



**RELATIONSHIPS AMONG L2 MOTIVATIONAL SELF-SYSTEM,
LEARNING STRATEGY AND LEARNER AUTONOMY AMONG
MALAYSIAN NON-CHINESE UNDERGRADUATES IN MANDARIN
LEARNING**

By

XI MIZHE

**Thesis Submitted to the School of Graduate Studies,
Universiti Putra Malaysia, in Fulfilment of the Requirements for the
Degree of Doctor of Philosophy**

July 2024

FBMK 2024 37

All material contained within the thesis, including without limitation text, logos, icons, photographs, and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



**Abstract of thesis presented to the Senate of Universiti Putra Malaysia
in fulfilment of the requirement for the degree of Doctor of Philosophy**

**RELATIONSHIPS AMONG L2 MOTIVATIONAL SELF-SYSTEM,
LEARNING STRATEGY AND LEARNER AUTONOMY AMONG
MALAYSIAN NON-CHINESE UNDERGRADUATES IN MANDARIN
LEARNING**

By

XI MIZHE

July 2024

Chairman : Ng Chwee Fang, PhD
Faculty : Modern Languages and Communication

Learner autonomy is a pivotal challenge for 21st-century students. This study addresses the critical yet under explored dimension of learner autonomy in the context of Mandarin as a foreign language among non-Chinese learners in Malaysia. The Malaysian Education Blueprint (MEB 2013-2025) emphasizes autonomous language learning, but research on autonomy, particularly for non-Chinese Mandarin learners, is scarce. This research gap is significant as autonomous learning is a key objective in teaching Mandarin as a second or foreign language.

Drawing on the Social Cognitive Theory and the Self-regulation Model, this study investigates the degree of Learner Autonomy (LA) and its relationship with the L2 Motivational Self System (L2MSS) and Language Learning Strategies (LLS). A quantitative approach was employed, surveying 600 Malaysian non-Chinese undergraduate Mandarin learners at a public

university. Data collection involved the Autonomous Learning Scale, L2 Motivational Self System Scale, and Strategy Inventory for Language Learning. Statistical analyses included mean, standard deviation, Pearson correlation, multiple regression, and mediation analysis using PROCESS MICRO 4.1. The study revealed a medium degree of learner autonomy. Both L2MSS and LLS significantly influenced Learner Autonomy, with components such as Ideal L2 Self (IL2S), L2 Learning Experience (L2LE), and three learning strategies—memory, cognitive, and metacognitive—emerging as significant predictors. The mediating role of LLS in the relationship between L2MSS and LA was confirmed, supporting the Theoretical Model of Self-Regulation.

The findings suggest that Mandarin educators in Malaysia should focus on enhancing L2MSS components and LLS to foster autonomy among non-Chinese learners. There is a need to deepen understanding of how LLS mediate the relationship between L2MSS and LA, providing a more nuanced approach to fostering autonomous language learning. This study contributes to the field by highlighting the importance of personal factors in influencing autonomous learning and offers practical implications for teaching Mandarin to non-Chinese learners in Malaysia.

Keywords: Learner Autonomy, Language Learning Strategies, L2 Motivational Self System, Mandarin Learning, Non-Chinese

SDG: GOAL 4: Quality Education

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**HUBUNGAN ANTARA SISTEM KENDIRI MOTIVASI L2, STRATEGI
PEMBELAJARAN BAHASA DAN AUTONOMI PELAJAR BAHASA
MANDARIN DALAM KALANGAN MAHASISWA BUKAN CINA DI
MALAYSIA**

Oleh

XI MIZHE

Julai 2024

Pengerusi : Ng Chweefang, PhD
Fakulti : Bahasa Moden dan Komunikasi

Autonomi pelajar merupakan cabaran penting bagi pelajar abad ke-21. Kajian ini membincangkan dimensi autonomi pelajar yang kritikal namun masih dalam penerokaan, dalam konteks bahasa Mandarin sebagai bahasa asing dalam kalangan pelajar bukan Cina di Malaysia. Pelan Pembangunan Pendidikan Malaysia (MEB 2013-2025) menekankan pembelajaran bahasa autonomi, tetapi penyelidikan mengenai autonomi, terutamanya untuk pelajar bukan Cina Mandarin, adalah terhad. Jurang kajian ini ketara kerana pembelajaran autonomi merupakan objektif utama dalam pengajaran bahasa Mandarin sebagai bahasa kedua atau bahasa asing.

Berdasarkan Teori Kognitif Sosial dan Model Regulasi Kendiri, kajian ini menyiasat tahap autonomi pelajar dan hubungannya dengan Sistem Kendiri Motivasi L2 (L2MSS) dan Strategi Pembelajaran Bahasa (LLS). Pendekatan kuantitatif telah digunakan, untuk meninjau 600 pelajar Malaysia bukan Cina

yang mempelajari bahasa Mandarin di universiti awam. Pengumpulan data melibatkan Skala Pembelajaran Autonomi, Skala Sistem Kendiri Motivasi L2, dan Inventori Strategi untuk Pembelajaran Bahasa. Analisis statistik termasuk min, sisihan piawai, korelasi Pearson, regresi berganda, dan analisis pengantaraan menggunakan PROSES MICRO 4.1. Kajian ini mendedahkan tahap autonomi pelajar yang sederhana. Kedua-dua L2MSS dan LLS mempengaruhi autonomi pelajar dengan ketara, dengan komponen seperti Ideal L2 Self (IL2S), L2 Learning Experience (L2LE) dan tiga strategi pembelajaran —ingatan, kognitif dan metakognitif—muncul sebagai peramal penting. Peranan pengantara LLS dalam hubungan antara L2MSS dan LA telah disahkan, menyokong Model Teori Peraturan Kendiri.

Penemuan menunjukkan bahawa pendidik bahasa Mandarin di Malaysia harus menumpukan pada peningkatan komponen L2MSS dan LLS untuk memupuk autonomi dalam kalangan pelajar bukan Cina. Terdapat keperluan untuk memperdalam pemahaman tentang cara LLS mengantara hubungan antara L2MSS dan LA, menyediakan pendekatan yang lebih bernuansa untuk memupuk pembelajaran bahasa autonomi. Kajian ini menyumbang kepada bidang tersebut dengan menonjolkan kepentingan faktor peribadi dalam mempengaruhi pembelajaran autonomi dan menawarkan implikasi praktikal untuk mengajar bahasa Mandarin kepada pelajar bukan Cina di Malaysia.

Kata Kunci: Autonomi Pelajar, Pembelajaran Bahasa Mandarin, Pelajar Bukan Cina, Sistem Kendiri Motivasi L2, Strategi Pembelajaran Bahasa,

SDG: MATLAMAT 4: Pendidikan Berkualiti

ACKNOWLEDGEMENTS

The completion of this piece of research work has been made possible due to the trust and dedication of dozens of people. Here, I sincerely appreciate, from the depths of my heart, each of them whom I have encountered in this journey.

First, I would like to express my heartfelt gratitude to my beloved supervisors. Special appreciation goes to my supervisor, Dr. Ng Chwee Fang, for providing me with a great deal of assistance during my PhD journey, as well as for giving me professional advice and full support when I needed it the most. I would also like to extend my sincerest gratitude to Prof. Azidan and Dr. Ilyana for their invaluable input and professional guidance in improving my dissertation. In addition, I would like to express my appreciation for the enthusiastic and professional Prof. Hiang Loon Low from UiTM, as well as the respondents who facilitated me by completing the questionnaires. Hereby, I sincerely appreciate all your support and help with my research from the bottom of my heart.

I would like to express my deepest appreciation to my dear family for their unwavering love and encouragement throughout my PhD journey. In particular, I would like to express my heartfelt gratitude to my husband for his endless support, tolerance, understanding, and dedication. Meanwhile, I would like to express my sincere gratitude to the leaders of Xianyang Normal University, where I am employed. I am grateful to them for creating a platform and providing me with an opportunity to enhance myself.

In short, I am sincerely grateful to everyone who has helped and contributed to my academic journey. Above all, I am extremely thankful to be living in such a wonderful era, where I have the opportunity to meet a group of amazing people and engage in meaningful activities.



This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Ng Chwee Fang, PhD

Senior Lecturer
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Chairman)

Mohd Azidan bin Abdul Jabar, PhD

Professor
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Member)

Ilyana binti Jalaluddin, PhD

Senior Lecturer
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Member)

ZALILAH MOHD SHARIFF, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 7 November 2024

TABLE OF CONTENTS

	Page
ABSTRACT	i
ABSTRAK	iii
ACKNOWLEDGEMENTS	v
APPROVAL	vii
DECLARATION	ix
LIST OF TABLES	xv
LIST OF FIGURES	xvii
LIST OF APPENDICES	xviii
LIST OF ABBREVIATIONS	xix
 CHAPTER	
1 INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study	1
1.2.1 Overview of Mandarin as a Second/Foreign Language in Malaysia	3
1.2.2 Overview of Relevant Constructs in the Study	6
1.3 Problem Statement	8
1.4 Research Objectives	13
1.5 Research Questions and Hypotheses	14
1.6 Theoretical Framework of the Study	17
1.6.1 The Social Cognitive Theory	17
1.6.2 The Model of Self-Regulation Learning	18
1.7 Conceptual Framework of the Study	26
1.8 Scope of the Study	28
1.9 Significance of the Study	29
1.10 Definition of Terminology	30
1.11 Summary	33
 2 LITERATURE REVIEW	35
2.1 Introduction	35
2.2 The Learner Autonomy	35
2.2.1 Conceptual Connotation of Learner Autonomy	35
2.2.2 Characteristics of Learner Autonomy	38
2.2.3 Learner Autonomy and Cultural Adaptation	40
2.2.4 Readiness for Learner Autonomy	42
2.2.5 Studies on Readiness for Learner Autonomy in Second Language Learning	44
2.2.6 Learner Autonomy in Mandarin as a Second Language/Foreign Language (MSL/MFL)	49
2.2.7 Learner Autonomy for Mandarin as a Foreign Language (MFL) in Malaysia	53
2.3 Factors in Developing Learner Autonomy	56

2.4	Learning Motivation	57
2.4.1	Conceptual Connotation of Learning Motivation	57
2.4.2	Second Language Motivational Self-System	59
2.4.3	Second Language Motivational Self System in Second Language Learning	62
2.4.4	Second Language Motivational Self System in Mandarin as a Second Language/Foreign Language	66
2.4.5	Second Language Motivational Self System in Mandarin as a Second Language/Foreign Language in Malaysia	69
2.5	Language Learning Strategies	72
2.5.1	Conceptual Connotation of Language Learning Strategies	72
2.5.2	Classification of Language Learning Strategies	74
2.5.3	Language Learning Strategies in Mandarin as a Second Language/Foreign Language	76
2.5.4	Language Learning Strategies in Mandarin as a Second Language/Foreign Language in Malaysia in Malaysia	80
2.6	Relationship between Second Language Motivational Self System and Learner Autonomy	83
2.7	The Relationship between Language Learning Strategies and Learner Autonomy	87
2.8	The Relationship between Second Language Motivational Self System and Language Learning Strategies	91
2.9	Language Learning Strategies as Mediating Variables	95
2.10	Gaps Bridged in this Study	96
2.11	Summary	98
3	METHODOLOGY	100
3.1	Introduction	100
3.2	Research Design	100
3.3	Population Sampling Method	102
3.3.1	Population	102
3.3.2	Sample Size	103
3.3.3	Sampling Procedure	106
3.4	Research Instruments	107
3.4.1	The Demographic Section	108
3.4.2	Learner Autonomy Scale	108
3.4.3	L2 Motivational Self System Scale	109
3.4.4	The Strategy Inventory for Language Learning	110
3.5	Validity and Reliability of Instruments	111
3.5.1	Validity of Instruments	111
3.5.2	Reliability of Instruments	112

3.6	Pilot Study	112
3.7	Data Collection	116
3.8	Exploratory Data Analysis	117
3.9	Data Analysis	122
3.10	Summary	128
4	RESULTS AND DISCUSSION	129
4.1	Introduction	129
4.2	Demographic Profile	129
4.3	The Degree of Learner Autonomy, the Level of Second Language Motivational Self System, and the Use of Language Learning Strategies	131
4.3.1	The Degree of Learner Autonomy	132
4.3.2	The Level of Second Language Motivational Self-System	139
4.3.3	The Use of Language Learning Strategies	145
4.4	The Relationship between Second Language Motivational Self System and Learner Autonomy	155
4.4.1	The Relationship between Second Language Motivational Self System and Learner Autonomy	156
4.5	The Relationship between the Use of Language Learning Strategies and Learner Autonomy	158
4.6	The Relationship between Second Language Motivational Self System and Language Learning Strategies	159
4.7	The Influence of Second Language Motivational Self System and Language Learning Strategies on Learner	161
4.8	Mediation Analysis	166
4.8.1	The Mediation Test of Language Learning Strategies on the Relationship between Ideal L2 Self and Learner Autonomy	169
4.8.2	The Mediation Test of Language Learning Strategies on the Relationship between Ought to L2 Self and Learner Autonomy	173
4.8.3	The Mediation Test of Language Learning Strategies on the Relationship between L2 Learning Experience and Learner Autonomy	176
4.9	Discussion	179
4.9.1	Discussion on the Degree of Learner Autonomy, the Level of Second Language Motivational Self System and the Use of Language Learning Strategies	180
4.9.2	Discussion on the Relationship between L2MSS and Learner Autonomy	187
4.9.3	Discussion on the Relationship between LLS and Learner Autonomy	188
4.9.4	Discussion on the Relationship between L2MSS and LLS	190

4.9.5	Discussion on Predictors of Learner Autonomy	191
4.9.6	Discussion on the Mediation Role of LLS in the Relationship between L2MSS and LA	195
4.10	Summary	199
5	SUMMARY, CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH	200
5.1	Introduction	200
5.2	Summary of Research	200
5.3	Key Findings of the Study	202
5.3.1	The Degree of Learner Autonomy, the Level of L2MSS, and the Use of Language Learning Strategies among Malaysian Non-Chinese Undergraduates in Mandarin Learning	202
5.3.2	Relationships among Second Language Motivational Self System, Language Learning Strategies and Learner Autonomy among Malaysian Non-Chinese Undergraduates in Mandarin Learning	204
5.3.3	Predictors of Learner Autonomy among Malaysian Non-Chinese Undergraduates in Mandarin Learning	205
5.3.4	Mediating Role of Language Learning Strategies on the Relationship between Second Language Motivational Self System and Learner Autonomy among Malaysian Non-Chinese Undergraduates in Mandarin Learning	206
5.4	Implications of the Study	207
5.4.1	Pedagogical Implications	207
5.4.2	Theoretical Implications	209
5.5	Contributions of the Study	211
5.6	Limitations and Recommendations for Future Research	213
5.7	Conclusion	215
	REFERENCES	216
	APPENDICES	244
	BIODATA OF STUDENT	268
	LIST OF PUBLICATIONS	269

