depending on their previous language experiences and language learning background. Ethnic minority students in China are native speakers of languages other than Chinese, and both orientations have been reported as significant predictors of language proficiency in the context of heritage language (HL) learning in China (Lu & Li, 2008; Yang, 2003).

Dörnyei and his colleagues (Dörnyei, 1994, 2003; Dörnyei & Ottó, 1998) extended Gardner's social-theoretical framework at the social, personal, and educational levels, reflecting the L2 learning process at three motivational levels: 1. the language level (e.g., attitudes toward the target language, such as the culture it conveys, the community in which it is spoken, and the language is the potential usefulness of proficiency); 2. the learner level (affective and cognitive elements of personality traits, such as self-confidence and the need for achievement); and 3. the learning situation level (components consisting of intrinsic and extrinsic motivational dimensions related to specific curricula, teachers, and peer group situations).

In a meta-analysis of attitudes and motivation in L2 learning, Masgoret and Gardner (2003) concluded that sustained effort, or "motivational intensity," is critical to L2 achievement. Research has shown that learning behaviors, such as effort and strategy, are moderated by motivational factors and contribute to students' language achievement (Csizér & Dörnyei, 2005; Dörnyei & Ottó, 1998; Wen, 1997, 1999).

Different scholars have different views on the motivation of second language learning. Based on the utility of language, Gardner believes that the motivation for language learning has an integrative and instrumental orientation; Donier believes that in addition to the motivation proposed by Gardner, the motivation of learning a second language is also affected by the social environment (e.g., usefulness to the target language), personal characteristics and education; Masgoret and Gardner believe that the efforts and strategies in learning can regulate the motivation of second language learning.

The three sociocultural dimensions discussed above at the level of motivation and the learning environment (referred to as "environment" in the study by Donier and colleagues) suggest that HL learners can receive support and

encouragement from their family members, relatives, and friends. This type of support has been identified as a source of motivation in the context of HL learning in China (He & Xiao, 2008; Peyton, Ranard, & McGinnis, 2001). Another sociocultural dimension and learner-level factor is 'cultural interest', which HL learners will likely acquire through exposure to the target language and culture through movies, TV programs, and popular music (Wen, 2011). Familiarizing learners with the L2 community and culture can help to shape their attitudes towards L2 learning, as Clement and Cludinier's (1983) study has shown. At the contextual level of learning, positive attitudes toward learning come from self-confidence and promote constructive interaction with the classroom learning experience.

Lu and Li (2008) analyzed the effects of various motivational factors (integrative, instrumental, situational, and learner traits) on Chinese heritage and nonheritage learners in a university setting. In examining the relationship between motivation and language performance in a blended classroom, they found that integrative and instrumental motivation was important for students' self-efficacy in test scores. This shows that students' utility motivation for language learning can influence their achievement in language learning. In addition, heritage learners were more influenced by instrumental motivation than non-heritage learners. Lu and Li's (2008) findings were inconsistent with Yang's (2003) investigated the relationship between motivational orientations and learner variables among East Asian language learners and found that integrative motivation was more substantial than instrumental motivation for both Japanese and Korean students but that instrumental motivation was more substantial than instrumental motivation for Chinese learners. Motivation was stronger than integrative motivation. Japanese learners may learn Japanese because of their interest in Japanese culture and language, Korean learners may learn about their heritage, and Chinese learners may be attracted by China's rapidly growing economy and the potential value of learning Chinese. Given this, minority students' instrumental motivation may be an important motivation for them to learn Mandarin.

2.2.3 Barriers to Learning Mandarin

Pragmatic competence consists of two distinct but interrelated subcomponents: pragmatic linguistic competence and sociolinguistic competence, and pragmatic competence, which is recognized as an important component of

communicative competence (Laughlin et al., 2015; Usó-Juan & Martinez-Flor, 2006), is a considerable challenge to second language (L2) learners is a great challenge for even those who are proficient, as they often lack the knowledge and ability to use pragmatic language in everyday communication (Bardovi-Harlig, 2001; Halenko & Jones, 2011; Kasper, 1997).

In China, the learning of Mandarin by ethnic minority students is influenced by their language. A (2010) compares Buyei and Chinese and mainly analyzes the differences in pronouncing the two (differences in fricatives, nasals, and consonants). This difference makes Buyei students struggle with certain pronunciations in Mandarin, and inaccurate pronunciation can cause language learning and communication obstacles. The words themselves need to be learned, and the lack of connection between words and sounds leads to learning difficulties (Kane, 2006; Xing, 2006). Zhang (2012) came to a similar conclusion by analyzing Tibetan vowels and rhyming tones. In addition to phonological differences, there are differences in vocabulary and the conventions of grammatical structures and word order, which make ethnic minority students experience communication barriers and problems in thinking transitions when communicating in Chinese (Yang, 2008). When people learn new knowledge, old knowledge is bound to be transferred. Migration that facilitates the learning of new knowledge is called "positive migration", while migration that hinders the learning of new knowledge is called "negative migration" (Jia, 2011). In the process of learning Mandarin, there are many components of "negative transfer" from the mother tongue, and the negative transfer from the national language is also manifested in the phenomenon of petrification of the intermediary language, i.e., overreliance on the knowledge of the mother tongue as an auxiliary to the expression of meaning makes ethnic minority students' understanding deviate from that of the second language when they are using their mother tongue deviation (Jia, 2011). The thinking process of minority students using a second language is much more complicated; the language used for expression is a second language, while the language of thinking may be the mother tongue. In this process, the second language is constantly subjected to two different influences, both positive and negative, of the mother tongue. Hence, the elimination of dependence on and interference with the native language is important for accelerating the learning of the second language (Wang, 1995).

Based on environmental reasons, Wang (2013) pointed out that due to the closed environment and high concentration of Uyghurs in the Gaotai Minjiu community in the ancient city of Kashgar, Xinjiang, residents use only Uyghur in their daily lives, and believe that their national language is imperative to them, while they consider Mandarin to be relatively important to their offspring; however, primary and secondary school students are not interested in or even resistant to the learning of Chinese, and there is a contradiction between their subjective willingness to learn Mandarin and their actual behaviors, due to the influence of their family environments and their living habits. Li (2005), however, pointed out that through the survey, although the concentration of ethnic minorities in the Southern Xinjiang region has led to a lower level of Mandarin popularization, ethnic minorities have a stronger willingness to learn Mandarin because learning it well can help them master advanced production techniques through media and books and thus increase their economic income and change the economic backwardness caused by geographic factors. It can be seen that ethnic minorities in different regions have different attitudes towards learning Chinese.

Students of different nationalities may be affected by different factors when learning Chinese. Mei (2011) observed the process of Chinese kana learning among Thai learners and found that first language transfer greatly impacted Mandarin acquisition. An and Zhang (2007) used various data collection methods such as questionnaires, interviews, and classroom observations and found that students from countries that use Chinese characters recognize pinyin faster than students from countries that do not use Chinese characters. Chen (2011) studied the process of tone acquisition of Western learners at different levels and found that learners' tone performance varied with their Chinese proficiency. Chen (2011) studied the acquisition process of tones in Western learners at different levels and found that learners' performance of tones varied with their Chinese language level. J. Zhang (2008) investigated the effects of the number of strokes, lexical frequency, and grapheme frequency on single-character recognition of Chinese characters, and the results showed that it was more difficult for learners to memorize Chinese characters with a higher number of strokes, which confirms that the stroke is the central unit of Chinese character recognition. Fan (2013) pointed out that CSL/CFL learners tended to learn

neologisms that were more pragmatic, current, and efficient and to acquire neologisms through everyday Chinese communication, TV programs, movies, and the Internet to acquire new words.

Students of different nationalities have different strategies for learning Chinese. Liu (2012) found that Japanese university students used memory strategies the most and affective and functional strategies (e.g., watching Chinese movies and communicating with Chinese friends) the least when learning Chinese. Students' motivation was positively correlated with using learning strategies. Wu and Chen (2006) found that students with better listening skills used cognitive strategies, metacognitive strategies (metacognitive strategies are strategies that manage one's learning through a series of behaviors such as planning, monitoring, summarizing, evaluating, and allocating attention), and affective strategies (affective factors can be a part of language learning) when learning Chinese. Wu and Chen (2006) found that students with better listening skills used better cognitive strategies, metacognitive strategies (metacognitive strategies are strategies for managing one's learning through a series of behaviors such as planning, monitoring, summarizing, evaluating, and allocating attention), and affective strategies (affective factors can be a motivation or resistance to language learning) when listening to Chinese, and suggested that the use of teaching Chinese as a second or foreign language (CSL/CFL) is more effective than that of listening to Chinese as a second or foreign language (CSL/CFL). Teaching Chinese as a second or foreign language (CSL/CFL), teachers should encourage active learning and provide more self-assessment tasks in listening instruction. Zhou and Xie (2007) explored the word separation strategies utilized by intermediate-level students through reading tasks and stimulus recall, as Chinese word separation is a complex task for most CSL/CFL learners, and concluded that the use of familiar words, grammatical judgments, rhythmic judgments, substitutions, and native language comprehension are the common strategies used for Chinese vocabulary extraction. Qian (2010) found that Korean students comprehended Chinese reading mainly through main idea speculation, contextual information, and text markers but avoided using their mother tongue and interacting and communicating in their mother tongue. In contrast, Wu (2008) found that Italian students in the target language environment mostly used alternative ways of expression, i.e., speaking in other words or using gestures to help them express themselves, and then using English if they could not improve their spoken Chinese.