LIST OF TABLES

Table	Page
3.1 Amendments Made to the Statements of the Items	114
3.2 Cronbach's Alpha Values for L2MSS	115
3.3 Cronbach's Alpha Values for LLS	115
3.4 Cronbach's Alpha Values for LA	115
3.5 Results of the Normality Test	118
3.6 Results of the Outlier Test	120
3.7 Summary of the Data Analysis	127
4.1 Demographic Variables (n=600)	130
4.2 Level of Mean Score	132
4.3 The Degree of LA among Malaysian Non-Chinese Mandarin Learners	133
4.4 Descriptive Statistics for Responsibility	134
4.5 Descriptive Statistics for Ability	136
4.6 Descriptive Statistics for Activity	139
4.7 Descriptive Statistics of L2MSS	140
4.8 Descriptive Statistics for IL2S	142
4.9 Descriptive Statistics for OL2S	143
4.10 Descriptive Statistics for L2LE	145
4.11 The Use of Language Learning Strategies	145
4.12 Descriptive Statistics for the Use of Memory Strategy	148
4.13 Descriptive Statistics for the Use of Cognitive Strategy	149
4.14 Descriptive Statistics for the Use of Compensation Strategy	150
4.15 Descriptive Statistics for the Use of Metacognitive Strategy	152
4.16 Descriptive Statistics for the Use of Affective Strategy	153
4.17 Descriptive Statistics for the Use of Social Strategy	155

4.18	Criteria for the Strength of Relationship between Two Variables	156
4.19	The Relationship between L2MSS and Learner Autonomy	156
4.20	The Relationship between Learner Autonomy and Use of LLS	159
4.21	The Relationship between L2MSS and the Use of LLS	161
4.22	Model Summary	163
4.23	Results of ANOVA	164
4.24	The Regression Coefficient of Variables	166
4.25	Results of the Mediating-Effect Test of LLS on the Relationship between IL2S and LA	170
4.26	Direct, Indirect, and Total Effects of IL2S on LA	172
4.27	Results of the Mediating-Effect Test of LLS on the Relationship between OL2S and LA	174
4.28	Direct, Indirect, and Total Effects of OL2S on LA	176
4.29	The Results of the Mediating-Effect Test of LLS on the Relationship between L2LE and LA	177
4.30	Direct, Indirect, and Total Effects of L2LE on LA	179

LIST OF FIGURES

Figure	Page
1.1 Theoretical Framework of the Study	25
1.2 Conceptual Framework of this Study	28
3.1 Sample Size Calculation with RAOSOFT Online Tool	105
3.2 Normality of the Dependent Variable	121
3.3 Linearity of the Dependent Variable	121
3.4 Homoscedasticity of the Dependent Variable	121
4.1 Mediation Conceptual Model Diagram on IL2S and LA	168
4.2 Mediation Conceptual Model Diagram on OL2S and LA	168
4.3 Mediation Conceptual Model Diagram on L2LE and LA	169
4.4 Model of the Mediating Role of the Domains of LLS on the Relationship between IL2S and LA	171
4.5 Model of the Mediating Role of the Domains of LLS on the Relationship between OL2S and LA	175
4.6 Model of the Mediating Role of the Domains of LLS between L2LE and LA	178

LIST OF APPENDICES

Appendix	Page
A Demographic Information	244
B Learner Autonomy Questionnaire	245
C L2 Motivation Questionnaire	250
D Learning Strategy Questionnaire	253
E NILAI-NILAI r PRODUCT MOMENT	257
F Output of Questionnaires' Validity	258
G Assumption of Multicollinearity	260
H Independence of Observations	261
I Ethical Consideration	262

LIST OF ABBREVIATIONS

AFFECT	Affection
CFL/MFL	Chinese/Mandarin as a Foreign Language
COG	Cognitive
COM	Compensation
CSL/MSL	Chinese/Mandarin as a Second Language
FL	Foreign Language
IL2S	Ideal L2 Self
L2	Second Language
L2LE	L2 Learning Experience
L2M	L2 Motivation
L2MSS	L2 Motivational Self System
LA	Learner Autonomy
LLS	Language Learning Strategy/Strategies
MEM	Memory
META	Metacognitive
OL2S	Ought-to L2 Self
SILL	Strategy Inventory for Language Learning
SLL	Second Language Learning
SOC	Social

CHAPTER 1

INTRODUCTION

1.1 Introduction

This introductory chapter covers the basic aspects of this study. This chapter starts by discussing the disciplinary background of Mandarin as a second or foreign language (MSL/MFL) education, followed by an overview of the main variables incorporated in this study and a statement of the relevant issues lurking in this subject matter. Next, the research objectives, questions, and hypotheses, along with the scope of this study, are presented. Besides delineating the significance of this study, the theoretical framework and the conceptual model applied in this study are elaborated in this chapter. Finally, the operational definitions of the terms incorporated in this study are presented.

1.2 Background of the Study

An ancient proverb in the West says, “Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime” (Wiktionary, 2023). Similarly, an old Chinese saying of “授人以鱼, 不如授人以渔 (shòu rén yǐ yú, bùrú shòu rén yǐ yú)” means “it is better to teach a man to fish than to give him a fish”. Hence, teaching others to acquire a skill effectively resolves problems.

The importance of autonomy in enhancing one's comprehensive abilities and developing the awareness of lifelong learning is vastly reckoned. Delors, the

former President of UNESCO, introduced the theme Learning: The Treasure Within because lifelong education is the key to unlocking the door to the light of the 21st century (Delors et al., 2010). He pointed out the four pillars of the future of education, namely: learning to know, learning to do, learning to live together, and learning to be. Benson (2007) stated that the ultimate goal of education is to nurture autonomous learners. In this 21st century and the fourth industrial revolution, successful autonomy is not only desirable in language learning but also in other disciplines and all aspects of life. Hence, Learner Autonomy (LA), one of the most important capabilities for the survival and development of humans, has become a hot topic among front-line educators, academic policymakers, and scholars across numerous countries (Tseng et al., 2020; Van Alten et al., 2020; Uslu & Durak, 2022; Zimmerman, 2000; Boekaerts & Corno, 2005; Ismail et al., 2020).

In the field of Second Language Learning (SLL), most studies revolve around the significance of LA in learning English as a second language (L2) or FL (ESL/EFL) (Borg & Alshumaimeri, 2019; Lenkaitis, 2020; Wang et al., 2021) while research work on the acquisition of other languages apart from the English language is in scarcity. In particular, despite reckoning Mandarin as the world's most spoken language (Yun, 2019), with an influential position in the field of language education, only a handful of scholars have delved into MSL/MFL. With the growing number of people learning Mandarin across the globe, cultivating LA has turned into a great concern due to its significance in teaching MSL/MFL (Confucius Institute Headquarters & Hanban, China, 2014).

1.2.1 Overview of Mandarin as a Second/Foreign Language in Malaysia

As the official language of China, Mandarin is the common language of the modern Han nationality in China based on “Beijing standard pronunciation, northern basic dialect, and modern vernacular writing as the grammatical standard” (Overview of Chinese Language & Characters, 2021). Chinese, Mandarin, Mandarin Chinese and Chinese language are applied synonymously in various contexts in the MSL/MFL domain (Guo, 2004). Turning to Malaysia, the term “Mandarin” has been used most extensively by researchers in MSL/MFL research work (Lam & Kuan, 2019; Yin, 2020). In Malaysia, Mandarin is the mother tongue of the ethnic Chinese, but for the “non-Chinese”, it is a foreign language (Li & Cao, 2015). Therefore, the current study focuses on non-Chinese Mandarin learners at Universiti Teknologi MARA (UiTM) in Malaysia, that’s because all students there are non-Chinese (San, et al.,2021).

With its rapid economic progress, the world has begun turning to China and China has substantial influence on the world in multiple aspects. Mandarin, one of the six working languages of the United Nations, functions as a bridge for people to better comprehend China and establish a mutual communication link. Having that said, the trend of learning Mandarin is gradually rising throughout the world. The statistics revealed that Mandarin was incorporated into the national education system in nearly 70 countries by the end of 2020 (Zhao & Liu, 2022). The number of people learning and using Mandarin outside of China has reached 200 million (Ministry of

Education of the People's Republic of China, 2021).

Under the reciprocity of the Belt and Road policy, China has become one of the most important trade partners to Malaysia stemming from the geographic advantages and cultural identity between the two countries (Wang & Wong, 2017). Mandarin has been considered an important international language apart from English in Malaysia (Cheong et al., 2019). Malaysian authorities encourage universities to provide more FL learning opportunities for students so that they can become proficient in a third language, such as Mandarin, Arabic, French, and Spanish (Ministry of Education Malaysia, 2007). Given that many public universities offer Mandarin courses, the number of non-Chinese Mandarin learners in universities is increasing (Tan et al., 2016). The Prime Minister of Malaysia, Anwar Ibrahim, encouraged young Malaysians to master Mandarin at the New Malaysian Vision seminar due to its emergence as an important regional “economic language” (The Straits Times, 2018). Hence, learning Mandarin is indeed necessary and crucial for non-Chinese Malaysians.

The history of MSL/MFL in Malaysia is not lengthy and the education system for MSL/MFL demands further development. Studies regarding the learning and teaching of Mandarin in Malaysia among non-Chinese learners are extremely limited. Existing studies reported that the Mandarin proficiency of non-Chinese learners is still at an unsatisfactory state (Ling et al., 2019; Lam & Kuan, 2019) and these learners face numerous problems in their Mandarin learning process. For non-Chinese Mandarin learners in Malaysia, learning

Mandarin is a much more difficult and challenging task, because it belongs to the ideographic system of writing, which is different from the most widely used alphabetic script language such as Malay or English (Winskel, 2020). For example, Mandarin Chinese characters, tones, and grammar are challenging for non-Chinese learners to acquire (Sung & Wu, 2011). In addition, a supportive MSL/MFL learning environment is lacking in Malaysia. For instance, there is limited time to learn Mandarin in the classroom and a lack of environment to practice Mandarin after class because English and Malay languages are still the main media of communication in public (Chu, 2019). Besides, studies have disclosed that learners have low motivation to learn Mandarin and cannot address problems they face through the use of appropriate language learning strategies (LLS) (Tan et al., 2019; Ya Ling, 2020). These factors have led to low proficiency in Mandarin among Malaysian non-Chinese learners.

Referring to the Malaysian Education Blueprint (MEB 2013-2025), Autonomous Language Learning (ALL) is crucial to improve language proficiency. Scholars of MSL studies revealed that succeeding in learning Mandarin in a non-target language environment demands the learners to acquire and maintain a stronger sense of autonomy and sustained willingness to learn (Sheng & Zhang, 2021). As such, ALL is vital to enhance Mandarin proficiency among non-Chinese learners because sustained learning motivation and effective learning approaches are both crucial for LA. Nonetheless, studies on LA are still in their early stages in Malaysia, particularly in the field of MSL/MFL. Hence, this study examined the LA

among non-Chinese Malaysian learners in Mandarin learning by exploring the internal influential factors to develop an effective path that enhances their Mandarin proficiency.

1.2.2 Overview of Relevant Constructs in the Study

The concept of LA, first introduced into the field of language education by Holec (1981), denotes “the ability to take charge of one’s learning” (p.3). Scholars have interpreted the concept of LA from various perspectives (Zimmerman, 1986; Little, 1991; Littlewood, 1996; Benson & Voller, 1997). In L2 studies, terminology related to LA has emerged, including independent learning, self-directed learning, self-guided learning, autonomous learning, and self-regulation learning (Pramesworo, 2023; Lopez, 2018). These studies have listed plenty of ideas and inspirations for LA within the L2 learning domain.

Studies on LA are still in the ascendant. It is generally accepted that “autonomy is a precondition for effective learning” (Benson, 2001, p. 24). Besides assessing the relationship between LA and academic performance, ways to develop LA are also sought by scholars in L2 learning (Zimmerman & Martinez-Pons, 1988; Schunk, 1996; Pang, 2001; Pape & Wang, 2003; Rosário et al., 2010). As stated in the Social Cognitive Theory (SCT) (Bandura, 1986), the emergence of human behaviour is affected by personal and environmental factors. The idea of learner-centred education highlights the importance of the individual learner in the process of language learning and the environment (e.g., teachers, teaching methods, and instructional

materials) should be in the service of the learner. Hence, this study looked into factors that influenced LA from the stance of language learners.

According to Wenden (1991), LA may be influenced by several variables, including age, level of psychological progress, level of cognition, cognitive style, motivation to learn, LLS, learning environment, and level of education. He added that “a learner who wishes to have autonomy in learning should have the willingness and ability to take control of his/her learning”. Willingness refers to one’s drive or motivation to learn, whereas ability is the skills and methods of learning that are incorporated in LLS. Similarly, Littlewood (1996) claimed that the ability to acquire knowledge and skills, as well as confidence and willingness to learn, is the key condition for learners to develop autonomy in language learning. Some studies verified that both motivation and LLS are the key factors in autonomy (Pintrich & Groot, 1990; Garcia & Pintrich, 1994; Ni, 2001; Pang, 2001).

The reason for associating motivation and LLS with high importance is because, as far as individual factors are concerned, they consist of changeable and unchangeable factors (Wen, 1993). The former signifies factors that can be changed through the efforts of the researcher, the teacher, and the learner him/herself, such as learners’ age, gender, and personality, which cannot be changed through effort. The latter denotes inherent factors, such as learners’ motivation and LLS - the two key factors (Pang, 2001). Both motivation and LLS are not stable attributes but can be influenced by training, pedagogical environment, and classroom

management style (Skehan, 1991). Both LLS and motivation are vital individual and main factors that affect learning autonomy. The Self-Regulation Learning Theory (SRLT) highlights the role that self-motivation and LLS play in autonomous behaviour (Zimmerman, 2000). This is explained in detail in the theoretical framework section of this study. Based on the literature discussion and theoretical underpinnings, three variables of LA, LLS, and learning motivation were included in one framework to assess the degree of autonomy among non-Chinese Mandarin learners in Malaysia and if this variable was affected by personal factors.

1.3 Problem Statement

Learner autonomy is recognized as an increasingly significant challenge for students in the 21st century (Khairallah, 2020). Previous studies have shown that there are substantial discrepancies in the degree of learner autonomy and the manifestation of its internal components across countries (Farahani, 2014; Khalhman & Shevchenko, 2017; Şenbayrak et al., 2019; Nguyen & Habók, 2022; Üstünlüoğlu, 2009). Scholars claimed that “Autonomy is not an absolute but a relative term and the degree of autonomy may vary from one context to another” (Farmer & Sweeney, 1994, p. 139). In Malaysia, it has been evidenced that Malaysian students were relatively weak in terms of their ability to learn autonomously and depended more on their teachers (Dwee & Anthony, 2017), though the Malaysian Education Blueprint (MEB 2013-2025) underscores the importance of developing autonomous language learning to enhance learners’ language proficiency. However, there are minimal referable works on learner autonomy in the Malaysian context,

especially on the degree of autonomy of Mandarin as a foreign language among non-Chinese learners. It is claimed that autonomous learning is one of the crucial goals of teaching Mandarin as a foreign or second language (ICCLE, 2014). Thus, it is imperative and pertinent to conduct a study on autonomy for non-Chinese Mandarin learners in Malaysia.