Some other factors can affect second language acquisition, such as a shortage of external resources that increases the difficulty of program immersion programs (Lindholm-Leary, 2011). Schachter and Gass (2013) state that bilingual immersion programs face equitable access, funding, staffing, socio-political tensions, collaboration, resource policy, and accountability challenges. The most immediate problem is the lack of teachers and instructional materials in Chinese as a foreign language; program styles need to be adapted to fit the local culture (Zhao, 2009).

Teachers are also factors that influence second language acquisition. Since language teachers play a key role in implementing relevant language programs and facilitating the learning of CSL/CFL learners, their professional development should be a priority research focus (Lai et al., 2016). With the rapid increase in the number of Chinese language learners, there is an urgent need for more and more Chinese language teachers (Wang et al., 2013; Xu, 2007). Indeed, teacher shortage is one of the most significant challenges policymakers face when promoting CIL. For example, Jiang and Hao (2010) studied and explained the practical pedagogical knowledge of two experienced and two novice Chinese language teachers. Experienced teachers valued teachers' beliefs, students' knowledge, and past experiences, although novice and experienced teachers had similar perceptions of pedagogical knowledge.

It can be seen that the learning of a second language may be influenced by the native language, environment, learning strategies, teaching resources, policies, and teachers.

2.2.4 Impact of the Cultural Environment

The influence of the cultural environment has also been recognized in recent theories about the role of motivation in second-stage language learning (Clement & Hamers, 1979; Gardner, 1978). Due to socio-cultural influences, heritage learners may wish to learn their heritage language (HL) rather than other foreign languages. Studies of Chinese heritage learners (Chao, 1997; He, 2008) have demonstrated that learners learning Chinese can search for their national identity and recover the roots of their neglected cultural heritage. Even within the group of native English-speaking learners, there are differences in learners' cultural experiences,

psychosocial backgrounds, and levels of education in their home countries, which contribute to differences in their language skills (He & Xiao, 2008; Peyton et al., 2001). Even the impact of digital and communication technologies, which over time are not immune to economic, political, and social impacts, can change how the determinants of linguistic competence in second language teaching intervene (Bárcena, 2020; Caliskan et al., 2017; Hartshorne et al., 2018; Thorne et al., 2015). Although there is nowadays a broad consensus on the involvement of these factors when learning a second language, the results caused by these factors are different. The teacher's perception of the student's academic performance, the capacity for social and institutional relations, and the knowledge of the family environment may positively or negatively influence the results obtained (Beltrán-Arias, 2015; Rao, 2016).

The influence of ethnic minority students' psychology and culture in the process of learning Mandarin should not be ignored, and it is necessary to grasp the differences between the two and grasp the rules in teaching in order to make them establish a correct view of language and eliminate the inferiority complex of language (Liang, 2009). With the development of the economy, although urban-rural integration is accelerating, the popularization of Mandarin among rural groups is still far less than that among urban groups (Dai, 2012). The students' parents' language influences the students' language when communicating at home. Students do not use Mandarin at home at a high rate because their parents do not speak Mandarin (An, 2010). Children use their first language to communicate privately or with peers (Chen 2013). Learners' first language is often cited as a source of unfavorable influence on their efforts to "master" Chinese (Feng & Hu, 2005; Yuan, 2009). Most children in foreign language (FL) immersion programs lack the family and community background to speak the FL language outside of school (DeJong & Bearse, 2014). Students do not possess cognitive-like syntactic abilities and lack unique conversational features (Genesee & Lindholm-Leary, 2013). This shows that second language learning can be influenced by the home language environment and the regional context in which the language learner lives.

2.2.5 Bilingualism

Suppose we conceptualize the mother tongue as the language the child first acquires, and the child uses the mother tongue for the first communicative act. In that

case, we can conceptualize acquiring a second language as the language used to communicate in the country where it is learned (Cook, 2016; Painter, 2015). Regarding the concept of acquisition, the term "acquisition" refers to the ability of learners to express themselves as naturally as their native language in any communicative context (Larsen-Frerman, 2018). In addition, "learning" refers to a conscious and planned activity that allows learners to acquire vocabulary and grammatical structures to become fluent in a language other than their mother tongue (Arnon & Christiansen, 2017; Chandler, 2003). The term acquisition should be used when referring to natural or language immersion contexts in the target language country. In the case of learning, learning should be used when referring to the context of formal education (Park, 2016; Vives, 2016).

According to Mitchell, Myles, and Marsden (2013) and Crystal (1997), a second language (SL) can be clearly defined as a non-native language that is widely used for communication purposes, often as a medium for education, government, or business. The study of the discipline of second language acquisition and the development of second language learning after learning a native language, third and fourth languages, and subsequent languages are also included in second language acquisition (Gass & Selinker, 2008). Second Language Acquisition (SLA) is a significant branch of Applied Linguistics, known in research and practice in other disciplines such as linguistics, psychology, and sociology. It is a new area of research. Digital research on SLA has been done at various academic institutions. The field is still in the developmental stage, "We are far from a complete theory of SLA, but it is still evolving." (Krashen, 2018; VanPatten, 2017; Gass & Selinker, 2008). As an interdisciplinary field, SLA primarily seeks to study the acquisition of a new language beyond the native language or L1. "The study of second language acquisition is a broader branch than the study of first language acquisition because it encompasses not only the progressive aspects of first language acquisition but also all aspects of second language speakers' language in other areas of linguistics and psychology." (Dörnyei, 2013).

Early research on the determinants of second language acquisition has emphasized the role of psychological factors. For example, linguistic competence has long been recognized as a determinant of proficiency (Henmon, 1929; Gardner, 1985).

Similarly, early social psychological approaches emphasized the role of individual determinants: attitudes and motivation (Gardner & Lambert, 1959; Gardner & Lambert, 1972). In contrast to the emphasis on individual characteristics, most of the empirical research on bilingual education and theorizing about language when it comes to learning revolves around social contextual considerations (Bibeau, 1982; Edwards, 1979, 1981; Hamers & Blanc, 1983; Paulston, 1980) such as the majority or minority status of the Locus Standi. Clément's model (1980, 1984; Clément & Kruidenier, 1985) proposes that second language proficiency is influenced by personal motivation, which is determined by two processes influenced and activated by two aspects of the environment: (a) is the relative ethnolinguistic vitality of the first and second language groups and (b) is the frequency of contact with the second language group. It is only at high contact frequencies that members of minority groups are significantly more acculturated than members of majority groups, and a high frequency of contact appears to promote acculturation, whereas a lower state promotes acculturation. (Clément, 1986).

In summary, the current findings suggest that language learners' status in a bilingual cultural context is related to second language exposure, self-confidence, proficiency, and acculturation, but not to attitudes toward the second language community or motivation to learn and use the second language. In addition, those variables that showed significant differences (e.g., self-confidence, language environment, attitudes and motivation, fear of assimilation) were most closely related to language proficiency and acculturation. In promoting second language acquisition and interethnic contact, aspects of this contact seem to play a significant role in influencing interethnic contact's linguistic and intercultural implications. Suppose status and attitudes play a lesser role here than previously reported. In that case, it may be because an individual's linguistic behavior is closely related to the proximate linguistic environment in which he/she finds himself/herself. (Clément, 1986).

The study of factors determining second language learning and the effective use of a second language did reach its heyday in the second half of the 20th century. At that time, disciplines (interrelated and different) such as linguistics, semiotics, psychology, sociology, anthropology, or education depended on authors and institutions to establish, link, and organize the factors affecting the learning process

from a multidisciplinary perspective (Levesque et al., 2017; Saito et al., 2019). The social context (Stern, 1983), understood as the space in which students interact regularly, consists of cultural, social, political, geographical, historical, religious, linguistic, and economic aspects that are part of the learner's identity (Beltrán-Arias, 2015) The combination of these aspects will determine the learner's perception of the learners' perceptions of the target language and the behavior of learning it (Cronin, 2017; Good and Lavigne, 2017).

2.2.6 Learning Strategy

Cohen (2005) defines learning strategies as the mental processes and behaviors students consciously and intentionally use to understand and learn new information. These strategies include four areas: cognitive, which focuses on memorizing the vocabulary and grammatical structures of the target language; affective, which is designed to reduce fear and anxiety and promote self-confidence in achieving goal-setting; social, which focuses on facilitating interactions with native speakers in authentic environments; and metacognitive, which is designed to design and monitor the appropriate use of the other three strategies (Feng, 2019). Based on this perspective and placing it in a formal instructional setting (e.g., school), we can hypothesize that the degree of control that teachers have over the development of learning strategies is quite limited, and thus, their interest in promoting the development of learning strategies in their students may be conditional, and thus subject to other factors in which the teacher's instruction of the student displays more pronounced results (Arigita-Garciaíaet al, 2021).

Children need to learn naturally, and the stimuli obtained from their surroundings are the primary source of learning (Caputo, 2014; Hartshorne et al., 2018). According to the Council of Europe (Colardyn & Bjornavold, 2004), formal education will be considered as learning (structured according to the pedagogical objectives, duration, or medium) usually provided by educational centers or training centers, and finally, certification. From the student's point of view, formal learning is intentional (Arigita-Garcia et al., 2021). In contrast, informal learning must be learned from everyday work, family, or leisure activities. Such learning is not based on pedagogical objectives, duration, or medium and does not usually lead to certification. Informal learning may be intentional, but in most cases, it is incidental and random

because it is not provided by an educational center or training center and usually does not lead to certification (Arigita-Garcia et al., 2021). However, it is structured according to the pedagogical objectives, duration, or medium (Arigita-Garcia et al., 2021). From a student's perspective, informal learning may be intentional (Cole & Vanderplank, 2016). Given this, students should be asked to speak more Mandarin daily to achieve the goal of practice makes perfect, learning to use, and learning to use (Mo & Gan, 2015).

Chinese language teachers adopt new concepts, theories, and pedagogical approaches to help CSL/CFL learners gain language proficiency (Shao, 2013; Zong et al., 2012; Zu, 2008). The significant presence of language pedagogy research may be related to the fact that the increase in Chinese language learners poses significant pedagogical challenges for researchers and teachers. These studies have documented the efforts of Chinese language teachers to develop customized instructional curricula for learners with different motivations and needs-such as Chinese language courses for specific purposes (Mao, 2010; Ni, 2007; Tao, 2012; Wang, 2005; Zhang, 2006; Zhao, 2008). Given the important role of instructional materials in language education, 95 studies have examined how textbooks, dictionaries, and other instructional resources can be appropriately designed to effectively facilitate CSL/CFL instruction (Hao, 2013; Li & Gong, 2015; Zhou & Chen, 2013). Chen et al. (2015) studied the effects of Chinese language teaching methods on learners' orthographic awareness (orthography refers to the rules of writing or spelling of words, and Chinese character orthographic awareness is learners' awareness of the rules of combining Chinese characters) with elementary school students and found that language learning was not related to personality. Jiang (2007) explored the effects of teaching Chinese character recognition and writing separation and integrating Chinese character recognition and writing on CSL/CFL beginners. Shao (2013) explored the effectiveness of cognitive-functional pedagogy in teaching Chinese personal onomatopoeia, and the results showed that cognitive-functional pedagogy had significant immediate and delayed effects on students' mastery of personal onomatopoeia. Zong et al. (2012) argue that the "length teaching method", which involves gradually increasing the length of students' writing in successive tasks, is an effective means of helping students master personification onomatopoeia and that the

length method" is an effective way to help foreign students write better compositions. It can be seen that the selection of teaching methods should be based on the specific situation of the students and their social background so that the expected teaching effect can be achieved.

It is well known that teachers' beliefs directly influence their pedagogy (An et al., 2004; Beijaard et al., 2000; Chiang, 2010; Wang & Du, 2014; Wu et al., 2011). Therefore, educational researchers have advocated for the inclusion of teachers' preexisting beliefs and knowledge as an integral part of teacher education programs (Sun, 2011) because teachers are not empty vessels waiting to be filled with theories and pedagogical skills; they are individuals who enter the teaching position with prior experiences, personal values, and beliefs that inform their pedagogical knowledge and influence their behavior in the classroom (Freeman & Johnson, 1998).

2.2.7 Differences in Chinese Studies between Chinese and Foreign Researchers

Due to the differences between Chinese and foreign education systems and academic environments, there are differences between Chinese and foreign scholars' research on teaching Chinese as a second or foreign language (CFL). Based on the frequency and co-occurrence of keywords in Chinese and English journal articles, there are many differences in research on Teaching Chinese as a Second Foreign Language (CSL/CFL) inside and outside mainland China (Gong et al., 2018). First, scholars within and outside mainland China have significantly different research foci. Researchers in mainland China focus on developing the professional skills and competencies of CSL/CFL teachers, thus exploring issues related to teacher teaching practices, education, and development. In contrast, researchers outside mainland China were highly concerned with students' academic achievement and looked for ways to improve students' language skills and intercultural communication competence. Therefore, they want the study to inform their support for student learning by examining learner differences, learner attitudes, and the learning process (Gong et al., 2018). Second, researchers outside of mainland China have also explored more specific and refined issues such as pinyin learning, students' attitudes toward Chinese language learning, and CSL/CFL education in the context of higher education than researchers in mainland China (Chai et al. 2016; Lee & Kalyuga, 2011; Wong et al.,

2013). Third, Chinese studies have paid particular attention to teacher dimensions, including "classroom content," "teaching materials," "teaching methods and processes," and "teacher education". Teacher education and "Chinese language global communication" are important research topics in Chinese publications (Gong et al., 2018). In contrast, English language articles focus more on student dimensions, such as "learning content", "student variants," and "student language learning" (Sung et al., 2015). In addition, international journals have also paid much attention to research issues related to the use of Information and Communication Technology (ICT) in CSL/CFL language teaching (Wong et al., 2015; Wu et al., 2010).

One possible explanation for this finding is the difference between the Chinese education system and a constructivist-based education system (Gong et al., 2018). In the Chinese education system, teachers are usually "formally respected" and "conceptualized as authorities of knowledge" (Moloney & Xu, 2015). This has primarily led to teacher-centered classrooms and a teacher-centered view of research. In contrast, the constructivist-based education system, which has trained researchers from outside mainland China, assumes that "only the learners themselves can be active participants in the learning process" (Simons, 1993). Therefore, in this case, teachers play a facilitating role in the classroom, and researchers usually focus more on students' learning process and achievement (Gong et al., 2018). In addition, while the demand for Chinese language teaching is increasing globally, the shortage of qualified teachers in Western and Chinese countries poses a significant challenge to policymakers and higher education institutions (Wong et al., 2013). Therefore, as the world's leading exporter of CSL/CFL teachers and producer of CSL/CFL education, the Chinese government and researchers often pay close attention to the "teacher factor" (Gong et al., 2018).

To summarize, foreign scholars mainly adopt quantitative research on Chinese language teaching, and the research primarily focuses on learners, studying learners' differences, attitudes, and the learning process. There is no way to get indepth research due to the influence of data. China's research on Chinese language teaching mainly focuses on teachers, research on teachers' teaching methods, teaching strategies, and classroom teaching. Most of the research is qualitative, and due to the influence of the research scope, there is no way to get a generalized research result.

There have been many studies on Chinese language learning in China and countries outside of China. However, few studies have focused on how ethnic minority students are influenced by their culture when learning Chinese. As the learning of Mandarin by ethnic minority students is not only influenced by themselves and their teachers' teaching but also by their own cultures, this paper will study the influence of their own cultures on the learning of Chinese by Miao and Zhuang students in four elementary school in Dehou Township, Wenshan, Yunnan Province, China, in an attempt to add to the research on Chinese language learning by ethnic minorities.



CHAPTER III RESEARCH METHODOLOGY

3.1 Research Design

The study used a mixed qualitative and quantitative data method to answer objectives 1 and 2.

Therefore, this study will use interviews and questionnaires to select Zhuang and Miao students and Mandarin language teachers from grades 4-6 in four elementary schools in Dehou Township, Wenshan City, to find out whether their language and culture, as Zhuang and Miao students, will have an impact on the learning of Mandarin.

3.2 Research Population and Samples

The four elementary schools selected for this study were located in Dehou Town, Wenshan City, a township elementary school under Wenshan City, and most of the students in the four elementary schools are ethnic minority students from nearby villages, mainly Miao and Zhuang students. There are 17 Mandarin language teachers in grades four to six of the four schools and 482 students in grades four to six, of which 376 are Zhuang and Miao students.

3.2.1 Sample Group

The data sample for this study was selected according to Krejcie and Morgan (1970). In empirical research, the need for a representative statistical sample was increasing. Hence, an efficient method was needed to determine the sample size. To address this problem, Krejcie and Morgan (1970) proposed a table for determining sample size for a given population for easy reference (see Table 3.1).

According to the sample size determination table, the following two data sets were selected for this study.

The questionnaire included 186 students from grades four to six in four schools.

-School A, there are 8 rooms for grades four to six. The researcher used a

simple random sampling method by drawing the number of rooms. So, it got room no.4, which has 47 students as participants.