Furthermore, it is argued that the premise for the development of capacity for autonomous learning is a knowledge of the degree and beliefs of learners in autonomous learning and the factors that influence it (Cotterall, 1995). Previous studies have shown that learner autonomy is related to some variables, such as self-efficacy and autonomy (Mojoudi & Tabatabaei, 2014; Ruelens, 2019), emotions, motivation and language learning autonomy (Csizér, & Albert, 2024), language learning strategy use, instrumental motivation, self-efficacy, self-regulation, autonomy, and L2 achievement (Afshar & Jamshidi 2022), learning autonomy and English language proficiency (Melvina & Julia, 2021), language learning strategies, autonomy, and academic achievement (Tan & Zhang, 2015). However, to date, scarce investigations have been conducted on the nature of the link between learning motivation, language learning strategies, and learner autonomy, especially in the case of autonomy-related personal factors (learning motivation and learning strategy) for non-Chinese learners in Malaysian Mandarin as a foreign language (MLFL) setting. Therefore, it is essential and critical to examine these variables as they are the principal emotional variables and changeable features that influence autonomy in language learning (Garcia & Pintrich, 1994; Skehan, 1991; Pintrich & Groot, 1990;

Pang, 2001).

In addition, Zimmerman's self-regulation model also emphasizes the important role of self-motivation and learning strategies in the formation of learner autonomy (Zimmerman,1996). Although some studies have investigated the relationship between motivation and learner autonomy (Amri& Fikri, 2019; Ceylan, 2021; Huiui-Liu, 2015), motivation and learning strategies (Wang, 2014; Daflizara et al.,2022), respectively. However, due to the complexity of motivational theories, the results of previous research on motivation and autonomy are characterized by numerous discrepancies across studies. More importantly, the complexity of the relationship within components of the variables has not been well clarified, especially the lack of empirical research support for concurrent investigations on the triad relationships between learner autonomy, learning strategies and L2MSS for non-Chinese Mandarin learners in Malaysia.

L2MSS is, as Ross (2017) claimed, the most influential theory of motivation in the last decade. As previous dichotomous models of motivation could not adapt to the original purpose of language acquisition in the context of globalization, where learners learn a foreign language not only to integrate with the target language community, but also to realize their self-ideal (Higgins, 2011). In L2MSS theory, more emphasis is placed on the role of the learner's self in the learning process (Dörnyei and Csizér, 2002). Meanwhile, self-motivation as an important factor plays the role of a prerequisite in the theoretical model of self-regulation, and works together with learning

strategies to form a cycle of autonomous learning behavior (Zimmerman,1996). Therefore, the motivation theory in this study is designated as L2MSS by Dörnyei (2005).

However, to date, in SLL, restricted studies on the relationship between L2MSS and learner autonomy have shown more complexity regarding the internal relationships between L2MSS and learner autonomy, with variations across populations. For example, Hu (2020) found that L2MSS was significantly and moderately correlated with LA through a survey of learners studying English as a foreign language in a senior high school in China. To be precise, L2LE had the strongest correlation with LA, followed by IL2S. Yet, in this study, OL2S had no correlation with LA. By contrast, Shi (2019) assessed the relationship between L2MSS and LA among 110 undergraduate students studying Japanese in China based on a survey. The study revealed a strong correlation between students' level of L2MSS and their LA. Among them, there were moderate-strength correlations between IL2S, OL2S, and L2LE with LA, respectively. A study conducted by (Sheng & Zhang, 2021), explored the relationship between L2MSS and learners' autonomous learning behaviour involving Korean Mandarin learners. The result indicated that IL2S and OL2S had a significantly positive impact on autonomous learning behaviour. However, the study did not cover the relationship between L2LE and learner autonomy. As a result, it is evident that the relationship between L2MSS and learner autonomy is extremely complex across studies.

Moreover, lately, there have been many appeals from scholars to conduct more research on L2MSS to learn Languages other than English (LOTE) (Yang & Chanyoo, 2022, Chanyoo, 2022). In Malaysia, Mandarin, an important international language after English, is popular among non-Chinese (Cheong et al., 2019). Developing learners' motivation, willingness to learn, and learning strategies as well as autonomy are also the general objectives of teaching Mandarin as a second language (ICCLE, 2014). Therefore, studying the relationship between L2MSS, language learning strategies and learner autonomy among Malaysian non-Chinese Mandarin learners is a meaningful endeavor.

As for language learning strategies, early research has given theoretical support, as claimed by Griffiths "strategies are an important element of LA, since it is by using strategies that learners can become autonomous" (2013, p. 31). Subsequent studies have also confirmed a positive correlation between them (Aboagye, et al., 2023; Daflizara et al. 2022; Samaie et al. 2015; Zakaria et al. 2017). These studies have also shown us the complex relationship between learning strategies and autonomy, however, they have not given us a full picture of the nature of the L2MSS, language learning strategies, and learner autonomy, nor have they further analyzed the relationship between the elements within the variables, especially in terms of the mediating role of learning strategies between the L2MSS and the LA. According to SRL, self-motivation and LLS play an important role in autonomous behavior (Zimmerman, 2000), self-motivation is a prerequisite for learner autonomy, and learning strategies are used throughout the

process of learning. As Oxford (1996), claimed that the command of learning strategies is to fulfill the behavior of autonomous learning. Ellis (1994) highlighted the mediating role of LLS's in different variables should be considered in SLL further. Although a few studies have investigated the mediating role of LLS on the link between emotional exhaustion and reduced self-efficacy (Hu & Yeo, 2020); motivation and achievement (Magen-Nagar & Cohen, 2017), ambiguity tolerance and English proficiency (Chang, 2012). However, up to date, it is unclear whether learning strategies have a mediating effect between L2MSS and LA, particularly, an empirical study on non-Chinese Mandarin learners in the Malaysian context.

Therefore, based on the self-regulation Model (Zimmerman, 2000), the current study provides a systematic and comprehensive examination of the relationship between L2 motivational self system, language learning strategies and learner autonomy among Malaysian non-Chinese Mandarin learners, and attempts to examine the mediating role of learning strategies. This study, on the one hand, provides richer supporting materials for self-regulation theory and enriches its empirical findings. On the other hand, it serves as a guide and reference for the development of autonomous learning and the teaching and learning of Mandarin by non-Chinese Mandarin learners in Malaysia.

1.4 Research Objectives

The main objective of this study is to examine the relationships among L2 Motivational Self System (L2MSS), Language Learning Strategies (LLS), and

Learner Autonomy (LA) among Malaysian non-Chinese Mandarin learners in a selected tertiary-level academic institute. Therefore, this study was conducted with the following objectives: -

RO1: To identify the degree of Learner Autonomy, the level of L2MSS (Ideal L2 self (IL2S), Ought-to L2 self (OL2S), and L2 learning experience (L2LE)), and the frequency of use of Language Learning Strategies (memory, cognitive, compensation, metacognitive, affective, and social) among Malaysian non-Chinese undergraduates in Mandarin learning.

RO2: To examine the relationships among L2MSS (IL2S, OL2S, and L2LE), Language Learning Strategies (memory, cognitive, compensation, metacognitive, affective, and social), and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

RO3: To ascertain the predictors of Learner Autonomy in terms of L2MSS and LLS among Malaysian non-Chinese undergraduates in Mandarin learning.

RO4: To determine the mediating role of Language Learning Strategies on the relationship between L2MSS (IL2S, OL2S, and L2LE) and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

1.5 Research Questions and Hypotheses

Based on the problem statement and research objectives described above, the questions and hypotheses formulated for this study are listed in the following:

RQ1: What is the degree of Learner Autonomy, the level of L2MSS (IL2S, OL2S, and L2LE), and the frequency of use of Language Learning Strategies (LLS) (memory, cognitive, compensation, metacognitive,

affective, and social) among Malaysian non-Chinese undergraduates in Mandarin learning?

1a: What is the degree of Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning?

1b: What is the level of L2MSS among Malaysian non-Chinese undergraduates in Mandarin learning?

1c: What is frequency of the use of Language Learning Strategies among Malaysian non-Chinese undergraduates in Mandarin learning?

RQ2: Is there any relationship between L2MSS (IL2S, OL2S, and L2LE) and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning?

Ha1: There is a significant relationship between L2MSS (IL2S, OL2S, and L2LE) and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

RQ3: Is there any relationship between the use of Language Learning Strategies (memory, cognitive, compensation, metacognitive, affective, and social) and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning?

Ha2: There is a significant relationship between the use of Language Learning Strategies (memory, cognitive, compensation, metacognitive, affective, and social) and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

RQ4: Is there any relationship between L2MSS (IL2S, OL2S, and L2LE) and the use of Language Learning Strategies (memory, cognitive, compensation, metacognitive, affective, and social) among Malaysian non-Chinese undergraduates in Mandarin learning?

Ha3: There is a significant relationship between L2MSS (IL2S, OL2S, and L2LE) and the use of Language Learning Strategies (memory, cognitive, compensation, metacognitive, affective, and social) among Malaysian non-Chinese undergraduates in Mandarin learning.

RQ5: To what extent do L2MSS (IL2S, OL2S, and L2LE) and Language Learning Strategies (memory, cognitive, compensation, metacognitive, affective, and social strategies) predict Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning?

Ha4: For the selected independent variable, the regression coefficients are significant when regressed against Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

RQ6: Do language learning strategies mediate the relationship between L2MSS (IL2S, OL2S, and L2LE) and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning?

Ha5: Language learning strategies mediate the relationship between ideal second language self and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

Ha6: Language learning strategies mediate the relationship between ought-to second language self and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

Ha7: Language learning strategies mediate the relationship between second language learning experience and Learner Autonomy among Malaysian non-Chinese undergraduates in Mandarin learning.

1.6 Theoretical Framework of the Study

1.6.1 The Social Cognitive Theory

Two basic theories were employed in this study to build the theoretical framework. The first theory refers to the Social Cognitive Theory (SCT) proposed by Albert Bandura (1986), a Canadian-American psychologist. The theory emphasises human cognitive processes by observing the role of learning and social interaction pairs in human behaviour. The core theory of SCT is the triadic interaction theory, which highlights the interplay among the individual, the environment, and the behaviour. The theory has had a significant impact on several disciplines, including education, psychology, and communication.

Personal factors include one's cognitive processes, emotions, beliefs, attitudes, and biological factors. These factors influence how one perceives and interprets the environment in which he/she lives. A person's self-efficacy beliefs reflect his/her confidence in abilities and can affect his/her willingness to engage in certain behaviours. Behaviour refers to the actions, reactions, and responses exhibited by a person. Besides being influenced by personal factors, behaviour is also a determinant of future personal factors and environmental experiences. For instance, one's decision to engage in language practice (behaviour) may influence his/her self-efficacy beliefs and subsequent motivation (personal factors). The environment includes several external stimuli, the social context, and the situation in which the individual finds himself/herself. This includes physical environment, social interactions,

cultural norms, and the presence of role models. The environment offers opportunities, constraints, and reinforcers that shape one's behaviour, thus contributing to the development of personal factors.

The SCT suggests that individuals, behaviour, and environments interact with each other in a continuous cycle of interaction. The environment has a strong impact on individuals and behaviour shaping. Bandura (1986) explained that individuals are not passively influenced by their environment but actively interpret and make decisions based on their cognitive processes. Subsequently, the individuals influence their behaviour and reaction towards their environment. The SCT presents several important implications for comprehending the cognitive processes of learners, who are dominant in the triad of individual, environment, and behaviour.

1.6.2 The Model of Self-Regulation Learning

The Model of SRL was initiated by Zimmerman (1989), who is a popular researcher of autonomous learning in the US and a representative of the social cognitive school of self-regulation learning. In 1989, Zimmerman proposed the self-regulation learning model based on Bandura's idea of interactive determinism of individual, behaviour, and environment, along with the self-regulation concept.

Zimmerman defines self-regulation as self-generated thoughts, feelings and behaviours to achieve goals (Zimmerman, 2000). He argues that self-regulation is neither a mental competence nor an academic performance

technique, but rather a process of self-direction by which the learner converts mental competence into academic technique. Learning is seen as an activity that the student performs proactively on his or her own, rather than as an insidious event that responds to instruction (Zimmerman, 2002).

The SRL posits that learning is dominated by a variety of cognitive, metacognitive, and motivational influences on one's interaction with others (Pintrich, 2000; Zimmerman, 2000). Cognition consists of diverse skills that learners use to encode, memorise, and retrieve information (Schraw et al., 2006). Metacognition is related to the skills that learners apply to comprehend, monitor, and manage their cognitive processes (Pintrich, 2000; Zimmerman, 2000). Meanwhile, motivation involves a variety of beliefs that motivate the usage and development of both cognitive and metacognitive strategies throughout the learning process (Pintrich, 2000).

According to Zimmerman (1989), self-regulation learning includes the interaction of person, behaviour, and environment. Besides actively controlling and regulating their learning process, self-regulation learners have to actively monitor and regulate the external performance of learning and the learning environment based on external feedback. In self-regulation learning, individuals have to constantly monitor and adjust their cognitive and affective states, observe and use various strategies to adjust their learning behaviour, as well as create and use material and social resources in the learning environment (Zimmerman, 1989).

Self-regulation learning is composed of three phases, namely the forethought phase, the performance phase, and the self-reflection phase. The forethought phase incorporates a task analysis process and self-motivated beliefs. The task analysis process has two sub-processes, goal setting and strategy planning; the former denotes the identification of specific, expected learning outcomes and the latter signifies the selection of appropriate LLS to meet learning objectives. Self-motivational beliefs are the intrinsic motivational force that initiates the learning process. These beliefs consist of self-efficacy, outcome expectations, intrinsic interests or values, and goal orientation. In particular, goal orientation refers to whether individuals take mastering knowledge and skills or completing learning tasks as their goal value orientation.

In the performance stage, the main processes refer to self-control and self-observation. Self-control processes facilitate a learner to focus on the task via several processes, including self-regulation, use of mental representation, concentration, and task strategies. Self-observation is the tracking of specific aspects, conditions, and progress of learning behaviour. Accurate, timely, and comprehensive self-recording is a common means of self-observation for self-regulated learners. When self-observation fails to offer a definitive explanation for a deviation from the direction of learning, one initiates a process of self-experimentation, such as systematically varying the processes, strategies, and conditions of learning to achieve the final learning objective.

The self-reflection stage has two processes: self-judgment and self-reaction. Self-judgment is composed of self-evaluation and attributional analysis. The former examines if the learning outcome is consistent with the expected goal and the importance of the learning outcome. At the same time, the latter denotes the analysis of the causes of the established learning outcome, such as whether the poor academic performance is due to limited ability or insufficient effort. Self-reaction consists of two forms: (1) self-satisfaction, which is based on the positive evaluation of one's learning outcome (autonomous learning students regard the acquisition of self-satisfaction as more important than the acquisition of material rewards) and (2) adaptive or defensive reaction, whereby adaptive reaction is adjusting the form of learning after failure to succeed in subsequent learning and defensive reaction is coping with subsequent learning tasks negatively to avoid further learning failure.

According to Zimmerman (1989), although self-regulation learning encompasses complex structures, processes or components (e.g., self-efficacy, goal setting, strategy selection and use, self-observation, and self-evaluation), it offers effective ways and tracks for developing autonomous learning capabilities in language learning, which are easier to manipulate and implement. Hence, it is apt to start with these aspects to develop students' autonomous learning ability.