- School B, there are 11 rooms for grades four to six. The researcher used a simple random sampling method by drawing the number of rooms. So, it got room no. 9, which has 47 students as participants.
- School C, there are 10 rooms for grades four to six. The researcher used a simple random sampling method by drawing the number of rooms. So, it got room no. 8, which has 47 students as participants.
- School D has 9 rooms for grades four to six. The researcher used a simple random sampling method by drawing the number of rooms. So, it got room no. 3, which has 47 students as participants.

Fourteen of these teachers were selected for interviews in this study, all of whom were Mandarin language teachers from grades four to six in the four schools.

- School A, 3 teachers taught Mandarin language and graduate B.A
- School B, 4 teachers taught Mandarin language and graduate B.A
- School C, 4 teachers taught Mandarin language and graduate B.A
- School D, 3 teachers taught Mandarin language and graduate B.A

Table 3.1: Krejcie and Morgan Table

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1,500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290 👝	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73 🦟	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86 💆	550	226	7000	364
120	92 3	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note .—Nis population size. S is sample size.

Source: Krejcie & Morgan, 1970

3.2.2 Sampling Methods

- 1. For 186 students from grades four to six, use the Krejcie and Morgan (1970) table to check the questionnaires they study in Dehou Township.
- 2. For 14 teachers, use the Krejcie and Morgan (1970) table according to the subjects and level they teach in the school in Dehou Township.

3.3 Data Collection

The information-gathering tool is the designed questionnaire and interview questions.

A questionnaire is a research instrument consisting of a series of questions designed to gather information from respondents. Questionnaires can be conducted face-to-face, over the phone, by computer, or by post. Questionnaires are a relatively cheap, quick, and efficient way of obtaining much information from a large sample. Data collection is relatively quick as the researcher does not need to be present when completing the questionnaire. This can be very useful for large groups of people where interviews are impractical. Questionnaires can effectively measure the behavior, attitudes, preferences, opinions, and intentions of a relatively large number of subjects more cheaply and quickly than other methods.

The questionnaire survey consists of 4 aspects

- 1. Social context
- 2. Learner characteristics
- 3. Learning conditions
- 4. Learning process

Because qualitative interviews allow researchers to learn about events and experiences of respondents with whom they have not been involved (Rubin & Rubin, 2011), this paper uses semi-structured interviews to analyze and study the influence of their culture on Zhuang and Miao students' learning of Mandarin, of course, as the researcher herself is not an ethnic minority or a primary school student, she can understand these experiences from a more objective and neutral perspective.

Although the interviews revolved around the general theme of "the influence of Zhuang and Miao cultures on the learning of Mandarin by students of

lesser dominant ethnic groups," the semi-structured interview design allows participants to answer questions as they wish. During the interviews, the interviewees gave different answers than expected, giving the author new ideas.

The interviews were conducted using Rubin and Rubin's 'dialogue partnership' (2011) methodology, where both parties have equal rights to express that the researcher is not trying to interrogate the participants. The researcher created an informal atmosphere where the conversations were in an environment that was familiar to the interviewees, and there were no right or wrong answers during the interviews, which helped to put the participants at ease and minimize their fear of the interviews.

The oral interview began with an introduction to the researcher's aims of the study, which involved ethical standards and initial inquiry, followed by the distribution of a participant information sheet and consent form. The respondents were reminded of their anonymity by asking about their chosen pseudonyms. They were assured that the interview would be used for this study only, allowing them to let their guard down before formally entering the interview. Interview questions were posed in a rotating dialogue so both parties could interject and ask questions. A copy of the interview transcript was provided to the participant after the interview to allow the interviewee to confirm whether there were any deviations in understanding and to avoid factual inconsistencies.

3.4 Research Instrument

1. Questionnaire for students

A questionnaire was used to collect data from the student section. The questions were designed based on the research objectives of the article as well as the relevant literature. Before using the questionnaire, the advice of relevant experts was taken, and the questionnaire was tested to ensure its validity.

The Likert (1932) 3 scale was used in this study because the participants were 9-12 years old. There are 20 questions in 4 dimensions: 5 questions per dimension as follows:

- 1. Social context 5 items
- 2. Learner characteristics 5 items

- 3. Learning conditions 5 items
- 4. Learning process 5 items

1.1) Data Collection

The researcher designed the questionnaire based on the framework of the study, where all the questions were in declarative sentence form, and the sampled students were allowed to choose their answers based on their ideas.

A rating of 3 means always

A rating of 2 means sometimes

A rating of 1 means never

1.2) Data Analysis

Quantitative data are analyzed by means (X)and standard deviations(S.D). and the mean value of the suitability score of expert opinions is calculated and compared with the following criteria:

A mean Score of 1.00-1.50 means "never."

A mean score of 1.51- 2.50 means "sometimes".

A mean Score of 2.51-3.00 means "always."

2. Semi- structure interviews for 14 teachers

The development process of semi-structured interview form about the influence of learning Mandarin among Zhuang and Miao students

- 1) Studied the concept and development process of interview form of the influence of Zhuang and Miao students on Mandarin language teaching in rural elementary schools.
 - 2) Drafted interview form.
 - 3) Verified interview form by advisers.
 - 4) Modified the interview form according to suggestion.
- 5) Three experts verified the validity of the interview form. Three come from China. The test consistency index of congruency is 0.50. 1.00.
- 6) Modified the interview form according to suggestion and selected 10 questions for the teacher to arrange into the interview form to implement the instruments.

2.1) Data Collection

The researcher conducted face-to-face interviews with the respondents based on the design questions during class breaks or during the respondents' rest time. Mobile phone recordings and pen and paper were used to record the respondents' responses.

2.2) Data Analysis

Qualitative data were analyzed through the narrative analysis method by MAXQDA to analyze frequently occurring words or content that appears more frequently.MAXQDA is a specialized software for qualitative, quantitative, and mixed methods data analysis.

3.5 Content Validity and Reliability

1. To ensure the validity of the content of the student questionnaires, a panel of educational research experts will review the questionnaires

Developing a validated evaluation form for a student questionnaire on factors affecting Mandarin language learning among Zhuang and Miao students.

- 1) Studied the concept and development process of assessment form for validity of questionnaire form
- 2) Drafted assessment form for validity of questionnaire form of factors influencing the learning of Mandarin in Zhuang and Miao schools. The level of consideration is as follows:

The rating is +1. There is an opinion that "Corresponds to content."

The rating is 0. There is an opinion that "Not sure it corresponds to content."

The rating is -1. There is an opinion that "Inconsistent with content."

At the end of each section, there is a space for experts to write suggestions that can help improve.

- 3) Verified assessment form for validity of questionnaire form by advisers.
- 4) Modified the assessment form to ensure the validity of the questionnaire form according to the suggestion.

Find the IOC (Index Objective Congruence). The content consistency standards index greater than or equal to 0.5 was considered suitable for use in research. The analysis result of the IOC (Index Objective Congruence) is 1.00.

Check the reliability of the influence of Zhuang and Miao students on Mandarin language teaching in rural elementary schools. The reliability result is 0.853, the difficulty result is 0.43, and the influence of Zhuang and Miao students on Mandarin language teaching in rural elementary schools is 0.52 by Cronbach's alpha.

2. To ensure the validity of the content of the teacher's interview, a panel of educational research experts will review the interview

Developing a validated evaluation form for a teacher's interview on factors affecting Mandarin language learning among Zhuang and Miao students.

- 1) Studied the concept and development process of assessment form for validity of interview form
- 2) Drafted assessment form for validity of interview form of factors influencing the learning of Mandarin in Zhuang and Miao schools. The level of consideration is as follows:

The rating is +1. There is an opinion that "Corresponds to content."

The rating is 0. There is an opinion that "Not sure it corresponds to content."

The rating is -1. There is an opinion that "Inconsistent with content."

At the end of each section, there is a space for experts to write suggestions that can help improve.

- 3) Verified assessment form for validity of interview form by advisers.
- 4) Modified the assessment form for the validity of the interview form according to the suggestion.

Find the IOC (Index Objective Congruence). The content consistency standards index greater than or equal to 0.5 was considered suitable for use in research. The analysis result of the IOC (Index Objective Congruence) is 1.00.

Check the reliability and the influence of Zhuang and Miao students on Mandarin language teaching in rural elementary schools. The reliability result is 0.853, the difficulty result is 0.43, and the influence of Zhuang and Miao students on Mandarin language teaching in rural elementary schools is 0.52 by Cronbach's alpha.

3.6 Data Analysis

The data were analyzed as follows.

1. Use the Likert scale (1932) for the questionnaire survey. The questionnaire was designed in four areas: social context, learner characteristics, learning conditions, and learning process, with five questions in each area.

Quantitative data collected through the questionnaire were analyzed using SPSS, including measures of concentrated trends (mean, median, plural) and measures of dispersion (standard deviation, extreme deviation).

The questionnaire was designed with 20 questions based mainly on the research framework: social context, learner characteristics, learning conditions, and learning process.

A mean Score of 1.00-1.50 means "never."

A mean score of 1.51-2.50 means "sometimes".

A mean Score of 2.51-3.00 means "always."

2. Qualitative data were analyzed through the narrative analysis method by MAXQDA to analyze frequently occurring words or content that appears more frequently.

Based on this framework, the researcher will study four aspects of social context, learner characteristics, learning conditions, and learning process, and design 10 interview questions.

These semi-semistructured interview questions are designed to answer the research questions effectively. This paper uses narrative analysis to understand the stories of students learning Mandarin. Narrative analysis is a method of analyzing information and providing some interpretation, and it takes many forms. It is called an analytical narrative, narrative description, narrative structure analysis, or sequence analysis (Abell, 2004).

3.7 Limitation

Since the research subjects selected for this study were students in grades four to six in four elementary schools in Dehou Township, Wenshan City, the scope of the study was relatively small. Although both qualitative and quantitative analysis methods were used, the conclusions drawn did not have a way of responding to the issue of the generalized learning of Mandarin by students of lesser ethnic groups and were only applicable to that township. Since the authors used qualitative interviews and quantitative analysis methods less frequently in the study, although the research process was analyzed based on some theories as much as possible, and the data obtained could effectively answer the designed questions, there may be some shortcomings in the design.



CHAPTER IV ANALYSIS RESULT

The data analysis of 'The impact of native language on Mandarin acquisition: a study of Zhuang and Miao students' will be presented in narrative descriptions and tables. It includes the narrative analysis of the teachers' interviews and the analysis of the mean and standard deviation of the students' questionnaire data. The specific analyses are as follows:

4.1 Analysis of Student Questionnaire

This section uses tables and descriptions to present the results of the analysis of Objective 1, to study the influences of the native language that affect Zhuang and Miao students when they learn Mandarin.

4.1.1 Basic Information about the Participants in the Questionnaire

Table 4.1 Demographic Data of Valid Subjects (N=186)

Frequency -	Percentage
62	33.3
62	33.3
62	33.3
186	100
71	38.2
115	61.8
186	100
92	49.5
94	50.5
186	100
	62 62 62 186 71 115 186

Table 4.1 shows the basic information about the participants of the questionnaire. The same number of participants in grades 4-6 participated in the

questionnaire (33.3%), more Zhuang students participated in the questionnaire (61.8%), and the number of female students who participated in the questionnaire was higher (50.5%).

4.1.2 Social Context

Table 4.2 Descriptive Statistics of Social Context(N=186)

Social Context	Mean (π/χ)	Standard Deviation (S.D.)	Arrange in Order
1. You often communicate with your friends	2.74	0.64	1
in Mandarin outside of school.			
2. Your family speaks good Mandarin.	2.73	0.62	2
3. In daily life, you often use Mandarin	2.70	0.58	3
4. You usually use Mandarin language to communicate with your parents or family at home.	2.69	0.60	4
5. You use Mandarin to communicate with friends of your ethnicity	2.67	0.65	5
Overall, the average social context	2.70	0.36	

Table 4.2 summarizes the social context of Mandarin learning among Zhuang and Miao students.

The overall mean $(\bar{\chi})$ is 2.70, and the standard deviation (S.D.) is 0.36, indicating that the influence of social context on students' Mandarin learning is "always".

The two points with the highest mean scores are:

"Outside of school, you often communicate with your friends in Mandarin." has a mean ($\frac{1}{\chi}$) of 2.74 and a standard deviation (S.D.) of 0.64.

"Your family speaks good Mandarin." has a mean ($\frac{1}{\chi}$) of 2.73 and a standard deviation (S.D.) of 0.62.

The two points with the lowest mean scores are:

"You use Mandarin to communicate with friends of your ethnicity" has a mean ($\bar{\chi}$) of 2.67 and a standard deviation (S.D.) of 0.65.

"You usually use the Mandarin language to communicate with your parents

or family at home." has a mean ($\stackrel{-}{\chi}$) of 2.69 and a standard deviation (S.D.) of 0.60.

4.1.3 Learner Characteristics

Table 4.3 Descriptive Statistics of Learner Characteristics (N=186)

Learner Characteristics	Mean (π/χ)	Standard Deviation	Arrange in Order
		(S.D.)	
1. You think it is helpful to learn Mandarin.	2.62	0.54	1
2. You can communicate well with others in	2.52	0.55	2
Mandarin.			2
3. You like learning Mandarin.	2.44	0.61	3
			3
4. When you first started learning Mandarin,	2.34	0.71	4
you thought it would be easy			4
5. Your Mandarin is very good.	2.24	0.55	5
			5
Total mean values of learner characteristics	2.43	0.35	

Table 4.3 summarizes the learner characteristics of Zhuang and Miao students' Mandarin learning.

The overall mean (χ) is 2.43, and the standard deviation (S.D.) is 0.35, indicating that the influence of learner characteristics on students' Mandarin learning is moderate. The mean score is 1.51,- 2.50 means "sometimes".

The two points with the highest mean scores are:

"You think it is useful to learn Mandarin." has a mean ($\bar{\chi}$) of 2.62 and a standard deviation (S.D.) of 0.54.

"You can communicate well with others in Mandarin." has a mean ($\bar{\chi}$) of 2.52 and a standard deviation (S.D.) of 0.55.

The two points with the lowest mean scores are:

"Your Mandarin is very good." with a mean ($\bar{\chi}$) of 2.24 and a standard deviation (S.D.) of 0.55.

"When you first started learning Mandarin, you thought it would be easy." has a mean ($\frac{1}{\chi}$) of 2.23 and a standard deviation (S.D.) of 0.71.

4.1.4 Learning Conditions

Table 4.4 Descriptive Statistics of Learning Conditions (N=186)

Learning Conditions	Mean (π/2)	Standard Deviation (S.D.)	Arrange in Order
1. You use Mandarin to communicate during class time	2.86	0.38	1
2. You understand well when teachers use Mandarin in the classroom	2.70	0.47	2
3. In class, you can answer questions clearly in Mandarin	2.68	0.51	3
4. You can learn more Mandarin in your daily life	2.33	0.61	4
5. At home, your parents will teach you to speak Mandarin.	1.74	0.66	5
Total mean value of the learning conditions	2.46	0.29	

Table 4.4 summarizes the learning conditions of Mandarin learning for Zhuang and Miao students.

The overall mean ($\bar{\chi}$) is 2.46, and the standard deviation (S.D.) is 0.29, indicating that the influence of learning conditions on students' Mandarin learning is moderate. The mean score is 1.51,-2.50 means "sometimes".

The two points with the highest mean scores are:

"You use Mandarin to communicate during class time." with a mean ($\bar{\chi}$) of 2.86 and a standard deviation (S.D.) of 0.38.

"You understand well when teachers use Mandarin in the classroom." has a mean ($\frac{1}{2}$) of 2.70 and a standard deviation (S.D.) of 0.47.

The two points with the lowest mean scores are:

"At home, your parents will teach you to speak Mandarin." has a mean ($\bar{\chi}$) of 1.74 and a standard deviation (S.D.) of 0.66.

"You can learn more Mandarin in your daily life." has a mean ($\bar{\chi}$) of 2.33 and a standard deviation (S.D.) of 0.61.

4.1.5 Learning Process

Table 4.5 Descriptive Statistics of the Learning Process (N=186)

Learning Process	Mean (π/χ)	Standard Deviation (S.D.)	Arrange in Order
1. You can understand the teacher's Mandarin.	2.87	0.34	1
2. After class, you use Mandarin to communicate with your teacher	2.82	0.41	2
3. As a Zhuang and Miao student, you find no difficulty in learning Mandarin	2.42	0.66	3
4. You can solve the difficulties in learning Mandarin by yourself	2.35	0.63	4
5. After class, you use Mandarin to communicate with classmates of your ethnicity	2.10	0.60	5
Total mean value of the learning process	2.51	0.30	

Table 5 summarizes the Mandarin learning process of the Zhuang and Miao students.

The overall mean ($\bar{\chi}$) is 2.51, and the standard deviation (S.D.) is 0.30, indicating that the influence of the learning process on students' Mandarin learning is high. A mean score of 2.51-3.00 means "always."

The two points with the highest mean scores are:

"You can understand the teacher's Mandarin." has a mean ($\bar{\chi}$) of 2.87 and a standard deviation (S.D.) of 0.34.

"After class, you use Mandarin to communicate with your teacher." has a mean ($\bar{\chi}$) of 2.82 and a standard deviation (S.D.) of 0.41.

The two points with the lowest mean scores are:

"After class, you use Mandarin to communicate with classmates of your ethnicity. "The mean ($\bar{\chi}$) is 2.10, and the standard deviation (S.D.) is 0.60.