The two basic conditions required for one to learn autonomously are explained as follows. One is to have the intention to learn - "want to learn";

the other is to know how to learn - “know how to learn” (Pang, 2001). Upon looking at SRL as an activity and a process, one will find that the connotation of SRL is far more complicated than anyone can imagine. The model of SRL presented above revealed that at least the following aspects should be involved in developing students’ autonomous learning abilities:

First, interventions on the intrinsic motivational factors of learning. Motivation for autonomous learning is intrinsic and self-motivated, with many factors exerting a catalytic effect on such motivation (e.g., self-efficacy, outcome expectations, a sense of the value of learning, attribution tendencies, and appropriate goal orientation). Self-efficacy denotes one’s belief in his/her ability to perform a learning task and it is a concrete manifestation of self-confidence in learning certain activities. Students with high self-efficacy set higher learning goals and to confirm their learning ability, they autonomously engage in learning activities and use a variety of LLS to achieve their goals (Schunk, 1996). The sense of value of learning is one’s belief that academic success is crucial to him/her. Suppose students do not perceive a great deal of value in their academic success. In that case, they are less likely to spend more time using strategies (e.g., refining and organising) and less likely to use important LLS (e.g., planning, monitoring, and regulating). The impact of attributional tendencies on SRL portrays that people are more likely to be motivated to learn if they attribute their success to ability and failure to lack effort, while individuals become less motivated to learn if they attribute their success to external, uncontrollable factors, and failure to lack ability (Zimmerman, 2000). Goal orientation has a significant impact on one’s SRL.

Mastery goal orientation for mastering knowledge and developing skills has a strong impact on autonomous learning, while performance goal orientation for demonstrating one's ability, surpassing others, and gaining the approval of others has a weak impact on independent learning (Pintrich, 2000). To stimulate students' intrinsic motivation, it is crucial to consider these motivational factors and focus on one or more of them based on the students' specific situation.

Second, teaching students adequate LLS. In the self-regulation model, LLS is vital in the stages of motivation generation, maintenance and reinforcement and maintenance due to its strong impact on learning behaviour. Having sufficient cognitive strategies and being able to use them are important guarantees for autonomous learning (Alderman, 1999). Thus, cognitive strategies are embedded in Zimmerman's self-regulation model as a crucial component to facilitate the capacity for autonomous learning. Cognitive strategies refer to one's processing methods of external information that comprise the following three categories: memory strategies, refinement strategies, and organisation strategies.

Metacognition refers to the knowledge and beliefs about cognitive processes, along with the monitoring and controlling of those processes. Researchers generally divide it into two: metacognitive knowledge and metacognitive processes. The former refers to knowledge or beliefs about self, tasks, strategies, etc., while the latter denotes planning, monitoring, and regulating the cognitive processes (e.g., time management and strategy selection).

Metacognition is closely associated with autonomous learning and it is an indispensable condition for a person to learn autonomously (Brown, 1987). Oxford (1990, 1996) proposed additional strategies that may belong to language learners' self-regulation. The affective strategy helps learners manage their emotions and motivation, such as by reducing anxiety through music or rewarding themselves for doing well. The compensation strategy makes up for missing knowledge or information, such as making guesses based on context or using gestures to express unknown words. Memory strategies are cognitive strategies with a specific function of embedding new information in long-term memory, such as mental imagery or acronyms. Social strategies work with others by asking questions, requesting help, and through language or social speech. Thus, LLS has a vital role in self-regulated learners (Wenden & Rubin, 1987; O'Malley & Chamot, 1990; Oxford, 1990, 1996b; Wenden, 1991).

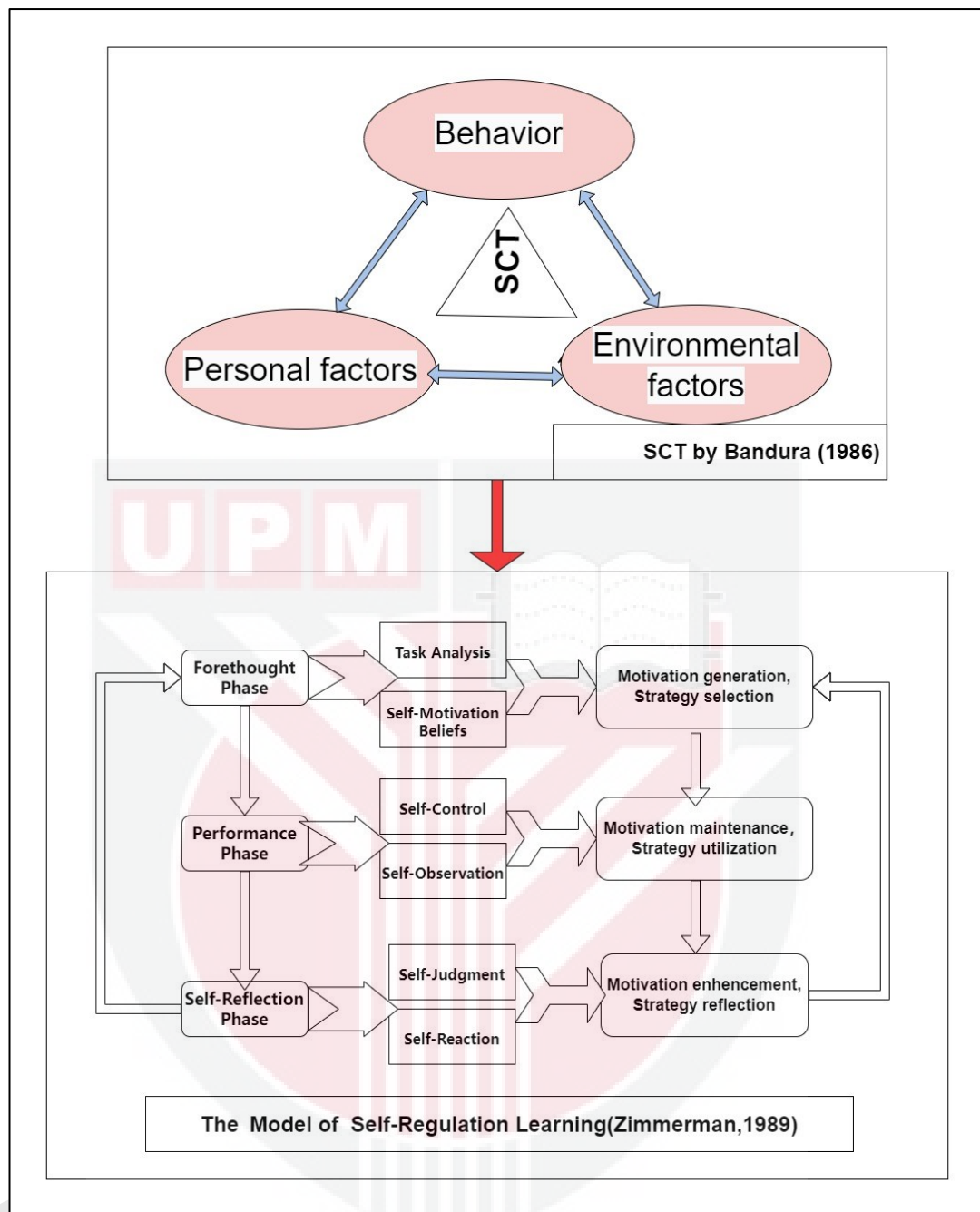


Figure 1.1 : Theoretical Framework of the Study

Based on Zimmerman's theoretical model of self-regulation, two important and interrelated elements were extracted to be embedded into the conceptual framework: motivation and LLS. Motivation is influenced by self-efficacy, expected value, and goal setting in the forethought stage. In this stage, learners plan LLS based on the actual performance of their

motivation. In the performance stage, to maintain the strength of self-motivation, learners apply suitable LLS for various tasks. In the self-reflection stage, learners reflect on the use of LLS based on task performance to strengthen their motivation. This cycle is repeated in the learner's autonomous cognitive process (see **Figure 1.1**).

1.7 Conceptual Framework of the Study

The conceptual framework of this study was built based on the theoretical underpinning of self-regulation and empirical studies on the selected variables. This study assessed the correlations among L2MSS, LLS, and LA among Malaysian non-Chinese undergraduate Mandarin learners. Therefore, the conceptual framework consists of three main variables: L2MSS, LLS, and LA.

In this study, the independent variable refers to L2MSS and it consists of three elements: IL2S, OL2S, and L2LE (Dornyei, 2009). Language learning strategies (LLS), which served as the mediating variable in this study, were adopted from Oxford's (1989) framework of LLS that outlined memory strategy, cognitive strategy, compensatory strategy, metacognitive strategy, affective strategy, and social strategy. This classification system is "the most comprehensive classification of LLS" (Ellis, 1994, p. 539). Learner Autonomy (LA), the dependent variable in this study, was retrieved from the theory of LA proposed by Holec (1981) and Littlewood (1999), as well as other LA studies (Ustunluoglu, 2009; Sakai et al., 2010).

Learning is a complex cognitive process and one's active learning behaviour is influenced by both the individual and the environment (Bandura, 1986). Studies revealed that motivation and LLS are the crucial personal factors that influence LA (Garcia & Pintrich, 1994; Ni, 2001; Pintrich & Groot, 1990; Pang, 2001; Zimmerman, 2002). While Ushioda (1996) emphasized that motivation to learn autonomy has a significant effect, other studies showed that LLS has a positive impact on LA (Griffiths, 2003; Oxford & Crookall, 1989; Oxford, 1990). Based on the SRL, this study examined the mediating effect of LLS on the link between L2MSS and LA. The relationships outlined in this study based on the variables are presented in the conceptual framework portrayed in **Figure 1.2**.

Based on the above discussions this study explored the relationships among L2MSS, LLS, and LA among non-Chinese Malaysian Mandarin learners. Next, this study examined the mediating impact of LLS on the link between L2MSS and LA to shed light on the teaching and learning of MFL in Malaysia.

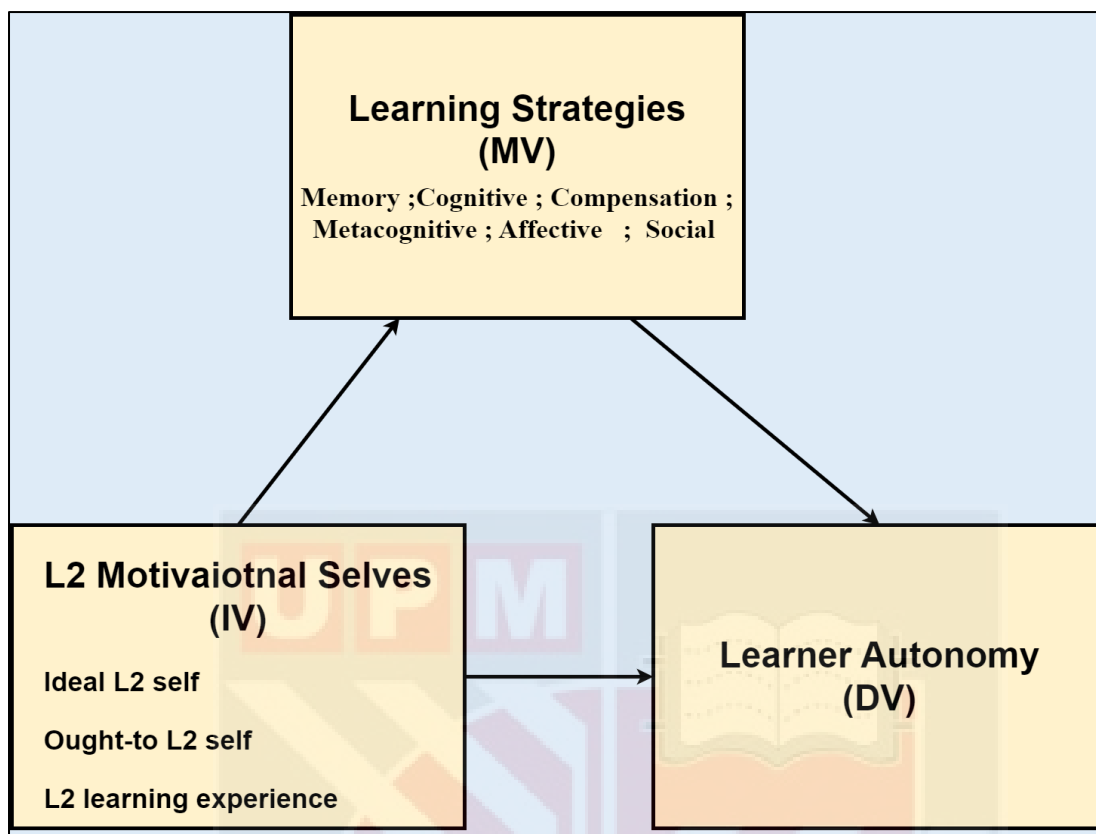


Figure 1.2 : Conceptual Framework of this Study

1.8 Scope of the Study

Given that this study looked into the relationship between LA and its internal influences on Mandarin learning among Malaysian non-Chinese undergraduate students, the scope of this study is limited to students learning MFL while excluding other language learners. Due to time and effort constraints, non-Chinese Mandarin learners in one public university located in Malaysia were involved in this study. At the same time, considering that the number of non-Chinese learners in the Universiti Teknologi MARA (UiTM) Shah Alam Campus is the largest (Sim et al., 2019), this study only focuses on this university.

Many studies have reported a range of factors that influence LA, including age, gender, self-efficacy, and language level (Dafei, 2007; Wenden, 1991). Based on the purpose and the theoretical framework of this study, the variables selected for this study focused only on the relationship between LA and its internal factors (i.e., L2MSS and LLS). In addition, this study explored the mediating effect of LLS on the relationship between self-motivation and LA. The LLS deployed in this study is based on Oxford's six-factor classification (i.e., memory strategy, cognitive strategy, compensatory strategy, metacognitive strategy, affective strategy, and social strategy).

Based on the research objectives and questions outlined in this chapter, the quantitative research approach was adopted in this study due to its suitability. The three questionnaires used in this study were the L2 Motivation Questionnaire, the Language Learning Strategies Questionnaire, and the Learner Autonomy Questionnaire. Given that no additional instrument was used in this study, the interpretation of the findings is legit only to the specific instruments applied in this study.

1.9 Significance of the Study

This study is significant in the field of MSL/MFL studies within the context of non-target language and serves as an important guidance for the teaching and learning of Mandarin in Malaysia. The study outcomes may facilitate educators, policymakers, and scholars to achieve better comprehension of the readiness for autonomy among Malaysian Mandarin learners, thus offering first-hand information for curriculum design, policy formulation, and

research extension.

To the best of the author's knowledge, this study is the first to park L2MSS, LLS, and LA under a single framework. This study expands the field of empirical research on LA in MSL/MFL teaching. A new path is paved for LA development in the context of MSL/MFL in Malaysia. This study verifies the notion stipulated in theory of SRL. Under the framework of this theory, this study is the first to assess the mediation impact of LLS on the relationship between L2MSS and LA. The outcomes shed light on the enhancement of self-motivation and the formation of LA through the teaching and training of LLS. Simultaneously, it provides research ideas and methodological references for the mediating role of LLS in other related variables at a later stage. In conclusion, this study is of great significance because it offers guidance for practical teaching and functions as a reference for theoretical research in the field of teaching MSL/MFL in the Malaysian context.

1.10 Definition of Terminology

Learner Autonomy (LA): The term was introduced into the field of L2 teaching by Holec (1981) as the "ability to take charge of one's learning" (p. 3). Following his influential definition, many other scholars attempted to describe autonomy. Little (1991) defined autonomy as "a capacity for detachment, critical reflection, decision-making, and independent action" (p. 4), while Littlewood (1996) described autonomy as "the learners' ability and willingness to make choices independently" (p. 427). He added that "this capacity depends on two main components: ability and willingness" (p. 428).

Next, Benson (2013) associated LA with “the ability to control learning” (p. 61). The various definitions of LA found in the literature point towards a common notion depicting that LA is concerned with a learner’s ability and willingness to undertake learning, make decisions, set goals, plan strategies, as well as monitor and evaluate his/her learning progress.

L2 Motivation (L2M): Gardner (1985) first defined L2M as “the extent to which one works or strives to learn the language because of a desire to do so and the satisfaction experienced in doing so” (p. 10). Dörnyei (1998) asserted that motivation is external behaviour caused by induction that is maintained until one meets the goal and the motivation will remain in the whole process of continuous behaviour. Brown (1994) depicted that motivation is the purpose and direction that one pursues, as well as the level of effort that the person has put in to complete the purpose or task.

L2 Motivational Self System (L2MSS): The L2MSS is a new motivational model proposed by Zoltán Dörnyei in 2005 based on the socio-educational model. It has the following three core elements (Dörnyei & Ushioda, 2009, p. 29):

- a) **Ideal L2 Self (IL2S):** The L2-specific facet of ones ‘ideal self’. If the person we would like to become speaks an L2, the IL2S becomes a powerful motivator to learn the L2 because of the desire to reduce the discrepancy between our actual and ideal selves. Traditional integrative and internalised instrumental motives typically belong to this component.
- b) **Ought-to L2 Self (OL2S):** The attribute that one believes one ought to possess to meet expectations and avoid possible negative

outcomes. This dimension corresponds to Higgins' ought self and revolves around the more extrinsic (i.e., less internalised) types of instrumental motives.

- c) **L2 Learning Experience (L2LE)**: The 'executive' motives related to the immediate learning environment and experience (e.g., the impact of the teacher, the curriculum, the peer group, and the experience of success). This component is conceptualised at a different level from the two self-guides and future research will hopefully elaborate on the self-aspects of this bottom-up process.

Language Learning Strategies (LLS): The most widely cited definition by Oxford (1990) is "LLS is adopted by a learner to make learning easier, faster, more enjoyable, more autonomous, more effective, and more specific actions for situations" (p. 8). Based on the cognitive framework, O'Malley and Chamot (1990) proposed the following alternative definition: "Special thoughts or behaviour that individuals use to help them understand, learn or retain new information" (p. 1). Self-regulation was introduced into educational psychology to enrich the connotation of LLS. Griffiths (2008) defined LLS as "a consciously chosen activity by learners to regulate their language learning" (p. 87). The most recent definition by Oxford (2011) is "LLS refers to complex, dynamic thoughts and actions selected and used in specific contexts to regulate multiple aspects of oneself (cognitive, affective, and social) to (a) complete language tasks, (b) improve language performance/use, and (c) enhance long-term proficiency" (p. 48).

Second Language (L2): It is "a language learned in an environment where it is the primary language of daily communication for most people, with some

degree of competence or proficiency in the language is needed for survival (e.g., learning English in the US)” (Oxford, 1999, p. 133).

Foreign Language (FL): It is “a language learned in a setting where it is not the usual medium of interaction for the majority of the population, whereby competence or proficiency is not required for survival purposes (e.g., learning Russian in France or Papua New Guinea)” (Oxford, 1999, p. 133).

Chinese/Mandarin as a Second Language (CSL/MSL): It refers to not only teaching Chinese/Mandarin to foreigners in China but also the teaching of Chinese/Mandarin across the world, including the teaching of Chinese/Mandarin by ethnic minorities in China (Liu, 2002).

Chinese/Mandarin as a Foreign Language (CFL/MFL): To teach foreigners to learn Chinese/Mandarin abroad is called CFL/MFL teaching. The main consideration here is the different learning environment. In China, it is the target language environment, while in abroad, it is the learner’s mother tongue. Although the environment of teaching Chinese at home and abroad differs, the teaching ability of teachers should be common (Zhao, 2019).

1.11 Summary

This chapter introduces the background of this study to highlight the importance and necessity of LA research in the field of MSL/MFL, particularly in the Malaysian context. The research objectives and questions of this study revolve around issues related to LA in the MFL context. The proposed

theoretical and conceptual frameworks clarify the scope and content of this study. Finally, the connotation of important terms in this study is explained. This chapter lays a strong foundation for the general research framework that follows this study.



REFERENCES

- Ablard, K. E., & Lipschultz, R. E. (1998). Self-regulated learning in high-achieving students: Relations to advanced reasoning, achievement goals, and gender. *Journal of Educational Psychology*, 90(1): 94–10.
- Abu-Bader, S., & Jones, T. V. (2021). Statistical mediation analysis using the Sobel test and Hayes SPSS Process Macro. *International Journal of Quantitative and Qualitative Research Methods*, 9(1): 42–61.
- Alderman, M. K. (2004). *Motivation for achievement: Possibilities for teaching and learning* (2nd Ed.). Lawrence Erlbaum Associates Publishers.
- Alemayehu, L., & Chen, H.-L. (2021). The influence of motivation on learning engagement: The mediating role of learning self-efficacy and self-monitoring in online learning environments. *Interactive Learning Environments*, 31(3): 1–14.
- Ary, D., Jacobs, L. C., & Razavieh, A. (1990). *Introduction to Research in Education* (4th Ed.). Holt, Rinehart and Winston Inc.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education* (Eds.). Cengage Learning.
- Ary, D., Jacobs, L., Sorensen, C., & Walker, D. (2013). *Introduction to Research in Education* (Eds.). Cengage Learning.
- Aspelmeier, J. (2005). Table of critical values for Pearson's r. Retrieved from <https://pdf4pro.com/amp/view/table-of-critical-values-for-pearson-s-r-59198f.html>
- Bandura, A. (1986). *Social Foundations of Thoughts and Action: A Social Cognitive Theory*. Prentice-Hall.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2): 248–287.
- Bonney, C. R., Cortina, K. S., Smith-Darden, J. P., & Fiori, K. L. (2008). Understanding strategies in foreign language learning: Are integrative and intrinsic motives distinct predictors? *Learning and Individual Differences*, 18(1): 1–10.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173–1182.
- Borg, S., & Alshumaimeri, Y. (2019). Language Learner Autonomy in a tertiary context: Teachers' beliefs and practices. *Language Teaching Research*, 23(1): 9–38.

- Bai, W. (2010). The use of “autonomous learning” in the reform of university Chinese language teaching. *Journal of Hotan Normal College: Chinese Comprehensive Edition*, 1: 2.
- Benson, P. (2001). *Teaching and Researching Autonomy in Language Learning*. Longman.
- Benson, P. (2005). *(Auto)biography and learner diversity* (pp. 4–21). Cambridge University Press.
- Benson, P. (2007). Autonomy in language teaching and learning. *Language Teaching*, 40(1): 21–40.
- Benson, P. (2013). *Teaching and Researching: Autonomy in Language Learning* (2nd Ed.). Routledge.
- Benson, P., & Voller, P. (1997). *Autonomy and Independence in Language Learning*. Longman.
- Boekaerts, M., & Corno, L. (2005). Self-regulation in the classroom: A perspective on assessment and intervention. *Applied Psychology: An International Review*, 54(2): 199–231.
- Breen, M. P., & Mann, S. J. (1997). Shooting arrows at the sun: Perspectives on a pedagogy for autonomy. In P. Benson and P. Voller (Eds.), *Autonomy and independence in language learning* (pp. 132–149). Longman.
- Bremner, S. (1999). Language learning strategies and language proficiency: Investigating the relationship in Hong Kong. *Asia Pacific Journal of Language in Education*, 55(4): 490–514.
- Brown, A. (1987). Metacognition, executive control, self-regulation, and other more mysterious mechanisms. In F. E. Weinert, & R. H. Kluwe (Eds.), *Metacognition, motivation, and understanding* (pp. 65–116). Lawrence Erlbaum Inc.
- Brown, C. (2007). Learning through multimedia construction—A complex strategy. *Journal of Educational Multimedia and Hypermedia*, 16(2): 93–124.
- Brown, H. D. (1994). *Principles of Language Learning and Teaching*. Prentice Hall.
- Byrne, B. M. (2010). *Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming* (2nd Ed.). Routledge.
- Cameron, L. J. (1990). Staying within the script: Personality and self-directed learning. *System*, 18(1): 65–75.

- Candy, P. (1991). *Self-direction for lifelong learning: A comprehensive guide to theory and practice*. Jossey-Bass Publishers.
- Chamot, A. (1987). The Learning Strategies of ESL Students. In A. Wenden, & J. Rubin (Eds.), *Learner Strategy in Language Learning* (pp. 71–83). Prentice Hall Inc.
- Chan, V. (2001). Readiness for Learner Autonomy: What do our learners tell us? *Teaching in Higher Education*, 6(4): 505–518.
- Chan, V. (2003). Autonomous language learning: The teachers' perspectives. *Teaching in Higher Education*, 8(1): 33–54.
- Chan, V., Spratt, M., & Humphreys, G. (2002). Autonomous language learning: Hong Kong tertiary students' attitudes and behaviours. *Evaluation and Research in Education*, 16(1): 1–18.
- Chao, L. (2020). *A Survey Study on Chinese Independent Learning Based on WeChat Function*. (Unpublished Master's thesis). Huaqiao University.
- Chanyoo, N. (2022). The comparison of motivating factors for taking English and other foreign languages among Thai college students. *Journal of Language Teaching and Research*, 12(6), 1087–1097.
- Chatterjee, S., & Hadi, A. S. (2012). *Regression Analysis by Example* (5th Ed.). John Wiley and Sons Inc.
- Chen, Z.G. (2005). The status of Chinese language under the situation of economic globalization. *Mall Modernization*, 4: 200–201.
- Cheng, L. (2018). *Study on Chinese vocabulary learning strategies of foreign students in Malaysian Chinese Teacher Program* (Unpublished Master's thesis). Beijing Foreign Studies University.
- Cheng, Y. Y. (2019). *A study on the correlation between L2 motivational self-system and Chinese language performance of international students coming to China*. (Unpublished Master's thesis). Shanghai Jiao Tong University.
- Cheong, K. M., Jano, Z., Salam, S., Bareed, N. A., Ithnin, F., & Suraidi, N. (2019). Motivational factors among undergraduates learning mandarin: A qualitative perspective. *International Journal of Academic Research in Progressive Education and Development*, 8(2): 187–199.
- Chiang, H. -H. (2016). A study of interactions among ambiguity tolerance, classroom work styles, and English proficiency. *English Language Teaching*, 9(6): 61.
- Chuah, K. P., Ngoi, G. P., & Foo, A. P. (2022). Relationship between motivation and listening achievement in learning Chinese as second

language in Malaysia. *The Eurasia Proceedings of Educational and Social Sciences*, 25: 1–8.

Chuan, H. L. (2006). Sample size estimation using Krejcie and Morgan and Cohen statistical power analysis: A Comparison. *Jurnal Penyelidikan IPBL*, 7: 78–86.

Cirocki, A., Anam, S., & Retnaningdyah, P. (2019). Readiness for autonomy in English language learning: The case of Indonesian high school students. *Iranian Journal of Language Teaching Research*, 7(2): 1–18.

Clark-Carter, D. (2010). *Quantitative Psychological Research: The Complete Student's Companion*. Psychology Press—Taylor and Francis.

Cohen, A. D. (1998). *Strategies in Learning and Using a Second Language*. Longman.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd Ed.). Lawrence Erlbaum Associate Publishers.

Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education*. (5th Ed.), Routledge.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th Ed.). Routledge.

Cotterall, S. (1995). Readiness for autonomy: Investigating learner beliefs. *System*, 23(2): 195–205.

Creswell, J. W. (1994). *Research Design: Qualitative and Quantitative Approaches*. Sage Publishing.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd Ed.). Pearson Education, Inc.

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd Ed.). Sage Publishing.

Crookes, G., & Schmidt, R. W. (1991). Motivation: Reopening the research agenda. *Language Learning*, 41(4): 469–512.

Csizér, K., & Kormos, J. (2009). Learning experiences, selves and motivated learning behaviour: A comparative analysis of structural models for Hungarian secondary and university learners of English. Motivation, language identity and the L2 self. *Multilingual Matters*, 36: 98–119.

Cui, Y. J. (2015). An analysis of achievement goal orientation and self-regulated learning among Korean university Chinese learners-centered on the comparison between advanced and basic learners.

Research on Chinese Language and Literature Teaching, 12(1): 153–168.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1): 98–104.

Chu, T. L. N. (2020). *A survey and analysis of Chinese language learning strategies of Japanese students in China*. (Unpublished PhD thesis). Dalian University of Foreign Studies.

Confucius Institute Headquarters & Hanban (2014). *International Curriculum for Chinese Language Education*. Beijing Language and Culture University Press.

Dafei, D. (2007). An exploration of the relationship between Learner Autonomy and English proficiency. *Asian EFL Journal*, 24(4): 24–34.

Daflizara, Sulistiyo, U., & Kamil, D. (2022). Language learning strategies and Learner Autonomy: The case of Indonesian tertiary EFL students. *Journal of Language Education and Acquisition Research Network*, 15(1): 257–281.

Dam, L. (1995). *Learner Autonomy 3: From theory to classroom practice*. Authentik Language Learning Resources.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. Plenum Publishing Corporation.

Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 11(4): 227–268.

Delors, J., Carneiro, R., Chung, F., Geremek, B., Gorham, W., Kornhauser, A., Manley, M., Quero, M. P., Savane, M. -A., Singh, K., Stavenhagen, R., Won, M., & Nanzhao, S. Z. (2010). *Learning: The treasure within; Report to UNESCO of the International Commission on Education for the Twenty-first Century*. UNESCO Publishing.

Denscombe, M. (2010). *The Good Research Guide for Small Scale Research Projects* (4th Ed.). Open University Press.

Diseth, Å. (2011). Self-efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement. *Learning and Individual Differences*, 21(2): 191–195.

Dickinson, L. (1995). Autonomy and motivation: A literature review. *System*, 23(2): 165–174.

Ding, A. Q. (2011). Teachers’ investigation on the cultivation of international students’ autonomous learning ability. *Language and Literature Application*, 4: 9.

- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31: 117–135.
- Dörnyei, Z. (2001). New themes and approaches in second language motivation research. *Annual Review of Applied Linguistics*, 21: 43–59.
- Dörnyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Lawrence Erlbaum Associates Publishers.
- Dörnyei, Z. (2009). The L2 motivational self-system: Motivation, language identity and the L2 self. *Multilingual Matters*, 36: 9–42.
- Dörnyei, Z., & Al-Hoorie, A. H. (2017). The motivation foundation of learning languages other than English: Theoretical issues and research directions. *The Modern Language Journal*, 101(3): 455–468.
- Dörnyei, Z., & Csizér, K. (1998). Ten commandments for motivating language learners: Results of an empirical study. *Language Reaching Research*, 2(3): 203–229.
- Dörnyei, Z., & Csizér, K. (2002). Some dynamics of language attitudes and motivation: Results of a longitudinal nationwide survey. *Applied Linguistics*, 23: 421–62.
- Dörnyei, Z., & Otto, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics*, 4: 43–69.
- Dörnyei, Z., & Ushioda, E. (2009). Motivation, Language Identity and the L2 Self: A Theoretical Overview. In Z. Dörnyei, & E. Ushioda (Ed.), *Motivation, Language Identity and the L2 Self* (pp. 1–8). Multilingual Matters.
- Duffy, G. G., & Roehler, L. R. (1989). Why strategy instruction is so difficult and what we need to do about it. In C. B. McCormick, G. E. Miller, & M. Pressley (Eds.), *Cognitive Strategy Research: From Basic Research to Educational Applications* (pp. 133–154). Springer.
- Dwee, C. Y., & Anthony, E. M. (2017). Learner Autonomy in university English classrooms: Teachers' perceptions and practices. *International Journal of Applied Linguistics and English Literature*, 6(2): 19–25.
- Efron, B. (1979). Bootstrap methods: Another look at the Jackknife. *Annals of Statistics*, 7(1): 1–26.
- Ehrman, M. E., & Oxford, R. L. (1995). Cognition plus: Correlates of language learning success. *The Modern Language Journal*, 79(1): 67–89.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34(3): 169–189.

- Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford University Press.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (1991). *Management Research: An Introduction*. Sage Publishing.
- Farahani, M. (2014). From spoon feeding to self-feeding: Are Iranian EFL learners ready to take charge of their own learning? *Electronic Journal of Foreign Language Teaching*, 1(1): 98–115.
- Farmer, R., & Sweeney, E. (1994). *Are You Speaking Comfortably?*. Hong Kong Polytechnic University, Hong Kong. Retrieved from <http://www.teaching.polyu.edu.hk/detailfiles/r5.pdf>.
- Feng, Q. (2019). *Survey and analysis of Chinese language learning motivation and learning strategies among students of Confucius Institute at the University of Burundi*. (Unpublished PhD thesis). Bohai University.
- Field, A. (2006). *Discovering Statistics Using SPSS* (2nd Ed.). Sage Publishing.
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics: And Sex and Drugs and Rock "N" Roll* (4th Ed.), Sage Publishing.
- Figura, K., & Jarvis, H. (2007). Computer-based materials: A study of Learner Autonomy and strategies. *System*, 35(4): 448–468.
- Fraenkel, J. R., & Wallen, N. E. (1993). *How to design and evaluate research in education* (2nd Ed.). McGraw Hill.
- Fukuda, S., Sakata, H., & Takeuchi, M. (2011). Facilitating autonomy to enhance motivation: Examining the effects of a guided-autonomy syllabus. *Electronic Journal of Foreign Language Teaching*, 8(1): 71–86.
- Gamble, C., Aliponga, J., Wilkins, M., Koshiyama, Y., Yoshida, K., & Ando, S. (2012). Examining Learner Autonomy dimensions: Students' perceptions of their responsibility and ability. In the *JALT2011 Conference Proceedings*. (pp. 263–272).
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. Edward Arnold Publishers.
- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology / Revue canadienne de psychologie*, 13(4), 266–272.
- Garcia, T., & Pintrich, P. R. (1994). Regulating motivation and cognition in the classroom: The role of self-schemas and self-regulatory strategies. In D. H. Schunk, & B. J. Zimmerman (Eds.), *Self-regulation of learning*

and performance: Issues and educational applications (pp. 127–153). Lawrence Erlbaum Associates, Inc.

- Gardner, R. C., & MacIntyre, P. D. (1993). A student's contributions to second-language learning. Part II: Affective variables. *Language Teaching*, 26(1): 1–11.
- Gardner, R. C., & Tremblay, P. F. (1994). On motivation, research agendas, and theoretical frameworks 1. *The Modern Language Journal*, 78(3): 359–368.
- Gay, L. R., & Diehl, P.L. (1992). *Research Methods for Business and Management*. Mc. Millan Publishing Company.
- Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational Research Competencies for Analysis and Applications*. Pearson.
- Ghee, T. T., Ismail, H. N., & Kabilan, M. K. (2010). Language learning strategies used by MFL students based on genders and achievement groups. *US-China Foreign Language*, 8(1): 50–58.
- Gremmo, M. -J., & P. Riley (1995). Autonomy, self-direction and self-access in language. *System*, 23(2): 151–164.
- Griffiths, C. (2003). Patterns of language learning strategy use. *System*, 31(3), 367–383.
- Griffiths, C. (2008). Strategies and good language learners. In C. Griffiths (Ed.), *Lessons from good language learners* (pp. 83–98). Cambridge University Press.
- Griffiths, C. (2013). *The strategy factor in successful language learning*. Multilingual Matters.
- Griffiths, C. (2020). Language learning strategies: Is the baby still in the bathwater? *Applied Linguistics*, 41(4): 607–611.
- Guilford, J. P. (1973). *Fundamental statistics in psychology and education*. McGraw-Hill.
- Guo, C. (2004). Discussion on “Chinese language”. *TCSOL Studies*, 2, 56–76.
- Hair, J. F., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate data analysis* (5th Ed.). Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th Ed.). Pearson-Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th Ed.). Pearson.

- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning: International Journal of Strategic Management*, 46(1–2): 1–12.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4): 408–420.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (pp. 34–40). Guilford Press.
- Hayes, A.F. (2017) *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford Press.
- Hazzi, O., & Maldaon, I. (2015). A pilot study: Vital methodological issues. *Business: Theory and Practice*, 16(1): 53–62.
- Heng, B. C., Cheong, C. Y. M., & Taib, F. (2014). Penilaian kurikulum pengajaran bahasa Mandarin komunikatif: Satu kajian pendekatan iluminatif (Assesment of communicative Mandarin language curriculum: A study of the illuminative approach). *Jurnal Kurikulum dan Pengajaran Asia Pasifik*, 2(3): 52–59.
- Hie-ling, T. (2019). Learning To Write Chinese Characters Among Non-Native Chinese Learners. In the *International Innovation in Teaching and Learning and Language Education Conference*, (pp.1–11)
- Higgins, E. T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer? *Advances in Experimental Social Psychology*, 22: 93–136.
- Ho, J., & Crookall, D. (1995). Breaking with Chinese cultural traditions: Learner Autonomy in English language teaching. *System*, 23(2): 235–243.
- Holec, H. (1981). *Autonomy in foreign language learning*. Pergamon.
- Holton, E. H., & Burnett, M. B. (1997). Qualitative research methods. In R. A. Swanson, & E. F. Holton (Eds.), *Human resource development research handbook: Linking research and practice*. Berrett-Koehler Publishers.
- Hu, X., & Yeo, G. (2020). Emotional exhaustion and reduced self-efficacy: The mediating role of deep and surface learning strategies. *Motivation and Emotion*, 44(5): 785–795.
- Huang, H. T., Hsu, C. C., & Chen, S. W. (2015). Identification with social role obligations, possible selves, and L2 motivation in foreign language learning. *System*, 51: 28–38.

- Huang, S. C. (2019). Learning experience reigns–Taiwanese learners' motivation in learning eight additional languages as compared to English. *Journal of Multilingual and Multicultural Development*, 40(7): 576–589.
- Hedge, T. (2000). *Teaching and Learning in the Language Classroom*. Oxford University Press.
- Henry, A. (2010). Contexts of possibility in simultaneous language learning: Using the L2 Motivational Self System to assess the impact of global English. *Journal of Multicultural and Multilingual Development*, 31(2): 149–162.
- Henry, A. (2011). Examining the impact of L2 English on L3 selves: A case study. *International Journal of Multilingualism*, 8(3): 235–255.
- Henry, A. (2015). In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 83–94). Multilingual Matters.
- Hossain, M. M., & Mustapha, S. M. B. (2020). The relationship between Learner Autonomy readiness and English language performance of undergraduates at public universities in Bangladesh. *Journal of Education and Social Sciences*, 16(1): 82–92.
- Hsiao, T., & Oxford, R. L. (2002). Comparing theories of language learning strategies: A confirmatory factor analysis. *The Modern Language Journal*, 86(3): 368–383.
- Hu, L. (2020). *A Survey on High School Students' English Autonomous Learning Ability under the Threshold of L2MSS Theory*. (Unpublished Master's thesis). Shaanxi University of Science and Technology, China.
- Higgins, C. (2011). The formation of L2 selves in a globalizing world. *Identity formation in globalizing contexts: Language learning in the new millennium*, 1-18.
- Irgatoğlu, A. (2021). L2 motivational self-system and learning approaches of high school students. *Education Quarterly Reviews*, 4: 240–252.
- Islam, M., Lamb, M., & Chambers, G. (2013). The L2 motivational self-system and national interest: A Pakistani perspective. *System*, 41(2): 231–244.
- Ismail, F., Yunus, M. M., & Zahidi, A. M. (2020). Promotion of Learner Autonomy: Beliefs and practices from the ESL teachers' perspectives. *International Journal of Academic Research in Progressive Education and Development*, 9(2): 309–317.

- Jiang, X. H. (2003). The effects of achievement motivation and attribution on English learning strategy selection. *Journal of PLA Foreign Language College*, 26(2): 4.
- Jin, H. (2001). Research on the theory of autonomous learning and the best model of teaching Chinese as a foreign language. *Research on Higher Financial Education*, 2: 16–17.
- Jones, J. F. (1995). Self-access and culture retreating from autonomy. *English Language Teaching*, 49(3): 228–234.
- Kalton, G. (1983). *Introduction to survey sampling*. SAGE Publications, Inc.
- Kang, S. H., & Pashler, H. (2014). Is the benefit of retrieval practice modulated by motivation?. *Journal of Applied Research in Memory and Cognition*, 3(3): 183–188.
- Khaki, S. (2013). The Relationship between Learner Autonomy and willingness to communicate (WTC) in Iranian EFL learners. *International Journal of Applied Linguistics and English Literature*, 2: 97–109.
- Khalymon, I., & Shevchenko, S. (2017). Readiness for Learner Autonomy of prospective teachers minoring in English. *Advanced Education*, 4(8): 65–71.
- Khan, M. R. (2015). Analyzing the relationship between L2 motivational selves and L2 achievement: A Saudi perspective. *International Journal of English Language Teaching*, 2(1): 68–75.
- Khany, R., & Amiri, M. (2018). Action control, L2 motivational self-system, and motivated learning behavior in a foreign language learning context. *European Journal of Psychology of Education*, 33: 337–353.
- Kim, T. Y., & Kim, Y. K. (2014). A structural model for perceptual learning styles, the ideal L2 self, motivated behavior, and English proficiency. *System*, 46: 14–27.
- Kline, R. B. (2015). *Principles and Practice of Structural Equation Modeling* (4th Ed.). Guilford Press.
- Kong, J. H., Han, J. E., Kim, S., Park, H., Kim, Y. S., & Park, H. (2018). L2 Motivational Self System, international posture and competitiveness of Korean CTL and LCTL college learners: A structural equation modeling approach. *System*, 72: 178–189.
- Kormos, J., & Csizér, K. (2007). An interview study of inter-cultural contact and its role in language learning in a foreign language environment. *System*, 35(2): 241–258.

- Kormos, J., Kiddle, T. and Csizér, K. (2011). Systems of goals, attitudes, and self-related beliefs in second-language-learning motivation. *Applied Linguistics*, 32(5): 495–516.
- Kozjek-Gulyás, A. (2015). Chinese language learning strategies characteristic of language learners. *History*, 5(1): 61–76.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3): 607–610.
- Kremer-Hayon, L., & Tillema, H. H. (1999). Self-regulated learning in the context of teacher education. *Teaching and Teacher Education*, 15(5): 507–522.
- Kumar Shah, R. (2020). Concepts of learner-centred teaching. *Shanlax International Journal of Education*, 8(3): 45–60.
- Kwok, C. K. (2017). *The role of self and identity in motivating learners of Mandarin Chinese as a foreign language in Ireland* [Doctoral dissertation, Trinity College Dublin]. ProQuest Dissertations & Theses Global. <http://bit.ly/example>.
- Lam, K.-C., & Kuan, W.-L. (2019). Vocabulary learning strategies: The case of Mandarin learners in Sarawak. *Human Behavior Development and Society*, 20(3): 62–72.
- Lamb, M. (2004). Integrative motivation in a globalizing world. *System*, 32(1): 3–19.
- Leech, N., Barrett, K., & Morgan, G. (2012). *IBM SPSS for Intermediate Statistics*. Routledge.
- Lenkaitis, C. A. (2020). Technology as a mediating tool: Videoconferencing, L2 learning, and Learner Autonomy. *Computer Assisted Language Learning*, 33(5-6): 483–509.
- Li, B. L., & Cao, Wenfu. (2015). A survey on Chinese language attitudes of Chinese language learners for Chinese as a foreign language in Malaysian universities. *Science and Education Literature*, 1(36): 32–34
- Li, D. (2016). *Study on the relationship between learning motivation, attributional tendency and independent learning ability of American students*. [Unpublished Master's Thesis]. East China Normal University.
- Li, D. P., & Chang, D.Q. (2017). Exploration of international students' autonomous learning ability in Chinese language environment. *Research in Teaching*, 40(6): 5–12.

- Li, N. (2021). Chinese learning strategies of American college students in a non-target language environment. *Journal of Yichun College*, 43(11): 68–74.
- Li, T. H. (2015). *L2 Motivation Self System analysis for elementary Chinese learners*. [Unpublished Master's thesis]. Chongqing University.
- Li, W. J. (2010). An introduction to cooperative learning. *Science and Technology Information*, (9).
- Li, Y. L. (2019). *Chinese language learning strategies of German secondary school students in a non-target language environment-The case of Marbach Schiller Higher Grammar School in Germany*. [Unpublished PhD thesis]. Qingdao University.
- Li, Y. M. (2019). *Research on autonomy of Chinese learner from the perspective of classroom culture--Take the Confucius Institute in Munich as an example*. [Unpublished Master's thesis]. Beijing Foreign Studies University.
- Liang, W. T., & Zhang, C. M. (2022). A Study on Chinese learning strategies of international students from countries along the “Belt and Road” and African countries-Taking Weifang College as an example. *Journal of Weifang College*, 22(2): 84–90.
- Liao, P. (2020). *A comparative study of learning strategies of elementary Chinese learners in target language and non-target language environments*. [Unpublished PhD thesis]. Central University for Nationalities.
- Lin, L., & Reinders, H. (2019). Students' and teachers' readiness for autonomy: Beliefs and practices in developing autonomy in the Chinese context. *Asia Pacific Education Review*, 20: 69–89.
- Little, D. (1991). *Learner Autonomy: Definitions, Issues and Problems*. Authentik, Dublin, Republic of Ireland.
- Little, D. (1995). Learning as dialogue: The dependence of Learner Autonomy on teacher autonomy. *System*, 23(2): 175–182.
- Little, D. (1996). Freedom to learn and compulsion to interact: Promoting Learner Autonomy through the use of information systems and information technologies. In R. Pemberton, S. L. Edward Li, W. F. Winnie, & H. D. Pierson (Eds.). *Taking Control: Autonomy in Language Learning* (pp. 203–218). Hong Kong University Press.
- Little, D. (1997). Language awareness and the autonomous language learner. *Language Awareness*, 6(2-3): 93–104.
- Littlewood, W. (1996). “Autonomy”: An anatomy and a framework. *System*, 24(4): 427–435.

- Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistic*, 20: 71–94.
- Littlewood, W. (2000). Do Asian students really want to listen and obey?. *English Language Teaching*, 54(1): 31–35.
- Liu, H. (2021). *A study on the correlation between L2 motivational self-system and the ability of autonomous learning of high school students*. [Unpublished Master's thesis]. Huaibei Normal University.
- Liu, H. J. (2012). Understanding EFL undergraduate anxiety in relation to motivation, autonomy, and language proficiency. *Electronic Journal of Foreign Language Teaching*, 9(1): 123–139.
- Liu, H. J. (2015). Learner Autonomy: The role of motivation in foreign language learning. *Journal of Language Teaching and Research*, 6(6): 1165–1174.
- Liu, L. Y. (2020). *The effect of bilingual motivational self-systems on Chinese learning behavior*. [Unpublished Master's thesis]. Shanghai International Studies University.
- Liu, N. J. (2019). *Study on the Effect of Autonomous Learning Ability on Writing of Overseas Students from Malaysia*. [Unpublished Master's thesis]. Beijing Foreign Studies University.
- Liu, X. (2002). *A brief introduction to teaching Chinese as a second language*. Beijing Language and Culture University Press.
- Liu, Y. (2013). An investigation of factors affecting college students' English autonomous learning ability under the Internet environment. *Journal of Huaihai Institute of Technology (Humanities and Social Sciences Edition)*, 11(23): 3.
- Liu, Y. (2020). *Explore L2 Chinese Learners' Motivation through L2MSS: Selves, Mental Imagery, and Pedagogical Implications*. [Unpublished doctoral dissertation]. University of South Florida.
- Lu, C. Y. (2010). An empirical study of English learning motivation and learning strategies: A quantitative survey of non-English majors. *Journal of Beijing University of Aeronautics and Astronautics (Social Science Edition)*, 23(4): 4.
- Luo, H. Y. (2020). *Survey and Analysis of Study Motivation and Strategies of International Students in Thailand*. [Unpublished Master's thesis]. Huaqiao University.
- Lopez, N. (2018). Age, Aptitude, and Autonomy: An Exploration of Self-Guided Learning and Autonomy Development in Adult Learners.

- Ma, M. Z. (2019). *A Study on the Relationships between the L2 Motivational Self System, International Posture and Intended Effort of Southeast and South Asian International Students Learning Chinese in Yunnan Province*. [Unpublished Master's thesis]. Yunnan Normal University.
- Ma, M. Z., & Li, L. S. (2020). A study on the relationship between Motivation Self System, international attitude and effort degree of foreign students with different Chinese proficiency: A multi-group structural equation model analysis of learners in Yunnan, Southeast Asia and South Asia. *Journal of Yunnan Normal University (Teaching and Research Chinese as a Foreign Language)*, 2:1–9.
- Magen-Nagar, N., & Cohen, L. (2017). Learning strategies as a mediator for motivation and a sense of achievement among students who study in MOOCs. *Education and Information Technologies*, 22: 1271–1290.
- Mao, L., Xu, H. G., & Wu, J. G. (2020). Research and practice of construction of Chinese language autonomous learning platform for international students in China based on WeChat. *Textile Industry and Technology*, 6: 104–108.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41(9): 954–969.
- McKeachie, W. J. (1988). The need for study strategy training. In C. E. Weinstein, E. T. Goetz, & P. A. Alexander (Eds.), *Learning and study strategies: Issues in assessment, instruction, and evaluation* (pp. 3–9). Academic Press.
- Middlemist, R. D., Knowles, E. S., & Matter, C. F. (1976). Personal space invasions in the lavatory: Suggestive evidence for arousal. *Journal of Personality and Social Psychology*, 33(5): 541–546.
- Miles, D. A. (2017, August). A taxonomy of research gaps: Identifying and defining the seven research gaps. In *Doctoral student workshop: finding research gaps-research methods and strategies* (pp. 1–15), Texas, USA.
- Ministry of Education of the People's Republic of China, (2021). Retrieved from <http://en.moe.gov.cn/>
- Ministry of Education Malaysia, (2007). Retrieved from <https://www.moe.gov.my/en/>
- Moskovsky, C., Assulaimani, T., Racheva, S., & Harkins, J. (2016). The L2 Motivational Self System and L2 achievement: A study of Saudi EFL learners. *The Modern Language Journal*, 100(3): 641–654.
- Neuman, W. L., Wiegand, B., & Winterdyk, J. A. (2000). *Criminal justice research methods: Qualitative and quantitative approaches*. Allyn and Bacon.

- Ni, Q. Q. (2010). An empirical study on the relationship between College English learning motivation, learning strategies and self-directed learning ability. *Foreign Language Journal*, 3: 30–35.
- Nikolov, M. (1999). 'Why do you learn English?' 'Because the teacher is short.' A study of Hungarian children's foreign language learning motivation. *Language Teaching Research*, 3(1): 33–56.
- Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50(1): 57–85.
- Norris-Holt, J. (2001). Motivation as a contributing factor in second language acquisition. *The Internet TESL Journal*, 7(6): 1–8.
- Norusis, M.J. (1990). *SPSS Inc., SPSS Advanced Statistics User's Guide*. SPSS Inc., Illinois. (pp. 285).
- Oga-Baldwin, W. Q., & Fryer, L. K. (2020). Profiles of language learning motivation: Are new and own languages different?. *Learning and Individual Differences*, 79: 101852.
- Oh, S., & Roh, S. C. (2019). A moderated mediation model of self-concept clarity, transformational leadership, perceived work meaningfulness, and work motivation. *Frontiers in Psychology*, 10: 1756.
- Olaussen, B. S., & Braten, I. (1999). Students' use of strategies for self-regulated learning: Cross-cultural perspectives. *Scandinavian Journal of Educational Research*, 43: 409–432
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*, Cambridge University Press.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Russo, R. P., & Küpper, L. (1985). Learning strategy applications with students of English as a second language. *TESOL Quarterly*, 19(3): 557–584.
- Ou, F. Y. (2018). *A survey on the use of Chinese learning strategies among Bangladeshi international students at Yunnan University*[Unpublished PhD thesis]. Yunnan University.
- Ou, Q. F. (2022). *A study on the correlation between autonomous learning ability in English and L2 motivational self-system elements of high school students*[Unpublished Master's thesis]. Guangdong Technical Teacher's University.
- Overview of Chinese Language and Characters, (2021). Retrieved from http://www.moe.gov.cn/jyb_sjzl/wenzi/202108/t20210827_554992.html
- Oxford, R. L. (1989). Use of language learning strategies: A synthesis of studies with implications for strategy training. *System*, 17: 235–247.

- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know* (1st Ed.). Heinle ELT.
- Oxford, R. L. (1996). *Language learning strategies around the world: Cross-cultural perspectives*. National Foreign Language Resource Center.
- Oxford, R. L. (1999). Anxiety and the Language Learner: New Insights. In J. Arnold (Ed.), *Affect in Language Learning* (pp. 58–67). Cambridge University Press.
- Oxford, R. L. (2011). *Teaching and researching language learning strategies*. Pearson Longman.
- Oxford, R. L. (2017). 'The craft so long to lerne': Aspects of time in language learning. *Innovation in Language Learning and Teaching*, 11(3): 282–297.
- Oxford, R. L., & Burry-Stock, J. A. (1995). Assessing the language learning strategies worldwide with the ESL/EFL version of the strategy inventory language learning. *System*, 23(1): 1–23.
- Oxford, R. L., & Crookall, D. (1989). Research on language learning strategies: Methods, findings, and instructional issues. *The Modern Language Journal*, 73: 404–419.
- Oxford, R., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *The Modern Language Journal*, 78(1): 12–28.
- Oxford, R. L., Nyikos, M., & Ehrman, M. (1988). Vive la difference? Reflections on sex differences in use of language learning strategies. *Foreign Language Annals*, 21(4): 321–329.
- Palfreyman, D., & Smith, R. C. (2003). *Learner Autonomy across cultures*. Palgrave Macmillan.
- Pallant, J. (2007). *SPSS survival manual—A step by step guide to data analysis using SPSS for windows* (3rd Ed.). Open University Press.
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS* (4th Ed.), Open University Press/McGrawHill.
- Pan, J. S. (2020). *Analysis of Malay native speakers' idiosyncratic clauses bias*[Unpublished Master's thesis]. Jiangsu University.
- Pang, G.W. (2001). On students' autonomous learning. *Journal of East China Normal University (Education Science Edition)*, 20(2): 78–83.
- Pape, S., & Wang, C. (2003). Middle school children's strategic behavior: Classification and relation to academic achievement and mathematical problem-solving. *Instructional Science*, 31: 419–449.

- Papi, M. (2010). The L2 Motivational Self System, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, 38(3): 467–479.
- Park, G. P. (1997). Language learning strategies and English proficiency in Korean university students. *Foreign Language Annals*, 30(2): 211–221.
- Pennycook, A. (1997). Vulgar pragmatism, critical pragmatism, and EAP. *English for Specific Purposes*, 16: 253–269.
- Philip, B. (2018). Self-regulated learning strategies in reading comprehension of a group of ESL students. *Journal of Creative Practices in Language Learning*, 6(2): 22–43.
- Pintrich, P. R., & Groot, E. V. De. (1990). Motivational and self-regulated learning components of classroom. *Journal of Educational Psychology*, 82(1): 33–40.
- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). Academic Press.
- Pintrich, P.R., & Schunk, D.H. (2002). *Motivation in education theory, research, and applications*. Prentice Hall.
- Preacher, K. J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods Instruments and Computers*, 36: 717–731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40: 879–891.
- Pramesworo, I. S., Fathurrochman, I., Sembing, D., Bangkara, B. A., & Sudrajat, D. (2023). Relevance between Blended Learning and Students' Independent Learning Curriculum: An Overview of Digital Age Education, Student and Teacher Engagement, Technological Resources. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran*, 9(3), 858-869.
- Rahimi, M. (2015). The role of individual differences in L2 learners' retention of written corrective feedback. *Journal of Response to Writing*, 1: 19–48.
- Reinders, H., & White, C. (2011). Learner Autonomy and new learning environments. *Language Learning and Technology*, 15(3): 1–3.
- Rosário, P., Núñez, J. C., González-Pienda, J., Valle, A., Trigo, L., & Guimarães, C. (2010). Enhancing self-regulation and approaches to

learning in first-year college students: A narrative-based programme assessed in the Iberian Peninsula. *European Journal of Psychology of Education*, 25(4): 411–428.

Ruzek, E. A., Hafen, C. A., Allen, J. P., Gregory, A., Mikami, A. Y., & Pianta, R. C. (2016). How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learning and instruction*, 42: 95–103

Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic dialectical perspective. In E. L. Deci, & R. M. Ryan (Eds.). *Handbook of self-determination research* (pp. 3–33). University of Rochester Press.

Sakai, S., Takagi, A., & Chu, M. (2010). Promoting Learner Autonomy: Student perceptions of responsibilities in a language classroom in East Asia. *Educational Perspectives*, 43(1): 12–27.

Salkind, N. J. (1997). *Exploring research* (3rd Ed.), Prentice Hall.

Samaie, M., Khany, R., & Habibi, N. (2015). On the relationship between Learner Autonomy and language learning strategies among Iranian EFL students. *International Journal of Educational Investigations*, 2(6): 96–109

San, L. S., Kie, J. Y. T., & Ping, W. S. (2021). Chinese Culture Teaching In Mandarin Language Course At Uitm. *Education*, 3(11), 43-57.

Scharle, A., & Szabó, A. (2000). *Learner Autonomy* (pp. 3–10). Cambridge University Press.

Schraw, G., Crippen, K. J., & Hartley, K. (2006). Promoting self-regulation in science education: Metacognition as part of a broader perspective on learning. *Research in Science Education*, 36(1–2): 111–139.

Schunk, D. H. (1996). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal*, 33: 359–382.

Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th Ed.). John Wiley and Sons Inc.

Sheng, L., & Zhang, Y. H. (2021). An empirical study on the efficient of Chinese learners' L2 self on autonomous learning behavior in Korea. *Language Teaching and Research*, 209(3): 45–57.

Shi, T. H. (2019). *A study on the correlation between L2 motivational self-system and autonomous learning ability of Japanese undergraduates*[Unpublished doctoral dissertation]. Shanxi University of Finance and Economics.

- Shum, M. S., Gao, F., Tsung, L., & Ki, W. W. (2011). South Asian students' Chinese language learning in Hong Kong: Motivations and strategies. *Journal of Multilingual and Multicultural Development*, 32(3): 285–297.
- Sim, M. S., Khin, L. S., & Sankaran, S. S. (2019). The error analysis of learning Mandarin endocentric phrases among the Malay students in Malaysia. *International Journal of Modern Languages and Applied Linguistics*, 3(2): 49–62.
- Siridetkoon, P., & Dewaele, J. M. (2018). Ideal self and ought-to self of simultaneous learners of multiple foreign languages. *International Journal of Multilingualism*, 15(4): 313–328.
- Skehan, P. (1991). Individual differences in second language learning. *Studies in Second Language Acquisition*, 13(2): 275–298.
- Smith, R. C. (2003). Pedagogy for autonomy as (becoming-) appropriate methodology. In D. Palfreyman, & R. Smith (Eds.), *Learner Autonomy across cultures: language education perspectives* (pp. 129–146). Palgrave Macmillan.
- Snyder, S. (2002). An ethical imperative for learner choice. In A. S. Mackenzie, & E. McCafferty (Eds.), *Developing autonomy* (pp. 55–64).
- Sonaiya, R. (2002). Autonomous language learning in Africa: A mismatch of cultural assumptions. *Language Culture and Curriculum*, 15(2): 106–116.
- Spratt, M., Humphreys, G., & Chan, V. (2002). Autonomy and motivation: Which comes first?. *Language Teaching Research*, 6: 245–266.
- Stern, H. (1983). *Fundamental Concepts of Language Teaching*. Oxford University Press.
- Sternberg, R. J. (1983). Criteria for intellectual skills training. *Educational Researcher*, 12(2): 6–26.
- Su, H. (2018). *A Study of Autonomous Learning of Chinese Language for International Students from Kazakhstan at Intermediate and Advanced Levels Based on WeChat Platform*[Unpublished Master's thesis]. Shanghai International Studies University.
- Subekti, A. S. (2018). L2 Motivational Self System and L2 achievement: A study of Indonesian EAP learners. *Indonesian Journal of Applied Linguistics*, 8(1): 57–67.
- Sung, K. Y., & Wu, H. P. (2011). Factors influencing the learning of Chinese characters. *International Journal of Bilingual Education and Bilingualism*, 14(6): 683–700.