"You can solve the difficulties in learning Mandarin by yourself. "The mean ($\bar{\chi}$) is 2.35, and the standard deviation (S.D.) is 0.63.

4.1.6 Mean and Standard Deviation of Social Context, Learner Characteristics, Learning Conditions, and Learning Process

Table 4.6 Descriptive Statistics of Social Context, Learner Characteristics, Learning Conditions, and Learning Process

Items	Mean	Standard Deviation	
	(χ)	(S.D.)	
Social context	2.70	0.36	
Learner characteristics	2.43	0.35	
Learning conditions	2.46	0.29	
Learning process	2.51	0.30	
Total	2.52	0.33	

Table 4.6 shows that all four dimensions have a high impact on Zhuang and Miao students' learning of Mandarin; the total mean ($\bar{\chi}$) of the four dimensions is 2.52, and the standard deviation (S.D.) is 0.33. The mean score was high. The four dimensions were expressed as social context ($\bar{\chi}$ =2.70, S.D.=0.36); learner characteristics ($\bar{\chi}$ =2.43, S.D.=0.35); learning conditions ($\bar{\chi}$ =2.46, S.D.=0.29); and learning process ($\bar{\chi}$ =2.51, S.D.=0.30).

From the above table, it can be seen that the effects of the four dimensions on the learning of Mandarin by Zhuang and Miao students are significant. ($\bar{\chi}$ =2.52) (S.D.=0.33) indicates that the four are consistent.

4.2 Analysis of Teacher Interviews

This section uses interview data by narrative analysis to present the results of Objective 2. To study how teachers' opinions about their students' native language affect their learning when teaching Mandarin to Zhuang and Miao students, four issues can be formed.

4.2.1 Language of Instruction and Effectiveness

After analyzing the theme, which contains the following codes: teacher's ethnicity, language of instruction, and effectiveness of instruction, the theme allows for the analysis of the language used for instruction and its effectiveness in student learning.

Of the 14 teachers interviewed, 9 were Han Chinese, 2 were Zhuang, 1 was Miao, 1 was Yi, and 1 was Hani.

For the 14 teachers interviewed, the language used in class was Mandarin.

The 14 teachers' comments about the effectiveness of their teaching can be summarized as follows:

"I think the teaching effect is okay. Most students can understand what I teach, but a small part may be more difficult."

"I think the teaching effect is okay; simple points can be understood. For the statements that are difficult for students to understand when we encounter them in the teaching, we also use the national language to explain the meaning to the students."

"I think the teaching effect is better. The students can understand what I speak, and for the knowledge points, students can mostly understand clearly."

From the interviews, it is clear that most Mandarin teachers are from other ethnic groups and cannot use Miao and Zhuang to communicate with their students, so Mandarin is used in the classroom. The effect of using Mandarin to teach was generally recognized by the interviewees, who said that the students could understand and had good results, which shows that the students could understand the Mandarin spoken by the teacher and the content taught in the classroom.

4.2.2 Student Expression and Communication

After analyzing the theme, which included the following codes: language used by students in communication, students' ability to express themselves, and evaluation of students' expression, the theme allowed for an analysis of students' ability to express themselves in Mandarin in various classroom settings.

The language students use when communicating can be categorized into the language used for communication in the classroom and the language used for communication with teachers outside the classroom. All 14 respondents said that students use Mandarin for communication in the classroom. In contrast, 13 teachers said they use Mandarin for communication outside of the classroom, and 1 teacher said that students use both Mandarin and dialects.

Students' ability to express themselves can be categorized into their ability to express themselves in class and their ability to express themselves out of class.

The responses of the 14 respondents regarding students' ability to express

themselves in class can be summarized as follows:

"Students communicate in class in both ethnic languages and Mandarin; they use Mandarin to communicate with the teacher and sometimes use ethnic languages to communicate with their classmates; students' ability to communicate classroom content in Mandarin needs to be improved, and some of them have some difficulty in expressing themselves."

"In the classroom, most of the students can use Mandarin relatively well to express themselves, but there are more ethnic minority students, and the pronunciation of some words is not very accurate when they express themselves."

"Students can express themselves using Mandarin, and their Mandarin is clearer and more fluent."

The 14 respondents' comments about the students' students' ability to express themselves can be summarized as follows:

"A small number of students have standardized Mandarin, and most have indistinguishable flat and warbled tongues and accented Mandarin."

"I think most students can express themselves fluently, and students can express themselves accurately in Mandarin with moderate expression."

"I feel that most students can express themselves clearly, but their Mandarin will have some accent, and very few struggling students cannot express themselves clearly."

"Students express themselves better in Mandarin and can express their ideas clearly."

The interviews show that the students mainly communicate in Mandarin at school, and some use their ethnic languages when communicating with students of the same ethnicity. Most of the students are clear and fluent in Mandarin and can express themselves clearly. A few students have accents in Mandarin and have difficulty expressing themselves.

4.2.3 Challenges Faced by Students

After analyzing the theme, which contains the following codes: difficulties in expressing themselves in Mandarin and effective teaching methods, the theme allows for analyzing shared challenges students face and effective strategies teachers use to address these challenges.

The 14 respondents' difficulties with students' Mandarin expressions can be summarized as follows:

"Most of the students do not distinguish between flat, warbling, front and back nasal sounds when speaking Mandarin, some of them have accents, and some of them do not pronounce some words accurately, which leads to the pronunciation of Mandarin not being standard enough will, and the biting of the words is not clear."

"The students' Mandarin words are more scarce, and there is no way to express their views more vividly. There are those few words in the expression of the words, so there will not be more ways of expression."

"When students express themselves, they subconsciously add the pronunciation of some ethnic languages into Mandarin and have a somewhat heavy accent, and they may also have difficulties in converting their ethnic languages into Mandarin, which is, after all, completely different from Mandarin."

"For example, some of the more advanced things that rural children have never seen before, they do not know how to express them in Mandarin."

"Students do not use Mandarin too much in their daily lives, resulting in some students' Mandarin expressions not sounding fluent enough."

The responses given by the 14 respondents regarding effective teaching methods can be summarized as follows:

"I think some pictures can be utilized, especially for words that are difficult to understand, and they can be combined with illustrations so that students can understand them easily; or these difficult phrases can be placed in students' life situations so that students can understand them easily."

"Students seldom use Mandarin when they go home, so they should be allowed to practice more Mandarin at school, encourage students to express themselves more, and create an environment for them to speak Mandarin."

"I think it is possible to help each other with ethnic students, especially those who are better in Mandarin, to use the ethnic language to explain for those who cannot understand, and of course, if the teacher speaks their language, then they can explain to them themselves."

"It is important to combine theory and practice and use activities and games with fun to help students understand, which can increase their interest in learning and deepen their impression of more difficult knowledge."

"According to the differences in students' basic Mandarin, implement a tiered teaching strategy while giving individualized instruction and using a combination of visual aids and multimedia in teaching."

"First of all, we should be strict with ourselves to make our Mandarin more standardized, and then use more simple and easy-to-understand phrases when teaching."

From the interviews, it can be seen that there are two types of difficulties in students' Mandarin expression: first, they are influenced by their language and have pronunciation difficulties; second, they have accumulated fewer Mandarin words and phrases, and their expressions are more scarce, so they cannot express themselves well in Mandarin for new things. Good teaching methods for ethnic minority students can be summarized into three categories: first, the use of teaching aids and games to concretize abstract food; second, the creation of a Mandarin-speaking environment that encourages students to use Mandarin; third, the combination of students' life situations to reduce the difficulty of comprehension; and, fourth, the demand for their use of plain words to teach knowledge.

4.2.4 Perceptions of Learning Difficulties

This theme was analyzed, including the following elements and norms: the causes of the difficulties and, thus, the teachers' perceptions of the causes of the students' difficulties in learning Mandarin.

The reasons given by the 14 interviewees for students' difficulties in learning Mandarin can be summarized as follows:

On the one hand, it is the students' families, as the respondents put it:

"The reason may have a lot to do with family attitudes. Ethnic minorities may not have the same ideas about learning and do not value learning. There is a lack of accompaniment and inspiration for students' learning, and parents are backward in their thinking and do not pay attention to their children's learning."

"Most of the students lack family education and do not have the conditions to consolidate their learning when they go home. Parents have a limited understanding of Mandarin and cannot teach students well. Most students follow their grandparents and have no one to tutor their homework when they go home, have bad behavior, and do not develop a love of reading."

"I think the reason could be the family concept. Maybe the parents do not have that concept of making students study seriously, which leads to students not knowing why they study."

On the one hand, it is the students themselves, the interviewees said so:

"Maybe the students' ideological awareness is not in place. They do not know the importance of learning; students do not have learning goals and do not know why they learn; a small number of them are affected by the language; it is difficult for them to understand the difficult knowledge points, and they lack confidence in learning."

"Students are influenced by fast and online games, and are reluctant to learn; weak foundation and loss of interest in learning."