- Tabachnick, B. G., and Fidell, L. S. (2001). *Using Multivariate Statistics* (4th Ed.), Allyn and Bacon.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (5th Ed.). Allyn and Bacon.
- Taguchi, T. (2002). Learner factors affecting the use of learning strategies in cross-cultural contexts. *Prospect*, 17(2): 18–34.
- Taguchi, T., Magid, M., & Papi, M. (2009). The L2 Motivational Self System among Japanese, Chinese and Iranian Learners of English: A Comparative Study. In Z. Dornyei, & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 66–97). Multilingual Matters.
- Tan, T. G., Hairul, N. I., Hoe, T. F., & Ho, C. C. (2016). The motivation of undergraduates learning Mandarin as a foreign language. *e-Academia Journal UiTMT*, 5(1): 1–11.
- Tan, T. G., Lim, T. H., & Hoe, F. T. (2017). Analysing the relationship between L2 Motivational Self System and achievement in Mandarin. *International Academic Research Journal of Social Science*, 3(1): 104–108.
- Tan, T., Lim, T. H., & Hoe, F. T. (2019). Metacognitive language learning strategies used by students learning Mandarin as a foreign language. *Journal of Second and Multiple Language Acquisition*, 7(1): 1–14.
- Tan, X., & Zhang, Z. H. (2015). An analysis of the relationship between English learning strategies, autonomous learning ability and learning achievement. *Foreign Language Teaching Theory and Practice*, 1: 59–65.
- Tang, G. (1999). *Development of autonomy by New Arrival Children*. In Crew et al. (eds.) pp. 247–269.
- Teh, H. S., Siraj, S., & Wong, S. L. (2017). Penilaian kurikulum pengajaran bahasa Mandarin komunikatif: Satu kajian pendekatan iluminatif (Assessment of communicative Mandarin curriculum: A study of the illuminative approach). *Jurnal Kurikulum and Pengajaran Asia Pasifik*, 2(3): 52–59.
- Thavenius, C. (1999). Teacher autonomy for Learner Autonomy. In S. Cotterall, & D. Crabbe (Eds.), *Learner Autonomy in language learning: Defining the field and effecting change* (pp. 159–163). Peter Lang.
- Thang, S. M. (2001). *Malaysian learners' conceptions of their learning processes and their perceptions of their English as a Second Language courses in a tertiary distance learning context* [Unpublished doctoral dissertation]. University of Nottingham.

- Thang, S. M. (2003). How ready are Malaysian learners for online learning? An investigation into learner characteristics. In the *Proceedings of ASIACALL International Conference on Information Technology and Language Education*, Bangkok, Thailand. (pp.149–153).
- Thang, S. M. (2005). Investigating Malaysian distance learners' perceptions of their English proficiency courses. *Open Learning*, 20(3): 243–256.
- Thang, S. M., & Alias, A. (2007). Investigating readiness for autonomy: A comparison of Malaysian ESL undergraduates of three public universities. *Reflections on English Language Teaching*, 6(1): 1–18.
- Thang, S. M. (2009). Investigating autonomy of Malaysian ESL learners: Comparison between public and private universities. *3L: The South East Asia Journal of English Language Studies*. 15: 97–124.
- Tseng, W. T., Liou, H. J., & Chu, H. C. (2020). Vocabulary learning in virtual environments: Learner autonomy and collaboration. *System*, 88, 102190.
- The Straits Times (2018, October 21). 'Anwar urges Malay children to master Chinese language', *The Straits Times*. Retrieved from <https://www.straitstimes.com/asia/se-asia/anwar-urges-malay-children-to-master-chinese-language>
- Ling, T. H., Chin, C. N. L., & Unin, N. (2019). Learning to write Chinese Characters among non-native Chinese learners. *International Innovation in Teaching and Learning and Language Education Conference*, Kedah, Malaysia. (pp.1–11).
- Uakarn, C. (2021). Sample size estimation using Yamane and Cochran and Krejcie and Morgan and Green formulas and Cohen statistical power analysis by G*power and comparisons. *APHEIT International Journal*, 10(2): 76–88
- Ueki, M., & Takeuchi, O. (2013). Forming a clearer image of the ideal L2 self: the L2 Motivational Self System and Learner Autonomy in a Japanese EFL context. *Innovation in Language Learning and Teaching*, 7: 238–252.
- Ushioda, E. (1996). *Learner Autonomy 5: The role of motivation*. Authentik.
- Ushioda, E. (2006). Language motivation in a reconfigured Europe: Access, identity, autonomy. *Journal of Multilingual and Multicultural Development*, 27(2): 148–161.
- Ushioda, E., & Dörnyei, Z. (2017). Beyond global English: Motivation to learn languages in a multicultural world: Introduction to the special issue. *The Modern Language Journal*, 101: 451–454.

- Üstünlüoğlu, E. (2009). Autonomy in language learning: Do student take responsibility for their learning?. *Journal of Theory and Practice in Education*, 5(2): 148–169.
- Uslu, N. A., & Durak, H. Y. (2022). Predicting learner autonomy in collaborative learning: The role of group metacognition and motivational regulation strategies. *Learning and Motivation*, 78, 101804.
- Veloo, P. K., Yang, W., Kaur, G., & Singh, P. (2019). Relationship between the Chinese language classroom environment and students' motivation to learn Mandarin in Malaysia. *Universal Journal of Educational Research*, 7(10A): 54–59.
- Van Alten, D. C., Phielix, C., Janssen, J., & Kester, L. (2020). Self-regulated learning support in flipped learning videos enhances learning outcomes. *Computers & Education*, 158, 104000.
- Wang, D. P. (2016). A preliminary study of the characteristics of autonomous learners in Chinese language learning. *Overseas Chinese Language Education*, 4: 9.
- Wang, L. N., & Wu, Y. Y. (2017). The mediating role of learning strategies in the relationship between learning motivation and independent English learning. *Foreign Language Teaching*, 3: 74–78.
- Wang, N., Chen, J., Tai, M. and Zhang, J. (2021). Blended learning for Chinese university EFL learners: Learning environment and learner perceptions. *Computer Assisted Language Learning*, 34(3): 297–323.
- Wang, R. X. and Wong S. (2017). Synthesis of the Malaysian “Theory and Practice of Chinese Language Teaching” Symposium. *Overseas Chinese Language Education* 2: 4.
- Wang, S. L. (2016). A study on the correlation between motivation and learning strategies of undergraduate international students coming to China to learn Chinese. *Central China Academic*, 2: 9.
- Wang, X. J. (2014). The relationship between autonomous learning motivation and metacognitive strategies of non-English majors. *Foreign Language Teaching*, 35(5): 72–75.
- Wang, X. M. (2019). *A study on the current situation of motivation of foreign college students in Chinese language learning-The case of University of Pahang, Malaysia*[Unpublished doctoral dissertation]. Hebei University.
- Wang, X. M. (2019). *A Study of the Motivation of Foreign College Students in Learning Chinese-Taking University Malaysia Pahang as an Example* [Unpublished Master's thesis]. Hebei University.

- Wang, Y. M., & Liu, M. L. (2021). A study of the relationship between L2 motivational self-systems and learning strategy use among Egyptian learners of Chinese. *Research on International Chinese Language Teaching*, 4: 66–75.
- Wang, Y. Y. (2021). A study of quantity word acquisition bias in elementary Chinese learners (Unpublished Master's thesis), Hebei University, China.
- Weaver, S. J., & Cohen, A. D. (1997). *Strategies-based instruction: A teacher training manual*. Center for Advanced Research on Language Acquisition, University of Minnesota.
- Weinstein, C. E., & Mayer, R. E. (1986). The Teaching of Learning Strategies. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 315–327). Macmillan.
- Weinstein, C. E. (1988). *Assessment and Training of Student Learning Strategies*. In C. E. Weinstein, E. T. Goetz, & P. A. Alexander (Eds.), *Learning Strategies and Learning Styles* (pp. 291–316). Springer, .
- Weinberg, S. L., & Abramowitz, S. K. (2002). *Data analysis for the behavioral sciences using SPSS*. Cambridge University Press.
- Wen, Q. F. (1993). *Advanced level English language learning in China: The relationship of modifiable learner variables to learning outcomes* [Unpublished Master's thesis]. University of Hong Kong.
- Wen, Z. L., Liu, H. Y., & Hou, J. T. (2012). *Analysis of Moderating and Mediating Effects*. Educational Science Publishing Press.
- Wenden, A. L., & Rubin, J. (1987). *Learner Strategies in Language Learning*. Prentice-Hall.
- Wenden, A. L. (1991). *Learner strategies for Learner Autonomy*. Prentice Hall.
- Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning*, 50: 203–243.
- Winkel, H. (2020). Learning to read in multilingual Malaysia: A focus on Bahasa Melayu, Tamil and Chinese. *GEMA Online Journal of Language Studies*, 20(1), 1.
- White, C. (1995). Autonomy and strategy use in distance foreign language learning: Research findings. *System*, 23(2): 207–221.
- Wiktionary (2023). https://en.wiktionary.org/wiki/Wiktionary:Main_Page.
- Williams, M., & Burden, R. (1997). *Psychology for Language Teachers: A Social Constructivist Approach*. Cambridge University Press.

- Williams, M., Mercer, S., & Ryan, S. (2015). *Exploring psychology in language learning and teaching*. Oxford University Press.
- Wu, X. Y., & Zhang, Q. Z. (2009). A study on the relationship between English majors' self-efficacy, learning strategies, autonomous learning ability and academic achievement. *Foreign Language Teaching*, 3: 43–62.
- Wu, Y. Y. (2007). *Study on Chinese Learning Strategies of Foreigners in Different Environments* [Unpublished PhD thesis]. Shanghai Normal University.
- Xiang, R. D. (2019). A study on the correlation between English learning motivation, learning strategies and independent learning ability: A case study of public funded normal university students at the beginning of junior middle school. *Examination and Evaluation (College English Teaching and Research Edition)*, pp. 82–86.
- Xu, Y. L. (2018). *The relationship between Chinese Writing strategies and Writing Achievement of Malaysian Foreign Students* [Unpublished Master's Thesis]. Beijing Foreign Studies University.
- Xu, J. F., & Li, B. B. (2014). The influence of learner Controllable factors on college students' independent English learning Ability. *Modern Foreign Language*, 5: 647–656.
- Xue, L. B. (2018). *A Comparative Study of Chinese Learning Strategies of International Students* [Unpublished Master's thesis]. Dalian University of Foreign Languages.
- Ya-Ling, L. (2020). A case study on the application of cognitive strategies to Malay Mandarin learners. *Jurnal Intelek*, 15(1): 1–10.
- Yang, W. (2014). A study of autonomous learning in teaching Chinese as a foreign language. *Learning Monthly*, 2: 2.
- Yang, L. (2020). *A study of motivation of Mandarin Chinese learners under the perspective of L2 motivation self-system theory* [Unpublished Master's thesis]. Yunnan University.
- Yang, J. (2012). *An empirical study on the theory of "L2 motivational self-system" of international students* [Unpublished Master's thesis]. Shandong University.
- Yao, M., & Crosthwaite, P. R. (2017). An investigation of English learning motivation among Chinese undergraduates and postgraduates. *The Asian Journal of Applied Linguistics*, 4(1): 1–18.
- Yang, L., & Chanyoo, N. (2022). Motivational factors and intended efforts in learning East Asian languages among Thai undergraduate students. *Theory and Practice in Language Studies*, 12(2), 254–262.

- Yıldırım, S. (2012). Teacher support, motivation, learning strategy use, and achievement: A multilevel mediation model. *The Journal of Experimental Education*, 80(2): 150–172.
- Yin, E. L. (2020). A concept paper: The effectiveness of project-based learning on speaking skill among non-native Mandarin learners in vocational college Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 10(7): 638–646.
- Yin, P. (2016). *A study of the correlation between motivation for international students' Chinese language learning and their autonomous learning behaviors outside the classroom*[Unpublished Master's thesis]. Guangdong University of Foreign Studies.
- You, C. (Julia), & Dörnyei, Z. (2016). Language learning motivation in China: results of a large-scale stratified survey. *Applied Linguistics*, 37(4): 495–519.
- Yunus, M. M., & Arshad, N. D. M. (2015). ESL teachers' perceptions toward the practices and prospects of autonomous language learning. *Asian Social Science*, 11(2): 41–51.
- Yun, X (2019). Chinese language in the United States: An ethnolinguistic perspective. *Global Chinese*, 5(2): 127-139.
- Zakaria, N. L., Aziz, A. A., & Ramayah, K. (2017). Language learning strategies and Learner Autonomy in learning Japanese. *Journal of Advanced Research in Social and Behavioural Sciences*, 9(3): 50–60.
- Zeng, X. H. (2017). *A Study of Learning Strategies of Turkish Chinese Learners under Non-Target Language Environments*[Unpublished Master's thesis]. Shanghai International Studies University.
- Zhang, D. Y. (2005). Learning strategies and autonomous learning in English. *foreign language teaching*, 26(1).
- Zhang, K. (2020). *Investigation and Analysis of Learning Motivation and Attitude of Chinese Learners- A Case Study of the Kongzi Institute University of Malaysia* [Unpublished Master's thesis]. Shanxi University.
- Zhang, L. (2016). *Discourse Cohesion and Coherence Bias Analysis of Malay Foreign Students in Chinese* [Unpublished Master's thesis]. Beijing Foreign Studies University.
- Zhang, L. X., & Li, X. X. (2004). A comparative study of Chinese-Western European students' ability to learn autonomously. *Foreign Language Community*, 4:15–23.

- Zhang, L. Y. (2020). *The influence of Chinese classroom environment on the autonomous learning of international students in China*[Unpublished Master's thesis]. Beijing Foreign Studies University.
- Zhang, X. X. (2020). *A study of the "L2 motivational self-system" of international students with lower-intermediate Russian background* [Unpublished Master's thesis]. Dalian University of Foreign Languages.
- Zhao, J. M. (2019). *Introduction to teaching Chinese as a foreign language: A revised edition*. The Commercial Press.
- Zhao, X. (2019). A study on Chinese language learning strategies among Pakistani university students. *Journal of Northwest College of Adult Education*, 4: 7.
- Zhao, Z. C. (2022). *A Comparative Study of Cross-Cultural Identity among Different Ethnic Chinese Learners in Malaysia* [Unpublished Master's thesis]. Beijing Foreign Studies University.
- Zhao, Y., & Liu, Z. (2022). A review of "Chinese Plus" studies and tendency of development. *International Chinese Language Teaching*, 2(1), 70-81.
- Zhong, C. (2014). *A Survey Study on Chinese Language Learning Motivation of Malaysian Confucius Institute Students*[Unpublished Master's thesis]. Beijing Foreign Studies University.
- Zhou, M., Ma, W. J., & Deci, E. L. (2009). The importance of autonomy for rural Chinese children's motivation for learning. *Learning and Individual Differences*, 19(4): 492–498.
- Zhou, R. X. (2019). *Chinese Communication Strategies of Chinese Schools in Malaysia from the perspective of Chinese Learning Motivation* [Unpublished Master's thesis], Minzu University of China.
- Zhou, W. Z. (2018). *Study on The Motivation of Chinese Language of Malay Students-A Case Study of University Kuala Lumpur, Malaysia* [Unpublished Master's thesis]. Central China Normal University.
- Zhu, S., & Wang, C. (2022). Vocabulary learning in Chinese as a second language: Exploring the role of self-regulation in facilitating vocabulary knowledge of second language learners. *Frontiers in Psychology*, 13: 893900.
- Zijlstra, W. P., van der Ark, L. A., & Sijtsma, K. (2011). Robust Mokken scale analysis by means of the forward search algorithm for outlier detection. *Multivariate Behavioral Research*, 46(1): 58–89.
- Zikmund, W. G. (1997). *Business Research Methods*. Harcourt Canada Limited.

- Zimmerman, B. J. (1986). Development of self-regulated learning. *Contemporary Educational Psychology*, 11(4): 307–313.
- Zimmerman, B. J., & Martinez-Pons, M. (1988). Construct validation of strategy model of student self-regulated learning. *Journal of Educational Psychology*, 80(3): 284–290.
- Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81(3): 329–339.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2): 64–70.
- Zimmerman, B. J., & Schunk, D. H. (2012). Motivation: An essential dimension of self-regulated learning. In D. H. Schunk, & B. J. Zimmerman (Eds.), *Motivation and self-regulated learning* (pp. 1-30). Routledge.