On the one hand, it is affected by the students' language environment, as respondents put it this way:

"I think maybe the students have different language environments and are not comfortable with Mandarin, especially the pinyin, which is used as the basis of Mandarin, is a bit difficult to distinguish, resulting in learning that cannot be well understood."

"The first language that students are exposed to from birth is mostly their minority language. They have their unique language, and students face challenges in understanding Mandarin, including differences in pronunciation and expression habits. Students usually speak less Mandarin and may have difficulty understanding some of the more difficult statements."

There are other reasons, as respondents put it:

"Ethnic minorities live in mostly remote areas, the implementation of many central government policies is slow, and children know less about the importance of learning."

"The places where students live are backward in science and technology, information resources are relatively scarce, and there is a lack of educational resources, insufficient teachers, and backward teaching facilities."

4.2.5 Way of Teaching for Enhancing Native Language in Mandarin

This theme was analyzed, including the following elements and norms: effective teaching methods, thus analyzing how teachers can effectively students learn Mandarin.

The 14 respondents' views on effective teaching methods for students to learn

Mandarin can be summarized as follows:

"I think we can combine pictures and texts and link them with examples from class, school, family, and social life to make it easier for students to understand."

"First of all, we should be strict with ourselves to make our Putonghua more standardized, and then use more simple and easy-to-understand phrases plus some visual aids when teaching to reduce the difficulty of students' understanding."

"Learning Mandarin encourages students to express themselves and practice Mandarin more, both in and out of school."

"I think local dialects can be used appropriately to explain to students, and some difficult to understand can be explained by students to each other in the national language. Activities and games with fun can also be used to help students understand and deepen their impression of what they are being taught."

"I think we can implement a tiered teaching strategy according to the differences in students' basic Mandarin while giving individualized instruction and using visual aids combined with multimedia in teaching."



CHAPTER V CONCLUSION

5.1 Conclusion

The research objectives of this study are as follows: 1) to study the influences of the native language that affect Zhuang and Miao students when they learn Mandarin, 2) to study teachers' opinions about how their students' native language affects their learning when teaching Mandarin to Zhuang and Miao students. The selected samples are from four rural primary schools in Dehou Township. The sample was selected from 186 Zhuang and Miao students in grades 4-6 and 14 Mandarin teachers from four rural elementary schools in Dehou Township. The study was divided into two parts: a questionnaire survey of the students and an interview with the teachers.

1) To study the influences of the native language that affect Zhuang and Miao students when they learn Mandarin, the student questionnaire was divided into four sections: social context, learner characteristics, learning conditions, and learning process.

An analysis of the social context in which Zhuang and Miao students learn Mandarin shows that students use Mandarin less frequently in their social life outside of school, especially when communicating with parents, family members, and friends of the same ethnicity.

The Mandarin learner characteristics analysis of Zhuang and Miao students showed that they were more receptive to Mandarin and willing to learn and speak it.

An analysis of the learning conditions of Zhuang and Miao students shows that students use Mandarin more frequently than outside school. School is the principal place where students learn and use Mandarin, and students use it less frequently at home and in their daily lives.

An analysis of the Mandarin learning process of Zhuang and Miao students showed that they used Mandarin more often and could understand and comprehend it in the school learning process. Students use Mandarin more often in and out of the classroom.

It can be seen that the main place where Zhuang and Miao students learn Mandarin is the school, and the lesser use of Mandarin outside the school campus is the reason for their difficulties in learning Mandarin. The switching between their language and Mandarin also affects the learning of Mandarin by Zhuang and Miao students.

- 2) To study how teachers' opinions about their students' native language affect their learning when teaching Mandarin to Zhuang and Miao students. An analysis of teacher interviews shows that students mainly communicate in Mandarin at school and that most are clear and fluent. In contrast, a few students have an accent, have difficulty speaking with their tongues, and have difficulty expressing themselves. These pronunciation difficulties may be due to the influence of their language. Teachers' opinions about their students' native language affect their learning when teaching Mandarin to Zhuang and Miao students had 5 issues:
 - 1 Language of instruction and effectiveness
 - 2 Student expression and communication
 - 3 Challenges faced by students
 - 4 Perceptions of Learning Difficulties
 - 5 Ways of Teaching for Enhancing Native Language in Mandarin

5.2 Discussion

5.2.1 To discuss objective 1) to study the influences of the native language that affect Zhuang and Miao students when they learn Mandarin can explain as follows:

5.2.1.1 The Impact of Social Context on the Acquisition of Mandarin by Zhuang and Miao Students

According to the analysis of the teacher interviews, students use Mandarin language less frequently outside school than inside school. In the questionnaire for the students' social context section, "You usually use the Mandarin language to communicate with your parents or family at home." had a mean ($\bar{\chi}$) of 1.79, a standard deviation (S.D.) is 0.60, and a mean score is 1.51- 2.50 means "sometimes". It can be concluded that the language of the student's parents has an influential role on the language used by the students to communicate at home, and the reason why the students do not use a high percentage of Mandarin at home is because their parents do not speak Mandarin (An, 2010).

Children tend to use their first language to communicate in private settings or among peers (Chen, 2013). For the questionnaire of the students' social context section, "You use Mandarin to communicate with friends of your ethnicity", the mean ($\bar{\chi}$) was 1.77, the standard deviation (S.D.) was 0.65, and the mean score was 1.51-2.50means "sometimes". The conclusions drawn are consistent with Chen's.

This is a massive challenge to second language (L2) learners is a great challenge for even those who are proficient, as they often lack the knowledge and ability to use pragmatic language in everyday communication (Bardovi-Harlig, 2001; Halenko & Jones, 2011; Kasper, 1997). In the student questionnaire, the social context mean ($\bar{\chi}$) was 1.98, the standard deviation (S.D.) was 0.36, and the mean score was 1.51- 2.50 means "sometimes". In daily life, Zhuang and Miao students use Mandarin less frequently, which affects the learning of Mandarin. Therefore, students should be required to speak more Mandarin in their daily lives to achieve the purpose of familiarity, learning to use, and learning to use (Mo, 2015).

5.2.1.2 The Effect of Learner Characteristics on the Acquisition of Mandarin by Zhuang and Miao Students

In their study of motivation for learning a second language, Gardner and his colleagues (Gardner & Lambert, 1972; Gardner, 1985) proposed two motivational orientations that indicate why students learn a language. The first orientation is integrative, i.e., "the student's desire to "learn more about other cultural communities as he becomes interested in it in an open-ended way, and ultimately to be accepted as a member of another group" (Gardner & Lambert, 1972). In the student questionnaire, the mean ($\bar{\chi}$) of "You like learning Mandarin." is 2.44, and the standard deviation (S.D.) is 0.61, which shows that the Zhuang and Miao students have a high interest in learning Mandarin and have a motivation of communicating with other ethnic groups or people.

The second orientation is instrumental. That is, students want to derive particular benefits from learning a language, such as career opportunities, and the tools include pragmatic reasons and utilitarian values, as well as learners' perceptions of the benefits of the language, such as finding a better job, traveling, making friends, and understanding foreign media (Gardner, 2001; Csizér & Dörnyei, 2005). In the student questionnaire, the mean ($\bar{\chi}$) of "You think it is useful to learn Mandarin." was 2.62 with a standard deviation (S.D.) of 0.54, A mean Score of 2.51- 3.00 means "always".It can be

seen that Zhuang and Miao students are more instrumentally motivated to learn Mandarin.

5.2.1.3 The Impact of Learning Conditions on the Acquisition of Mandarin by Zhuang and Miao Students

Learning conditions can be divided into conditions at and outside of school. Through the analysis of student questionnaires and teacher interviews, students' conditions for learning Mandarin at school are better than conditions for learning Mandarin outside of school. Students use Mandarin more in school, teachers use Mandarin to teach, and students answer questions and communicate with classmates in Mandarin during class. Outside school, from the students' questionnaire "At home, your parents will teach you to speak Mandarin.", the mean ($\bar{\chi}$) is 1.74, the standard deviation (S.D.) is 0.66, and the mean is the never in the part of learning conditions. Learning conditions are worse than in school.

Another factor in the socio-cultural dimension and learner level is "cultural interest", which HL learners are likely to acquire through exposure to the target language and culture through movies, TV programs, and popular music (Wen, 2011). The student questionnaire, "You can learn more Mandarin in your daily life." has a mean ($\bar{\chi}$) of 2.33, a standard deviation (S.D.) of 0.61, and a mean score of 1.51- 2.50 means " sometimes". In daily life, online media may enhance the interest of Zhuang and Miao students in learning Mandarin, and these channels, too, have become a way for students to learn Mandarin outside of school.

The allocation of teachers in the school and the teachers' years of teaching experience are also part of the conditions for the students' Mandarin students. Jiang and Hao (2010) studied and interpreted the practical pedagogical knowledge of two experienced and two novice Chinese language teachers. The experienced teachers valued teachers' beliefs, students' knowledge, and past experiences, although the novice and experienced teachers had similar perceptions of pedagogical knowledge. Most teachers interviewed were experienced teachers who also brought favorable conditions for Zhuang and Miao students to learn Mandarin.

5.2.1.4 The Impact of the Learning Process on the Acquisition of Mandarin by Zhuang and Miao Students

Parents and teachers are mediators to children in passing on culture and leading development. Children, as well as all developing individuals, develop their minds

by interacting with people who are more extended than them in terms of knowledge and ability (mainly through verbal communication), so verbal communication and the use of language are of great significance in the psychological development of an individual (Liu, 2011). By analyzing the questions in the questionnaire of students' Learning process section, it is concluded that the overall mean ($\bar{\chi}$) is 2.51 and the standard deviation (S.D.) is 0.30, indicating that the influence of the learning process on students' Mandarin learning is high. Students mainly use Mandarin to communicate with teachers and classmates in school, and Mandarin is also developed in communication.

For members of minority groups, learning Mandarin, the lingua franca, enables them to better integrate into the group or to share in the resources of the majority (Clément & Kruidenier, 1983). Therefore, students use Mandarin on campus to communicate with others, which is consistent with the data obtained from the student questionnaire.

5.2.2 To discuss for objective 2) Teachers' opinion of the impact of their native language on Zhuang and Miao students' learning of Mandarin had 5 issued as follows:

5.2.2.1 Language of Instruction and Effectiveness

Children, as well as all developing individuals, develop their minds by interacting with people whose intellectual abilities are longer than his (mainly with the help of verbal communication), so verbal communication, the use of language, is of great importance in the psychological development of the individual (Liu, 2011). In teaching Mandarin at school, teachers require students to use Mandarin to communicate and exchange ideas, which helps to improve students' ability to express themselves in Mandarin. It was also evident from the teacher interviews that the primary language used by students at school was Mandarin. Students' understanding of Mandarin also improved after they got used to using Mandarin to communicate at school. The interviews with teachers also consistently concluded that "I think the teaching effect is okay. Most of the students can understand what I teach."

5.2.2.2 Student Expression and Communication

Pragmatic competence consists of two distinct but interrelated subcomponents: pragmatic linguistic competence and sociolinguistic competence, and pragmatic competence, which is recognized as an important component of communicative competence (Laughlin et al., 2015; Usó-Juan & Martínez-Flor, 2006), is a considerable challenge to second language (L2) learners is a great challenge for even those who are proficient, as they often lack the knowledge and ability to use pragmatic language in everyday communication (Bardovi-Harlig, 2001; Halenko & Jones, 2011; Kasper, 1997). Analysis of the teacher interviews revealed that students mainly communicate in Mandarin at school, and some use their ethnic language when communicating with students of the same ethnicity. Most of the students are fluent and clear in Mandarin and can express themselves clearly. A few students have accents in Mandarin and have difficulty expressing themselves. This also shows that adequate Mandarin communication can improve students' ability to express themselves in Mandarin. In contrast, the tendency to communicate with students of the same ethnicity using their language affects the improvement of students' Mandarin expression ability to a certain extent.

5.2.2.3 Challenges Faced by Students and Teaching Strategies

Analysis of teacher interviews revealed that Zhuang and Miao's students have problems with Mandarin pronunciation, such as the inability to pronounce flat, arched, front and back nasal sounds. In addition to differences in pronunciation, there are differences in vocabulary, grammatical structure, and word order conventions, which cause communication barriers and problems in thinking transitions when minority students communicate in Chinese (Yang, 2008). Regarding expression, some Zhuang and Miao students only use simple Mandarin words to express themselves.

In the process of learning Mandarin, there are many components of "negative transfer" of the mother tongue, and the negative transfer of the national language is also manifested in the phenomenon of petrification of intermediary language, i.e., over-reliance on knowledge of the mother tongue as an auxiliary to the expression of meanings makes ethnic minority students appear to have deviations in understanding when using their mother tongue to understand the second language (Jia, 2011). This is in line with the conclusion from the interviews with teachers that the first language students come into contact with from birth is their ethnic language. When expressing themselves, students subconsciously add some of the pronunciation of their ethnic language to Mandarin and have a somewhat heavy accent. It is possible that students also have difficulties converting their ethnic language to Mandarin because, after all, the

pronunciation of the ethnic language is entirely different from that of Mandarin.

5.2.2.4 Perceptions of Learning Difficulties

According to Campbell and Peyton (1998), heritage language students have varied historical and cultural backgrounds. Their language proficiency varies from knowing only a few words or phrases to near-native proficiency, depending on their previous language experiences and language learning background. From the interviews with the teachers, it can be learned that there are several reasons affecting the students' Mandarin students: the learners' home language environment, the learners themselves, the learners' language environment, and other reasons, which are related to the learners' language experience and language learning background, thus indicating that the linguistic and cultural backgrounds of the ethnic minority students may, to a certain extent, affect the ethnic minority students' learning of Mandarin.

The words themselves need to be learned, and the lack of connection between words and sounds leads to learning difficulties (Kane, 2006; Xing, 2006). Minority students use different languages in different language environments. They use their language at home when communicating with their ethnic classmates and friends. When communicating with teachers, students of other ethnic groups mostly use Mandarin. The pronunciation of the two languages and the habit of using words may affect the acquisition of Mandarin by ethnic minority students.

5.2.2.5 Way of Teaching for Enhancing Native Language in Mandarin

The thinking process of minority students using a second language is much more complicated. The language used for expression is a second language, while the language of thinking may be the mother tongue. In this process, the second language is always subject to two different influences, positive and negative, of the mother tongue. Hence, eliminating the dependence on and interference with the native language is important for accelerating the learning of the second language (Wang, 1995). Therefore, school teaching is conducted in Mandarin, and teachers also use appropriate teaching methods and teaching aids to help Zhuang and Miao students learn Mandarin.

Jiang and Hao (2010) studied and explained the practical pedagogical knowledge of two experienced and two novice Chinese language teachers. Experienced teachers valued teachers' beliefs, students' knowledge, and past experiences, although

novice and experienced teachers had similar perceptions of pedagogical knowledge. It can be seen that experienced Mandarin teachers may have better teaching methods for minority students to acquire Mandarin.

5.3 Recommendation

The results of this study have the following implications for the teaching of Mandarin in similar districts at the Dehau Township level:

- 1. Emphasize creating a Mandarin-speaking environment for Zhuang and Miao students. Schools are the central place for Zhuang and Miao students to learn Mandarin; they should give full play to the advantages of the school's language environment, create a good Mandarin-speaking environment within the school, and promote the use of Mandarin by students to communicate with their teachers and classmates in and out of the classroom. Students are encouraged to use Mandarin more often to communicate with friends and family outside of school.
- 2. Innovative methods of teaching Mandarin. Utilize multimedia, teaching aids, pictures, and other visual aids to reduce learning difficulty. When teaching in the classroom, activities and games can be used appropriately to enrich the content of classroom teaching and allow students to participate actively in the classroom. Create scenarios for students to practice Mandarin in specific situations. Scenarios should align with students' age and living environment so that students can express themselves easily and are willing to speak.
- 3. Enhance the interest of Zhuang and Miao students in learning Mandarin. Mandarin is the common language of China and plays an important role in the future development of Zhuang and Miao students. Students should be made to understand the importance of learning Mandarin and take the initiative to learn it. Teachers' evaluation of students' Mandarin should be based on encouragement and praise to eliminate the inferiority complex of Zhuang and Miao ethnic students speaking Mandarin.
- 4. Use multimedia networks and other resources to provide conditions for Zhuang and Miao students to learn Mandarin. With economic development, cell phones and computers have been popularized. Outside of school, students can be encouraged to use the Internet to watch age-appropriate TV and videos in Mandarin, and they watch and

listen while imitating and speaking.

This study provides valuable insights into the learning of Mandarin by Miao and Zhuang students. The findings emphasize the importance of social context, learner characteristics, learning conditions, and the learning process in learning Mandarin. For Zhuang and Miao students to learn Mandarin well, the students' efforts and the schools and parents should pay attention to creating a good Mandarin learning environment.

5.4 Recommendation for Future Research

This study found that Zhuang and Miao's students highly accept Mandarin, and most of the students' family members also speak Mandarin. With the popularization of Mandarin, will the increase in the number of Mandarin speakers in the villages affect the inheritance and development of the language and culture of the Zhuang and Miao ethnic groups? How should we continue to pass on and develop the culture of our ethnic groups while popularizing Mandarin? The researcher thinks this is an issue worth studying.

In conclusion, this study aims to analyze and understand the influence of Zhuang and Miao students' mother tongue on their learning of Mandarin to make reasonable suggestions for Zhuang and Miao students to learn Mandarin well. From the study results, it can be seen that influenced by their languages, Zhuang and Miao students need the participation of their families, schools, and society to create a good language environment in which they can learn Mandarin well.

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